



Ag Decision Maker



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Join Start to Farm, a network for new farmers

By Margaret Smith, extension value added ag specialist, 641-430-9241, mrgsmith@iastate.edu; Patrick Gunn, extension beef cow-calf specialist, 515-294-3020, pgunn@iastate.edu

The Start to Farm: New Farmer Learning Network, organized by Iowa State University Extension and Outreach, is a statewide program designed to provide education and support for beginning and early-career agricultural producers. Start to Farm groups will meet several times throughout the year. Based on priorities and topics determined by each group they will discuss production techniques, ways to grow and improve business practices, and farm management strategies.

Multiple groups will be organized throughout the state, with beginning farmers able to join a group that will be most beneficial to them through either a focus on farm enterprises or geography. Group members will participate in a wide variety of activities, including touring successful farming operations. They

also will become part of a community of Iowa beginning farmers.

“Our goal is to provide an open atmosphere for discussion, sharing of ideas and learning about resources for producers who are in their first 10-12 years of farming,” said Patrick Gunn, assistant professor in animal science and extension beef cow-calf specialist. “Each group will have its own focus depending on the needs of its members.”

Registration for the program is requested, but there is no participation fee. Start to Farm groups will be organized across the state. Contact an [ISU Extension and Outreach county office](#) for information about a local Start to Farm group and to register for upcoming Start to Farm: New Farmer Learning Network meetings.

Group locations and assigned extension specialists

Start to Farm groups will be facilitated by Iowa State University Extension and Outreach specialists. Specialists and their topic area are listed by location.

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Handbook updates
 For those of you subscribing to the handbook, the following updates are included.

Pricing Forage in the Field – A1-65 (3 pages)
 Please add these files to your handbook and remove the out-of-date material.

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Inside . . .

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Join Start to Farm, a network for new farmers, continued from page 1

Eastern Iowa

- Group 3: Winneshiek County – Jenn Bentley, Dairy; jbentley@iastate.edu, 563-382-2949
- Group 5: Fayette County – Mark Storlie, Swine; mstorlie@iastate.edu, 563-425-3331
- Group 6: Dubuque County – Larry Tranel, Dairy; tranel@iastate.edu, 563-425-3331
- Group 9: Benton County – Denise Schwab, Beef; dschwab@iastate.edu, 319-721-9624
- Group 11: Iowa County – Patrick O'Malley, Commercial Horticulture; omall@iastate.edu, 319-330-0337
- Group 14: Mahaska County – Charles Brown, Farm Management; crbrown@iastate.edu, 641-673-5841
- Group 15: Washington County – Tom Miller, Swine; tmiller@iastate.edu, 319-931-3781
- Group 17: Wapello County – Colin Johnson, Beef/Swine; colinj@iastate.edu, 515-291-9287

Central Iowa

- Group 2: Hancock County – Russ Euken, Beef/Swine; reuken@iastate.edu, 641-923-2856
- Group 8: Story County – Hugo Ramirez, Dairy; hramirez@iastate.edu, 515-294-5517
- Group 10: Dallas County – Joe Hannan, Commercial Horticulture; jmhannan@iastate.edu, 515-993-4281

