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Markets at a glance

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

▲ Easing
■ Neutral
▼ Tightening

While international wheat, maize and vegetable oil prices registered record highs and much volatility last year, rice markets kept relatively calm in view of large global supplies. Over the past seven months, however, rice prices have been generally on a rise and in some suppliers increased by more than 25 percent. The rapid emergence of El Niño, a climate pattern that describes the unusual warming of surface waters in the eastern Pacific Ocean, combined with a positive Indian Ocean Dipole raises concerns about possible impacts on rice production in South and Southeast Asia. Much will depend on the timing and strength of El Niño, especially as to whether or not normal monsoon patterns will be affected. Over the next couple of months, these climatic developments will be closely monitored by AMIS.

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

El Niño is Likely Right Around the Corner

Current situation/Forecast

After experiencing three consecutive years of La Niña that brought bumper crops for some and crop failures for others, we are likely heading right into an El Niño. This will make a lot of farmers happy who have been suffering these past years while shifting the agony elsewhere.

The El Niño-Southern Oscillation (ENSO) is currently neutral, but it will likely not stay that way for long. Both the Australian Bureau of Meteorology (BoM) and the Climate Prediction Center (CPC) of the National Oceanic and Atmospheric Administration (NOAA) from the US have now issued an El Niño Watch. El Niño could occur as soon as during May-June-July, with a 62 percent chance of development during that time according to NOAA CPC forecasts. After that, the chances of development continue going up with a 75 percent chance during June-July-August, followed by an 80 percent chance or greater for the rest of the year. While forecasts made during this time of the year tend to be less accurate than those later in the season, there are a lot of signs suggesting that El Niño might be just around the corner.

Strength and Precipitation Changes

Strength matters. The stronger the ENSO event, the further reaching and the more severe the global climate impacts are likely to be. Events are broken down into either weak, moderate, strong, or very strong. By the end of the year, when El Niños typically reach their peak strength, the current forecast is for about a 40 percent chance of the event becoming a strong one.

Should El Niño materialize and depending on its strength, average to above-average rains could occur in Central Asia, southern North America, southeast South America, southern Europe, eastern and southern East Africa, and southern and eastern China. Drier-than-average condi-

tions could occur in Central America, the Caribbean, parts of western and northern East Africa, northern South America, Southern Africa, India, Northern China, the Maritime Continent, and Australia.

Potential Crop Impacts

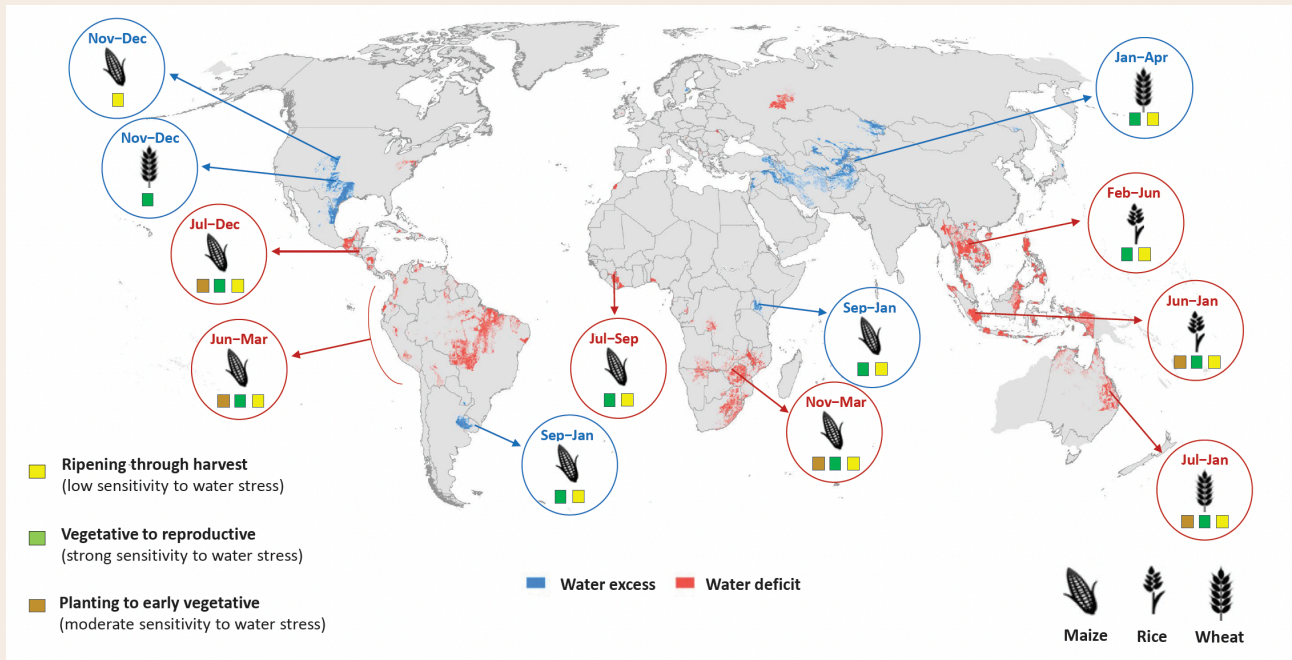
ENSO events are estimated to affect crop yields on over 25 percent of global croplands. While crop yields are not affected every year, El Niño events have been generally shown to slightly improve global-mean soybean yields, while slightly decreasing global-mean maize, rice, and wheat yields. Maize tends to be impacted more than the other crops. Also, negative impacts tend to be lessened for irrigated crops compared with those that are rainfed.

How the current potential El Niño event will impact agricultural production is uncertain as no two events are the same with regards to strength, duration, or localized mitigations. However, based on historical El Niño events, some crops and regions can be highlighted as being likely to have yield impacts. For maize and soybeans, yields will likely be positively impacted in parts of the Midwest US and southeast South America, while negatively impacted in the North China Plain, southern Mexico, northeast Brazil, India, Indonesia, West Africa, and Southern Africa. For wheat, yields will likely be positively impacted for the US southern Great Plains, China, Central Asia, and southeast South America, while negatively impacted in southeast Australia. For rice, negative impacts are possible across all of Southeast Asia.

While El Niño can significantly lower crop yields in some regions, at the global level, there is a chance that the negative yield impacts in the major producing countries could be partially offset. Thus, reductions in yields in one region might be balanced by increases in another. However, only when the El Niño event begins to ramp up will its true impacts on agriculture begin to be known.

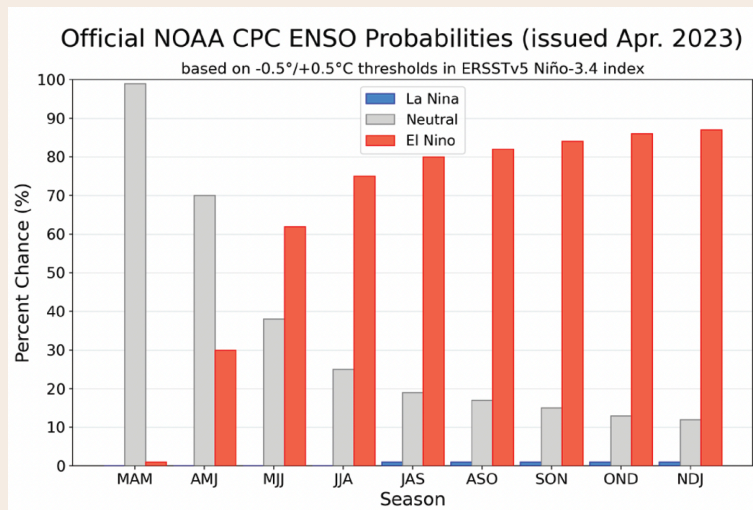
Feature article

Agricultural areas with high correlation between dry/wet conditions and El Niño events and crops affected



Note: The highlighted areas represent croplands where a statistically significant correlation was identified between El Niño events and areas experiencing drought conditions (water deficits) and abnormally healthy vegetation conditions (water excess). The Spearman's Rank Correlation Coefficient was used to measure the relationship between the Agricultural Stress Index (ASI) and ENSO values, and a cut-off factor of ≥ 0.3 and ≤ -0.3 (signifying water deficits and water excess) was applied.
 Source: FAO/GIEWS <https://www.fao.org/3/cc5749en/cc5749en.pdf>

Forecasts point to a high likelihood of El Niño developing from June 2023



Source: IRI 2023. ENSO Forecast. International Research Institute for Climate Prediction, Lamont-Doherty Earth Observatory, Columbia Climate School, Columbia University. Palisades, New York, 2023. <https://iri.columbia.edu/our-expertise/climate/forecasts/ens0/current/>

World supply-demand outlook

WHEAT 2022 production scaled up further with an upward adjustment to Kazakhstan's harvest estimate, bringing the global output to 2.9 percent above the 2021 level.

Utilization in 2022/23 lifted this month, largely on higher utilization in India and the EU, and now rising by 1.0 percent above the 2021/22 level underpinned by growth in food, feed, and other uses.

Trade in 2022/23 (July/June) up slightly m/m mostly on strong pace of purchases by the EU, as well as China, and higher sales foreseen for the Russian Federation, which offset a cut to India's export forecast.

