

#### **United States Department of Agriculture**

Economic Research Service

Situation and Outlook Report OCS-14e

Release Date May 13, 2014

### **Oil Crops Outlook**

Mark Ash mash@ers.usda.gov

# Global Oilseed Supplies Seen Surging With a Record U.S. Soybean Crop

Oil Crops Chart Gallery will be updated on May 13, 2014

The next release is June 13, 2014

Approved by the World Agricultural Outlook Board.

USDA calculates a 2014/15 trend yield for soybeans at 45.2 bushels per acre. When coupled with forecast harvested acreage of 80.5 million acres, U.S. soybean production is expected to climb 11 percent to an all-time high of 3.635 billion bushels. Record soybean demand is also expected for 2014/15, with U.S. exports forecast up 25 million bushels to 1.625 billion and the domestic crush up 20 million bushels to 1.715 billion. Despite higher use, seasonending soybean stocks for 2014/15 could surge to 330 million bushels. USDA forecasts a sharp decline in the 2014/15 U.S. average farm price for soybeans to \$9.75-\$11.75 per bushel.

Largely propelled by a strong increase in U.S. output, global soybean production for 2014/15 is expected nearly 6 percent higher to 299.8 million metric tons. For Brazil, modest area gains for soybeans are expected to raise production to 91 million tons. Argentine soybean production could total 54 million tons—equal to the 2013/14 crop. Soybean imports for China in 2014/15 are forecast up 3 million tons to 72 million based on higher consumption of soybean meal.

### **Domestic Outlook**

## USDA Anticipates Bumper 2014/15 Soybean Crop If Record Acreage and Yields Are Realized

The current strength of soybean prices encouraged U.S. farmers to raise their 2014 acreage intentions by 6 percent to a record 81.5 million acres. Spring planting conditions look good as recent rainfall has left abundant soil moisture throughout the Corn Belt and Northern Plains regions. The rains have also slowed the start of crop planting (20 percent completed as of May 11, compared with a 5-year average of 21 percent) but it could accelerate quickly by the end of this month.

Last year, very low August rainfall in the Midwest pushed the U.S. average yield below its trend to 43.3 bushels per acre. USDA calculates a 2014/15 trend yield for soybeans at 45.2 bushels per acre. When coupled with forecast harvested acreage of 80.5 million acres, an 11-percent increase in U.S. soybean production is expected to an all-time high of 3.635 billion bushels. Such abundance should scale back soybean imports (expected to swell this year to an unprecedented 90 million bushels) to 15 million bushels. Total supplies of soybeans would expand by 261 million bushels from the current season.

## U.S. Supply Gains Will Boost Soybean Demand but Foreign Competition Staying Firm

Despite USDA's outlook for a historically large domestic crop, gains for U.S. soybean demand would be tempered by the likelihood of large inventories in South America this fall. Also likely to constrain the export market would be slower import growth for China—the top global destination for soybeans. U.S. soybean exports for 2014/15 are forecast at 1.625 billion bushels, surpassing the 2013/14 expected record of 1.6 billion.

The domestic crush in 2014/15 could grow moderately by 20 million bushels to 1.715 billion. The primary inducement for soybean processors may be a 1.7-percent increase in the domestic use of soybean meal (to 29.7 million short tons). Feed demand by the swine and poultry sectors should rebound next year with considerably lower costs and an expansion of breeding. Expanding supplies of competing protein substitutes such as canola meal could be offset by a reduced availability of cottonseed and cottonseed meal. And the U.S. market share of world soybean meal trade would be supported next year by moderating prices, which could inch 2014/15 exports slightly higher to 11.2 million short tons from 11.1 million this year.

Soybean oil domestic consumption has stagnated for 5 years, and no improvement is anticipated for 2014/15. Total domestic disappearance of soybean oil is forecast 2 percent lower next season to 18.1 billion pounds. The edible use of soybean oil may decline nearly 3 percent as other oils (particularly canola oil) dominate the growth in total vegetable oil use. And the biodiesel industry has little incentive to boost its consumption of soybean oil next year without either a restoration of the lapsed biodiesel blending credit or the setting of a higher use volume within the Renewable Fuel Standard. USDA forecasts the 2014/15 use of soybean oil in biodiesel unchanged at 4.8 billion pounds. A marginal increase is expected for U.S. soybean oil exports to 1.7 billion pounds from 1.65 billion in 2013/14.

#### Outlook for Much Higher Soybean Stocks in 2014/15 Will Pressure Prices

Continued growth is anticipated for U.S. soybean demand in 2014/15 but that could be overwhelmed by far larger gains in the supply. Following a minimal expected carryout of 130 million bushels for 2013/14, season-ending soybean stocks next year are forecast surging to 330 million bushels. If realized, this would be the largest soybean carryout in 8 years.

Currently, soybean cash prices in many locations have ballooned toward \$15 per bushel. In order to sustain crushing margins, prices for soybean meal and soybean oil have similarly strengthened. However, once the fall harvest approaches, it is unlikely that the price outlook can stay that strong. Contract prices for new-crop delivery have now fallen below \$12 per bushel and may continue weakening if growing conditions are mostly favorable. Early this fall, these forward contracts would support crop sales, but the cash prices could plummet. USDA forecasts the 2014/15 U.S. average farm price for soybeans at \$9.75-\$11.75 per bushel—down sharply from an expected 2013/14 average of \$13.10 per bushel.

