Weather, policy and animal diseases are emerging as important market drivers, making the 2019/20 season one of the most volatile in recent years. The unfavourable weather gripping the US has jeopardised production prospects namely for maize and soybeans, adding to the uncertainty generated by ongoing trade frictions and related compensatory measures for US farmers (see editorial). In the meantime, the rapid spread of African Swine Fever in China, the world’s largest pork producer and consumer of feed stuffs, is expected to have major implications for international trade flows.
Message from the outgoing Chair

AMIS was established by the G20 in response to the global food price hikes in 2007/08 and 2010/11, bringing together G20 members, seven other major exporting and importing countries of agricultural commodities and ten international organizations. The initiative has matured over the intervening years, establishing a unique network of experts from governments and international organizations to analyse the key issues facing international grain trade and their effect on prices and flows. In its short history, AMIS has already played a key role in improving the timelines, completeness and comparability of data and helped calm markets in 2012 when a drought in the US and a heat wave in Southern Europe threatened global grain production. This year, AMIS has leveraged its unique network to work with governments and relevant agencies on the significant revisions to Chinese grain production, helping reach a shared understanding and incorporating the revisions into global balance sheets.

Fundamentals have changed drastically since the launch of AMIS in 2011, with commodity prices having reached multi-year lows and global stocks standing at comfortable levels. Despite the changed market environment, the world is far from being safe from future food price spikes as global markets face mounting uncertainties, including trade disputes between main market players, animal disease outbreaks such as African Swine Fever and their impact on feed demand and trade flows, and uncertainties due to extreme weather conditions as illustrated by the current situation facing American farmers this spring. These factors, combined with the long-term impacts of climate change and the increasing demand for food commodities in the world, might lead to new disruptions in global food markets, thus underscoring the relevance of AMIS today and into the future.

The value of AMIS was highlighted in the last declaration by G20 Agriculture Ministers which recognise AMIS as an initiative that should be continued and supported in the form of voluntary financial contributions. In fact, the G20 statement alludes to both the importance of AMIS and the significant challenge facing the initiative in regards to its financial sustainability.

As outgoing Chair of AMIS on behalf of Canada, I would like to emphasise the relevance of the initiative and the important work it is doing to tackle the seminal issues facing international grain trade today. Lastly, I would like to welcome the incoming Chair, Mr. Marcelo Fernandes Guimarães of Brazil, who I am confident will ensure the ongoing success of AMIS.

Marco Valicenti
Director General, Market and Industry Services Branch
Agriculture and Agri-Food Canada / Government of Canada

**Feature article**

**US planting uncertainties cloud outlook for maize and soybean markets**

An abnormally wet spring has delayed plantings across much of the United States, and planting progress for maize and soybeans is at historically low levels. If these delays continue, global feed grain supplies could be significantly reduced in the upcoming marketing year. The delays will likely result in a shift of maize area into soybean production, further depressing US soybean prices that are already at eleven-year lows due to the ongoing trade spat with China.

According to the annual March survey of planting intentions, 37.6 million hectares were to be used for maize and 34.2 million hectares for soybean production. As of 2 June, US farmers had planted less than 67 percent of intended maize area (compared to 96 percent on this date last year) and only 39 percent of intended soybean area (compared to almost 86 percent last year). The next few weeks will be crucial for maize plantings as expected yields will decline the further the plantings (and harvest) get pushed back into the calendar year. Soybeans are typically planted later than maize, but their yields could be affected as well if plantings are delayed by several weeks.

US farm programmes are likely to have an impact on planting decisions as well. If insured under the federal crop insurance programme, producers may opt to receive a ‘prevented planting’ payment. Decisions whether to take a payment in lieu of planting a crop will need to be made in most of the major maize and soybean producing regions by the end of June. Analyses by extension agents and market advisors suggest that at current prices, the ‘prevented planting’ payments may be attractive for many producers.

The 2019 Market Facilitation Program is an additional source of uncertainty regarding the outlook for maize and soybean markets. It provides USD 14.5 billion in direct payments to compensate eligible producers for losses sustained as a result of higher tariffs imposed by countries to counter US trade actions on steel and aluminum and other products. While details on the Market Facilitation Program are yet to be finalised, preliminary indications suggest that producers may have to plant to receive a payment. Tying the payment to plantings would encourage producers to plant a crop rather than take a ‘prevented planting’ insurance payment, which would likely result in more soybeans being planted than previously anticipated.

USDA will publish its Acreage report at the end of June, based on surveys taken over the first two weeks of June, i.e. at a time when many farmers will yet have to complete plantings. Market uncertainty might thus prevail until the fall when a more accurate measure of actual plantings is determined.
World supply-demand outlook

- **Wheat** production forecast for 2019 raised on better prospects in the EU and Canada more than offsetting downward adjustments in Australia and Turkey.
- Utilization in 2019/20 trimmed slightly on lower feed use of wheat in the EU but still up 1.2 percent from 2018/19.
- Trade in 2019/20 (July/June) pointing to a modest recovery, a rise of 3.3 percent from 2018/19, underpinned by significant increases in exports from Australia and the EU.
- Stocks (ending in 2020) projected to increase to a near-record level, largely on higher inventories in China and the EU.

- **Maize** production forecast for 2019 cut by 38 million tonnes m/m largely on expectation of a sharp fall in plantings and hence production in the US, now projected at 330 million tonnes, down 45 million tonnes m/m and 36 million tonnes y/y.
- Utilization in 2019/20 also lowered mostly on expectation of reduced feed and industrial use in the US.
- Trade forecast for 2019/20 (July/June) raised slightly but still falling short of the two previous seasons’ levels, with export prospects from the US trimmed in part due to tighter domestic supplies.
- Stocks (ending in 2020) cut significantly with most of the decrease in the US where stocks could drop to a seven year low of 28 million tonnes.

