Situation and Outlook: Wheat, Corn, Soybeans, and Rice

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Introduction

I wish to thank the conference organizers for inviting me here today. It was 30 years ago that I had the pleasure of visiting China for the first time. And, since then, I have been back numerous times. During my 40 plus years with the United States Department of Agriculture (USDA), my travels to China have been a highlight of my career.

As chairman of the World Agricultural Outlook Board, I am responsible for the coordination, review, and clearance of all commodity forecasts released by USDA in the monthly *World Agricultural Supply and Demand Estimates* report, generally known as the *WASDE* report. The information published in this report is essential for commodity markets to operate efficiently, discover prices, and to facilitate international trade. As such, it is a primary source of information used by world commodity markets. It is the Board’s responsibility to ensure that *WASDE* estimates and forecasts are unbiased, based on the best available information, and released to the public in a timely manner. The *WASDE* report may be downloaded from the USDA Web site.

It should be noted that the *WASDE* report contributes to the mission and goals of the Agricultural Market Information System. It has long been the policy of USDA to assemble, analyze, and make publicly available the most current information available on world production, trade, utilization, and stocks for major agricultural commodities.

Today, I limit my remarks to prospects for 2013/14 world wheat, corn, soybean, and rice markets as published in the May 10 *WASDE* report. The next update of the *WASDE* report will be published on June 12.
Given the importance of the United States and China to world markets, I will highlight supply and demand developments in both countries. Last year, the United States suffered one of its most severe droughts in recent history. Given the U.S. role as a major exporter, there is heightened interest in U.S. crop prospects for 2013/14. And in China, urbanization, increased incomes, and improvements in diets continue at a rapid pace. This is reflected in increased animal protein consumption. Large-scale, capital-intensive livestock operations are replacing small-scale production. China’s livestock producers are consuming more wheat-, corn-, and soybean-based compound feeds. With continued robust economic growth, growth in meat production and compound feed production is expected to continue.

**Wheat Situation and Outlook**

World wheat production is expected to recover significantly from last year. All major exporting countries except the United States are expected to produce larger crops. Canada, Kazakhstan, EU-27, Russia, and Ukraine account for the majority of the increase. World wheat production, as shown in **Chart 1**, is expected to reach a record 701 million tons and exceed consumption by 6 million tons this year. Thus, world wheat ending stocks are expected to grow significantly for the first time in 4 years. It should also be noted that in the 2 years prior to 2010/11, world wheat production increased dramatically and substantially exceeded world consumption. Thus, going into 2010/11, world stocks had grown to comfortable levels.

**Chart 1. World Wheat Production & Consumption**

![Chart 1](image)

**Chart 2** compares annual wheat production in the United States and China and highlights the steady growth in China’s wheat output during the last decade.
U.S. wheat production, on the other hand, has been trending lower as corn and soybeans compete for land. Harvested area for 2013/14 is projected to decrease nearly 5 percent from last year because of persistent drought and spring freezes in the Great Plains. Assuming yields decline from last year’s record high, wheat production for 2013/14 is expected to decrease more than 9 percent to 56 million tons. China’s 2013/14 wheat production is projected at 121 million tons; more than double the U.S. level and only slightly below the record 123 million tons reported in 1997/98. That year, China’s harvested area was nearly 25 percent higher.

Wheat yields in China have grown steadily since 2002/03, setting new records nearly every year over the past decade. As shown in Chart 3, China’s yields have exceeded those in the United States by about 60 percent in recent years. This largely reflects China’s greater production of higher-yielding soft winter wheat and widespread use of irrigation.
In the United States, a smaller wheat crop and lower beginning stocks are projected to reduce 2013/14 U.S. wheat supplies to the lowest level since the 2007/08; however, supplies are expected to remain ample.

Given the expected rebound in U.S. corn production, wheat feed and residual use is expected to decline sharply from 2012/13. And with expected production increases in other major wheat exporting countries, U.S. wheat exports are expected to drop nearly 3 million tons from 2012/13 to 25 million. Ending stocks for 2013/14 are projected at 19 million tons, down less than 2 million from the beginning level. The season-average farm price is projected at $250 per ton, down $37 from last year’s record high.