Likewise, the 2014/15 average price for soybean meal is forecast easing to \$355-\$395 per short ton, versus this year's record \$485. The soybean oil price level may also settle lower with larger soybean stocks and an ample supply of canola oil. USDA forecasts the 2014/15 average price for soybean oil at 37-41 cents per pound, compared with the 2013/14 average at 40 cents.

## Northern Plains Wetness May Determine Crop Gains For Canola and Sunflowerseed

This year's robust 29-percent recovery for intended canola acreage substantially raises U.S. production prospects for 2014/15 to 2.6 billion pounds from 2.2 billion last year. Lower crop yields should moderate the crop gains, though, as they are likely to fall back from last year's stellar outcome. In Oklahoma, the winter canola crop is already in poor condition because of a prolonged drought. For the main crop of spring-sown canola in North Dakota, only 2 percent of the intended acreage had been sown by May 11 due to cold and wet soils.

Domestic crushers will benefit next season not only from a larger U.S. canola harvest but also from a ready supply of imports from Canada. Up to 1.65 billion pounds of canola imports could augment 2014/15 supplies—a high volume considering the bright U.S. crop outlook. Over the past few years, substantial crushing capacity has been added and could raise next season's crush to a record 3.8 billion pounds. The export market for U.S. canola shipments abroad may also increase by nearly one-third in 2014/15 to 397 million pounds. Even with strong use, a major reduction in carryout stocks next year is unlikely.

For sunflowerseed, the supply gains this year may be limited by a minimal increase in March planting intentions, which were up only 1 percent to 1.6 million acres. Nevertheless, if it stays too wet in the Northern Plains to plant other crops, its later planting window could prompt a higher sown acreage. U.S. sunflowerseed production for 2014/15 is forecast 10 percent higher to 2.2 billion pounds mostly on expectations of improved yields to 1,481 pounds per acre. Below-average yields last year in North Dakota held down the national average to 1,378 pounds per acre.

Much of the small gain in 2014/15 sunflowerseed production is likely to come from confection-type varieties. Thus, the new-crop outlook for crushing oil-type sunflowerseed is virtually unchanged at 905 million pounds and would again constrain exports of sunflowerseed oil. Another year of large sunflowerseed oil imports—primarily from Argentina—may be the only way for domestic use to expand by an expected 9-percent to 425 million pounds.

#### Peanut Surplus May Reemerge

U.S. farmers intend to expand the acreage sown to peanuts this year by 29 percent to 1.4 million acres. On this basis, the peanut crop is expected up sharply to 5.355 billion pounds from 4.174 billion last year. As of May 4, 14 percent of the peanut acreage was sown, on par with the usual pace.

Domestic use of peanuts is forecast maintaining a steady 3-percent increase in 2014/15. In contrast, U.S. peanut exports may slip 3 percent next year to 950 million pounds as a prospectively larger Argentine crop competes for the top import market in Europe. Strong prospects for the U.S. crop, however, may dwarf its use. March 2014 peanut stocks (3.5 billion pounds) were slimmed by 20 percent from the previous year's record high and may decline to 2.1 billion pounds by the season's end. But for 2014/15, the season-ending carryout may once again build up to 2.4 billion pounds. The price outlook continues to deteriorate.

#### Drought May Elicit a Disappointing Recovery in Cottonseed Production

Last year, U.S. cottonseed supplies fell to a 4-year low, but only marginal improvement is anticipated for 2014/15. U.S. farmers intend to expand this year's sown cotton acreage by 7 percent to 11.1 million acres. However, a prolonged drought in the Southern Plains may once again lead to a high level of crop abandonment. Cotton acreage in California is down, too, as drought there has drawn down reservoirs sharply and restricted water supplies for irrigation. U.S. harvested acreage of cotton this year may total only 8.45 million acres. While the 2014/15 cottonseed production is forecast 15 percent higher to 4.8 million short tons, it would still be well below the average of the last 10 years. Also, imports of cottonseed to supplement domestic supplies may be lacking due to expectations of a sharp decline in Australian production. USDA anticipates only modest gains for cottonseed demand for 2014/15, with the crush forecast up 5 percent to 2.1 million short tons and feed use 6 percent higher to 2.4 million tons.

### **International Outlook**

## Prospects for Huge U.S. Soybean Crop Heighten Competition for Global Exports

In 2014/15, soybeans may account for nearly all of world growth in oilseeds output. Global soybean production for 2014/15 is expected nearly 6 percent higher to 299.8 million metric tons—largely propelled by a strong increase in U.S. output. Soybean consumption—which is forecast up 4 percent to 280.6 million tons—may significantly lag the production gains, however. As a consequence, global soybean stocks could surge by 23 percent in 2014/15 to 82.2 million tons.

For Brazil, a prolonged expansion of soybean area should be slowed by a substantially dimmer price outlook this year. Brazil's 2014/15 soybean area is anticipated increasing by only 2 percent to 30.5 million hectares. Area gains for some regions would be partly offset by a steep decline in lower yielding second-crop soybean area that in 2013/14 totaled an unprecedented 300,000-400,000 hectares. Assuming a trend yield, soybean production in Brazil would increase moderately to 91 million tons, compared with 87.5 million in 2013/14.

Even with an ample supply, Brazil's soybean exports could be slowed by strong foreign competition. Shipments from Brazil are forecast to increase to 45 million tons in 2014/15, compared with 44.5 million in 2013/14. Domestic processors may fare no better with the 2014/15 crush forecast only 0.3 percent higher to 37.1 million tons. Exports of soybean meal from Brazil could edge nearly 2 percent higher to 14 million tons while domestic use may increase 3 percent in 2014/15 to 15 million tons.