Stocks (ending in 2023) still set to rise above opening levels, by 5.2 percent, and unchanged this month as higher inventories in Kazakhstan (on account of higher production) were balanced by downgrades for stocks in the Russian Federation (on account of higher exports).

Wheat	FAO-AMIS			USDA		IGC	
	2021/22 est	2022/23 f'cast		2021/22 est	2022/23 f'cast	2021/22 est	2022/23 f'cast
		6 Apr	4 May				
Prod.	777.5	796.6	800.4	779.1	789.0	781.0	801.0
	640.6	658.9	662.7	642.2	651.3	644.0	663.3
Supply	1070.7	1090.5	1094.8	1065.5	1061.1	1057.8	1075.6
	803.3	818.9	823.2	789.4	786.6	793.6	806.0
Utiliz.	773.8	780.1	781.5	793.4	796.1	783.3	789.3
	631.0	638.4	639.3	645.4	650.1	642.1	649.8
Trade	195.7	199.4	200.1	205.4	210.4	196.8	199.1
	186.0	188.4	188.6	195.8	198.4	187.0	189.4
Stocks	294.5	309.5	309.7	272.1	265.1	274.6	286.2
	160.5	168.3	169.0	135.3	125.5	141.7	146.6

IN MILLION TONNES

MAIZE production still well below (4.2 percent) last season's level despite a marginal upward revision this month stemming from a higher estimate for India.

Utilization 2022/23 forecast unchanged and still set to decline by 1.5 percent below 2021/22 as a result of falls in both feed use, especially in the US and the EU, as well as industrial use, mostly in China and the US.

Trade in 2022/23 (July/June) lifted m/m, driven by continued robust demand by the EU and higher than anticipated exports by Ukraine. Nonetheless, global trade is still seen contracting by 2.2 percent from 2021/22.

Stocks (ending in 2023) revised up m/m reflecting higher inventories in the Republic of Korea following historical balance revisions, India as a result of higher production, and the EU owing to higher imports.

Maize	FAO-AMIS			USDA		IGC	
	2021/22 est	2022/23 f'cast		2021/22 est	2022/23 f'cast	2021/22 est	2022/23 f'cast
		6 Apr	4 May				
Prod.	1212.0	1159.0	1161.6	1217.0	1144.5	1220.4	1150.0
	939.4	881.8	884.4	944.4	867.3	947.9	872.8
Supply	1498.9	1464.9	1469.1	1509.8	1451.4	1499.5	1430.9
	1072.2	1031.0	1035.2	1031.6	965.1	1032.6	965.5
Utiliz.	1198.4	1180.4	1180.0	1202.9	1156.1	1218.6	1174.4
	906.5	883.0	882.6	911.9	859.1	917.5	866.0
Trade	181.9	176.5	177.9	193.5	179.4	179.4	167.8
	159.8	158.5	159.9	171.6	161.4	156.9	148.8
Stocks	307.4	285.4	288.2	306.9	295.3	280.8	256.4
	150.7	130.9	133.8	97.8	88.0	92.6	80.4

IN MILLION TONNES

RICE production in 2022/23 raised somewhat, as upgrades for Myanmar and some African and South American countries outweighed a small reduction for the Philippines.

Utilization in 2022/23 lifted and seen falling minimally short of the 2021/22 all-time high.

Trade in 2023 (January-December) increased slightly m/m, as less subdued import prospects for the Philippines and Viet Nam outweighed a downgrade to Nigerian import forecasts.

Stocks (2022/23 carry-outs) little changed m/m and seen falling 1.3 percent below their record opening levels due to stock reductions in importing countries. Among exporters, build-ups in Thailand and, especially, India could help compensate for expected drawdowns in most other exporters.

Rice	FAO-AMIS			USDA		IGC	
	2021/22 est	2022/23 f'cast		2021/22 est	2022/23 f'cast	2021/22 est	2022/23 f'cast
		6 Apr	4 May				
Prod.	526.0	516.0	516.7	513.9	509.4	515.0	511.4
	380.2	373.2	373.9	364.9	363.5	366.0	365.5
Supply	720.8	712.6	713.7	701.2	691.4	697.2	689.4
	471.9	469.1	470.3	435.7	432.5	440.9	437.7
Utiliz.	522.5	519.8	520.6	519.2	520.0	519.2	516.5
	370.5	372.5	373.3	362.8	365.1	364.9	365.4
Trade	56.0	53.1	53.6	56.2	55.9	55.1	52.0
	49.8	48.1	48.6	50.0	50.8	49.0	47.8
Stocks	197.0	194.1	194.4	182.0	171.4	178.0	172.9
	96.4	94.6	94.9	69.0	64.5	70.0	68.0

IN MILLION TONNES

SOYBEAN 2022/23 production downgraded for the third consecutive month, with a lower forecast for Argentina amid persistent hot and dry conditions outweighing an upward revision for Brazil.

Utilization in 2022/23 trimmed m/m, chiefly reflecting expectations of reduced crushings in Argentina and Egypt, while global consumption is seen growing by only 0.8 percent from the previous season.

Trade in 2022/23 (Oct/Sep) lifted marginally, as a higher import requirement by Argentina was largely offset by lower purchases by Egypt, while on the export side, lower sales from the US were compensated by higher exports from several other origins.

Stocks (2022/23 carry-out) virtually unchanged, with projected higher ending stocks in Brazil offsetting forecasted reserve releases in Argentina and Ukraine.

Soybean	FAO-AMIS			USDA		IGC	
	2021/22 est	2022/23 f'cast		2021/22 est	2022/23 f'cast	2021/22 est	2022/23 f'cast
		6 Apr	4 May				
Prod.	354.9	370.7	369.1	359.8	369.6	355.8	369.8
	338.5	350.4	348.8	343.4	349.4	339.4	349.5
Supply	408.1	413.0	412.6	460.1	469.4	410.6	415.5
	368.2	373.8	373.3	412.6	417.7	363.7	366.8
Utiliz.	365.9	370.0	368.8	363.0	365.8	364.9	369.5
	253.5	255.6	254.4	255.4	253.5	256.8	254.9
Trade	154.7	166.1	166.6	154.0	168.0	155.3	166.9
	63.2	69.9	70.4	62.4	72.0	65.7	71.8
Stocks	43.5	43.9	44.0	99.7	100.3	45.7	46.0
	24.5	22.9	23.0	68.3	65.0	17.2	16.7

IN MILLION TONNES

+i World Balances

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

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

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

World supply-demand outlook

Revisions (FAO-AMIS) to 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	3757	748	1383	766	199	2637	1399	-349	1375	2866	701	445	752	476	224	-1600	520	-1131	479	106
Total AMIS	3606	1586	2250	625	82	2533	517	-790	1375	2642	-100	475	347	290	-475	-1869	670	-1234	500	165
Argentina	-	-	-	-465	-	-	-	-	-1000	-	-	-	-	-	-	-4000	1500	-1800	600	-300
Australia	-	-	-	-	-	-	-	-	-	-	-2	-	-2	-20	-	-	-	-	-	-
Brazil	-	-	-	-	-	-	-500	-500	-	-	-	-	-	-	-	2244	-	795	400	1400
Canada	-	-	-200	-	-100	-	-	-	-	-100	-	-	-	-	-	-	-	-11	-	-
China Mainland	-	500	500	-	-500	-	-	-	-	-	-	-	-12	-60	-	-	-	-	-	-
Egypt	-	-800	-	-	61	-	-	-	-	-	-	-	-	-	-	5	-1000	-725	-	-220
EU	-	1700	1250	-	450	-	1000	-	-	1000	-	-	-	-	-	-	100	100	-	-
India	902	-	2102	-2400	-500	2113	-	300	450	1423	-	-	190	150	-	-	-	-	-	-
Indonesia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Japan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kazakhstan	2704	-	-	500	2204	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	346	-	346	-	-	-	-	-	-	-	-121	-	-121	-	-
Nigeria	-	-	-	-	-	-	-	-	-	-	-	-150	-40	-	-120	-	-	-	-	-
Philippines	-	-	-	-	-	-	-	-	-	-	-98	500	127	-	-100	-	-	-	-	-
Rep. of Korea	-	-	-	-	-	-	-	-	-	1471	-	-	-	-	-	-	-30	-15	-	-15
Russian Fed.	-	-	-	2400	-2400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Thailand	-	-	-	-	-	-	-400	-400	-	-	-	-	-44	100	-	-	100	100	-	-
Türkiye	-	-	-	-	-50	-	-	-	-	-	-	-	-	-	-	3	-	3	-	-
Ukraine	-	-	-450	500	-50	-	-	-740	2000	-1260	-	-	-	-	-	-	-	100	600	-700
UK	-	-	11	100	-111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
US	-	-	-680	-	816	-	-	-254	-	-	-	-75	127	50	-255	-	-	340	-1100	-
Viet Nam	-	186	-283	-10	262	75	417	459	-75	108	-	200	-	70	-	-	-	-	-	-