- **Rice** production in 2019 barely changed m/m and still envisaged to remain close to the 2018 all-time record.
- Utilization in 2019/20 trimmed, but still seen at a fresh peak, with per capita food intake expanding by nearly 1.0 percent.
- Trade in 2019 broadly steady m/m and pointing to a 3.5 percent demand-driven contraction from 2018. Trade is tentatively projected to rebound in 2020.
- Stocks (2019/20 carry-out) raised marginally on higher anticipated inventories in the US and Viet Nam, but still predicted to fall 0.9 percent below their record opening levels.

- **Soybean** 2019/20 production could decline slightly from the 2018/19 all-time record, assuming a return to average yields and virtually unchanged plantings. Higher outputs in Brazil, Paraguay and China could be more than offset by a smaller crop in the US.
- Utilization in 2019/20 to continue expanding, but at a below-average rate given the expectation of subdued growth in China, largely linked to the African Swine Fever epidemic.
- Trade in 2019/20 projected to expand by a lower than average pace, mostly reflecting a timid recovery in China’s purchases.
- Global inventories (2019/20 carry-out) forecast to drop slightly from their record opening level, with US stocks remaining at their historic peak and replenishments in Brazil offsetting drawdowns in several countries.
**Summary of revisions to FAO-AMIS monthly forecasts for 2019/20**

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*For soybeans, month-on-month revisions will be provided starting from the July issue as the present issue shows the first forecasts for the 2019/20 season.*
**Crop market**

**Crop conditions in AMIS countries (as of 28 May)**

**Synthesis Conditions**

Crop condition map synthesizing information for all four AMIS crops as of 28 May. 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 along with 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 with some spot areas of dryness. Spring wheat is favourable in the Russian Federation and China, while in Canada conditions are cold and dry. In the southern hemisphere, sowing of wheat is ongoing under mixed conditions in Australia and South Africa.

**Maize** - In the southern hemisphere, harvest is on hold in Argentina in favour of soybean harvest. In the northern hemisphere, North America is suffering from cool-wet conditions delaying sowing and emergence, while in Europe and China conditions are mostly favourable.

**Rice** – In China, conditions are generally favourable. In India, Rabi rice harvest is nearing completion. In southern regions of Southeast Asia, harvest is wrapping up under generally favourable conditions for dry-season rice. In Indonesia, wet-season rice harvesting and dry-season rice sowing continues.

**Soybeans** - In the southern hemisphere, harvest is ongoing in Argentina under favourable to exceptional conditions across most of the country. In the northern hemisphere, the US and Canada are suffering delays in sowing from mostly cold-wet conditions.

**El Niño advisory**

Weak El Niño conditions are present and are forecast to continue through the Northern Hemisphere summer and fall (~70 percent chance for June to August and after that, a 55-60 percent chance). Associated with this event are increased chances of below normal June to August rainfall in the Maritime Continent, eastern Australia, Central America, the Caribbean, and northern South America. The Indian Ocean Dipole is forecast to be positive during June to August. Such conditions tend to enhance (suppress) rainfall in parts of East Africa (southern and central Australia).
Wheat

In the **EU**, winter wheat conditions have improved in the southeast region owing to recent rainfall, however dry conditions remain in the southwest and parts of central Europe. In **Ukraine**, conditions are favourable. In the **Russian Federation**, winter wheat conditions are generally favourable albeit with dry conditions in Volga. Sowing of spring wheat is ongoing under favourable conditions despite an initial delay due to dry conditions. In **Kazakhstan**, sowing of spring wheat is progressing under generally favourable conditions. In **China**, winter wheat is under generally favourable conditions with the exception of some dry conditions in Loess region. Spring wheat sowing is ongoing under favourable conditions. In **India**, harvesting is wrapping up under favourable conditions. In the **US**, winter wheat conditions are favourable. Spring wheat conditions are favourable while sowing is somewhat delayed in the Dakotas due to cool and wet conditions. In **Canada**, conditions are mixed for both winter and spring wheat due to cool and dry conditions in the prairies along with cool and wet conditions in the eastern provinces. In **Australia**, conditions are generally favourable for southern growing regions, while low soil moisture and a lack of May rainfall is affecting winter wheat prospects in northern NSW, southern Queensland and Western Australia. In **Argentina**, sowing of wheat has begun under generally favourable conditions with for some wetness in the north.

Maize

In **Brazil**, conditions are exceptional for the summer-planted crop (higher producing season) with harvest beginning early in the south and some in central states. In **Argentina**, harvest has been delayed with a shift in focus towards the harvest of soybeans. Conditions remain favourable to exceptional for both spring-planted crop and summer-planted crops with a record harvest expected. In **Mexico**, harvest of the autumn-winter cycle crop is continuing under favourable conditions and sowing of the spring-summer crop is also progressing under favourable conditions. In **South Africa**, wet conditions in April, coupled with warm conditions in May with no frosts, enabled favourable conditions as harvest wraps up. In **China**, conditions are generally favourable albeit some dryness in the southwest. In the **US**, conditions are mixed as sowing and emergence has been markedly delayed across much of the northern Corn Belt due to cool and wet conditions. Climatic conditions over the next month will determine the final sown area. In **Canada**, conditions are mixed as sowing and emergence have been delayed across the country due to excessive moisture in the main producing eastern provinces and cold-dry conditions in Manitoba. In the **EU**, conditions are generally favourable, with recent rainfall improving soil moisture conditions. In the **Russian Federation**, conditions are favourable with the crop in early crop development.

**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 accounts for multiple cropping seasons (i.e. spring and winter wheat).

