

WEEKLY NEWS ARTICLE UPDATE



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Export Sales Highlights

This summary is based on reports from exporters for the period November 15-21, 2013.

Soybeans: Net sales of 1,405,900 MT for 2013/2014 were reported for China (992,900 MT, including 180,300 MT switched from unknown destinations and decreases of 41,200 MT), Germany (91,300 MT), Mexico (75,200 MT), Iran (68,300 MT, including 65,000 MT switched from unknown destinations), and Japan (44,900 MT, including 33,000 MT switched from unknown destinations). Decreases were reported for unknown destinations (19,300 MT) and Russia (1,300 MT). Net sales of 364,900 MT for 2014/2015 were reported for China (240,000 MT), unknown destinations (120,000 MT), and Japan (4,900 MT). Exports of 1,843,800 MT were primarily to China (1,326,300 MT), Germany (91,300 MT), Mexico (91,000 MT), Japan (79,700 MT), Iran (68,300 MT), and Turkey (60,400 MT). NOTE: Accumulated exports were adjusted down for the Netherlands (91,300 MT).

Optional Origin Sales: For 2013/2014, outstanding optional origin sales total 280,000 MT were reported, all China.

Exports for Own Account: For 2013/2014, exports for own account totaling 24,300 MT were, all Canada.

Soybean Cake and Meal: Net sales of 307,900 MT for 2013/2014 were reported for Germany (66,500 MT, including 35,000 MT switched from unknown destinations and 25,000 MT switched from Poland), unknown destinations (57,300 MT), Venezuela (45,000 MT, including 15,000 MT switched from unknown destinations), Turkey (40,100 MT, including 40,000 switched from unknown destinations and decreases of 4,000 MT), and Canada (27,800 MT). Decreases were reported for the French West Indies (5,800 MT) and Poland (1,100 MT). Exports of 324,400 MT were primarily to Turkey (83,400 MT), Germany (66,500 MT), Venezuela (31,700 MT), Colombia (28,000 MT), and Canada (24,500 MT).

Soybean Oil: Net sales of 18,800 MT for 2013/2014 were reported for China (36,000 MT, including 33,000 MT switched from unknown destinations), Mexico (9,500 MT), Venezuela (2,500 MT), and Hong Kong (2,000 MT). Decreases were reported for unknown destinations (33,500 MT). Exports of 8,200 MT were primarily to Mexico (3,900 MT), Venezuela (2,500 MT), and Canada (1,100 MT).

New German Coalition Would Seek Stricter Labelling of GMO-Fed Meat

HAMBURG, Nov 25 (Reuters) - A new German grand coalition government would seek tougher regulations in the European Union for labelling of meat from farm animals that have eaten genetically-modified organisms (GMOs), a policy draft showed.

Angela Merkel's conservatives and the Social Democrats (SPD) are starting a decisive week of German coalition talks and are negotiating policies.

"The coalition would seek an EU labelling duty for products from animals which have been fed with genetically-modified plants," said a draft of a coalition agricultural policy document seen by Reuters on Monday.

Any such policy would have to be agreed and approved by the European Union via a lengthy process.

If introduced, the labels could potentially have a significant impact on livestock production as many European consumers might be reluctant knowingly to eat GMO-fed meat.

Currently most soybean-based animal feed, which is mainly imported from the United States and South America, contains GMOs while other grains that are often domestically grown for animal feed mostly do not. Soy-based feed is valued and widely used for its high protein content.

A new coalition would retain the policy of zero-tolerance of non-approved GMOs in human food, it said.

Chancellor Merkel's Christian Democratic Union (CDU) beat the SPD in an election two months ago but failed to secure a parliamentary majority, forcing her into prolonged talks with her arch-rivals.

The parties are expected to overcome their remaining differences and divide up cabinet posts this week.

The draft agricultural policy document said the conservatives and SPD have not yet been able to agree whether to continue current German policy restricting GMO cultivation.