Argentine soybean area could be reduced 2 percent in 2014/15 to 19.6 million hectares by a dimmer price outlook and expected expansions of sown area for wheat and sunflowerseed. Assuming a slightly higher yield trend, Argentine soybean production could total 54 million tons—equal to the 2013/14 crop.

The availability of soybean supplies in Argentina may moderately improve as the difference between the official exchange rate and market rate narrowed early this year. Expectations for another imminent devaluation are lower now, which lessens the incentive of farmers to withhold marketing of soybeans. The soybean crush may strengthen to 39.8 million tons from 37.3 million in 2013/14. Argentine processors will again dominate the soybean meal market by supplying up to 46 percent (29.8 million tons) of world exports. Soybean exports could stay unchanged at 9 million in 2014/15 from 9 million this year. Yet, better soybean demand may only slow the growing Argentine surplus of unsold stocks.

In China, soybean area may continue to decline this year as farmers can earn far better returns with corn. Lower soybean area in China would trim production by 2 percent to 12 million tons. Government authorities have recognized the deteriorating competitiveness of soybeans with other crops and are modifying support policies to stabilize production. Instead of purchasing soybeans for a minimum price and taking them off market into a government reserve, now farmers will be able to sell only at the prevailing market price. If the sales price is below a set target price for soybeans, the Government will pay the farmer a cash subsidy to offset the difference. Over time, as Government procurement of soybeans comes to

an end and auctions of existing stocks proceed, China's reserve could shrink substantially.

In recent years, the appeal of holding soybean stocks by commercial entities in China had grown as some importers purchased them solely for collateral to obtain credit for other investments. Banks in China recently raised the deposit requirements to issue a letter of credit for commodity imports—including soybeans. Now the incentives to hold soybean stocks for this purpose may be diminished. USDA anticipates a minimal increase for China's soybean inventory (the sum of reserves and commercially owned stocks) next year. Soybean imports for China in 2014/15 are forecast up 3 million tons to 72 million, nearly two-thirds of the world total. The primary driver of soybean imports would be an expected 6-percent increase in soybean meal consumption (to 56.3 million tons).

## Despite Lower Rapeseed Crops in 2014/15, Ample Carryover Stocks Will Buoy Supplies

USDA forecasts that global rapeseed production in 2014/15 will decline 3 percent to 68.6 million tons based on expectations for smaller crops in Canada, Australia, and Ukraine. Nevertheless, there may be no shortfall in total supplies of rapeseed because of the difficulties in disposing of last year's overwhelming abundance. Global ending stocks in 2014/15 could stay high at 6.7 million tons.

In Canada, the production of canola in 2014/15 may fall to 15.4 million tons from 18 million in 2013/14. Record high canola stocks remain after last year's massive harvest, with most still located on farms. Inventories totaled 9 million tons as of March 31 and were nearly double the level of a year earlier. A subsequent shortage of railcars for transporting crops and harsh winter weather compounded the glut. Although Canadian wheat area is also expected lower this year, wheat prices have rallied now that the shipping backlog is easing and the condition of the U.S. winter wheat crop has deteriorated. Many old-crop supplies are still undelivered and farmers are lacking capital for purchases of new-crop production inputs this spring. Production costs are generally higher for canola, so the financing issues may curb its acreage this year more than other grain crops. Canadian farmers also want to avoid shortening the crop rotation for canola, as a 3- to 4-year cycle is better for avoiding crop diseases. Only 2 years ago, canola acreage in the western prairies set a record high. These factors have trimmed canola planting intentions for 2014/15 by 0.7 percent. Canola planting is off to a late start this spring with generally cold and wet soil conditions in the Canadian Prairies, but the great success of last year's harvest under similar circumstances shows that this is not yet a serious problem. Canola yields also may not duplicate last year's record high.

Even with a smaller Canadian harvest, large carryover stocks will support 2014/15 canola exports near 8.1 million tons. Domestic crush margins for canola are exceptionally high right now and the outlook for 2014/15 may be equally promising. A 2-percent increase in the country's canola crush is expected next season to a record 7.35 million tons. As a consequence, Canadian exports of canola oil and canola meal should accelerate, with the United States as a primary destination for them.

In Australia, canola area for 2014/15 is forecast down 5 percent to 2.45 million hectares as farmers are anticipated to favor growing wheat. The main producing regions received favorable rainfall in late April so planting will start soon. Australian canola production is expected to decline 13 percent to 3.1 million tons as yields may not do quite as well as last year. Crop exports for 2014/15 are seen declining 10 percent to 2.35 million tons.

EU rapeseed area in 2014/15 is estimated nearly unchanged at 6.85 million hectares, with increases in France and Romania offsetting reductions in Poland and Germany. Planting conditions last fall were favorable and mild winter temperatures led to minimal crop damage. Over the winter, moisture deficits developed in Germany and Poland but have eased since late April just as the rapeseed was advancing into a flowering stage. A small improvement for expected yields this year raises the forecast of EU rapeseed production to 21.5 million tons. A good finish for the growing season could challenge the all-time high for the EU crop. However, lower shipments from Ukraine and Australia could limit EU rapeseed imports, which are forecast down 12 percent for 2014/15 to 2.9 million tons. The EU rapeseed crush may then increase by less than 1 percent to 23 million tons.

