International Crops Summary
While wheat and feed barley are expected to see price stabilize in 2018/19, price increases for corn will continue another year as high global stocks are worked down. Longer term, grain prices will reflect less of a pull from ethanol as the renewable fuels standard (RFS) has largely been met for conventional ethanol and China is expected to supply corn ethanol use from domestic sources.

Worldwide corn production is estimated to reach the second highest level ever recorded in 2018/19, eclipsing last year’s production by nearly 25 mmt. Increases in demand this year will outpace larger supply and result in a reduction in ending stocks. Nevertheless, supplies will still be large enough to limit price increases with the expectation that corn prices will finally stabilize in 2019/20.

Following several years of record global production that resulted in substantial inventory building and declining prices, supplies began to tighten in 2017/18. Stocks shrank slightly and prices moved upward. This situation continued into 2018/19 with the first decline in production in six years. This is expected to lead to further inventory drawdown and another year of rising prices. After this year, wheat prices are expected to stabilize and regain long-term relationships with prices of other grains.

Substitution between different meals and vegetable oils creates a long-term relationship between oilseed prices. However, in the past few years and expectations for short-term movements, oilseeds have fallen out of sync with each other.

Record area and yields resulted in the highest soybean production ever in 2018/19, pushing prices lower. Prices of oilseeds will remain well below previous peak levels. Lower grain prices allow oilseeds to compete for area and expanding South American crops will also keep downward pressure on soybean prices over the projection period. For U.S. soybeans, the impacts of Chinese retaliatory tariffs have pushed domestic prices relatively lower than for competing exporters.

In major producing regions, rapeseed competes with wheat and barley. But on the demand side, rapeseed products compete with those of other oilseeds. Rapeseed prices will generally mirror those of soybeans in the long term.

Sunflowerseed prices are expected to settle back into the normal long-term relationship with soybean, prices, but will still be out of long-term balance with rapeseed prices.

Soybean, rapeseed, and sunflowerseed meal prices reflect the substantial substitution between them, but also are influenced by prices of other major livestock feed components. With the outlook for relatively low grain prices, meal prices are expected to show little upward movement in the long term, even with expanding livestock production.

Additionally, the stability in soybean, rapeseed, and sunflowerseed prices will be reflected in meal prices. Because the oilseeds are the largest cost categories for protein meal and vegetable oil production, the steady oilseed prices will allow adequate crushers’ margins to be maintained even with little movement in product output prices.
Ample Supplies Mean Stable Prices

Stability Expected in Oilseed Prices

Meal Prices Reflect Low Prices of Other Feeds
Because soybean, rapeseed, and sunflowerseed oils are co-products with their meal counterparts, some common costs underlie both products. Oil prices are expected to remain well below previous peaks with the low oilseed input costs while allowing crushers to maintain long-run profitability.

Different factors affect demand for meals and oils, so those prices do not move in lock step. Biodiesel is a growing demand category for vegetable oils. However, the petroleum price path in this baseline is below vegetable oil prices, limiting switching to biofuels beyond mandates such as the U.S. Renewable Fuels Standard, the EU Renewable Energy Directive, and anti-dumping duties involving Argentina, the EU, U.S, and Indonesia.

The boom in palm oil, and to a lesser extent sunflowerseed oil production, has resulted in rising stocks and declining prices this year. Prices of both oils are expected to adjust higher as demand increases catch up to large supplies and palm oil production slows cyclically in the next year.

Global cotton declined from 2017/18 levels this year, but is expected to be sufficient to meet global demand. As a result, stock drawdown outside of China will not be required to help balance supply and demand, even with a slight increase expected in mill use. As a result, cotton prices are expected to edge lower in 2018/19 and again next year, before stabilizing thereafter.

China continues to draw down cotton stocks. The inventory reduction will allow that country to keep imports down, even as area and production do not recover fully to previous highs. However, this is a medium-term phenomenon. Once China reduces stocks, it is expected to begin to modestly increase production in pace with increasing mill use.

Competition from other fibers, including man-made fibers will help keep cotton demand from rising rapidly, and dampen upward pressure on prices.