A decision will be made later about whether Germany would make use of possible new EU rules which would enable countries to prevent farmers from growing GMO crops even if they had been approved for cultivation at EU level, the document said. (

Former German Agriculture Minister Ilse Aigner had taken a tough stand against GMO cultivation but she left the government after the German election in September to return to local politics. A new coalition would start a new initiative to improve welfare of farm animals, the document said. Restrictions on use of antibiotics on farm animals agreed before the election will be introduced as planned, it said.

The coalition would also press for an EU-wide ban on animal cloning and an EU ban on imports of cloned animals or their meat, it said.

The coalition would also seek EU-wide freedom from patent laws on conventional plant seeds.

Some seed companies have caused controversy by seeking to stop farmers producing seeds which are patented.

China Can Lower Its Grain Self-Sufficiency Threshold

BEIJING, Nov 25 (Reuters) - China could lower its food grains self-sufficiency threshold as its urbanization drive pushes up demand for grains and it faces increasingly dwindling water and farmland resources, according to a leading government researcher.

"In the long term, the grain self-sufficiency rate could be maintained at more than 80 percent while we should be basically sufficient in livestock products," said Han Jun, deputy head of the Development and Research Centre (DRC) of the State Council, or the cabinet.

The comments by Han reflect a wider debate in government about China's food security goal. The country set a self-sufficiency target of 95 percent nearly two decades ago but it has had difficulty meeting that, leading to rising imports.

"Farmland has been decreasing while water shortage is accelerating coupled with worsening climate, which will all lead to great pressure on the country's grain supply," said Han at a grain security summit at the weekend. His speech was posted on the centre's web site.

"The basic target is to achieve cereals security, which can be maintained at more than 90 percent in normal years while the rate could be lowered by 3-5 percentage points in abnormal years," he said.

By 2020 and 2035, China's corn self-sufficiency rate could be about 92 percent and 84 percent, respectively, which would mean imports could hit 19.87 million metric tons and 50.36 million metric tons a year by the time, estimated Han.

Imports of soybean would reach about 69.06 million metric tons by 2020 and 89.28 million by 2035, he said. China, the world's top soy importer, already imports about 60 percent of global-traded soybean and imports next year were seen topping 60 million metric tons.

Think-tank DRC, an agency of the country's cabinet, does not decide policy but does directly advise and issue policy recommendations to Chinese policy makers.

China's urbanization could peak at about 70 percent in 2030, up from 52.57 percent in 2012, and about 300 million people will move to cities, which will be a major driver behind the rising food consumption, said Han.

His estimate on corn imports was in line with forecasts by researchers and traders.

Agricultural minister Han Changfu in September reaffirmed Beijing's determination to stick to its long-established self-sufficiency target. But China's commerce minister Gao Hucheng told Xinhua News Agency on Monday that the world's most populous country will boost imports, particularly of grains, among other resources, to ease the constraint of limited land.

The New York Times Opinion — Iowa in the Amazon

By STEPHEN PORDER

Stephen Porder is an associate professor of ecology and evolutionary biology at Brown University.

A few years ago, one of my graduate students showed me a Google Earth image that changed my view of the world. On a photo showing all of South America, I could clearly see a single soybean farm in the Brazilian state of Mato Grosso. My first thought was that a farm that big, sitting on the edge of the Amazon, must be an environmental disaster. But when it comes to agricultural sustainability, all is not what it seems.

Despite what you might hear at your local farmers' market or Whole Foods, not all big farms are bad. Nor are all small organic farms sustainable. They may produce high-quality food, but if they don't produce a lot of calories per acre, they are doing little to help increase the global food supply. How we increase this supply over the next few decades will determine agriculture's sustainability. It's worth exploring why this is so, because sustainable food production is a fundamental human need. Getting it right will require us to carefully assess the consequences of where and how we farm.

Already, the world's farms take up an area the size of South America. By 2050, a global population of nearly 10 billion people will require roughly 70 percent more food. We have two options: Either we need to get more food out of the land we already farm, or we need to farm more land.