#### Sunflowerseed Output May Fall Due to Poor Prospects for Ukraine

Global sunflowerseed production is foreseen 5 percent lower in 2014/15 at 40.8 million tons. Lower output for Ukraine may account for a majority of the reduction. The sunflowerseed area in Ukraine is seen steady this year at 5.6 million hectares as farmers favor crops with lower production costs, such as soybeans. However, Ukraine sunflowerseed production may fall by 14 percent to 10 million tons because of lower yields. Last year, a record harvest was achieved through exceptionally good yields. Now, Ukraine's economy is struggling and its currency has depreciated more than 40 percent since December. Sharply higher import costs have tightened the availability of high-quality planting seed and other inputs for production. On the other hand, the price competitiveness of Ukraine's exports is enhanced, which will support sunflowerseed crushers. Exports of sunflowerseed oil for 2014/15 may decline only 2 percent to 3.7 million tons.

Russian farmers face a similar deterioration in prices and sunflowerseed area is expected to decline by 4 percent this year to 6.5 million hectares. However, the 2014/15 outlook for Russian sunflowerseed output may be less dim than in Ukraine. Stable yields and input use could limit the production decline, with a Russian crop down 3 percent from last year to 10.2 million tons. Russian crush and exports of sunflowerseed meal could increase, but not by enough to offset the declines for Ukraine.

In Argentina, the area sown to sunflowerseed last year was suppressed by poor soil moisture for planting. Provided more normal sowing conditions for 2014/15, Argentine sunflowerseed area may rebound to 1.6 million hectares. Crop production for next year is forecast rising to 2.9 million tons from 2.3 million in 2013/14. The overall Argentine supply could be almost the same, however, due to a large decline in beginning stocks. The Argentine sunflowerseed crush for 2014/15 is forecast rising 2 percent to 2.8 million tons, with the associated increase in sunflowerseed oil supplies consumed domestically.

A 7-percent reduction is expected for EU sunflowerseed production in 2014/15 to 8.1 million tons. Although diminished price prospects may trim sunflowerseed area by 2 percent, most of the decline in production is based on a more typical yield outlook. Last year's excellent sunflowerseed yields in Romania, Bulgaria, and Hungary may not be as readily repeated. A modest decline in EU exports of sunflowerseed would allow the domestic crush to stay nearly unchanged at 7 million tons.

### Policy Shifts and Slim Moisture Prospects May Lower Cottonseed Output

USDA forecasts that 2014/15 global production of cottonseed will slip 2 percent to 43.3 million tons as a larger U.S. crop is offset by smaller harvests in China, India, and Australia. In China, cottonseed production for 2014/15 is forecast down 8 percent to 11.6 million tons. All of the expected decrease can be attributed to an 11-percent reduction in China cotton area to 4.35 million hectares. In recent years, massive stocks of cotton have accumulated in the country's Government reserves. China implemented a policy change this year to shave down these inventories, which have been about 50 percent larger than the country's annual use. Support for cotton farmers would now be limited to cash subsidies for a single Province. Without that support, farmers in other Provinces are likely to switch from growing cotton to other crops. Overall crop yields may actually improve, though, because of a concentration of sown area in China's most productive region. Cottonseed crushing in China is expected to decline 6 percent in 2014/15 to 9.5 million tons.

China's emphasis on drawing down domestic stocks may temper demand for India's cotton as well. By allowing domestic prices in China to fall, its imports of raw cotton from India may decline. That may slow the increase in Indian cotton area this year to only 1 percent after steady upward growth over the last decade. The forecast of Indian cotton area also assumes a normal summer monsoon. Lower cotton yields, which were exceptionally high for India last year, may more than offset the modest area increase. Indian cottonseed output for 2014/15 could decline 3 percent to 12.1 million tons. The country's 2014/15 cottonseed crush is forecast down 2 percent to 8.7 million tons.

In Australia, the area sown to cotton may decline in 2014/15 by 28 percent to 320,000 hectares. Low reservoir levels in the main growing region stretching between New South Wales and Queensland are seen restricting water supplies for irrigated cotton in the coming season. Although most cotton area in Australia is irrigated, long-range forecasts for drought may also deter farmers from planting dryland cotton. Thus, Australian cottonseed production for 2014/15 is projected to plunge 26 percent to 960,000 tons—a 5-year low. Australian exports of cottonseed may then slump 22 percent to 350,000 tons while domestic use is seen 15 percent lower to 710,000 tons.

#### Indonesia and India Form the Foundation of Global Palm Oil Trade

Provided that no adverse weather conditions develop in Southeast Asia, global palm oil production is forecast 6 percent higher for 2014/15 to 62.3 million tons. Of the expected production increase next season for all vegetable oils, palm oil could account for 63 percent of the total. Indonesia should contribute the largest share of the palm oil gain. Indonesian palm oil production for 2014/15 is projected up 8

percent to 33.5 million tons on account of a higher yield trend and an expansion of fruit-bearing tree area. This could support an 8-percent increase in Indonesian palm oil exports to 22 million tons.

Over the last few years, Indonesia has promoted greater development of its own oil refining industry through a restructuring of its export tax regime. Its aim has been to expand exports of refined palm oil products and inedible derivatives such as biodiesel. Industrial use of palm oil in Indonesia is projected to expand 22 percent in 2014/15 to 5 million tons and account for nearly 45 percent of total domestic use. The viability of Indonesia's biodiesel industry was threatened last year, though, as the European Union imposed high anti-dumping duties on its exports. These trade barriers were countered by raising domestic use requirements to 10 percent of Indonesia's own fuel market.