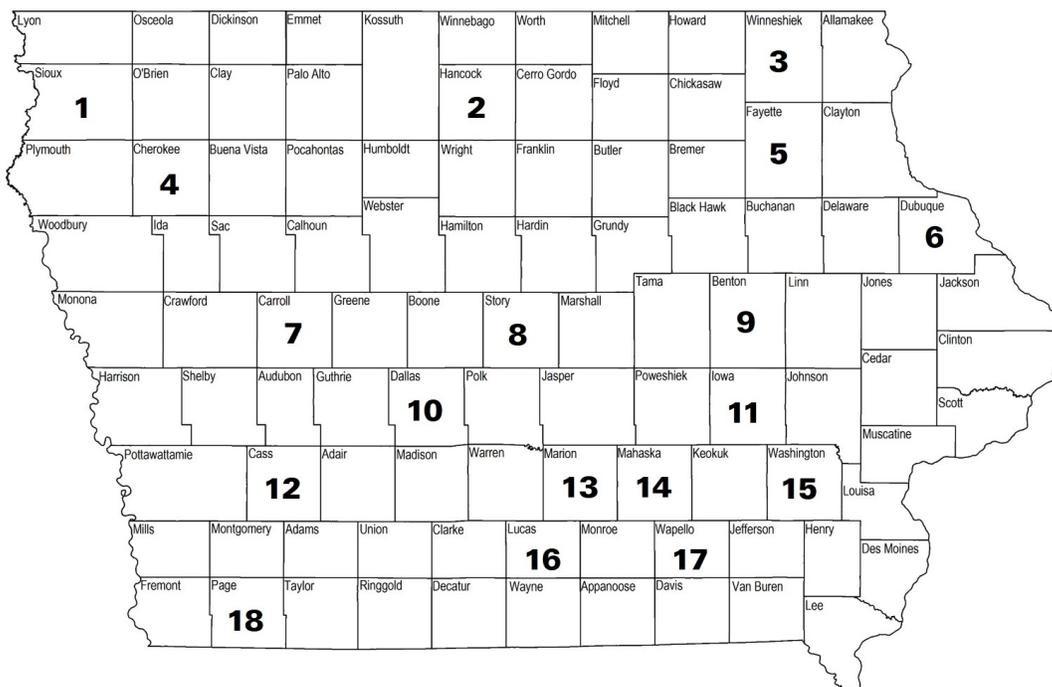
- Group 13: Marion County – Patrick Wall, Beef; patwall@iastate.edu, 515-450-7665
- Group 16: Lucas County – Joe Sellers, Beef; sellers@iastate.edu, 641-203-1270

Western Iowa

- Group 1: Sioux County – Beth Doran, Beef; doranb@iastate.edu, 712-395-0280
- Group 4: Cherokee County – David Stender, Swine; dstender@iastate.edu, 712-261-0225
- Group 7: Carroll County – Shane Ellis, Farm Management; shanee@iastate.edu, 515-520-0601
- Group 12: Cass County – Christopher Clark, Beef; caclark@iastate.edu, 712-250-0070
- Group 18: Page County – Tim Eggers, Farm Management; teggers@iastate.edu, 712-542-5171

ISU Extension and Outreach specialists will deliver information on topics that include basic livestock, grain and horticultural crop farming practices, land access strategies, financial and risk management training and diversification.

The groups are funded by an ISU Extension and Outreach grant through the USDA Beginning Farmer and Rancher Development Program. For more information, visit the ISU Extension and Outreach [Start to Farm](http://www.starttofarm.org) website.





Crude oil prices and U.S. crop exports: exploring the secondary links between the energy and ag markets*

By Chad Hart, extension economist, 515-294-9111, chart@iastate.edu;
Wendong Zhang, extension economist, 515-294-2536, wdzhang@iastate.edu

As the biofuel industry has developed, there has been a lot of discussion about the linkages between the energy and agricultural markets. The growth of the ethanol and biodiesel sectors bolstered the connection among the oil, gas, and crop markets. As crop-based biofuels compete in the energy market, crop prices are directly impacted not only by the relative standing of biofuels in the fuel hierarchy, but also by general shifts in energy supplies and demands. However, there is another distinct way energy markets can impact crop markets—many US international trade partners are reliant on the energy sector as a major source of income. Thus, energy market swings can translate into significant income movements for those countries, influencing their ability to purchase U.S. agricultural products. In this article, we examine the robustness of treating a key energy commodity—crude oil—as an indicator for income for those oil-reliant countries and investigate how that affects their demand for U.S. crop exports.