Nowhere are farmers pursuing the first option faster than in Mato Grosso. Last January I decided to see the consequences for myself. After a long flight from Boston, I rode the night bus nearly 500 miles of rutted roads to reach the frontier town of Canarana. Only about 25,000 people live here, but the main street has several stores selling million-dollar tractors. Waiting for my ride to the farm, I met a man from Silicon Valley who commutes every month to sell heavy equipment. He told me, "This is where the money is."

How can we determine if these farms are sustainable? Admittedly, it's unnerving to stand in an endless sea of soybeans where there was once rain forest. Exotic animals like tapirs, jaguars and rheas wander through the monocrop desert, and macaws compete for airspace with crop dusters. But sustainability has little to do with appearances. Sustainability depends on whether a farm can continue to produce food over the long term, without irreparably damaging the environment or causing other land to be cleared in the quest for increased food production.

For the past five years, my students, colleagues and I have been trying to understand the sustainability of these giant soy farms. Although I typically work on tropical forests and the soils that sustain them, the fate of the forests I love is intimately intertwined with the way people use them. When colleagues suggested that I come to Mato Grosso to see this bustling agricultural frontier, I jumped at the chance.

We focused first on fertilizer. Fertilizer helps grow more food on a given plot of land, but overuse can have serious environmental consequences. Largely, these depend on how efficiently farms use nitrogen and phosphorus. These two elements, which limit how much crops can grow, are the main components of fertilizer. Crops don't absorb all the fertilizer farmers apply, and what's left behind often ends up in waterways, where it fuels algae growth. Fifty years of heavy fertilizer use in the breadbaskets of the United States and Europe has left lakes, rivers and coasts with algae-choked "dead zones."

We expected the story to be similar in Mato Grosso. But to our surprise, we've found that streams draining the farms there have no more nitrogen or phosphorus than those in adjacent forests. The deep tropical soils are highly efficient filters, removing nutrients before they reach the water. In the American Midwest, scientists have long been searching for ways to clean up farm runoff. In Mato Grosso, the soils do the work.

But these same soils present a sustainability concern on a different front. After millions of years of heavy rainfall, Mato Grosso's soils have lost nearly all their phosphorus. The soils efficiently remove phosphorus before it reaches the streams but also bind phosphorus added as fertilizer, leaving less for the crops. As a result, farms here require twice as much phosphorus fertilizer as their counterparts in more temperate regions, where the soils are younger and more fertile. And phosphate ore, the source of phosphorus fertilizer, is a finite resource.

The world's phosphorus reserves are held by a handful of countries — the exact distribution is disputed, but possibly half of it is in Morocco alone. Much of Morocco's phosphate ore is carried 61 miles across the Western Sahara to the Atlantic, on the world's longest conveyor belt. A farm might not be sustainable if it depended on political stability in faraway countries. And how should we weigh the negative of phosphorus depletion against the positive of reduced water pollution? We don't yet know the answers.

The fertilizer story makes it complicated to figure out the sustainability of Mato Grosso's farms, which send their soy to China, as animal feed, and to Europe. Even more complicated is the question of how these farms will affect the global climate. The link, while not obvious, is important. Global warming results largely from burning fossil fuels. But another important contributor — about 15 percent of our carbon-dioxide emissions — comes from changing land use, primarily the burning of tropical rain forests to make room for food or biofuel crops. If we really want to know the environmental impact of these soy farms, we need to understand their effect on carbon-dioxide emissions.

Natural science alone cannot answer this question, so I increasingly find myself talking to economists and sociologists. Because at the end of the day, the carbon footprint of these farms will depend on whether their economic success leads to more deforestation. If so, their carbon footprint will be huge. This would be a deathblow to their sustainability.

On the other hand, these soy fields produce more calories than the low-productivity pastures they replaced. Remember options one and two: To feed a growing population we will need to either farm more land, or to get more food out of the land we farm. Either option will need to be coupled with efforts to reduce food waste and to feed fewer crops to animals.

For now, deforestation rates in Mato Grosso have slowed, as pastures have been converted to soy. It may be that megafarms, unlike the small-scale landholders they replace, are more reticent to take on the sanctions that come with illegal deforestation, though there are certainly other potential explanations. We don't know if the slowdown in deforestation will continue. If it does, and if big soy is a reason, one could argue that these fields are a boon to the global environment far greater than your local organic farm.