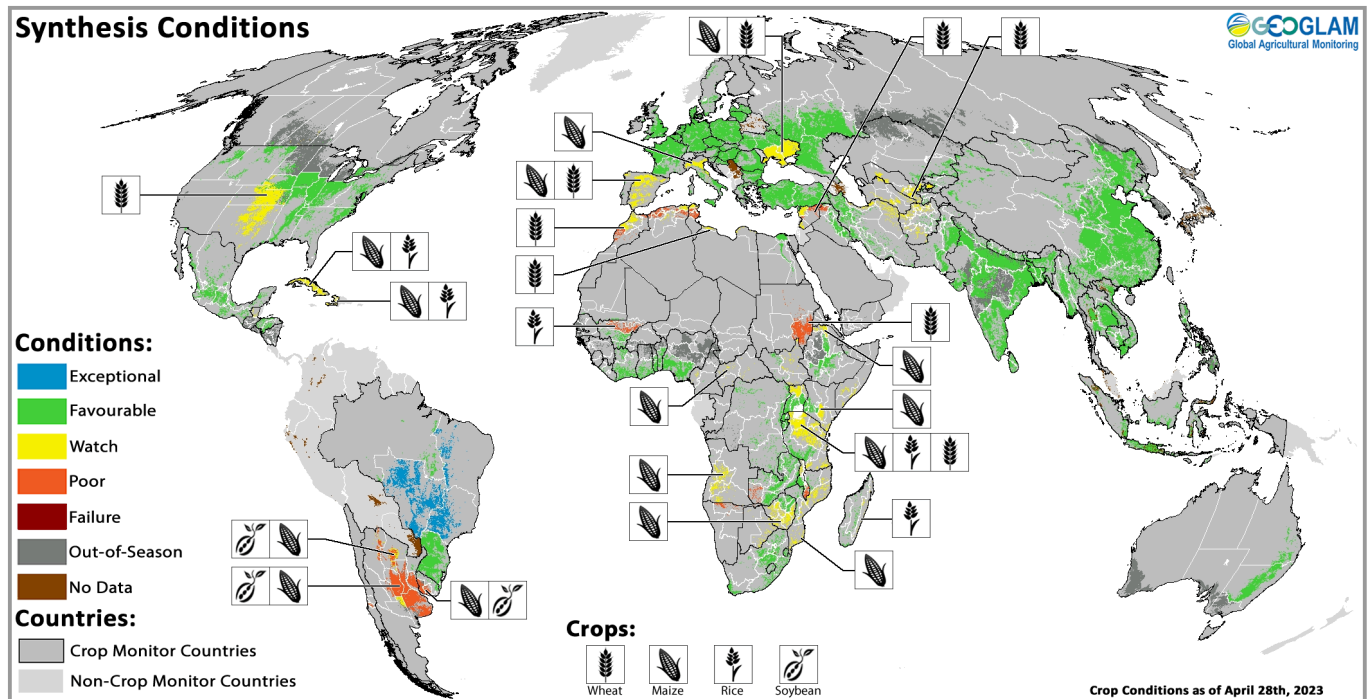
In thousand tonnes

+i Note

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

Crop monitor

Crop conditions around the world



Crop condition map synthesizing information for all four AMIS crops as of 28 April. 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 favourable conditions except for in parts of Ukraine, Spain, and the US. In the southern hemisphere, sowing is beginning in eastern Australia.

Maize

In the southern hemisphere, harvest is wrapping up in Brazil for the spring-planted crop (smaller season) under exceptional conditions. In Argentina, harvesting continues on a poor crop. In the northern hemisphere, sowing is beginning under generally favourable conditions.

Rice

In China, early-planted rice enters the vegetative stage while single-season rice sowing begins. Conditions are favourable for the Rabi crop in India as harvesting begins. In Southeast Asia, harvesting is progressing for wet-season rice in Indonesia and dry-season rice in the northern countries.

Soybeans

In the southern hemisphere, harvest is wrapping up in Brazil under exceptional conditions, while in Argentina, harvesting is ongoing for both the early-planted and the late-planted crops with poor yields. In the northern hemisphere, sowing is beginning in the US.

El Niño watch

An El Niño event might be just around the corner. There is a 62 percent chance of El Niño developing during May-June-July rising to 86 percent chance during October-November-December, according to the IRI/CPC forecast. El Niño events can have widespread, global impacts, including enhanced rainfall in some areas and drier-than-average conditions elsewhere. For more information on the impact of El Niño on agriculture, please see this month's feature article.

Positive Indian Ocean Dipole (IOD) conditions may also develop during June to September, according to the Australian Bureau of Meteorology. Positive IOD conditions can enhance El Niño-related drying influences in Australia and the Maritime Continent, and wetting influences during the East Africa short rains.

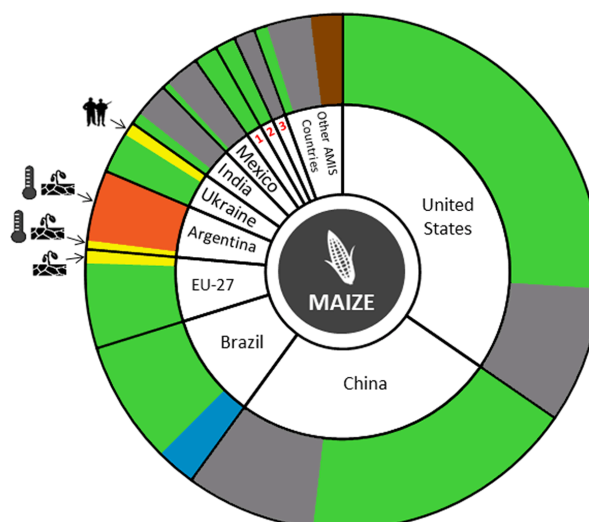
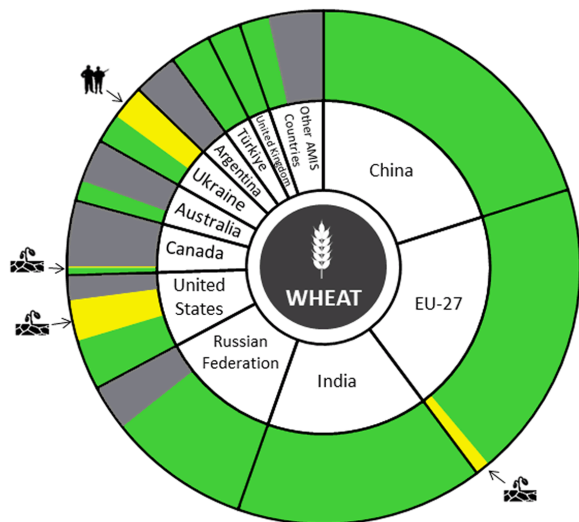
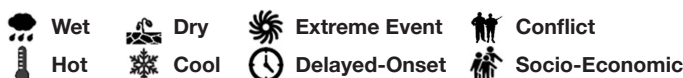
Source: UCSB Climate Hazards Center

Crop monitor

Conditions



Drivers



South Africa¹, Russian Federation², Canada³

Summaries by crop

Wheat

In the **EU**, conditions are generally favourable except for Spain, where the crop could reach failure if rainfall does not return by the end of May. In the **UK**, conditions are favourable. In **Türkiye**, conditions are generally favourable, with recent above-average temperatures and abundant rainfall supporting the crop. In **Ukraine**, recent rainfall has improved soil moisture conditions and removed areas of drought. However, the ongoing war continues to impact the east and south regions. In the **Russian Federation**, conditions are favourable for winter wheat and the beginning of spring wheat sowing in the Volga district. In **China**, conditions are favourable as winter wheat enters the reproductive stage and sowing of the spring wheat begins. In **India**, harvesting is wrapping up under favourable conditions. In the **US**, the prolonged drought in the central and southern Great Plains continues to impact winter wheat. Sowing of spring wheat is beginning in the Pacific Northwest. In **Canada**, winter wheat conditions are generally favourable. In **Australia**, sowing is beginning under favourable conditions in Queensland and New South Wales.

Maize

In **Brazil**, harvesting for the spring-planted crop (smaller season) is progressing with exceptional conditions in the Central-West, Southeast and Northeast regions, and favourable conditions in the South region. The summer-planted crop (larger season) is currently in the vegetative to reproductive stages under favourable conditions. In **Argentina**, harvest is ongoing with significantly reduced yields for both the early-planted crop (typically larger season) and the late-planted crop (typically smaller season), albeit at a slower pace than last year due to a higher proportion of the late-planted crop. In **India**, harvesting of the Rabi crop is wrapping up under favourable conditions. In **China**, conditions are favourable for the spring-planted crop. In **South Africa**, recent dry conditions are supporting crop ripening and harvesting. In **Mexico**, harvesting of the Autumn-Winter crop (smaller season) is ongoing under favourable conditions. In the **US**, sowing is picking up speed and expanding northwards into the central Corn Belt under favourable conditions. In the **EU**, sowing is ongoing under generally favourable conditions, except for drought issues in Spain and northern Italy. In **Ukraine**, sowing is beginning under favourable conditions away from the war zones. In the **Russian Federation**, sowing is beginning under favourable conditions.