The late vegetative through to reproductive crop growth stages are generally the most sensitive periods for crop development.
Rice

In China, early-rice and single-cropping rice are under generally favourable conditions with the exception of some dry conditions in the southwest. In India, Rabi rice harvest is nearing completion under favourable conditions with production expected to be higher than last year. In Indonesia, harvest of wet-season rice continues with yields expected to be close to average. Sowing of dry-season rice enters the second month under favourable conditions. In Viet Nam, conditions are favourable for winter-spring rice (dry-season rice) across the country as harvest progresses in the south. Sowing of wet-season rice has begun under favourable conditions earlier than last year. In Thailand, dry-season rice harvest is almost complete under generally favourable conditions with a decrease in production expected due to a decrease in total sown area. Wet-Season rice sowing has begun with some continued concerns about dryness in the northeastern region. In the Philippines, harvest of dry-season rice is wrapping up under generally favourable conditions with a slight reduction in harvested area and yields compared to last year. Preparations are underway for wet-season sowing. In the US, conditions are favourable.

Soybeans

In Argentina, harvest of spring-planted and summer-planted crops is advancing at a fast pace with favourable to exceptional yields in the main producing region. However, flooding and excess soil moisture in the northeast region is increasing crop losses and reducing yields. In China, sowing has begun in the northeast of the country under favourable conditions. In the US, conditions are mixed as sowing has been delayed across much of the northern half of the country due to wet conditions. Plenty of time still remains for sowing to be completed before yields begin to be affected. In Canada, conditions are mixed as sowing has been delayed across the country due to excessive moisture in the main producing eastern provinces and cold-dry conditions in the prairies. In Ukraine, conditions are favourable with good soil moisture in the northern and western regions.

Information on crop conditions in non-AMIS countries can be found in the GEOGLAM Early Warning Crop Monitor, published 6 June 2019.
Policy developments

Wheat

- On 14 May, the Ministry of Agriculture in Australia approved permits for single imports of bulk wheat from Canada (subject to biosecurity risk conditions) due to a tight domestic situation caused by last year’s drought-reduced crop.

- On 8 May, the Ministry of Agriculture in the Russian Federation announced extension of zero duty on wheat exports for another year beginning on 1 July 2019.

- On 22 May, the Ministry of Agriculture in Ukraine announced the implementation of new quality standards on feed wheat and three milling classes for soft wheat as of 10 June 2019.

Rice

- On 11 May, Mexico resumed the importation of Brazilian milled rice, which was previously banned due to the presence of fungus (phona sorghina).

Soybeans

- On 20 May, the Ministry of Treasury in Argentina exempted imports of soybeans that are crushed for re-export in the form of meal/oil from a generic import tax, which was raised at the beginning of the month to address fiscal problems. The exemption was granted to support the local crushing industry and facilitate the country’s exports of soymeal/oil.

Biofuels

- On 23 May, the Ministry of Mines and Energy in Brazil announced an increase in biofuel blend from 10 to 11 percent in the second half of 2019.

- On 14 May, the EU repealed the anti-dumping duty of EUR 62.3 (USD 69.7) per tonne on US ethanol (implementing regulation 2019/765). This anti-dumping duty had been in place since early 2013.

- On 21 May, the European Commission published the Delegated Act on the determination of high indirect land-use change-risk feedstock and the certification of low indirect land-use change-risk biofuels. The proposed text is under a two-month scrutiny period by the European Parliament and the European Council.

- On 14 May, to absorb crude palm oil surplus and reduce particulate-matter air content, the Ministry of Energy in Thailand has set biodiesel B10 (10 percent methyl ester from crude palm oil blended with diesel) as a standard in addition to the current biodiesel B7.

- On 9 May, the US Environmental Protection Agency proposed to increase the volume of biofuels blend to 20.04 billion gallons in 2020, from 19.92 billion gallons in 2019. The proposed mandate includes 15 billion gallons of conventional biofuels like ethanol. It also includes 5.04 billion gallons of advanced biofuels, like those made from agricultural waste, up from 4.92 billion in 2019.

- On 31 May, the US Environmental Protection Agency adopted regulatory changes to allow sale of higher ethanol blends of gasoline of up to 15 percent maize-based ethanol.

Across the board

- On 8 May, the Ministry of Agriculture in Brazil released the budget for the Rural Insurance Premium Programme 2019, allocating BRL 1.25 billion (USD 30.9 million) to winter crops such as safflower and wheat, and BRL 160 million (USD 39.6 million) to soybean, maize, rice, beans and coffee crops.

- On 20 May, the Ministry of Agriculture in China released a warning against the spread of Fall Armyworm that may reduce output and lower the quality of grains in northern areas.

- On 10 May, the US raised the level of tariffs from 10 percent (imposed in 2018) to 25 percent on approximately USD 200 billion worth of imports from China covering 6,000 items, including almost 1,000 food products. On 13 May, the Customs Tariff Commission of the State Council in China increased tariffs on USD 60 billion worth of US goods, from 10 to 25 percent on List 1 products, 10 to 20 percent on List 2 products and 5 to 10 percent on List 3 products that included wheat, maize and soy products.

- On 23 May, the US Department of Agriculture announced a USD 16 billion aid package for farmers affected by tariff retaliation. The package includes ‘Market Facilitation Programme’ that aims to provide USD 14.5 billion in direct payments to producers (including grain producers); a USD 1.4 billion ‘Food Purchase and Distribution Programme’ to purchase surplus commodities affected for distribution to food banks, schools, and outlets serving low-income individuals; and USD 100 million issued to ‘Agricultural Trade Promotion Programme’ to assist in developing new export markets on behalf of producers.

Stop Press

- On 30 April, the EU and the European Investment Bank granted a loan program of EUR 1 billion (USD 1.1 billion) to young farmers as part of a ‘Young farmers’ initiative’ to assist settlement in the sector.

AMIS Policy database
Visit the AMIS Policy database at: https://app.amis-outlook.org/#/policy-database

The AMIS Policy database gathers information on trade measures and domestic measures related to the four AMIS crops (wheat, maize, rice, and soybeans) as well as biofuels. The design of this database allows comparisons across countries, across commodities and across policies for selected periods of time.