One thing is clear: In the coming decades we will need to produce a lot more food. I'm not suggesting Mato Grosso's farms are the answer, far from it. But it's time to move beyond the oversimplification that large-scale agriculture is incompatible with environmental goals. There are vast areas of the tropics with similar soils. They are likely to be the megafarms of the future.

We need to admit that food production is going to be the dominant use of land in the 21st century, and to decide whether we are going to farm more land or farm more intensively. Then we can move on to the grand challenge of making our farms sustainable.

The Minneapolis Star Tribune Opinion — Agriculture's Deal with the Dark Side

by: BONNIE BLODGETT

What's widely hailed as the Green Revolution indeed is, if 'green' means money and a few companies control it.

My first job was in public relations, promoting the University of Minnesota's land-grant research role to state legislators. Job-creating tech start-ups like Control Data (which would shortly go bust) were the big story back then. I never ventured over to the St. Paul ag campus, where followers of a U-educated plant pathologist named Norman Borlaug were quietly engaged in the Green Revolution.

Borlaug himself had long since left his alma mater. In the early 1940s, he'd done war work for DuPont, which offered to double his pay when the war was over. Borlaug had other plans. His high-yield wheat hybrids won him a Nobel Peace Prize and helped quadruple world population. It also produced enduring alliances between land-grant universities and corporations, whose executives saw early on that there was serious money in agriculture.

In 1996, Monsanto patented a new type of weed-resistant corn and soybean immune to glyphosate, the active ingredient in Roundup. The gene for the worm-killing bacteria Bt was woven into corn's DNA next. Traditional breeding breakthroughs that kept on coming sent transgenic crop yields through the roof. Over three decades ending in 2000, the U.S. diet saw a 25 percent spike in added sugars. Then came ethanol. Improved soybeans found their way into everything from home insulation to eco-friendly cosmetics.

As genetically modified (GM) crops proliferated, the companies involved consolidated. Monsanto, DuPont Pioneer and Syngenta now cooperate to ward off regulation and litigate against all comers who would challenge their control. Anyway, that's how Iowa State University's Dennis Keeney sees it. A professor emeritus in agronomy, at age 76 he remembers a different time. "I knew Norman Borlaug," Keeney says. "He appreciated the need for technologies adapted to local needs [but] not the blanket injection of biotech seeds into developing agriculture as is so passionately argued currently by industrial agriculture supporters, including the Bill and Melinda Gates Foundation."

Before GM seeds invaded the Third World, the Green Revolution devastated rural communities in the United States. Land stewardship and other virtues embedded in a system of relatively small, biodiverse family farms were put on the shelf as vast tracts planted in a single annual crop, corn or soybeans, came to symbolize the new economies of scale. Farmers who survived the shakeout rallied to the grow-or-die mantra. Increased yields allowed them to service debt for expensive machinery and "chemical inputs" that destroyed the soil's capacity to renew itself. All this left little time to worry about water quality, weather or wildlife.

University scientists working in agronomy and plant genomics answered to agribusiness first, farmers second. When problems arose, these highly trained experts were instructed to keep quiet. U of M entomologist Ken Ostlie told the New York Times in 2009 that his corporate sponsor threatened to pull its funding after he and 26 colleagues complained to the Environmental Protection Agency that seed products were inadequately tested before going to market.

Corporate reprisals, or just the threat of them, hardly encouraged scientists dependent on industry to take similar risks. Tension arose between scientists working for industry and those working independently on issues like bee colony collapse, clean water, and the effect of climate change on forests.

In 2005, a University of Wisconsin survey of researchers warned of a chilling effect in the disproportionate private-sector sponsorship of land-grant research. Food and Water Watch, a Washington, D.C., advocacy group, confirmed that "[b]etween 1970 and 2006, the latest years for which data are available, total private agricultural research expenditures ... nearly tripled from \$2.6 billion to \$7.4 billion, in inflation-adjusted 2010 dollars. Over the same period, total public funding ... grew less quickly, rising from \$2.9 billion to \$5.7 billion." Research on

"environmental, public health and food safety risks related to industrial agriculture" as well as "alternatives to the dominant agricultural model" weren't supported at all.