+i Pie chart description

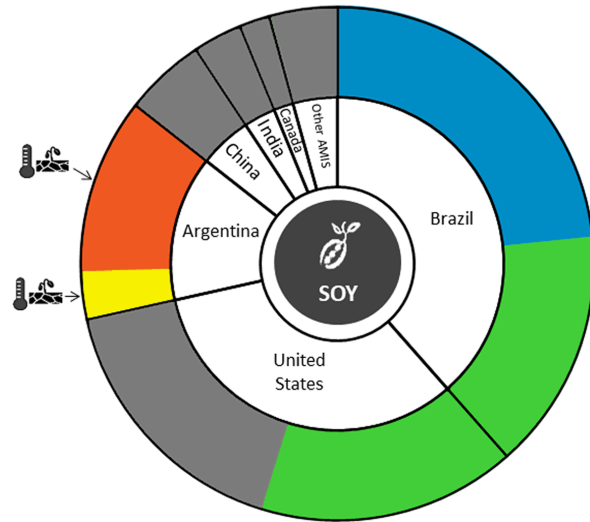
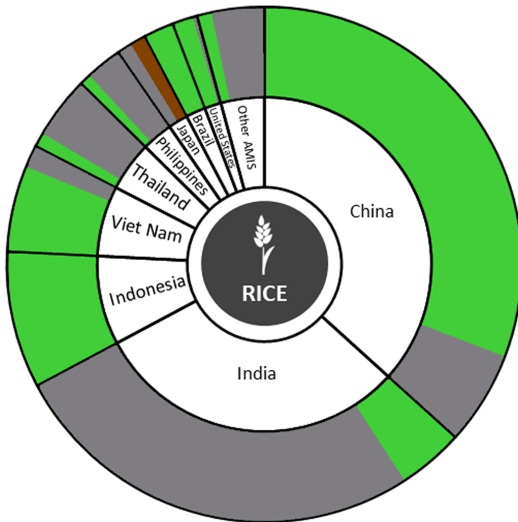
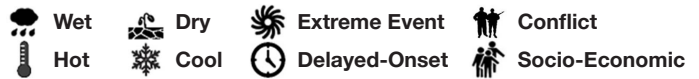
Each slice represents a country's share of total AMIS production (5-year average), with the main producing countries (95 percent of production) shown individually and the remaining 5 percent grouped into the "Other AMIS Countries" category. Sections within each country are weighted by the sub-national 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**, conditions are favourable as early-planted rice is in the vegetative stage and sowing of single-season rice is beginning. In **India**, conditions are favourable for the Rabi crop as transplanting is wrapping up and harvesting is beginning in some southern states. In **Indonesia**, harvesting of wet-season rice is continuing under favourable conditions, albeit at a slower pace than last year. Sowing of dry-season rice is beginning with good irrigation water levels. In **Viet Nam**, conditions are favourable for dry-season rice (winter-spring rice) across the country as harvesting continues in the South with yields slightly above last year's level due to good weather and lower fertilizer costs. Sowing of wet-season rice (summer-autumn rice) is beginning in the Mekong River Delta earlier than last year. In **Thailand**, harvesting of dry-season rice is progressing with good yields due to sufficient water and favourable weather. In the **Philippines**, dry-season rice harvesting is more than halfway complete under favourable conditions due to average to above-average rainfall. In **Brazil**, harvest is wrapping up under favourable conditions. In the **US**, sowing is progressing under favourable conditions.

Soybeans

In **Brazil**, harvesting is wrapping up with exceptional yields in the Central-West, Southeast and Northeast regions. In the South region, despite the lack of rain and high temperatures in Rio Grande do Sul, the favourable conditions in the other states were enough to result in a regional yield close to the 5-year average. In **Argentina**, harvesting is progressing for both the early-planted crop (larger season) and the late-planted crop (smaller season) with low yields so far. The poor crop conditions are a result of water deficits and extreme heat throughout the season, which also occurred at critical moments of yield development. Many affected crops were abandoned or used as fodder. In the **US**, conditions are favourable as sowing begins in the southeast and the lower reaches of the Corn Belt.

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

+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 & 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 12 April, **Egypt** approved an increase in the wheat procurement price for the upcoming season. The new purchase price paid to farmers is EGP 1 500 per ardeb (USD 325 per tonne), an increase of 20 percent from the previous price of EGP 1 250 per ardeb (USD 270 per tonne) announced last January (see AMIS Market Monitor February 2023).
- On 11 April, **India** removed the 20 percent export duty on seed-quality rice that was introduced in September 2022 (see AMIS Market Monitor October 2022) given the improved level of rice stocks.
- On 13 April, **India** relaxed wheat procurement quality norms for regions where crops were damaged by heavy rains and winds (Punjab, Haryana and Rajasthan).
- On 10 April, the Ministry of Agriculture in **Kazakhstan** introduced a ban on the import of wheat by road from third countries (including those of the Eurasian Economic Union), for a period of six months.
- On 8 March, the Ministry of Agriculture, Food and Rural Affairs in **South Korea** released a plan aiming to boost domestic wheat production. The plan outlines several actions to achieve this goal, including expanding the volume of wheat procured under the country's public stockholding programme, and establishing a system of advance procurement of wheat stocks for the following year before sowing takes place.

Maize

- In response to a severe drought that affected production, on 8 March, the Ministry of Agriculture in **Argentina** through resolution 78/2023, allowed maize exporters to reschedule their exports for a period of up to 180 days. This measure aims to alleviate the pressure on the domestic market and give local buyers an opportunity to purchase maize without exporters acquiring large quantities during times of limited supply.
- On 13 April, **Egypt** announced the addition of yellow maize to the Egyptian Stock Exchange for Commodities, in a bid to improve the possibility for domestic poultry producers to purchase feed at affordable prices.
- On 20 March, the Ministry of Health, Labour, and Welfare together with the Ministry of Agriculture, Forestry, and Fisheries in **Japan** added a waxy maize product to their list of genome edited products not subject to regulations for genetically engineered food, feed, and biodiversity. This variety has a 100 to 0 proportion of amylopectin to pectin, compared to a proportion of 75 to 25 for conventional maize.

Rice

- On 3 March, the **European Commission** adopted stricter rules on the presence of arsenic in foodstuffs, including rice. These rules reduce maximum admissible levels of inorganic arsenic in white rice, and introduce maximum admissible levels of arsenic in rice-based food items.

Soybeans

- On 9 April, **Argentina** reintroduced the preferential exchange rate for soybean until 31 May; it is now pegged at ARS 300 per USD (see AMIS Market Monitor October 2022), higher than the official rate of ARS 230 per USD. On 10 April, this "agri-dollar" scheme (previously referred to as "soy-dollar") was extended to more than 50 products, including biodiesel but excluding wheat and maize.
- On 14 April, the Ministry of Agriculture and Rural Affairs in **China** issued a three-year action plan to reduce soymeal use in animal feed. This initiative aims to decrease dependence on soybean imports. The new strategy proposes reducing the percentage of soymeal in animal feed to below 13 percent by 2025, which would be 1.5 percentage points below the 2022 level (see AMIS Market Monitor October 2022).

Biofuels

- On 24 April, **Argentina** raised the price of bioethanol made from maize and sugar cane along with biodiesel for compulsory blending with gasoline used in the local market. Bioethanol now costs ARS 148.5 (USD 0.69) per litre, up from the previous ARS 141.4 (USD 0.66) per litre. Similarly, the price of biodiesel was raised to ARS 294.4 (USD 1.4) per litre from ARS 283.1 pesos (USD 1.3) previously.
- On 13 April, the Federal Environment Ministry in **Germany** started flagging biofuels falsely certified as "advanced", which would be eligible to count twice towards Germany's greenhouse gas reduction target for transport fuels, once a baseline target has been met.
- On 31 March, **Japan** announced a new biofuels policy that will allow the **US** to capture up to 100 percent of its on-road ethanol market. The policy, which falls under the Sophisticated Methods of Energy Supply Structure Act, could increase US ethanol exports by over 80 million gallons annually, resulting in an additional USD 150-200 million in exports each year.