Only AMIS participants are marked in bold.
International prices

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

<table>
<thead>
<tr>
<th></th>
<th>May 2019 Average*</th>
<th>M/M</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOI</td>
<td>182</td>
<td>- 0.7%</td>
<td>- 14.4%</td>
</tr>
<tr>
<td>Wheat</td>
<td>177</td>
<td>- 2.1%</td>
<td>- 9.5%</td>
</tr>
<tr>
<td>Maize</td>
<td>178</td>
<td>+ 3.0%</td>
<td>- 12.6%</td>
</tr>
<tr>
<td>Rice</td>
<td>161</td>
<td>- 0.4%</td>
<td>- 9.9%</td>
</tr>
<tr>
<td>Soybeans</td>
<td>166</td>
<td>- 1.1%</td>
<td>- 19.5%</td>
</tr>
</tbody>
</table>

*Jan 2000=100, derived from daily export quotations

Wheat

On average, world wheat export prices were lower during May, but the market tone turned more positive as the month progressed. Weaker prices at the beginning of May largely reflected expectations for world supplies to remain ample, with added pressure at times from global trade tensions. However, later in the month, more attention was given to the possible impact on 2019/20 crops of unseasonably wet weather in the US, as well as dryness in Canada and Australia. Prices in the EU and Black Sea region sometimes responded to movements in the US, but gains were limited by a mostly good outlook for forthcoming harvests.

Maize

After sharp declines in the previous two months, the IGC maize sub-Index strengthened in May, averaging 3 percent higher. Gains were almost entirely linked to a rebound in the US, where prices rallied to a one-year high late in the month, as worries about severe planting delays became more entrenched. While quotations also began to firm in South America in recent weeks, the upside in Brazil and Argentina was capped by a seasonal increase in supplies and large exportable surpluses. Black Sea markets were also mixed, but with values in Ukraine lightly underpinned by broadly favourable demand prospects.

Rice

Global white rice and parboiled export quotes were marginally weaker in May on generally subdued export demand. Values in Thailand were further pressured by some off-season crop arrivals, although dry conditions continued to provide some offsetting support amid ideas that main crop output may be reduced. US quotes fell on weak buying interest, although a sale to Iraq and delays to 2019/20 planting provided later support. Indian offers were broadly steady, while values in Viet Nam were higher on a slight uptick in demand, including a sale to Iraq.

Soybeans

Average world soybean prices were weaker during May, the IGC GOI sub-Index falling by 2 percent. However, price movements were two-sided. Owing to prospects for heavy global supplies, US values initially fell steeply as hopes for a near-term resolution to the US-China trade dispute faded. In addition lingering speculation that delays to maize fieldwork across the Midwest could result in a switch to soybean acres added to pressure. More recently, the market staged a partial recovery on heightened worries about US plantings and yield potential owing to continuing adverse conditions. Despite seasonally rising new crop supplies, gains in South America were especially pronounced, mainly on news of large purchases by Chinese processors.
Selected export prices, currencies and indices

AMIS Countries’ Currencies Against US Dollar

<table>
<thead>
<tr>
<th>AMIS Countries</th>
<th>Currency</th>
<th>May 2019 Average</th>
<th>Monthly Change</th>
<th>Annual Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>ARS</td>
<td>44.8</td>
<td>-4.1%</td>
<td>-90.2%</td>
</tr>
<tr>
<td>Australia</td>
<td>AUD</td>
<td>1.4</td>
<td>-2.4%</td>
<td>-8.4%</td>
</tr>
<tr>
<td>Brazil</td>
<td>BRL</td>
<td>4.0</td>
<td>-2.6%</td>
<td>-10.1%</td>
</tr>
<tr>
<td>Canada</td>
<td>CAD</td>
<td>1.3</td>
<td>-0.6%</td>
<td>-4.6%</td>
</tr>
<tr>
<td>China</td>
<td>CNY</td>
<td>6.9</td>
<td>-2.1%</td>
<td>-7.6%</td>
</tr>
<tr>
<td>Egypt</td>
<td>EGP</td>
<td>17.0</td>
<td>1.3%</td>
<td>4.4%</td>
</tr>
<tr>
<td>EU</td>
<td>EUR</td>
<td>0.9</td>
<td>-0.4%</td>
<td>-5.6%</td>
</tr>
<tr>
<td>India</td>
<td>INR</td>
<td>69.8</td>
<td>-0.5%</td>
<td>-3.3%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>IDR</td>
<td>14,370.9</td>
<td>-1.7%</td>
<td>-2.4%</td>
</tr>
<tr>
<td>Japan</td>
<td>JPY</td>
<td>110.0</td>
<td>1.5%</td>
<td>-0.3%</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>KZT</td>
<td>379.9</td>
<td>-0.2%</td>
<td>-15.6%</td>
</tr>
<tr>
<td>Rep. Korea</td>
<td>KRW</td>
<td>1,182.5</td>
<td>-3.6%</td>
<td>-9.9%</td>
</tr>
<tr>
<td>Mexico</td>
<td>MXN</td>
<td>19.1</td>
<td>-0.9%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>NGN</td>
<td>305.9</td>
<td>0.0%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Philippines</td>
<td>PHP</td>
<td>52.2</td>
<td>-0.5%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Russian Fed.</td>
<td>RUB</td>
<td>64.9</td>
<td>-0.6%</td>
<td>-4.1%</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>SAR</td>
<td>3.7</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>South Africa</td>
<td>ZAR</td>
<td>14.4</td>
<td>-2.0%</td>
<td>-15.1%</td>
</tr>
<tr>
<td>Thailand</td>
<td>THB</td>
<td>31.8</td>
<td>0.1%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Turkey</td>
<td>TRY</td>
<td>6.0</td>
<td>-4.8%</td>
<td>-36.5%</td>
</tr>
<tr>
<td>UK</td>
<td>GBP</td>
<td>0.8</td>
<td>-1.5%</td>
<td>-4.9%</td>
</tr>
<tr>
<td>Ukraine</td>
<td>UAH</td>
<td>26.4</td>
<td>1.3%</td>
<td>-0.8%</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>VND</td>
<td>23,351.3</td>
<td>-0.6%</td>
<td>-2.5%</td>
</tr>
</tbody>
</table>
Futures markets