FWW analyst Tim Schwab noticed another troubling trend: corporations fund work whose "public good" seems dubious. Given the nutritional issues involved in cancer and diabetes, why is the University of Minnesota squandering its "tremendous resources" on improving breakfast cereal's mouth feel? (Schwab was referring to the U's Flavor Research and Education Center Taste Institute.) The tendency of research universities to turn a blind eye to their own conflict-of-interest policies aggravates the "biasing effect of industry money on science," the FWW study concluded.

What Norman Borlaug is to agronomy, Aldo Leopold is to ecology. Like Borlaug an Iowa native, Leopold wrote in "The Sand County Almanac" that people like him — a minority of people, he admitted — "see a law of diminishing returns in progress." Leopold admired scientists' ability to "disclose the drama" of the natural world, to manipulate the habits of a wild goose so as to "assure us a good breakfast." He also believed science and "the wild things" were on a collision course.

A bungled Iowa State University hiring process shows how administrators are caught in the crossfire between the two sides, technology vs. ecology. One side represents a decidedly human-centric worldview and the other a belief that all species have purpose in an ecosystem composed of interdependent living things.

Ames, Iowa (ISU's hometown) would be an ideal setting if the debate were given a fair hearing. No other land-grant university is so dependent on Big Ag — yet fewer than 10 percent of Iowans work in that sector. A tiny fraction even own farmland.

ISU bigwigs had gathered to hear the man regarded as a shoo-in to become the next director of its Aldo Leopold Center for Sustainable Agriculture when the candidate made an unfortunate gaffe. He let it slip that cattle had evolved to eat grass. While grass-fed is widely regarded as the most sustainable way to fatten a cow, Iowa beef are raised on corn. An appealing byproduct is the meat's luscious texture; downsides are that cornfed beef isn't a healthy choice for anyone with a cholesterol problem, and it takes a lot of antibiotics to offset corn-related digestive complaints.

In explaining why the candidate didn't get the job, ISU's president said the center's director must "walk the middle ground."

This disheartening episode reminded me of a talk I attended recently. After a truly riveting recital of threats to human life posed by industrial agriculture, Jonathan Foley, who runs the U of M's Institute on the Environment, closed with what sounded oddly like a hopeful "word from our sponsors." He suggested, in essence, that progress got us into this and progress will get us out.

Someone asked, "So Cargill isn't the devil?" Foley grinned, then told us about a project aimed at curbing deforestation in Brazil that he'd been working on with Cargill's public affairs vice president.

I remember looking around the room for someone braver than me who might follow up with a question about Cargill's recent purchase of 130,000 acres of barren farmland in Colombia. If the land will be used to feed the local population, as Cargill claims, why is the company rumored to be planning to build coastal ports? The environmental group Oxfam believes Cargill plans to export the very crops Brazil is criticized for planting in the deforested Amazon jungle — corn and soybeans. But there's no explanation beyond the company's brief news release disputing Oxfam's charges.

Despite such developments, or maybe because of them, World Wildlife Fund vice president Jason Clay places himself in the Borlaug (technology) camp. He does not dispute that the planet may be heading off a cliff, but if he

had to bet on what could prevent that, he'd put his money on the private sector. "Lord knows government isn't doing it," he jokes.

Here's the rub: WWF's situation is similar to that of the land grants. Its corporate partners Starbucks and Coca-Cola were the stars of Clay's talk at a food conference in Oregon. Mars, the candy company, came in for special praise for its eco-friendly initiatives and because it's privately held (this allows it to pursue its goals with little government interference or public scrutiny). Cargill is private, too, but apparently hasn't sought Clay's advice. Maybe that's because he believes farmer ownership of land is essential if developing nations are to eventually prosper, and Cargill seems to be taking land away from farmers.

The Economist magazine recently mentioned WWF as among several trendy new "conscience consultants" to giant multinationals, calling them "environmental charities." Citing evidence of disenchantment for the model stemming from, among other incidents, their failure to broker a carbon-trading deal, the Economist nonetheless endorsed "partnerships of opposites" as a way to counter the threat of "worldwide centralized planning."