The increase in global cropped area will slow somewhat with the expected moderate, stable price environment that will provide less incentive to expand plantings, especially if it requires new ground to be broken.

There are still some regions that have available land for expansion, particularly in South American soybean and grain producing countries such as Argentina and Brazil. Argentina’s new, temporary export tax policy for 2019 and 2020 will limit area expansion in that country in the next two years.

Area expansion will occur primarily in corn and oilseeds, especially soybeans. These are largely used to feed livestock. Even with yield growth at or slightly exceeding global population growth, current area will be inadequate to meet demand for income-driven livestock and dairy products.

Wheat and rice, crops that are primarily utilized for human consumption, are traditional staples that are driven more by population growth than increases in income. Per capita consumption for these grains is nearly flat, and future demand will be met mainly through yield growth. As a result, area of these grains is not expected to increase greatly through the baseline period.
Yields of major grains, oilseeds, and fiber crops are expected to continue growing at long-term trend rates. This means productivity will expand around one percent per year, slightly more than the global population growth rate, which is projected to dip below 1% per year after 2020.

One percent yield growth will be sufficient for crops where demand is largely driven by population. As global per capita consumption of wheat, rice, and cotton are projected to increase little in the coming ten years, little area increase over the baseline period is expected.

For crops that are driven by both population and income growth, increased production required to meet global demand will come from a combination of yield and area growth. Yield growth alone will be insufficient for oilseeds and feedgrains such as corn.

As staples, global wheat and rice consumption and trade will increase primarily as a result of population growth, regardless of rising incomes in most regions. The only regions that will see a positive income effect will be in the least developed nations that are currently moving out of subsistence diets to being able to purchase additional amounts on local markets.

Because wheat consumption is distributed well beyond major global production areas, it is the most widely traded grain. In the past decade 15% to 21% of global demand has been met by redistributing wheat from surplus nations to deficit areas. That proportion is expected to be maintained around 20% throughout the baseline, indicating no improvement expected in global self-sufficiency.

Rice production and consumption are much more geographically aligned than wheat. While consumption and trade occur around the world, Asia is by far the primary region for both supply and demand of rice. As a result, rice consuming nations are much more self-sufficient, on average than wheat consumers. Around 8% to 9% of global rice consumption is expected to be met by trade.

Corn is used for food, feed, and fuel production, but primarily in livestock feed rations. Feed demand is growing rapidly as meat and dairy product consumption are driven by per capita income growth and population. Production is more concentrated geographically than consumption, and trade is expanding. Fourteen percent of global demand is expected to be met by trade in the coming decade.

While sorghum is considered a feedgrain in the U.S., it is a traditional staple crop in areas such as Africa. As incomes increase and diets in rural areas shift away from sorghum, demand and trade for this grain will show only slow increases.

Egypt, the EU, Japan, South Korea, and Mexico will continue as the largest corn importers. China will be a stable export market as ethanol feedstocks will come mostly from domestic grain.

Barley trade is expected to rise very slowly. There is expected to be some increase in demand for livestock feeding in producing countries of Eastern Europe and the former Soviet Union, and this will be the primary source of demand growth. Global food use, especially for brewing is expected to be stable, at best, as demand for beer has weakened in recent years.
Yield Gains Account for Most Supply Growth

Global average yield, metric tons/hectare

Wheat Consumption, Trade More Global Than Rice

Net exports by exporting countries, mmt

Livestock, Ethanol Drive Corn Demand and Trade

Net exports by exporting countries, mmt
• Soybeans account for the largest share of global oilseed utilization and the U.S., Argentina, and Brazil account for the majority of production and exports. As demand for soybeans and products increased exports from these nations skyrocketed, with Brazil increasing production and exports the most. Over the next ten years, 40% of global consumption is expected to be supplied by trade.

• Rapeseed and products are much less dependent on global markets as processing occurs more in producing regions, however, trade is slowly expanding. In the next ten years, 16% of global rapeseed demand will be met through trade. Canada accounts for nearly all global rapeseed and rapeseed meal trade.