Policy developments

Across the board

- On 17 April, the Ministry of Agriculture and Rural Affairs in **China** announced the country had allocated an amount of CNY 10 billion (USD 14.5 billion) in support to grain farmers, including by supporting spring ploughing and production.
- On 20 April, the Health and Safety Agency in **France** (ANSES) revoked a ban that had been imposed earlier in the month on phosphine, an insecticide used to fumigate grains exported outside of the EU.
- On 21 April in the **EU**, Poland voted a financial envelope of PLN 10 billion (USD 2.4 billion) to support farmers. Poland also set a minimum price for wheat at PLN 1 400 (USD 342) per tonne and took measures to subsidize fuel and fertilizer prices.
- On 20 April in the **EU**, Romania voted a financial envelope of EUR 20.1 million (USD 22.3 million) for farmers due to additional costs, in particular storage, generated by imports from Ukraine. This envelope includes part (EUR 10.05 million, or USD 11.2 million) of the exceptional emergency aid from the European Union granted to farmers in countries bordering Ukraine (See AMIS Market Monitor April 2023), Poland and Hungary having received on their side EUR 29.5 million (USD 32.8 million) and EUR 16.75 million (USD 18.6 million) each.
- On 19 April, **European Commission** prepared a EUR 100 million (USD 111 million) support package to compensate farmers in Bulgaria, Hungary, Poland, Romania, and Slovakia that experienced price-depressing effects of increased volumes of Ukrainian farm exports, in particular grains and oilseeds (see AMIS Market Monitor April 2023). With the exception of Romania, the countries concerned unilaterally imposed temporary import bans on Ukrainian farm exports in mid-April, although talks with Ukraine led some countries to ease these restrictions so as to allow the transit of Ukrainian goods to other parts of the EU and to export markets outside the Union. The European Commission also said on 19 April that it would take emergency measures to ensure that, until June, imports of Ukrainian wheat, maize, sunflower seeds, and rapeseed would be allowed only if in transit. Separately, the European Commission has also proposed a one-year extension to the duty-free market access that was granted to Ukraine's farm exports after the outbreak of conflict in February 2022 (see AMIS Market Monitor, May 2022).
- On 19 March, the Federal Commission for the Protection against Sanitary Risks in **Mexico** announced the annual import quota for glyphosate, set at 4 131 tonnes of formulated glyphosate and 314 tonnes of technical glyphosate for 2023. These volumes are determined by the National Council of Science and Technology. The glyphosate import quota was implemented under the Maize Decree of 2020, which called for a gradual reduction in the use of glyphosate in Mexico and a complete ban by 31 January 2024.
- On 21 April, the National Economic and Development Authority in the **Philippines** approved an executive order on tariff commitments for the Regional Comprehensive Economic Partnership which is due to enter into force on 2 June. Under the Agreement, Australia, China, New Zealand, and South Korea will benefit from reduced duties on 33 agricultural tariff lines, including maize starch, and palm nuts and kernels.
- On 20 April, the **Russian Federation** published a regulation that would allow grain exporters who have reached their quota to benefit from those of unfilled competitors, up to 45 percent of their own quota.
- On 24 April, **Türkiye** decided to reinstate tariffs on cereal imports, which had been abolished during the COVID-19 pandemic (see AMIS Market Monitor February 2022). From 1 May, a 130 percent tariff will be due on certain cereals, including maize and wheat. However, duty-free treatment would be applied on grains from **Ukraine**.
- On 30 March, the **US** Department of Agriculture's Risk Management Agency announced it would expand Margin Protection plans for soybean and maize farmers in 1 255 and 1 729 counties respectively. Farmers will be able insure their 2024 crops under this programme, so long as they purchase coverage by the end of September 2023.

+i Note

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

International prices

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

	Apr 2023 Average*	Change	
		M/M	Y/Y
GOI	281.7	-2.7%	-19.4%
Wheat	255.7	-1.7%	-27.9%
Maize	289.2	-2.3%	-19.4%
Rice	200.4	+2.3%	+16.8%
Soybeans	278.8	-4.1%	-17.0%

*Jan 2000=100, derived from daily export quotations

Wheat

Although the GOI wheat sub-Index averaged 2 percent lower month-on-month, underlying export prices saw sharp two-sided swings amid conflicting fundamentals, namely competition from Russian supplies and uncertainty about shipments from Ukraine. With recent weakness also linked to limited international buying interest, the sub-Index touched its lowest since July 2021. Slow export demand remained a bearish influence for US prices, while much-needed rains across the US Plains added pressure. EU values dropped on mostly favourable new crop prospects. Russian prices were nominally little changed amid steady export progress. Quotations in Ukraine were ill-defined, with business hampered by confusion about the duration of the Black Sea Grain Initiative, halts to vessel inspections in Turkey, and restrictions on Ukrainian exports by some EU members.

Maize

World maize export prices mostly softened in April, with the IGC sub-Index averaging 2 percent lower, marking a third consecutive monthly decline. Despite an expected sharp drop in production, quotations worked lower in Argentina, pressured by a seasonal supply boost and overall slack overseas de-

mand. The downside in Brazilian FOB values was mainly tied to expectations for a larger surplus, but with nearby offers thinly quoted ahead of the second (safrinha) harvest. Deep sea prices in Ukraine also dropped, but were assessed as highly nominal given uncertainties about future export flows. In contrast, US values strengthened, bolstered mainly by confirmation of a series of large sales to China.

Rice

Average international rice prices were stronger in April, largely reflecting prospects for heavy Indonesian purchasing. Thai prices were firmer as exporters covered earlier commitments and looked to potential sales to Indonesia, albeit as gains were pared by off-season harvesting and weak demand from other buyers. Vietnamese quotes were likewise stronger as winter/spring crop harvesting drew to a close, amid solid local and Indonesian demand. Indian white rice values were underpinned by tight supplies, albeit as parboiled quotes softened on rabi-crop harvesting. In a context of overall limited activity, offers in Pakistan remained supported by tight fundamentals following a sub-par crop.

Soybeans

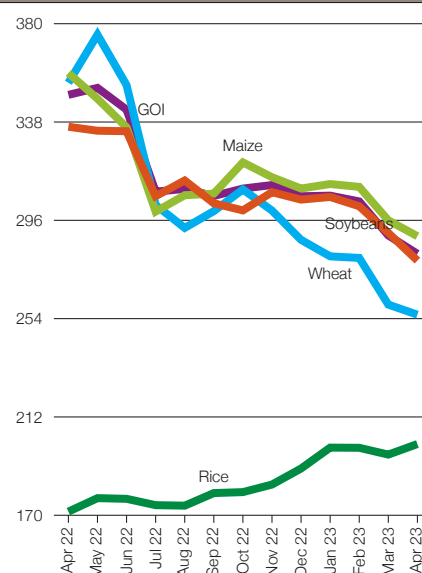
Average international prices retreated by 4 percent during April, pulled lower by softer South American quotations. With prospects for a heavily reduced crop in Argentina largely priced into the market, sentiment was weighed by outlooks for a record Brazilian outturn - harvesting of which was well advanced - and sizeable export availabilities. With an uptick in grower sales contributing to historically low export premiums, Brazilian supplies (Paranagua) were especially competitive, being more than USD 100 below US Gulf old crop export values. Weakness in outside markets, including energy, and softer soya product values added to pressure at times.

IGC commodity price indices

		GOI	Wheat	Maize	Rice	Soybeans	
2022	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
April		281.7	255.7	289.2	200.4	278.8	

(..... January 2000 = 100)

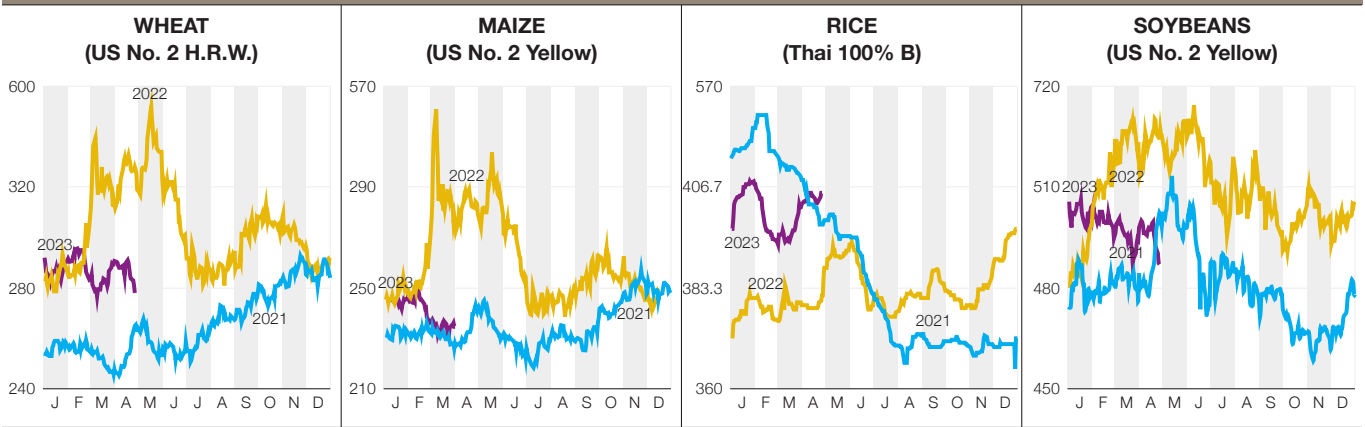
IGC commodity price indices



International prices

Selected export prices, currencies and indices

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



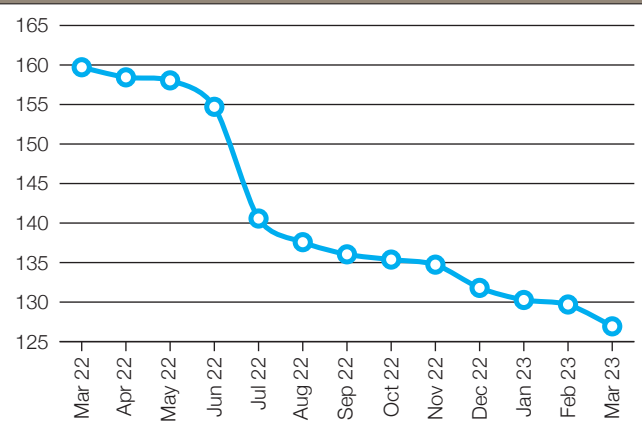
Daily quotations of selected export prices