The present arrangement — "100 corporations ... selling roughly a quarter of the world's food" — makes this a foregone conclusion, it seems to me.

The trouble, of course, is that old bugaboo, accountability. Shareholders don't provide that. Governments do. In a democracy, you have checks and balances. You have voters. Planning doesn't have to be centralized to be effective and fair. Secretiveness combined with contempt for old-fashioned constraints on corporations' increasingly centralized power effectively derails discussion of how the for-profit conglomerates are going to look after the needs of ordinary people and the planet. But even more effective is to characterize all criticism, whatever the content, as not fact-based and motivated by ... well, that's just it. Can a man like Wes Jackson seriously be motivated by money?

Jackson is the founder of the Land Institute in Salina, Kan. He grows perennials, and lots of them. As every gardener knows, perennials go dormant in winter and die back, but return year after year — the ultimate no-till solution to soil erosion and everything else Jackson says is wrong with modern agriculture. He plants his improved grain crops in biodiverse "mixtures" so productive, resilient, high-calorie and low-maintenance that the New York Times food writer Mark Bittman traveled to Salina to see them firsthand.

About industrial agriculture, Jackson told Bittman: "We don't have to slay Goliath with a pebble. We just have to quit using so much fertilizer and so many pesticides to shrink him to manageable proportions." On the progress-or-perish issue, he placed his bet decades ago. He's invested his whole life — all 77 years — in plants.

U.S. Farm Sector Bracing to 'Sober Up' from Boom in 2014

By Christine Stebbins

CHICAGO, Nov 25 (Reuters) - After more than six years of unprecedented boom in the U.S. farm economy driven by a government-backed drive for biofuels, record low interest rates and rising food exports, American grain farmers and their bankers are bracing for change.

U.S. farmers have just finished harvesting their largest corn crop in history – taking the steam out of a long bull market. Earlier this month the Obama administration also signaled that renewable fuels were losing political favor as the Environmental Protection Agency proposed cutting the amount of corn-based ethanol oil refiners must blend into U.S. fuel supplies.

The EPA news sent the corn market to its lowest in 3 years, with prices trading near \$4 a bushel on the Chicago Board of Trade, compared with record levels above \$8 in the summer of 2012 in the midst of the historic Midwest

drought. Soybeans, wheat and other crops have eased from a year ago, along with corn, the grain bellwether, with almost 100 million acres planted in the United States, the world's largest corn grower and exporter.

A growing number of farm bankers and economists interviewed at a Chicago Federal Reserve conference and the American Bankers ag meeting in Minneapolis this month warned farmers to brace for change in the coming year. Grain farmers will see their income shrink even as costs to produce crops stay high. Farm land rents and seed costs are among the biggest costs that may resist declines in the face of falling crop revenues, but fertilizer also remains pricey, they said.

Additionally, during the years-long grain boom many farmers paid cash for farm machinery and land at record high prices – which kept their debt low but cut the amount of cash on hand. So far, interest rates are staying low for refinancing or fresh debt, working in farmers' favor. But debt pressures remain intense in some pockets of the Corn Belt among many younger and more aggressive farmers who hopped on the boom. So distress sales of assets or even foreclosures and bankruptcies look inevitable as a "down" cycle returns to grain prices, farming experts say.

"The year 2014 will be the sobering up period," said Michael Swanson, an economist and senior vice president with Wells Fargo, the largest private lender to U.S. agriculture.

He said pockets of distress in the northern Midwest were evident. Last year in Minnesota there was a \$2.75 per bushel gap in the cost of production between the best and worst growers in the state, Swanson said.

"Four-dollar corn would be bust for the high-cost producers and a burden for the low-cost producers," he said. "We will see a lot of stress with \$4 corn, which will transform the market."

David Kohl, professor emeritus of agricultural economics at Virginia Tech, noted: "You have a group that is very efficient and doing well, but we're starting to see stress in that lower affluent economic producer.