• Turkey is by far the world’s largest importer of sunflowerseed. However, trade is not as important in the sunflowerseed market, with only about 1% to 2% being sold on the world market. Producers process most of the oilseed produced, then export the meal and oil.

• With the increase of livestock, especially poultry and hogs, and milk production around the world, particularly in commercial operations, the demand for protein meals will continue to rise rapidly.

• Many countries import soybeans, rapeseed, sunflowerseed and other oilseeds and crush them, meeting the much of their meal and oil needs, and supporting a domestic value-added industry. Nevertheless, trade in oilseed products is also increasing at a rapid pace as income growth pushes meal and oil demand faster than processing capacity expansion in many countries. About one-quarter of soymeal and 12% of rapeseed meal will be traded on the world market over the next 10 years.

• While sunflowerseed is very thinly traded, sunflowerseed meal consumption around the world is more dependent on trade, with one-third of global consumption coming from the world market. Ukraine accounts for two-thirds of exports, while the EU absorbs more than half of global sales.

• Palm oil accounts for the largest share of vegetable oil trade. Unlike soybean, rapeseed, or sunflowerseed oils, palm oil is not a co-product with protein meals. The trees are fast growing in low-cost areas of the Pacific Rim and Asia and production has exploded, keeping prices in check. Two-thirds of palm oil production is traded, coming primarily from Indonesia and Malaysia. A significant proportion of palm oil demand and trade is attributable to biofuel markets.

• Argentina exports more than 60% of its soyoil production. The new, temporary grain, oilseed, and products export taxes will lead have little effect on the proportion of soybeans vs. products traded from Argentina. However, the equalizing of the permanent taxes at 18% for soybeans as well as meal and oil will shift exports more toward soybeans. Approximately 15% of global soyoil production is traded.

• Rapeseed crushers cannot absorb the competition from palm oil prices in the baseline as readily as soybean processors, as rapeseed has a nearly 40% oil content, double that of soybeans. As a result, rapeseed crush will be somewhat constrained and rapeseed oil trade will increase relatively slowly.
• In 2014/15, China ended its massive cotton stocks buildup, also bringing to an end its outright domination of the global cotton trade. Stocks are being drawn down and the high cotton imports of 2011/12 through 2013/14 have not been sustained. This trend combined with steady expansion of textile and garment manufacturing in Bangladesh has propelled that country to the spot of the top cotton importer.

• China is expected to continue reducing inventories over the next several years. Its stocks-to-use ratio is projected to fall from more than one year’s equivalent to around two-thirds that ratio. In so doing, China will no longer drive cotton trade and impact prices to the same extend as a few years ago.

• One-quarter of global cotton production is expected to be sold on the world market over the next ten years, similar to the proportion traded prior to the past run-up in Chinese imports. The U.S. will remain the largest exporter over the projection period, but Brazil, India, and Australia will increase their presence on the global market.

• The outlook is for inventories of the commodities considered here to be at or above inventories prior to 2010. In the years since then, there have been a series of events, including hoarding of cotton, soybeans, sorghum, and corn by China. There have also been significant fluctuations in production from year to year that have also impacted stocks.

• The outlook for normal weather that results in adequate production, moderate price projections, and stable inventories is a major feature of this outlook. While there will certainly be production shortfalls and surpluses that will impact prices and ending stocks, overall, stability is expected, reducing the expectations of volatility and risk on commodity markets.

• Newly reported corn production data by China drastically changed the estimates of the supply/demand balance in that country. As a result, the view is that there is much more corn there than previously thought, a factor that changes the outlook for the Chinese market and therefore its role in global markets. With an expected drawdown of its huge inventories as ethanol production and other use expands, the global corn inventory will fall significantly. However, this inventory is not available to the world market, and the remaining stocks will be more than adequate to absorb short-term supply shocks.
Textile, Clothing Manufacturing Shifting to Bangladesh

Cotton net trade, mil. bales

- World net exports
- Bangladesh net imports

China Skews Corn, but Reserves Remain Adequate

Global stocks-to-use, percent