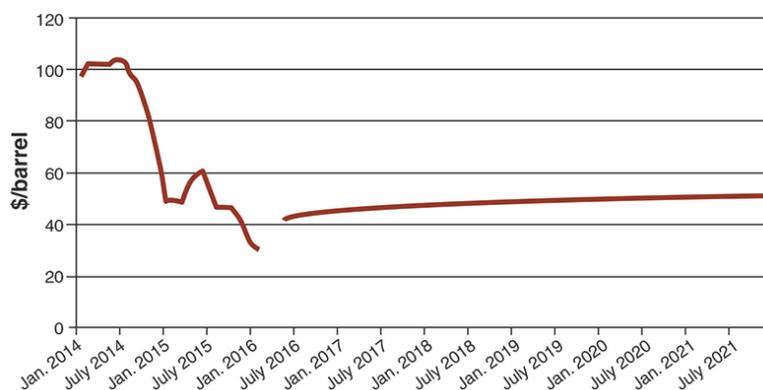
Global energy markets have experienced an astounding downturn in prices in recent years.

As Figure 1 highlights, crude oil prices have fallen from over \$100 per barrel in early-to-mid 2014 to below \$30 per barrel in early 2016. This drop in oil prices has been driven by several components including a slowdown in energy demand with the weakness in the global economy, as well as positive production shocks, in part due to new technology that allows oil extraction from new sources (shale oil, oil sands, etc.), and increased competition from biofuels. As Figure

1 shows, projections of future oil prices (taken from CME crude oil futures) indicate prices will remain well below recent highs for quite some time.

While the focus of the crude oil market tends to be the global supplies and the role OPEC played in driving oil prices down, it seems that the recent plunge in oil prices has as much to do with stagnant demand. However, the oil market wasn't the only market under pricing pressure through 2014 and 2015—crop markets exhibited a similar phenomenon. Figure 2 displays relative price movements for crude oil, corn, and soybean markets since June 2014. While oil suffered the largest price drop, 50 percent before 2015, corn and soybean prices also retreated in the second half of 2014. Since that decline, crude oil has continued to work its way lower, while the crop markets have been relatively steady. Based on April 2016 prices, the corn market is 20 percent below June 2014 price levels, while the soybean and oil markets are 40 and 60 percent below, respectively. Agricultural commodity prices, while lower, have not fallen as far as oil prices, possibly affecting the ability of countries

Figure 1. Crude oil prices since January 2014



Source: EIA and CME, as of April 15, 2016

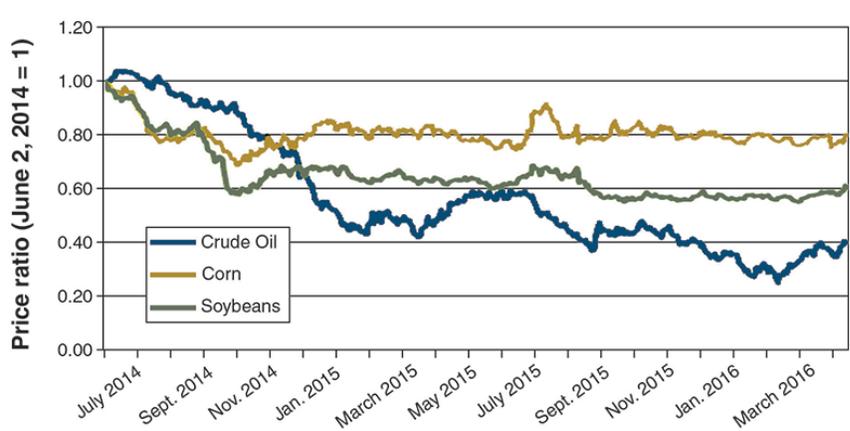
Crude oil prices and U.S. crop exports, continued from page 3

reliant on energy market income to import U.S. crops.

Examining crop export demand since June 2014, the international demand for corn and soybeans has fallen as well. As Figure 2 shows, overall corn export demand is down nearly 13 percent over the past year. The market shifts in Japan and Mexico, the two largest markets, have essentially offset each other. Mexico has imported more U.S. corn as the country expands its livestock industry and rebuilds its feed stocks. Meanwhile, Japan has purchased less U.S. corn as other countries offer more competitive prices and domestic feed sources are utilized. Overall, the general trend for U.S. corn exports has been lower, and soybean export demand has also shifted lower as shown in Figures 3 and 4. While China accounts for roughly 60 percent of U.S. soybean exports, demand there and from other areas of the world has declined, including many oil-producing and oil-reliant countries. For Figures 3 and 4, the “Unknown” category lists export sales where the delivery destination has not been determined.