"It's going to be interesting to see this play out this fall and winter."

HARD OR SOFT LANDING?

Other farm bankers and economists at the Fed conference agreed that stress is here or on the way in grain country, with the debate only on whether there will be a hard or soft landing. Most forecast a soft landing, with limited distressed sales of assets like land or farm foreclosures due to over-leveraged balance sheets. Few saw analogies to the 1980s, when thousands of over-leveraged farmers lost their farms as interest rates spiked.

Purdue economist Michael Boehlje told the conference there were four major booms in U.S. farm history – including the last 6 years of the biofuels boom, when plantings and prices both rose to records. What followed those booms, he said, were two busts and one soft landing. The two busts were marked by profound declines in export demand.

"The bust years were triggered by a cut-off in exports," Boehlje said, noting that U.S. exports remain strong and biofuels corn demand, though it may not grow at the same rate, will still take up to 40 percent of the U.S. crop. "I'm expecting a soft landing," he said.

A key economic indicator of the health of the farm economy is the value of farmland, which represents up to 90 percent of grain farm assets and is the basis of loan collateral and the wealth effect in farm country. Prices of prime grain land have doubled or even tripled in the last five years as farmers rushed to plant fence post to fence post and feed the ethanol pipeline even as export demand to China and others soared.

Quarterly surveys released this month by the Kansas City, Chicago and St. Louis Feds of more than 400 farm bankers in the grain belt confirmed that farmland auctions are showing a steady to weak tone for the first time in five years. Doubts center on 2014 crop revenue, but other key variables also fueling worry. The status of crop insurance in the absence of a new farm bill was the best example.

"The decline in commodity prices is going to have an influence on real estate. Where we end up is hard to say," said Curt Covington, senior vice president at Bank of the West. "Say you had 20 percent decline in real estate prices, most farmers' balance sheets are pretty well protected because there isn't a lot of real estate debt."

But if he is not overly concerned about a land bubble popping, cash flow is another matter.

"My biggest concern is not leverage, it's liquidity – how much working capital is in the balance sheet?" Covington said. "Traditionally, Midwest farmers don't carry a lot of working capital on the balance sheet."

Sam Miller, head of agribusiness for BMO Harris Bank, was cautiously optimistic about a soft landing.

"We've had some really good years for grain producers. All good things have to come to end or at least adjust. Seems like we're in that period," he said. "Supply has changed. But if you look at exports, they're robust."

Bangladesh Approves Cultivation of Genetically Modified Eggplant

Nov. 22, 2013 7:12 a.m. ET

SINGAPORE—Bangladesh has approved commercial cultivation of genetically modified eggplant resistant to insect damage, marking a significant breakthrough after seven years of research, a top government official said Friday.

Bangladesh becomes the 29th country in the world to commercially grow a genetically modified crop. Genetic modification of crops is one of the most controversial and polarizing issues in global agriculture. It is contested by environmental activists on concerns over food safety even as scientists research on transgenic crops to tackle drought, salinity and pest-related problems in agriculture.

"Cultivation of four varieties of Bt brinjal [eggplant] has been approved by the environment ministry and planting will start this month," Director General of the Bangladesh Agricultural Research Institute Rafiqul Islam Mondal told The Wall Street Journal.

Scientists in India have also developed Bt eggplant but commercial cultivation isn't permitted because of protests over its biosafety and concerns over economic viability.

"We have taken the Bt gene technology from India's Mahyco company but all varieties have been developed by our institute," Mr. Mondal said. U.S.-based crop science multinational Monsanto Co. has a 26% stake in Mahyco.

Mr. Mondal said cultivation will be done under strict monitoring, on a limited scale and the four varieties will be specific to four different regions.

December-January is the main planting season for eggplant in Bangladesh though it is also grown in the highlands over June and July.

Genetic modification of eggplant by introducing the "bacillus thuringiensis" gene will help tackle the menace of the fruit and shot borer, one of the most damaging pests for the crop, Mr. Mondal said. This pest has damaged between 25% and 70% of Bangladesh's eggplant crop in the past, he added.