**Futures Prices – nearby**

<table>
<thead>
<tr>
<th></th>
<th>May-19 Average</th>
<th>% Change M/M</th>
<th>% Change Y/Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>166</td>
<td>1.6%</td>
<td>-11.4%</td>
</tr>
<tr>
<td>Maize</td>
<td>150</td>
<td>6.2%</td>
<td>-4.6%</td>
</tr>
<tr>
<td>Rice</td>
<td>243</td>
<td>5.6%</td>
<td>-10.2%</td>
</tr>
<tr>
<td>Soybeans</td>
<td>305</td>
<td>-5.8%</td>
<td>-18.6%</td>
</tr>
</tbody>
</table>

Source: CME

**Historical Volatility – 30 Days, nearby**

<table>
<thead>
<tr>
<th></th>
<th>Monthly Averages</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>May-19</td>
<td>Apr-19</td>
<td>May-18</td>
</tr>
<tr>
<td>Wheat</td>
<td>24.3</td>
<td>26.1</td>
<td>31.4</td>
</tr>
<tr>
<td>Maize</td>
<td>21.8</td>
<td>19.8</td>
<td>16.3</td>
</tr>
<tr>
<td>Rice</td>
<td>15.0</td>
<td>16.9</td>
<td>16.9</td>
</tr>
<tr>
<td>Soybeans</td>
<td>15.7</td>
<td>12.2</td>
<td>17.4</td>
</tr>
</tbody>
</table>

**Futures Prices**

Prices for wheat, maize, soybeans and rice exhibited dynamic moves m/m, extending their fall that began in April before rebounding sharply during the second half of May. Persistent wet weather rose to prominence in maize and soybean price determination, overriding the impasse on trade issues between the US and China and the slowdown in oilseed demand caused by the spread in east Asia of African Swine Fever. USDA reported end month planting progress to be the slowest on record for maize and soybeans, triggering spike bottoms for both commodities with maize reversing a ten-month low to a three year high at end month, while soybeans, still weighed by excessive US inventories, recovered somewhat from an eleven-year low. Wheat prices rose in tandem with maize and soybean values even as the northern spring wheat planting progress was near the five-year average pace and crop conditions were mostly good to excellent for winter wheat grown in the southern plains, although scattered sightings of disease due to excessive moisture were reported there.

Complicating the delayed planting situation was the availability of numerous options for producers which could heavily influence their acreage allotment. These included remunerative insurance schemes (USDA provided - Prevent Plant) for producers unable to plant by a particular date, a second round of Market Facilitation Payments (a compensatory scheme for the lost soybean exports to China) that could be dependent on producer planted acres in 2019 and disaster relief for producers impacted by flooding. Meanwhile, some agricultural economists predicted that five to ten million acres intended for maize as projected by the USDA March Planting Intentions Report could fall into the category of prevented planting. This lent further uncertainty to the final level of soybean planted acres, which enjoy a longer planting window, causing the standard price ratio between soybeans and maize of 2.5:1 to move closer to 2:1, during some trading sessions.

On average, prices moved in divergent directions m/m with wheat increasing 1.6 percent, maize and rice rising over 5 percent and soybeans falling 5.8 percent.

For more information on technical terms please see the Glossary at the following link:

**Exogenous markets**, including a slightly higher USD index and falling West Texas Intermediate crude oil prices exerted negligible influence over agricultural price action. Despite a directional reversal, wheat, maize, soybeans and rice remained lower in price y/y, by 11.4, 4.6, 10.2 and 18.6 percent, respectively.

**Volumes and volatility**

Trade volumes rose to multi-year highs for maize, while declining m/m for wheat and soybeans. Wheat volumes were also lower y/y while soybeans were slightly higher. Implied volatility was higher for all three commodities both m/m and y/y while historical volatility, registered small mixed m/m and y/y changes.

**Basis levels and transport**

Domestic basis levels declined m/m for maize and soybeans, countering typical seasonal direction as futures prices moved sharply higher. In Illinois, where crop planting remained historically behind, bids to local elevators were quoted minus USD 9 per tonne for maize and minus USD 18 per tonne for soybeans, each under the respective July futures prices. In Iowa, where maize planting was 76 percent completed, maize bids fell m/m from minus USD 8 to minus USD 14 while soybean bids were slightly weaker at minus USD 30 for soybeans (under the respective July futures). In soft red wheat, bids for delivery to northern flour mills showed little change m/m at slightly below July futures. Delivered Gulf bids were higher m/m, as parts of the mid-Mississippi remained flooded – delaying barge shipments.

Maize and soybeans gulf were quoted as high as at USD 27 and USD 28, respectively, while wheat quotes ranged from USD 27 and USD 40, reflecting in part thin trading (per tonne premium over respective July futures). Water levels along the Mississippi River reached flood stages five times since March of this year, constituting the longest flood period in 90 years. Barge freight for the Lower Illinois River, which remained mostly navigable during the month, was slightly firmer at USD 21. Total y/t/d barge traffic for wheat, maize and soybean barge traffic declined to 74 percent of totals for 2018. The USDA reported total exports for all three commodities
92 percent, with maize and wheat ahead of last year and soybeans trailing behind.