For second-ranked producer Malaysia, palm oil output for 2014/15 is projected up 5 percent to 20.35 million tons. Nearly all of the production gains are based on an increase in mature oil-palm area. Trees that were replanted several years ago will soon start producing fruit. Despite productivity gains, however, oil yields continue to stagnate. Harvest losses are significant due to a chronic shortage of labor to harvest the ripe fruit bunches and transport them to mills. Malaysian plantation owners have had difficulty attracting the mostly Indonesian laborers, who have found better employment opportunities closer to home. Little oil-palm harvesting is currently mechanized, so many fruit bunches are being left to rot.

Facing stiff competition from the larger supplies of Indonesian palm oil, a moderate 2-percent increase is forecast for 2014/15 Malaysian exports to 17.7 million tons. Like Indonesia, Malaysia's Government also seeks to absorb more supplies of palm oil in its domestic biodiesel industry. It has set a national target for a 5-percent biodiesel blend that would consume up to 500,000 tons of palm oil. However, unless more government funds are allocated to the plan, the high cost to subsidize this blend level makes full achievement of this goal unlikely.

Expected growth in 2014/15 for Indian domestic oilseed production is forecast at 2 percent. With growing population and income levels, however, Indian consumption of vegetable oils is expected to rise 4 percent to 19.9 million tons. Vegetable oil imports will continue to escalate, with palm oil comprising the largest share. Indian palm oil imports for 2014/15 are forecast up 6 percent to 8.8 million tons. But the once commanding price advantage for palm oil versus other vegetable oils has narrowed considerably. Soybean oil imports for India, while much smaller in absolute terms, are forecast growing more robustly next year (up 10 percent to 1.65 million tons).

Over the past decade, EU palm oil imports have more than doubled. For 2014/15, however, import growth may slow to 6.3 million tons (up a modest 2-percent) as other oils become more price-competitive. Also, by December 2014, the EU will implement a food labeling requirement that would specify the vegetable oil used for making a product. Unless the palm oil is certified as sustainably produced, the negative perceptions in Europe of its environmental impact may be enough to encourage a replacement in foods. According to the Roundtable for Sustainable Palm Oil, only about 16 percent of the global palm oil supply is certified.

### **Contacts and Links**

#### **Contact Information**

Mark Ash, 202-694-5289, mash@ers.usda.gov Verna Daniels, (202) 694-5301, vblake@ers.usda.gov

#### **Subscription Information**

Subscribe to ERS e-mail notification service at

http://www.ers.usda.gov/subscribe-to-ers-e-newsletters.aspx to receive timely notification of newsletter availability. Printed copies can be purchased from the USDA Order Desk by calling 1-800-363-2068 (specify the issue number)

To order printed copies of the five field crop newsletters—cotton and wool, feed, rice, oil crops, and wheat—as a series, specify series SUB-COR-4043

Oil Crops Monthly Tables, (http://www.ers.usda.gov/publications/ocs-oil-crops-outlook/)

Oil Crops Chart Gallery, (http://www.ers.usda.gov/data-products/chart-gallery.aspx)

#### Data

Monthly tables from Oil Crops Outlook are available in Excel (.xls) spreadsheets at http://www.ers.usda.gov/publications/ocs-oil-crops-outlook/. These tables contain the latest data on the production, use, imports, exports, prices, and textile trade of cotton and other fibers.

#### Recent Report

Estimating the Substitution of Distillers' Grains for Corn and Soybean Meal in the U.S. Feed Complex <a href="http://www.ers.usda.gov/media/236568/fds11i01\_2\_.pdf">http://www.ers.usda.gov/media/236568/fds11i01\_2\_.pdf</a>. Corn-based dry-mill ethanol production and that of its coproducts—notably distillers'dried grains with soluble (DDGS)—has surged in the past several years. The U.S. feed industry has focused on the size of this new feed source and its impact on the U.S. feed market, particularly the degree that DDGS substitute for corn and soybean meal in livestock/poultry diets and reduce ethanol's impact on the feed market. This study develops a method to estimate the potential use of U.S. DDGS and its substitutability for corn and soybean meal in U.S. feed rations.

#### Related Websites

Oil Crops Outlook.

http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1288 WASDE

http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1194 Oilseed Circular, http://www.fas.usda.gov/oilseeds\_arc.asp Soybeans and Oil Crops Topic,

http://www.ers.usda.gov/topics/crops/soybeans-oil-crops.aspx

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and, where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

#### E mail Notification

Readers of ERS outlook reports have two ways they can receive an e-mail notice about release of reports and associated data.

- Receive timely notification (soon after the report is posted on the web) via USDA's Economics, Statistics and Market Information System (which is housed at Cornell University's Mann Library). Go to <a href="http://usda.mannlib.cornell.edu/MannUsda/aboutEmailService.do">http://usda.mannlib.cornell.edu/MannUsda/aboutEmailService.do</a> and follow the instructions to receive e-mail notices about ERS, Agricultural Marketing Service, National Agricultural Statistics Service, and World Agricultural Outlook Board products.
- Receive weekly notification (on Friday afternoon) via the ERS website. Go to http://www.ers.usda.gov/subscrib e-to-ers-e-newsletters.aspx and follow the instructions to receive notices about ERS outlook reports, Amber Waves magazine, and other reports and data products on specific topics. ERS also offers RSS (really simple syndication) feeds for all ERS products. Go to http://www.ers.usda.gov/rss/ to get started.