	Effective date	Quotation	Month ago	Year ago	% change M/M	% change Y/Y
USD/tonne						
Wheat (US No. 2, HRW)	26-Apr	354	392	477	-9.7%	-25.8%
Maize (US No. 2, Yellow)	31-Mar	284	289	407	-1.8%	-30.3%
Rice (Thai 100% B)	26-Apr	496	488	444	+1.6%	+11.7%
Soybeans (US No. 2, Yellow)	26-Apr	561	594	676	-5.6%	-17.0%

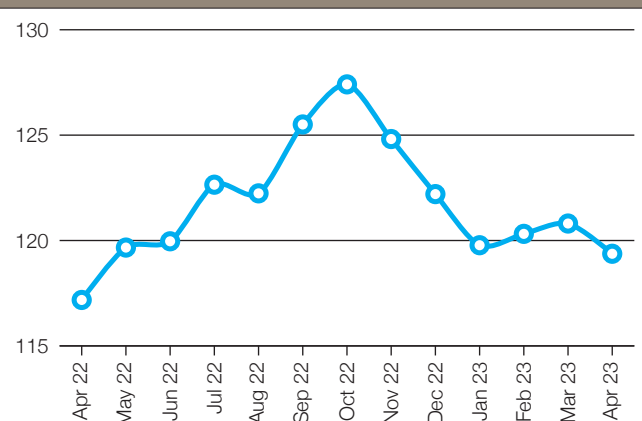
AMIS countries' currencies against US Dollar

AMIS Countries	Currency	Apr 2023 Average	Monthly Change	Annual Change
Argentina	ARS	216.0	-6.0%	-47.6%
Australia	AUD	1.5	0.3%	-9.1%
Brazil	BRL	5.0	3.7%	-5.4%
Canada	CAD	1.3	1.5%	-6.3%
China	CNY	6.9	0.1%	-6.6%
Egypt	EGP	30.8	-0.1%	-40.4%
EU	EUR	0.9	2.4%	1.5%
India	INR	81.9	0.4%	-7.0%
Indonesia	IDR	14836.0	3.0%	-3.1%
Japan	JPY	133.5	0.1%	-5.3%
Kazakhstan	KZT	451.3	0.1%	0.0%
Rep. of Korea	KRW	1322.5	-1.4%	-6.5%
Mexico	MXN	18.1	1.7%	11.0%
Nigeria	NGN	459.9	0.0%	-9.8%
Philippines	PHP	55.3	-1.1%	-6.0%
Russian Fed.	RUB	80.7	-5.5%	-3.8%
Saudi Arabia	SAR	3.8	0.1%	0.0%
South Africa	ZAR	18.2	0.3%	-17.4%
Thailand	THB	34.2	0.7%	-1.2%
Türkiye	TRY	19.3	-1.7%	-23.9%
UK	GBP	0.8	2.5%	-3.7%
Ukraine	UAH	36.9	0.1%	-20.2%
Viet Nam	VND	23464.8	0.5%	-2.4%

FAO Food Price Index Mar 2022 - Mar 2023



Nominal Broad Dollar Index Apr 2022 - Apr 2023



Futures markets

Overall market sentiment

- April saw a general decline in grain and soybean futures prices, driven by a combination of improved supply prospect and favourable crop conditions as well as increased competition from Brazilian exports.
- Volatility in CME and Euronext contracts remained relatively stable, illustrating a return to more contained risk premiums in commodities markets.
- Forward curves on wheat markets suggest that surplus supplies are gradually being built, while those for maize and soybean flattened slightly in the CME due to higher physical grain availability in the US.
- Positions of money managers reflected their bearish view on wheat markets and bullish view on maize and soybean markets.

MONTHLY PRICE TREND



Futures prices

Grain and soybean prices displayed a downward trend in April, with wheat reaching a 21-month low, maize hitting an 8-month low, and soy dropping to a 1-month low. In wheat markets, uncertainties concerning the future of the Black Sea Grain Initiative and the ban on Ukrainian grain imports of several Eastern European countries failed to lift values. Instead, market participants seem to expect abundant availability. The Russian Federation, in particular, continues to provide ample supplies to international markets, despite a somewhat slower export pace in April. Conditions for the new wheat crop are overall favourable, with some spot concerns mainly for Hard Red Winter growing regions near Kansas that have led to higher price premiums for high protein wheat.

In the case of maize and soybeans, declines are mainly due to improving weather in the US and good planting progress, with the brisk pace of exports from Brazil providing additional downward pressure. The maize and soybean futures markets experienced a sudden dip in prices at the end of April as China canceled large imports from the US, reversing the country's brisk demand displayed at the end of March.

Volumes & volatility

Trade volumes increased in April on both CME and Euronext, partly attributed to the return of financial operators to the market in view of easing tensions in the banking sector. In addition, as is typical in this time of the season, commercial traders wound down their exposure on old crops and gradually increased their exposure on new crops. Historical volatility on Euronext contracts rose slightly compared to the first quarter of 2023, while it has remained stable on the CME and within its 10-year average. Thresholds for daily price limits, a measure aimed at limiting excessive volatility, were revised down, signaling that markets are gradually returning to a more normal operation. However, market participants still fear the possibility of sudden upsurges in volatility, as is demonstrated by the upward trend in

implied volatility in wheat, maize, and soybean contracts on the nearby delivery. By contrast, risk premiums for new crops are relatively limited, as illustrated by the decline of implied volatility in maize for September contracts, reaching its lowest seasonal level since 2006.

Forward curves

In wheat markets, forward curves still display a contango configuration, highlighting the perceived surplus in the market. Forward curves remained in backwardation in CME maize and soybeans as prices are firmer for near-term deliveries compared to longer-dated expiries. The slope flattened slightly in April, reflecting higher physical grain availability in the US given the rather limited international demand for US exports. Brazil emerged as the most competitive exporter of maize and soybeans last month, notably to China.

Investment flows

Money managers increased their market share in wheat futures in April, reaching 46 percent on Euronext exchanges. On CME wheat, they hold their highest net short position since January 2018, indicating their bearish view of the market. Data of the Commitment of Traders report reveal a continuing divergence among market participants regarding the wheat outlook, with money managers sinking deeper into net short positions in Chicago Soft Red Wheat futures and Euronext wheat, while allocating more long positions in Kansas Hard Red Winter due to weather concerns. Managed money investors initially added new long contracts in maize and soybeans, following the announcement of Chinese buying, but have since changed course in view of waning Chinese demand.

Euronext futures volumes and price evolution

Average daily volume (1000 tonnes)	Apr 2023	M/M	Y/Y
Wheat	3 646.3	+12.0%	+55.6%
Maize	91.2	-18.6%	+4.2%

Prices (USD/t)	Apr 2023	M/M	Y/Y
Wheat	274.2	-3.2%	-35.3%
Maize	268.7	-3.8%	-24.8%

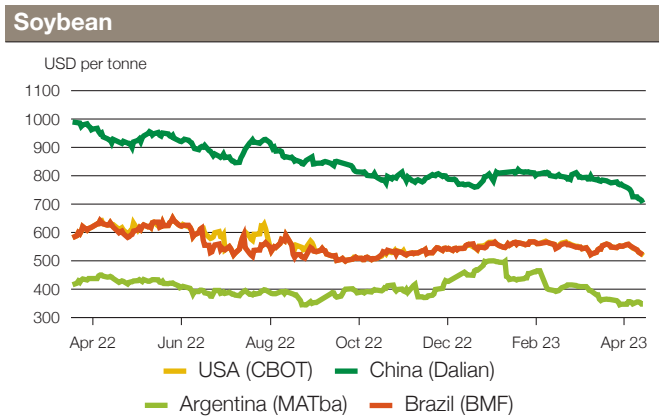
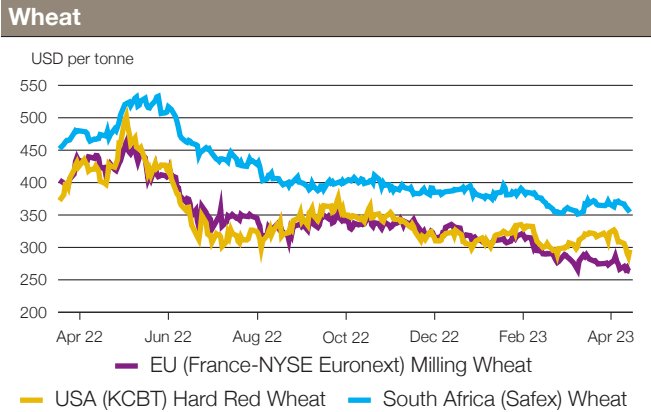
CME futures volumes and prices evolution

Average daily volume (1000 tonnes)	Apr 2023	M/M	Y/Y
Wheat	20 455.5	+39.5%	+68.2%
Maize	48 339.2	+19.7%	+4.4%
Soybean	38 009.6	+20.9%	+32.1%

Prices (USD/t)	Apr 2023	M/M	Y/Y
Wheat	248.7	-2.3%	-37.0%
Maize	248.0	-0.7%	-19.4%
Soybean	540.6	-0.9%	-11.7%