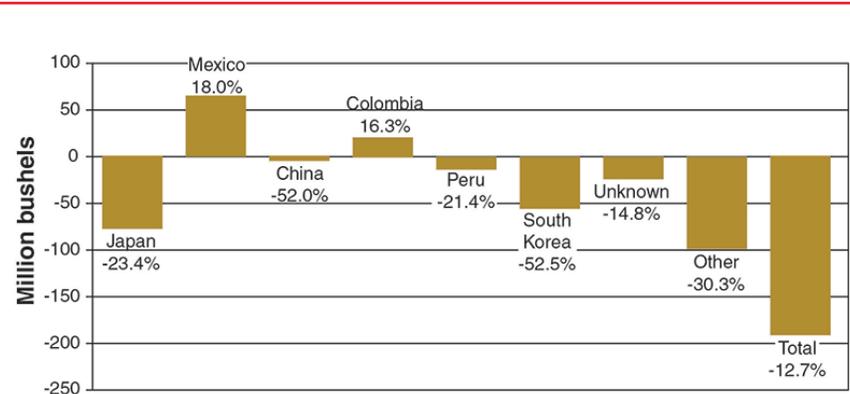
To explore the role that lower energy prices could be playing in export demand, we examine the corn and soybean demand from countries that derive a larger share of income from the oil market. We hypothesize that crude oil prices could serve as a proxy for the income of oil-reliant countries, and recent drops in oil prices could lead to a lower import demand for U.S. crops. We use “Oil Rents” developed by the World Bank, which measure the percentage of a country’s Gross Domestic Product (GDP) that can be directly attributed to the oil industry, to

Figure 2. Commodity price movements since June 2014



Source: Barchart.com

Figure 3. Corn export shifts April 2015–April 2016



Source: USDA-FAS

determine if a country is oil reliant. Oil rents are computed as the difference between the value and cost of crude oil production divided by the country’s GDP. For example, Kuwait is currently the most oil dependent country with an oil rent of 57 percent, meaning that the net profits or rents of Kuwait’s oil makes up 57 percent of the country’s GDP. For Saudi Arabia and the United States, rents are 44 and 1 percent, respectively. Globally, the oil rent is 3 percent.

For our analysis, we consider a country to be oil-reliant if it has an oil rent above the world average of 3 percent. Of the 25 largest U.S. corn export markets, 7 are oil reliant. The changes in U.S. crop export demand from those countries are displayed in Table 1. Overall, oil-

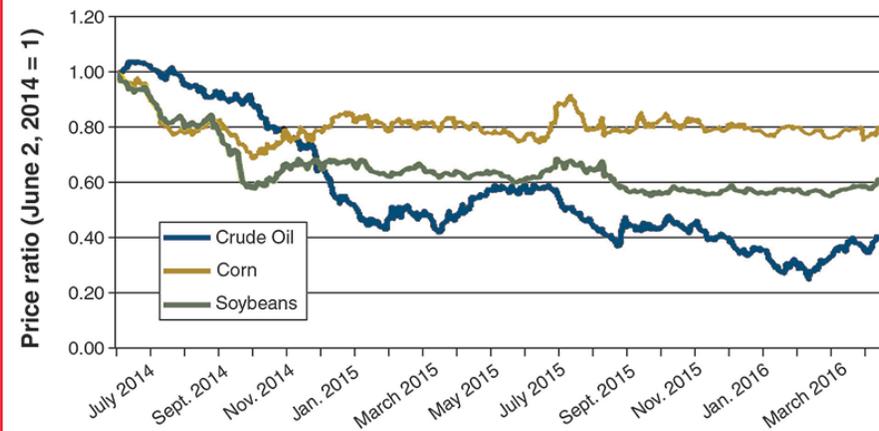
Crude oil prices and U.S. crop exports, continued from page 4

reliant countries are actually importing more U.S. corn, showing 6 percent growth versus 25 percent decline from non-reliant countries. However, that is due to the influence of Mexico, whose demand factors were briefly detailed earlier. Corn demand from oil-reliant OPEC member countries (Saudi Arabia and Venezuela) falls in line with demand from non-reliant countries. Thus, oil reliance does not seem to have much impact on the current corn export picture.