### **Tables**

Table 1Sovbeans: Annual U.S. supply and disappea	earance
--	---------

	A	rea	Yield		Supp	ly		_	Us	e		
Year beginning	Planted	Harvested		Beginning				Crush	Seed &			Ending
September 1				stocks	Production	Imports	Total		residual	Exports	Total	stocks
	Million	1 acres	Bu./acre					-Million bushels-				
2012/131	77.2	76.2	39.8	169	3,034	36	3,239	1,689	90	1,320	3,099	141
2013/14 <sup>2</sup>	76.5	75.9	43.3	141	3,289	90	3,519	1,695	94	1,600	3,389	130
2014/15 <sup>2</sup>	81.5	80.5	45.2	130	3,635	15	3,780	1,715	110	1,625	3,450	330

Soybeans: Quarterly U.S. supply and disappearance

		Supp	oly			Use		
	Beginning	5			Crush, seed			Ending
	stocks	Production	Imports	Total	& residual	Exports	Total	stocks
				Λ	Million bushels			
2012/13								
September-November	169.4	3,033.6	4.3	3,207.2	622.6	618.4	1,241.1	1,966.2
December-February	1,966.2		4.7	1,970.9	447.3	525.6	972.9	998.0
March-May	998.0		7.8	1,005.9	446.1	125.1	571.2	434.7
June-August	434.7		19.3	454.0	262.9	50.5	313.4	140.6
Total		3,033.6	36.1	3,239.1	1,779.0	1,319.6	3,098.5	
2013/14								
September-November	140.6	3,288.8	11.8	3,441.2	626.4	661.2	1,287.6	2,153.6
December-February	2,153.6		8.4	2,162.0	445.0	724.6	1,169.7	992.3
Total to date		3,288.8	20.2	3,449.6	1,071.4	1,385.8	2,457.2	

<sup>1</sup> Estimated. <sup>2</sup> Forecast. Sources: USDA, National Agricultural Statistics Service, *Crop Production* and *Grain Stocks* and U.S. Department of Commerce, U.S. Census Bureau, Foreign Trade Statistics.

Table 2--Soybean meal: U.S. supply and disappearance

		Su	pply		I	Disappearanc	e	_	
Year beginning	Beginning							Ending	
October 1	stocks	Production	Imports	Total	Domestic	Exports	Total	stocks	
				1,00	short tons				
2012/131	300	39,875	245	40,420	29,031	11,114	40,145	275	
$2013/14^2$	275	40,010	315	40,600	29,200	11,100	40,300	300	
$2014/15^2$	300	40,735	165	41,200	29,700	11,200	40,900	300	

<sup>1</sup> Estimated. 2 Forecast.

 $Source: USDA, World\ Agricultural\ Outlook\ Board, \textit{World\ Agricultural\ Supply\ and\ Demand\ Estimates}.$ 

Table 3--Soybean oil: U.S. supply and disappearance

		Si	upply		Disappearance						
Year beginning	Beginning	Production	Imports	Total		Domestic		Exports	Total	Ending	
October 1	stocks		-		Total	Biodiesel	Food	_		stocks	
					Million	pounds					
2012/131	2,540	19,820	196	22,556	18,686	4,689	13,997	2,164	20,851	1,705	
2013/142	1,705	19,745	200	21,650	18,450	4,800	13,650	1,650	20,100	1,550	
2014/152	1,550	19,810	160	21,520	18,100	4,800	13,300	1,700	19,800	1,720	

<sup>&</sup>lt;sup>1</sup> Estimated. <sup>2</sup> Forecast.

Estimated: Total Source: USDA, World Agricultural Outlook Board, World Agricultural Supply and Demand Estimates.

Last update: 5/12/2014

Table 4--Cottonseed: U.S. supply and disappearance

		S	Supply			Disappearance				_
Year beginning August 1	Beginnin stocks	g Production	Imports	Total		Crush	Exports	Other	Total	Ending stocks
					1,000 short to	1S				
2012/131	430	5,666	0	6,096		2,500	191	2,913	5,604	492
2013/142	492	4,406	110	5,008		2,000	200	2,365	4,565	443
2014/152	443	4,820	0	5,263		2,100	250	2,500	4,850	413

<sup>&</sup>lt;sup>1</sup> Estimated. <sup>2</sup> Forecast.

 $Sources: USDA, \ National \ Agricultural \ Statistics \ Service, \ {\it Crop\ Production}\ \ and \ U.S. \ Department \ of \ Commerce,$ 

U.S. Census Bureau, Foreign Trade Statistics.

Table 5--Cottonseed meal: U.S. supply and disappearance

		S	upply		Dis	_			
Year beginning	Beginning								
October 1	stocks	Production	Imports	Total	Domestic	Exports	Total	stocks	
				1,000 short tons					
2012/131	50	1,125	0	1,175	1,012	113	1,125	50	
2013/142	50	900	0	950	797	103	900	50	
2014/15 <sup>2</sup>	50	945	0	995	842	103	945	50	

<sup>&</sup>lt;sup>1</sup> Estimated. <sup>2</sup> Forecast.

Source: USDA, Foreign Agricultural Service, PS&D Online.