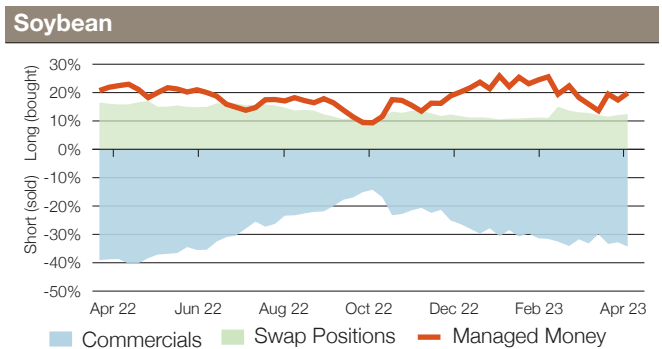
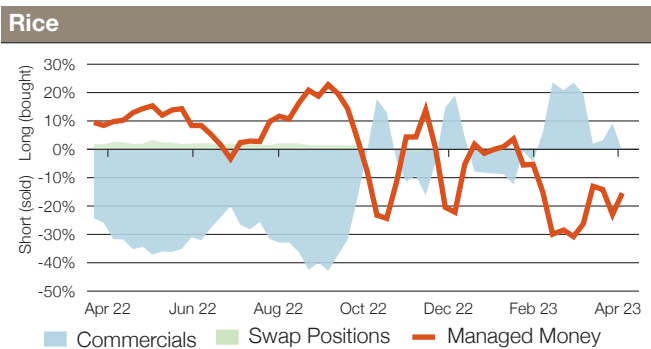
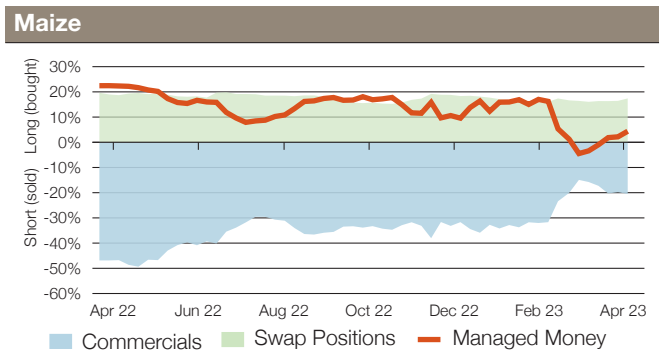
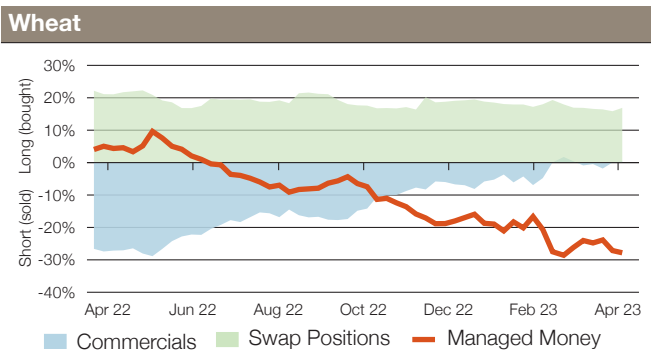
Market indicators

Daily quotations from leading exchanges - nearby futures



CFTC commitments of traders

Major categories net length as percentage of open interest*

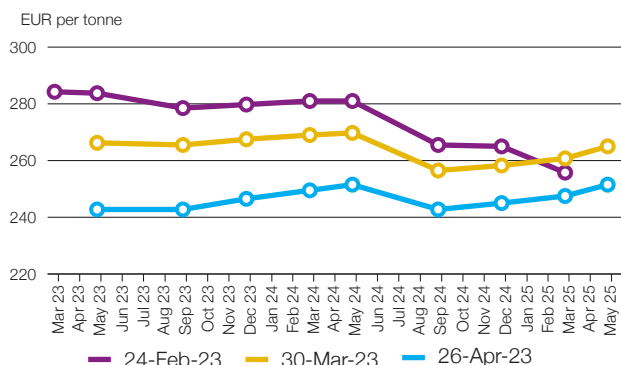


*Disaggregated futures only. Though not all positions are reflected in the charts, total long positions always equal total short positions.

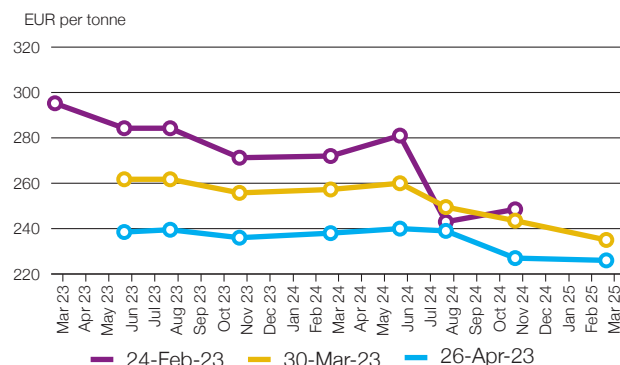
Market indicators

Forward curves

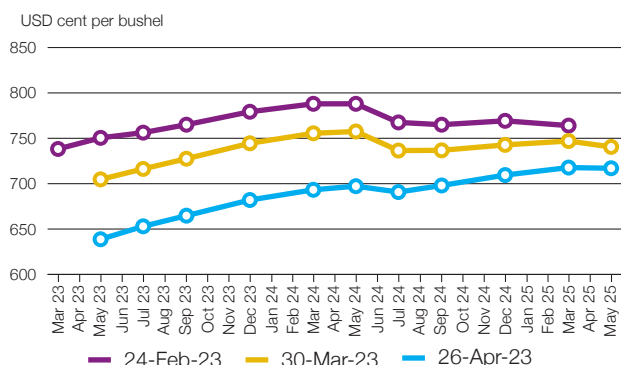
Euronext wheat (EBM)



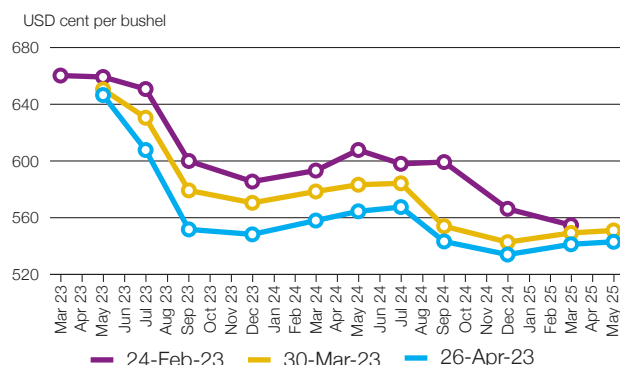
Euronext maize (EMA)



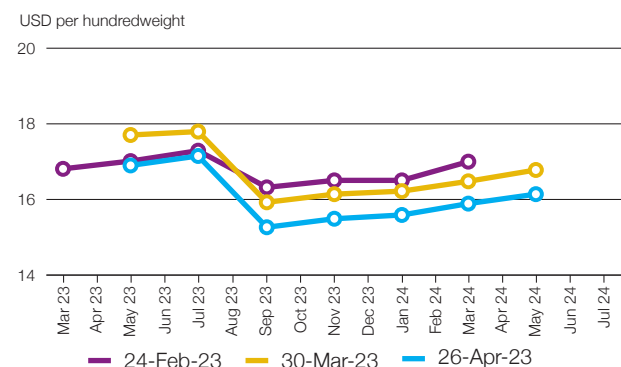
CBOT wheat



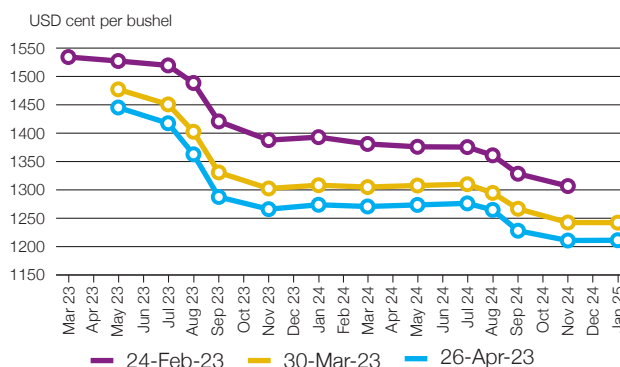
CBOT maize



CBOT rice

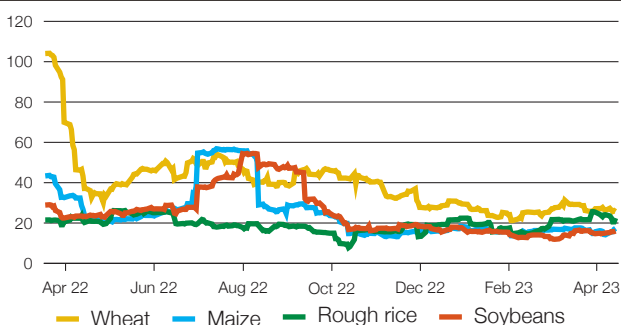


CBOT soybean

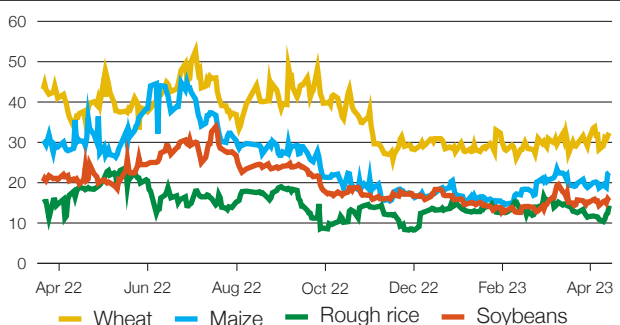


Historical and implied volatilities

Historical Volatility (30 days)