Forward curves
Forward curves persisted in contango (upward sloping) m/m to varying degrees for the period between July 2019 and July 2020. The maize market, which suffered the greatest threat of supply reductions due to adverse growing conditions, saw the one year spread between December 2019 and December 2020 move a decisive USD 19 per tonne. Its configuration transformed from USD 13 contango (upward sloping) to a USD 6 inverse (downward sloping), reflecting the massive projected change from surplus to relative tightness. In soybeans the one year spread from November 2019 to November 2020 also tightened from USD 22 to USD 13 (both in contango) reflecting the uncertainty over that crop’s production potential. The one year forward curve for wheat seemed to tighten in sympathy with maize and soybeans narrowing from USD 20 to USD 14 (both in contango), despite the surplus outlook for US wheat.

Investment flows
Managed money reversed most of its aggressive bearish strategies from last month, trimming its large net short positions in wheat by almost three-fourths and exiting nearly all of its record net short position in maize as prices began to spike upwards due to planting delays. Caught in what analysts deemed a classic “short squeeze” (a situation in which a short futures seller is without deliverable inventories), managed money’s large buy orders to cancel out short positions culminated in a 28 percent maize market rally in a two-week period. Commercial hedgers were considerable sellers into the rally during the last two weeks of May, making sales of over net 271,000 contracts, the equivalent of 34.4 million tonnes. Conversely, managed money added to its net short soybean position m/m.
**Market indicators**

*Daily quotations from leading exchanges - nearby futures*

### Wheat

<table>
<thead>
<tr>
<th>USD per tonne</th>
</tr>
</thead>
<tbody>
<tr>
<td>330</td>
</tr>
<tr>
<td>300</td>
</tr>
<tr>
<td>260</td>
</tr>
<tr>
<td>230</td>
</tr>
<tr>
<td>180</td>
</tr>
</tbody>
</table>

- **EU (France-NYSE Euronext) Milling Wheat**
- **USA (KCBT) Hard Red Wheat**
- **SAF (Safex) Wheat**

### Maize

<table>
<thead>
<tr>
<th>USD per tonne</th>
</tr>
</thead>
<tbody>
<tr>
<td>300</td>
</tr>
<tr>
<td>250</td>
</tr>
<tr>
<td>200</td>
</tr>
<tr>
<td>150</td>
</tr>
<tr>
<td>100</td>
</tr>
</tbody>
</table>

- **EU (NYSE Liffe) Maize**
- **China (DCE) Maize**
- **USA (CBOT) Maize**

### Rice

<table>
<thead>
<tr>
<th>USD per tonne</th>
</tr>
</thead>
<tbody>
<tr>
<td>430</td>
</tr>
<tr>
<td>400</td>
</tr>
<tr>
<td>380</td>
</tr>
<tr>
<td>360</td>
</tr>
<tr>
<td>330</td>
</tr>
</tbody>
</table>

- **USA (CBOT) Rough Rice**
- **China (ZCE) Milled Rice**

### Soybeans

<table>
<thead>
<tr>
<th>USD per tonne</th>
</tr>
</thead>
<tbody>
<tr>
<td>650</td>
</tr>
<tr>
<td>550</td>
</tr>
<tr>
<td>450</td>
</tr>
<tr>
<td>350</td>
</tr>
<tr>
<td>250</td>
</tr>
</tbody>
</table>

- **China (DCE)**
- **USA (CBOT)**
- **Argentina (MATba)**

### 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.*
Forward Curves

**Wheat**

USD per tonne

- May 19
- Jun 19
- Jul 19
- Aug 19
- Sep 19
- Oct 19
- Nov 19
- Dec 19
- Jan 20
- Feb 20
- Mar 20
- Apr 20
- May 20

- 31-May-19
- 30-Apr-19
- 29-Mar-19

**Maize**

USD per tonne

- May 19
- Jun 19
- Jul 19
- Aug 19
- Sep 19
- Oct 19
- Nov 19
- Dec 19
- Jan 20
- Feb 20
- Mar 20
- Apr 20
- May 20

- 31-May-19
- 30-Apr-19
- 29-Mar-19

**Rice**

USD per tonne

- May 19
- Jun 19
- Jul 19
- Aug 19
- Sep 19
- Oct 19
- Nov 19
- Dec 19
- Jan 20
- Feb 20
- Mar 20
- Apr 20
- May 20

- 31-May-19
- 30-Apr-19
- 29-Mar-19

**Soybeans**

USD per tonne

- May 19
- Jun 19
- Jul 19
- Aug 19
- Sep 19
- Oct 19
- Nov 19
- Dec 19
- Jan 20
- Feb 20
- Mar 20
- Apr 20
- May 20

- 31-May-19
- 30-Apr-19
- 29-Mar-19

Historical and Implied Volatilities

**Historical Volatility (30 days)**

- Soybeans
- Maize
- Wheat
- Rough Rice

**Implied Volatility (Daily)**

- Soybeans
- Maize
- Wheat
- Rough Rice

AMIS Market indicators

Some 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:

http://www.amis-outlook.org/amis-monitoring/indicators/
Despite a jump in ethanol prices, a surge in maize prices late in May plus tumbling DDGs prices pushed ethanol production margins to the lowest representative level on record.

Concerns about slow US planting as a result of above normal rainfall and its impact on total acreage has resulted in a surge in maize prices.

Ethanol production rose again in May to an annualized production pace above 16 billion gallons.

Ethanol futures prices rose more than gasoline prices, lifting ethanol above its energy equivalence pricing.