Table 6--Cottonseed oil: U.S. supply and disappearance

		S	upply		Di	Disappearance			
Year beginning	Beginning							Ending	
October 1	stocks	Production	Imports	Total	Domestic	Exports	Total	stocks	
				Million po	unds				
2012/131	100	800	20	920	599	221	820	100	
2013/142	100	630	20	750	475	175	650	100	
2014/152	100	670	20	790	485	205	690	100	

<sup>1</sup> Estimated. 2 Forecast.

Source: USDA, Foreign Agricultural Service, PS&D Online.

Table 7--Peanuts: U.S. supply and disappearance

_	A	rea	Yield		Supp	oly			]	Disappeara	nce		_
Year beginning	Planted	Harvested		Beginning				Domestic	;	Seed and			Ending
August 1				stocks	Production	Imports	Total	food	Crush	residual	Exports	Total	stocks
	1,000	acres	Pounds/acre					Million pounds					
2012/131	1,638	1,604	4,217	1,003	6,763	119	7,885	2,735	656	528	1,195	5,115	2,771
2013/142	1,067	1,042	4,006	2,771	4,174	85	7,030	2,893	650	443	975	4,961	2,069
2014/152	1,376	1,348	3,971	2,069	5,355	65	7,489	2,953	643	526	950	5,072	2,417

<sup>1</sup> Estimated. 2 Forecast

Sources: USDA, National Agricultural Statistics Service, Crop Production and Peanut Stocks and Processing, and U.S. Department of Commerce,

U.S. Census Bureau, Foreign Trade Statistics.

Table 8--Oilseed prices received by U.S. farmers

Marketing	Soybeans <sup>2</sup>	Cottonseed <sup>3</sup>	Sunflowerseed <sup>2</sup>	Canola <sup>4</sup>	Peanuts <sup>3</sup>	Flaxseed <sup>4</sup>
year	\$/bushel	\$/short ton	\$/cwt.	\$/cwt.	Cents/pound	\$/bushel
2004/05	5.74	107.00	13.70	10.70	18.90	8.07
2005/06	5.66	96.00	12.10	9.62	17.30	5.94
2006/07	6.43	111.00	14.50	11.90	17.70	5.80
2007/08	10.10	162.00	21.70	18.30	20.50	13.00
2008/09	9.97	223.00	21.80	18.70	23.00	12.70
2009/10	9.59	158.00	15.10	16.20	21.70	8.15
2010/11	11.30	161.00	23.30	19.30	22.50	12.20
2011/12	12.50	260.00	29.10	24.00	31.80	13.90
2012/13	14.40	252.00	25.40	26.50	30.10	13.80
2013/141	13.10	248.00	21.50	20.20	23.50	13.65
2014/151	9.75-11.75	220-260	18.10-21.40	17.35-20.65	18.35-21.65	10.50-12.50
2012/13						
September	14.30	254.00	28.90	26.50	35.20	13.30
October	14.20	254.00	26.30	27.00	33.70	13.60
November	14.30	255.00	26.70	26.70	32.60	14.10
December	14.30	252.00	24.80	27.10	36.90	13.80
January	14.30	249.00	26.30	26.80	31.20	13.70
February	14.60	217.00	26.10	27.80	28.20	14.30
March	14.60	NA	24.60	27.30	27.80	14.40
April	14.40	NA	24.80	27.50	26.80	14.90
May	14.90	NA	24.00	28.00	27.10	15.40
June	15.10	NA	24.40	27.40	27.00	15.20
July	15.30	NA	23.70	26.20	24.20	15.10
August	14.10	NA	23.70	22.20	25.10	14.90
2013/14						
September	13.30	190.00	22.60	20.70	25.50	13.10
October	12.50	281.00	23.00	21.00	26.00	13.50
November	12.70	248.00	20.80	20.40	26.60	13.40
December	13.00	246.00	18.80	21.20	24.60	13.50
January	12.90	230.00	20.30	18.40	25.40	13.30
February	13.20	227.00	22.90	18.50	24.20	13.80
March	13.70	NA	21.50	18.40	25.20	13.50
April <sup>1</sup> Preliminary	14.50	NA	22.20	18.80	24.10	NA

<sup>&</sup>lt;sup>1</sup> Preliminary. <sup>2</sup> September-August. <sup>3</sup>August-July. <sup>4</sup> July-June.

NA = Not available. cwt.=hundredweight.

 $Source: USDA, \ National \ Agricultural \ Statistics \ Service, \ \textit{Agricultural Prices}.$ 