With the introduction of genetically modified eggplant, "marketable" yields could potentially be doubled in the next few years, Mr. Mondal said. Currently large volumes of damaged crop are rejected by consumers in the retail and wholesale market and have to be thrown away.

"We are doing trials of five more varieties of Bt brinjal and plan to apply for permission for commercial cultivation next year," Mr. Mondal said.

Separately, Bangladesh is researching on genetically modified potatoes to tackle the serious disease called "late blight of potato," but trials will take up to three years, he said.

India's Mahyco is developing a series of genetically modified varieties of wheat and rice to boost crop yields by tackling drought, salinity and pests, the company's chief technology officer, Usha Zehr, told The Wall Street Journal in a recent interview. She said the company has also submitted an application to the regulatory authority, seeking permission to undertake field trials for a herbicide-tolerant variety of genetically modified wheat.

However, a technical committee appointed by India's Supreme Court in October 2012 had recommended a 10-year blanket ban on field trials of genetically engineered food crops, prompting criticism and opposition by many scientists.

Researchers Warn Against High Emissions from Oil Palm Expansion in Brazil

(VerticalNews) -- By a News Reporter-Staff News Editor at VerticalNews Health & Science -- Expanding millions of hectares of Brazilian land to produce palm oil for food or for renewable, clean-burning biodiesel could result in extremely high emissions of carbon dioxide (CO₂) unless strict controls are put in place.

This is according to a new study published, 14 November, in IOP Publishing's journal Environmental Research Letters, by a group of researchers from the University of California, Davis.

The researchers found that unless the oil palm plantations are strictly confined to previously deforested land and not allowed to spill over into conservation or indigenous areas, the total amount of CO₂ emissions from biodiesel, made from palm oil produced in that region, may exceed the carbon intensity of petroleum diesel, which biodiesel intends to replace.

Focusing on the Brazilian region of Para, the researchers employed a "bottom-up" model to arrive at their conclusions, which accounted for the complex interactions of drivers at the regional and local scale that can influence emissions, such as neighboring land use, access to infrastructure, the distance to local markets and the suitability of land.

Brazil has drastically increased its production of biodiesel over the last decade. In 2006, the country produced 69 million liters of biodiesel; today, it produces close to 3 billion liters, the majority of which is produced from soybean oil.

Oil palm has become an increasingly attractive crop for the production of biodiesel as it has a much higher yield than other crops, requires barely any new technology to produce and harvest, can grow in poor soil conditions and is very labor intensive-ideal for job creation and security.

The Brazilian government has recently approved a bill to expand 4.3 million hectares of previously deforested land to oil palm plantations and has found over 30 million hectares that may be suitable for the expansion, the majority of which are in the northern state of Para.

In their study, the researchers created three different scenarios of land use change over a 30 year period in Para and used a land use change model and spatially explicit carbon maps to assess the amount of CO₂ emissions that may occur as a result of each scenario.

In the first scenario, only a third of plantations occurred on previously deforested land with the rest occurring on conservation and indigenous areas; in the second and third scenarios, a larger proportion of plantations (46% and 78%, respectively) occurred on previously deforested land.

In each of the scenarios, 22.5 million hectares of land were converted, creating 29 billion gallons of biodiesel each year. In the first and second scenarios, where there was little or no enforcement, the land use change resulted in 84 and 60 grams of CO₂ emitted per megajoule (gCO₂e/MJ), respectively-the European Commission has rated the carbon intensity of diesel as 83.8 gCO₂e/MJ.

The researchers point out that if the extraction, refinement, transport and actual combustion of the biodiesel is taken into account and added to emissions from either of these two scenarios, the total carbon intensity of biodiesel will greatly exceed that of diesel.

Co-author of the study, Dr Sonia Yeh, from the UC Davis Institute of Transportation Studies, said: "If the Brazilian government is to promote policies that encourage land conversion next to environmentally and ecologically sensitive areas, then they should also weigh in on the consequences associated with the lack of enforcement if they are to avoid irreversible damage to the environment."

Sahoko Yui, a UC Davis graduate student researcher, completed the work under Dr Yeh's supervision.