**Monthly US ethanol update**

<table>
<thead>
<tr>
<th>Spot prices</th>
<th>May 2019</th>
<th>April 2019</th>
<th>May 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maize price (USD per tonne)</td>
<td>143.70</td>
<td>136.64</td>
<td>148.39</td>
</tr>
<tr>
<td>DDGs (USD per tonne)</td>
<td>124.36</td>
<td>142.88</td>
<td>172.36</td>
</tr>
<tr>
<td>Ethanol price (USD per gallon)</td>
<td>1.30</td>
<td>1.28</td>
<td>1.39</td>
</tr>
</tbody>
</table>

**Nearby futures prices**

CME, NYSE

- Ethanol (USD per gallon): 1.38, 1.32, 1.48
- RBOB Gasoline (USD per gallon): 1.96, 1.04, 2.19
- Ethanol/RBOB price ratio: 70.2%, 64.0%, 67.4%

**Ethanol margins**

IA, NE and IL/eastern corn belt average (USD per gallon)

- Ethanol receipts: 1.30, 1.28, 1.39
- DDGs receipts: 0.38, 0.44, 0.53
- Maize costs: 1.33, 1.26, 1.37
- Other costs: 0.55, 0.55, 0.55
- Production margin: -0.20, -0.09, 0.01

**Ethanol production**

(million gallons)

- Monthly production total: 1,385, 1,301, 1,353
- Annualized production pace: 16,311, 15,832, 15,931

Based on USDA data and private sources

* Estimated using available weekly data to date.

**Ethanol Production Pace, Capacity and Annual Mandate**

- Billion gallons

**Ethanol and RBOB Gasoline**

(nearby futures prices, CME, NYSE)

- USD per gallon

**Ethanol Production Margin**

(IA, NE, IL/eastern corn belt average)

- USD per gallon

**Ethanol Price vs. Maize**

(Spot prices)

- USD per tonne

- USD per gallon

<i>Chart and tables description</i>

**Ethanol Production Margin**: The ethanol margin gives an indication of the profitability of maize-based ethanol production in the United States. It uses current market prices for maize, Dried Distillers Grains (DDGs) and ethanol, with an additional USD 0.55 per gallon of production costs.

**Ethanol Production Pace, Capacity and Mandate**: Overview of the volume of maize-based ethanol production in the United States; it also highlights overall production capacity and the production volume that is mandated by public legislation. Name-plate (i.e. nominal) ethanol production capacity in the US is roughly 14.9 billion gallons per annum, but plants can exceed this level, so the actual capacity is assumed to be 15.2 billion gallons.

**DDGs**: By-product of maize-based biofuel production, commonly used as feedstuff.

**RBOB**: Reformulated Blendstock for Oxygenate Blending, gasoline nearby futures (NYSE).
Fertilizer outlook

Ammonia and Urea: Overview of nitrogen-based fertilizer prices in the US Gulf, Western Europe and Black Sea. Prices are weekly prices averaged by month.

Potash and Phosphate: Overview of phosphate and potassium-based fertilizer prices in the US Gulf, Baltic and Vancouver. Prices are weekly prices averaged by month.

Ammonia Average and Urea Average: 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 prices continued to fall due to rising inventories and mild weather conditions in the Northern Hemisphere.

Despite tight inventories, ammonia prices continued to decrease due to lower natural gas prices, reaching their lowest level since 2017.

Urea prices started to slowly recover, at least in some regions, as demand from Australia and India strengthened.

Despite efforts to cut back supply, DAP prices continued to decline due to a slowdown in global demand.

Potash prices continued their slow decline, especially in the US Gulf, due to additional delays at the start of the spring application season that hindered demand.

<table>
<thead>
<tr>
<th>Fertilizer</th>
<th>May average May std. dev</th>
<th>% change last month*</th>
<th>% change last year*</th>
<th>12-month high 12-month low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonia-US Gulf NOLA</td>
<td>200.0</td>
<td>-</td>
<td>-1.2%</td>
<td>-13.8%</td>
</tr>
<tr>
<td>Ammonia-Western Europe</td>
<td>281.3</td>
<td>8.5</td>
<td>-5.9%</td>
<td>-2.7%</td>
</tr>
<tr>
<td>Urea-US Gulf</td>
<td>265.0</td>
<td>9.1</td>
<td>-2.9%</td>
<td>18.3%</td>
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<tr>
<td>Urea-Black Sea</td>
<td>250.0</td>
<td>-</td>
<td>0.0%</td>
<td>11.9%</td>
</tr>
<tr>
<td>DAP-US Gulf</td>
<td>317.3</td>
<td>2.2</td>
<td>-2.9%</td>
<td>-18.0%</td>
</tr>
<tr>
<td>DAP-Baltic</td>
<td>420.0</td>
<td>-</td>
<td>-0.3%</td>
<td>5.0%</td>
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<tr>
<td>Potash-Baltic</td>
<td>252.0</td>
<td>-</td>
<td>0.0%</td>
<td>22.3%</td>
</tr>
<tr>
<td>Potash- US Gulf NOLA</td>
<td>271.5</td>
<td>1.0</td>
<td>-1.2%</td>
<td>12.0%</td>
</tr>
<tr>
<td>Ammonia</td>
<td>229.1</td>
<td>5.3</td>
<td>-7.9%</td>
<td>-10.6%</td>
</tr>
<tr>
<td>Urea</td>
<td>266.9</td>
<td>1.8</td>
<td>0.9%</td>
<td>14.0%</td>
</tr>
<tr>
<td>Natural Gas*</td>
<td>2.6</td>
<td>0.1</td>
<td>-0.5%</td>
<td>-5.5%</td>
</tr>
</tbody>
</table>

* All prices shown are in US dollars.
Source: Own elaboration based on Bloomberg

* Chart and tables description

Ammonia and Urea: Overview of nitrogen-based fertilizer prices in the US Gulf, Western Europe and Black Sea. Prices are weekly prices averaged by month.

Potash and Phosphate: Overview of phosphate and potassium-based fertilizer prices in the US Gulf, Baltic and Vancouver. Prices are weekly prices averaged by month.