For soybeans, the story is slightly different—11 of the 25 largest U.S. soybean importing countries are oil reliant. The reduction in demand from those countries is larger than from non-reliant countries. Overall, soybean demand from oil-reliant countries is down 12 percent, but only down 7 percent in non-reliant countries. Focusing on OPEC members, soybean

demand is actually up by 36 percent; however, that is deceiving because of the entry of Iran. Due to sanctions imposed on Iran for its nuclear program, U.S. soybeans were not entering the Iranian market during the 2014/15 marketing year. With the lifting of those sanctions, U.S. soybean exports to Iran have started to flow. Removing Iran from the calculations, OPEC members' demand for soybeans has fallen by 16 percent.

Figure 4. Soybean export shifts April 2015–April 2016



Source: USDA-FAS

Table 1. Oil-Reliant U.S. Crop Export Customers (Source: USDA-FAS)

Corn	2014/15	2015/16	Change	Soybeans	2014/15	2015/16	Change
	(million bushels)				(million bushels)		
Mexico	365.67	431.64	18%	Mexico	107.34	108.77	1%
Colombia	130.71	152.02	16%	Russia	11.64	17.86	53%
Saudi Arabia*	24.00	19.77	-18%	Vietnam	28.42	15.66	-45%
Venezuela*	17.52	11.79	-33%	Colombia	13.68	13.89	2%
Canada	29.43	10.56	-64%	Egypt	26.18	13.06	-50%
Egypt	34.19	9.68	-72%	Tunisia	6.90	8.31	20%
Trinidad	2.46	2.72	11%	Malaysia	9.01	5.51	-39%
				Saudi Arabia*	7.60	5.18	-32%
				Canada	15.61	4.99	-68%
				Iran*		4.54	
				Venezuela*	1.16	2.20	90%

* Denotes member of OPEC

Crude oil prices and U.S. crop exports, continued from page 4

Our study shows mixed results—for the corn market, the pattern of exports to countries dependent on oil is fairly similar to countries that are not dependent; however, for the soybean market, oil-reliant countries are purchasing a smaller percentage of soybeans than non-reliant countries. If oil prices remain low, as currently indicated by futures (see Figure 1), the impact of lower oil revenues could have greater influence on U.S. crop export demand. The Russian and Venezuelan economies are buckling under the strain of lower revenues and

that pressure is likely to spread to other (OPEC or non-OPEC) oil producing countries. For now, the larger factors influencing U.S. crop export demand seem to be the record size of global crop production over the past couple years and the strength of the U.S. dollar. Both of those factors reduce U.S. crop demand, whether the country is oil reliant or not.

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Updates, continued from page 1

Internet Updates

The following Information Files and Decision Tools have been updated on www.extension.iastate.edu/agdm.

Corn Silage Pricer – A1-65 (Decision Tool)

Converting Cash to Accrual Net Farm Income – C3-26 (5 pages)

Cash to Accrual Net Farm Income Worksheet – C3-26 (Decision Tool)

Calculating a Weighted Average Corn Suitability Rating 2 – C2-87 (Decision Tool)

Current Profitability

The following tools have been updated on www.extension.iastate.edu/agdm/info/outlook.html.

Corn Profitability – A1-85

Soybean Profitability – A1-86

Iowa Cash Corn and Soybean Prices – A2-11

Season Average Price Calculator – A2-15

Ethanol Profitability – D1-10

Biodiesel Profitability – D1-15

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