Implied Volatility (Daily)

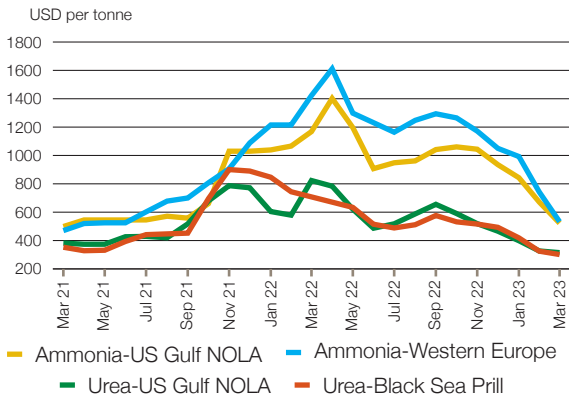


+i AMIS market indicators

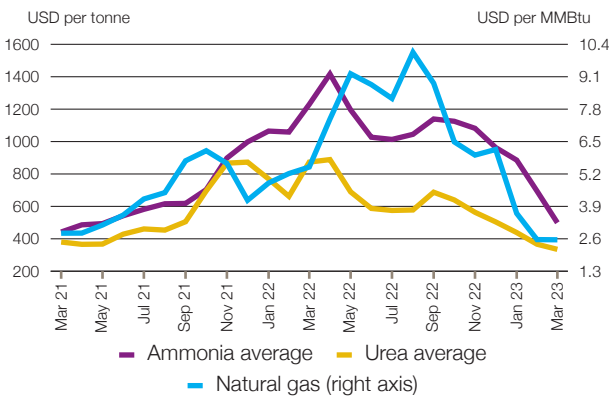
Several of the indicators covered in this report are updated regularly on the AMIS website. These, as well as other market indicators, can be found at: <https://www.amis-outlook.org/amis-monitoring/indicators/>. For more information about forward curves see the feature article in No. 75 February AMIS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

Fertilizer outlook

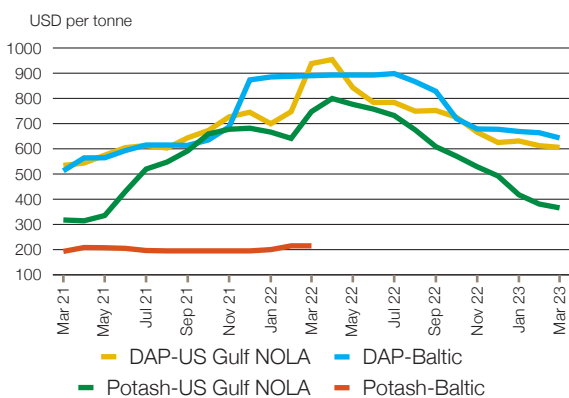
Ammonia and urea (spot prices)



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



Potash and phosphate (spot prices)



Price trends of main fertilizer products varied across regions in April. Strong demand in the northern hemisphere earlier in the month put an upward pressure on prices, particularly in the United States, while prices softened in other parts of the world. International markets remain generally well-supplied, helping keep prices well below year-ago levels.

- **Natural gas** prices decreased in April due to reduced demand following the end of the heating season in the Northern Hemisphere and ample supplies. Inventories are well-stocked.
- **Ammonia** prices dropped substantially again in April across major markets due generally to low demand in world markets and lower energy prices. It remains uncertain how much further prices will fall, leading buyers to delay purchases. The storage facilities of producers in the Middle East are gradually filling as movement of product remains slow.
- **Urea.** While average urea prices increased only slightly in April, gains were significant in the United States in view of strong spring demand and limited supply. The limited availability of barges for transport contributed to the tight market. While there are some indications that the uptick of prices in the United States will support increases elsewhere in the world, including Gulf countries and Brazil, the global market remains well-supplied. The extension of an export quota in April by the Russian Federation is unlikely to have a significant impact on world market prices.
- **DAP** prices increased in April in the United States while they generally decreased in other markets. Prices in the US were supported by strong though delayed spring demand, a tight barge market, and lower inventories. However, futures market prices suggest these increases might be short-lived.
- **Potash** prices were slightly up in the United States and down elsewhere as supply in world markets remained sufficient. Inventories in Brazil are particularly high, resulting in a downward pressure on prices. Lower potash contract prices in India likely pressured prices lower elsewhere.

	Apr-23 average	Apr-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

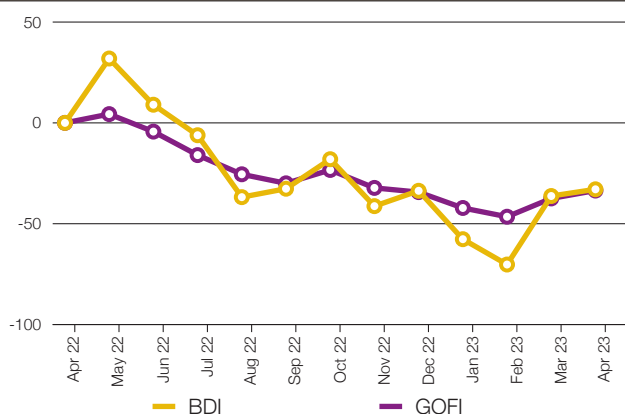
Dry bulk freight market developments

	Apr-23 average	Change	
		M/M	Y/Y
Baltic Dry Index (BDI)	1483.7	+5.2%	-32.9%
sub-indices:			
Capesize	1913.6	+14.1%	+14.5%
Panamax	1727.3	+6.1%	-41.6%
Supramax	1159.2	-7.7%	-55.5%
Baltic Handysize Index (BHSI)	648.8	-1.5%	-57.8%

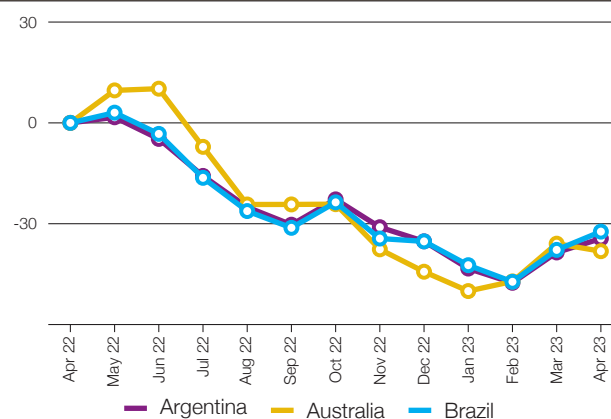
Source: Baltic Exchange, IGC. Base period for BDI: 4 January 1985 = 1000; for BHSI: 23 May 2006 = 1000; for GOFI: 1 January 2013 = 100

	Apr-23 average	Change	
		M/M	Y/Y
IGC Grains and Oilseeds Freight Index (GOFI)	150.9	+6.2%	-33.6%
sub-Indices:			
Argentina	190.7	+6.7%	-34.4%
Australia	98.4	-3.5%	-38.2%
Brazil	203.3	+8.7%	-32.4%
Black Sea	151.4	+4.6%	-33.3%
Canada	110.3	+5.8%	-36.2%
Europe	123.0	+5.0%	-38.1%
US	119.6	+4.0%	-33.1%

BDI and IGC GOFI



Selected IGC GOFI sub-indices



- Average timecharter rates in the dry bulk complex firmed during April, albeit with contrasting changes across underlying vessel segments. Led by gains in the Capesize sector, the **Baltic Dry Index (BDI)** averaged 5 percent higher month-on-month, but was quoted well below last year's levels.
- News of rising steel inventories in China contributed to initial weakness in **Capesize** rates, as did cyclone-linked disruption to operations at Australia's Hedland Port. Nonetheless, prices edged higher more recently on reports of firming demand for iron ore and coal shipments from Western Australia to China.
- **Panamax** rates were underpinned by robust mineral demand out of Australia and Indonesia. Grains market-related developments across the Pacific were mixed, as an upturn in shipments from the northern Pacific contrasted with a slowdown in deliveries out of Australia. In the Atlantic, sup-

port mainly stemmed from solid soyabean dispatches out of Brazil. However, this was partly offset by relatively lacklustre demand for vessels in Argentina, where this season's grains and oilseeds business has been significantly contained by anticipated drought-induced production losses

- Markets for **Supramax** and **Handysize** vessels exhibited a softer tone, albeit with mixed trends across the main areas. While limited enquiries at the US Gulf and growing tonnage in Asia were cited among notable bearish influences, support came from steady grains and oilseeds trade out of South America, coupled with sustained demand in Europe and the Mediterranean.
- The **IGC Grains and Oilseeds Freight Index (GOFI)** rose by 6 percent month-on-month on average, with lower voyage rates out of Australia countered by firmer values elsewhere

+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								Planting		C
	2nd crop		Planting	C	C				Harvest				
Argentina (5%)						Harvest					Planting	C	C
EU (4%)					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 (42%)		C	C								Planting		C
US (32%)						Planting	C	C	C		Harvest		
Argentina (7%)		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