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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 Phosphate.
Monthly ocean freight market update

Dry bulk freight market developments

<table>
<thead>
<tr>
<th>Baltic Dry Index (BDI) *</th>
<th>May 2019 Average</th>
<th>% Change M/M</th>
<th>% Change Y/Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>sub-indices:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capesize</td>
<td>1425</td>
<td>+ 200.6%</td>
<td>- 31.4%</td>
</tr>
<tr>
<td>Panamax</td>
<td>1240</td>
<td>+ 9.7%</td>
<td>+ 0.8%</td>
</tr>
<tr>
<td>Supramax</td>
<td>773</td>
<td>+ 3.1%</td>
<td>- 27.0%</td>
</tr>
<tr>
<td>Baltic Handysize Index (BHSI)**</td>
<td>386</td>
<td>- 6.0%</td>
<td>- 34.4%</td>
</tr>
</tbody>
</table>

Source: Baltic Exchange.

Note: *4 January 1985 = 1000 **23 May 2006 = 1000. Baltic Handysize sub-index excluded from the BDI from 1 March 2018

- Amid reduced volatility and improving sentiment across all underlying segments, the Baltic Dry Index (BDI) averaged one-third higher m/m in May.
- Gains were led by the Capesize market, where average earnings trebled m/m on robust cargo flows from Australia to China. However, worries about reduced iron ore business out of Brazil likely capped overall upside.
- Solid demand for shipments out of South America, notably destined for Asia, remained the driver in the Panamax market, which saw a 10 percent monthly rise in average values. Additional support came from mineral-driven demand in the Baltic and the Pacific, with spillover from Capesize gains also a notable feature.
- Supramax and Handysize carriers saw generally limited enquiries, with mixed changes in corresponding Baltic Indices. Rates softened across many grains/oilseeds origins, but increased trading was evident in the Indian Ocean, with firmer levels also reported for Supramax dispatches from the US Gulf and on the major soybean route from Brazil to China.

Baltic Dry Index (BDI): A global benchmark indicator issued daily by the London-based Baltic Exchange, providing an assessment of the costs of moving major raw materials on ocean going vessels. The BDI is a composite measure, comprising sub-indices for four carrying segments, representing different vessel sizes: Capesize, Panamax, Supramax and Handysize.

Capesize: The largest vessels included in the BDI with deadweight tonnage (DWT) above 80 000 DWT, primarily transporting coal, iron ore and other heavy raw materials on long-haul routes.

Panamax: Vessels with capacity of 60 000 to 80 000 DWT, which are mostly geared to transporting coal, grains, oilseeds and other bulks, including sugar and cement.

Supramax/Handysize: Vessels with capacity below 60 000 DWT, which account for the majority of the world’s ocean going vessels. They can transport a wide variety of cargos, including grains and oilseeds.
**Explanatory Notes**

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 include 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 carryovers 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**

<table>
<thead>
<tr>
<th><strong>Wheat</strong></th>
<th>J</th>
<th>F</th>
<th>M</th>
<th>A</th>
<th>M</th>
<th>J</th>
<th>A</th>
<th>S</th>
<th>O</th>
<th>N</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU (21%)*</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>winter</td>
<td>e</td>
<td>c</td>
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<tr>
<td>China (17%)</td>
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<td></td>
<td></td>
<td>spring</td>
<td>e</td>
<td>c</td>
<td>c</td>
<td>Harvest</td>
<td>Planting</td>
</tr>
<tr>
<td>India (13%)</td>
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<td></td>
<td></td>
<td>winter</td>
<td>e</td>
<td>c</td>
<td>c</td>
<td>Harvest</td>
<td>Planting</td>
</tr>
<tr>
<td>US (8%)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>spring</td>
<td>e</td>
<td>c</td>
<td>c</td>
<td>Harvest</td>
<td>Planting</td>
</tr>
<tr>
<td>Russia (8%)</td>
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<td></td>
<td></td>
<td>spring</td>
<td>e</td>
<td>c</td>
<td>c</td>
<td>Harvest</td>
<td>Planting</td>
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<table>
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<th>M</th>
<th>J</th>
<th>J</th>
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<td>e</td>
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<td>c</td>
<td>Harvest</td>
<td>Planting</td>
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<tr>
<td>China (22%)</td>
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<td>north</td>
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<td>e</td>
<td>c</td>
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<td>Harvest</td>
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<tr>
<td>Brazil (8%)</td>
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<td>1st crop</td>
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<td>Harvest</td>
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<tr>
<td>Argentina (3%)</td>
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<td>Harvest</td>
<td>Planting</td>
<td>e</td>
<td>c</td>
<td>c</td>
<td>Harvest</td>
<td>Planting</td>
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<table>
<thead>
<tr>
<th><strong>Rice</strong></th>
<th>J</th>
<th>F</th>
<th>M</th>
<th>A</th>
<th>M</th>
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<tbody>
<tr>
<td>China (29%)</td>
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<tr>
<td>India (21%)</td>
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<td>Planting</td>
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<table>
<thead>
<tr>
<th><strong>Soybeans</strong></th>
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<th>A</th>
<th>M</th>
<th>J</th>
<th>J</th>
<th>A</th>
<th>S</th>
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<th>N</th>
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</tr>
</thead>
<tbody>
<tr>
<td>USA (31%)</td>
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<tr>
<td>Brazil (29%)</td>
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<tr>
<td>Argentina (18%)</td>
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<td></td>
<td>Harvest</td>
<td>Planting</td>
<td>e</td>
<td>c</td>
<td>c</td>
<td>Harvest</td>
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<tr>
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<td>Harvest</td>
<td>Planting</td>
<td>e</td>
<td>c</td>
<td>c</td>
<td>Harvest</td>
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<tr>
<td>India (3%)</td>
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<td></td>
<td></td>
<td>Harvest</td>
<td>Planting</td>
<td>e</td>
<td>c</td>
<td>c</td>
<td>Harvest</td>
</tr>
</tbody>
</table>

* Percentages refer to the global share of production (average 2013-15).