Table 9--U.S. vegetable oil and fats prices

Marketing	Soybean	Cottonseed	Sunflowerseed	Canola	Peanut	Corn	Lard <sup>6</sup>	Edible
year	oil <sup>2</sup>	oil <sup>3</sup>	oil <sup>4</sup>	oil 4	oil 5	oil <sup>6</sup>		tallow 6
				Cents/po	ound			
2004/05	23.01	28.01	43.71	30.78	53.63	27.86	21.80	18.48
2005/06	23.41	29.47	40.64	31.00	44.48	25.18	21.74	18.16
2006/07	31.02	35.70	58.03	40.57	52.99	31.80	28.43	27.32
2007/08	52.03	73.56	91.15	65.64	94.53	69.40	40.85	41.68
2008/09	32.16	37.10	50.24	39.54	78.49	32.75	26.72	25.47
2009/10	35.95	40.27	52.80	42.88	59.62	39.29	31.99	32.26
2010/11	53.20	54.50	86.12	58.68	77.24	60.76	51.52	51.34
2011/12	51.90	53.22	83.20	57.19	100.15	56.09	48.11	50.33
2012/13	47.13	48.60	65.87	56.17	91.83	46.66	39.64	43.24
2013/141	40.00	62.50	59.50	45.25	68.50	41.00	41.00	40.50
2014/151	37.0-41.0	44.0-48.0	59.0-63.0	42.0-46.0	70.0-74.0	41.5-43.5	39.0-43.0	35.0-39.0
2012/13								
October	49.31	51.31	74.00	57.50	103.00	54.75	51.60	42.27
November	46.27	49.05	70.30	58.20	99.90	51.93	57.00	37.15
December	47.16	50.06	67.50	57.13	98.56	50.63	NA	40.92
January	48.85	50.94	65.25	57.19	96.75	52.06	52.45	43.50
February	49.33	51.56	65.00	59.38	86.00	51.71	45.56	41.93
March	48.62	50.20	64.60	58.95	79.05	47.76	NA	45.00
April	49.28	49.94	64.00	60.44	77.50	47.06	43.50	43.50
May	49.31	49.75	64.00	60.45	80.00	45.23	44.50	43.86
June	47.84	48.25	64.00	57.50	82.75	42.50	48.50	48.44
July	45.19	46.19	64.00	53.25	84.00	38.91	53.25	49.13
August	42.33	43.10	64.00	48.05	83.00	38.93	56.89	43.18
September	42.12	42.81	63.75	46.00	82.00	38.46	64.78	40.02
2013/14								
October	39.66	41.19	60.50	44.88	81.00	37.85	43.00	33.17
November	39.58	42.05	57.40	45.05	78.70	38.79	48.00	38.88
December	37.63	43.19	57.00	42.63	75.38	38.31	41.50	39.62
January	34.95	47.10	57.00	39.75	65.70	38.79	33.00	35.84
February	37.11	57.81	57.00	42.56	62.06	41.07	38.00	35.67
March	40.82	69.94	58.00	45.75	59.06	43.19	40.67	41.63
April <sup>1</sup>	41.87	75.00	59.00	47.63	57.75	41.94	53.00	45.50

Preliminary. <sup>2</sup> Decatur, IL. <sup>3</sup> PBSY Greenwood, MS. <sup>4</sup> Midwest. <sup>5</sup> Southeast mills. <sup>6</sup> Chicago.

NA = Not available.

 $Sources: USDA, Agricultural\ Marketing\ Service,\ \textit{Monthly}\ \textit{Feedstuff}\ \textit{Prices}\ \ \text{and}\ \textit{Milling}\ \textit{and}\ \textit{Baking}\ \textit{News}.$ 

Table 10--U.S. oilseed meal prices

Marketing	Soybean	Cottonseed	Sunflowerseed	Peanut	Canola	Linseed
year	meal <sup>2</sup>	meal <sup>3</sup>	meal 4	meal 5	meal 6	meal 7
			\$/Short	ton		
2004/05	182.90	124.04	85.50	118.34	139.75	115.55
2005/06	174.17	144.27	77.46	106.98	140.52	115.53
2006/07	205.44	150.36	104.88	100.00	173.50	133.01
2007/08	335.94	253.81	172.81	NA	251.32	228.81
2008/09	331.17	255.23	152.46	NA	248.82	220.89
2009/10	311.27	220.90	151.04	NA	224.92	209.23
2010/11	345.52	273.84	219.72	NA	263.63	240.65
2011/12	393.53	275.13	246.75	NA	307.59	265.68
2012/13	468.11	331.52	241.57	NA	354.22	329.31
2013/141	485.00	385.00	265.00	NA	370.00	360.00
2014/15 <sup>1</sup>	355-395	285-325	180-220	NA	275-315	255-295
2012/13						
October	488.46	343.00	287.00	NA	354.49	334.00
November	465.64	376.88	269.38	NA	334.46	297.50
December	459.40	345.00	266.67	NA	349.55	335.83
January	431.39	327.50	252.00	NA	347.22	296.00
February	440.66	279.38	237.50	NA	359.23	303.75
March	437.33	301.88	231.25	NA	356.74	303.75
April	422.07	314.50	222.00	NA	340.42	309.00
May	465.72	311.88	215.00	NA	362.51	331.88
June	496.78	329.38	233.13	NA	376.19	340.00
July	544.59	344.50	245.50	NA	374.89	382.50
August	464.90	330.00	221.25	NA	340.44	317.50
September	500.39	374.38	218.13	NA	354.55	400.00
2013/14						
October	443.63	355.00	236.25	NA	334.95	363.75
November	451.13	345.00	246.88	NA	342.86	316.25
December	498.10	401.88	277.50	NA	373.60	328.75
January	479.54	375.63	283.75	NA	365.48	330.00
February	509.25	388.75	285.00	NA	384.21	377.50
March	495.71	401.25	271.25	NA	383.68	413.75
April <sup>1</sup>	514.01	405.50	267.50	NA	398.39	388.00

<sup>&</sup>lt;sup>1</sup> Preliminary. <sup>2</sup> High-protein Decatur, IL. <sup>3</sup> 41-percent Memphis. <sup>4</sup> 34-percent North Dakota-Minnesota.

NA= Not available.

Source: USDA, Agricultural Marketing Service, Monthly Feedstuff Prices.

<sup>&</sup>lt;sup>5</sup> 50-percent Southeast mills. <sup>6</sup> 36-percent Pacific Northwest. <sup>7</sup> 34-percent Minneapolis.