**Corn Situation and Outlook**

World 2013/14 corn production is forecast to be a record as production is expected to recover in the United States and good crops are produced in the rest of the world. In 2013/14, global corn consumption is projected to rise again due to continued global economic expansion, falling grain prices, and growth in animal feed demand. However, as shown in **Chart 4**, world production is expected to exceed consumption. As a result, world corn ending stocks are expected to increase in 2013/14 after declining in 3 of the last 4 years.
It should also be noted that foreign corn consumption has continued to rise despite 40 percent of the U.S. corn crop being used in ethanol production over the past 3 years. As shown in Chart 5, this is largely due to increases in cultivated area and production of corn outside the United States.

Nevertheless, despite sharply increased corn production elsewhere in the world, the United States continues to be the world’s largest corn producer, followed by China. As shown in Chart 6, U.S. corn production is expected to rebound to a record 359 million tons, an increase of 31 percent. China’s corn production is forecast at 212 million tons, also a record and up 2 percent from 2012/13. This, of course, assumes normal weather in both countries.

In China, shifts in plantings away from wheat and toward corn have helped boost China’s corn production. However, as shown in Chart 7, corn yields are only about two-thirds of those in the United
States and are growing at a slower pace. This has limited China’s ability to meet its rising demand for corn with its own domestic production.

It is interesting to note that despite recent weather-related shortfalls, corn yields in the United States, have increased at a rate of about 0.12 tons per hectare per year over the long-term. This has resulted from improved genetics, higher plant populations, better nutrient and pest management, and other advances in agronomic practices. In China, corn yields have grown steadily, but only at a rate of about 0.07 tons per hectare per year. It would take only a small increase in China’s yield growth for China to achieve substantial gains in production. For example, yearly increases in yields like those in the United States would raise annual corn production in China by nearly 20 million tons by 2022/23 and add more than 100 million tons to China’s domestic supplies over the next decade.

In the United States, 2012/13 corn stocks remain very tight due to the impact of last year’s severe drought. However, the corn supply situation is expected to improve dramatically this year. U.S. corn planted area is expected to be about the same as a year ago. However, with normal weather, less abandonment, and a rebound in yields, production is forecast to be record high. The U.S. corn yield is projected at 9.9 metric tons per hectare. As a result, U.S. corn production is projected at a record 359 million tons, 85 million tons above the drought-reduced 2012 crop. The corn supply is projected to rise 25 percent as the increase in production far outweighs the smallest beginning stocks in 17 years.

Lower feed costs are expected to provide an economic incentive for a sharp increase in domestic feed use in 2013/14. Corn used to produce fuel ethanol is projected to increase 5 percent as returns to ethanol production improve. Despite the expected increase this year, corn used for ethanol production in the
United States continues to be limited by weak gasoline consumption, increases in vehicle efficiency, and obstacles to expanded use of gasoline blends with more than 10 percent ethanol.

U.S. corn exports, at 33 million tons, are expected to rebound sharply in 2013/14 from the 42-year low in 2012/13. Exports will be supported by record production, but will be limited by substantial foreign competition. Due to sharply lower world corn prices and increased domestic animal feed use, China’s corn imports from all sources are expected to more than double to 7 million tons.

U.S. corn ending stocks for 2013/14 are projected at 51 million tons, more than 2.5 times the 2012/13 forecast. While use is expected to approach record highs, strong export competition will allow stocks to rebuild rapidly. Given prospects for abundant stocks in the U.S. and major exporting countries, harvest time cash prices in the United States are expected to fall to around $158 per ton. The season-average farm price is projected at $185 per ton, down $87 from the 2012/13 record high.

**Soybean Situation and Outlook**

World soybean production rebounded sharply in 2012/13, largely due to improved crops in South America. Combined with a recovery in the United States from last year’s drought-reduced yields, world soybean production in 2013/14, at 286 million tons, is forecast record high. It should also be noted, as shown in Chart 8, that much of the growth in world soybean area, and therefore the increase in world production is occurring outside the United States. South America accounts for most of the increase.
As shown in **Chart 9**, China will continue to dominate world soybean trade in 2013/14 by accounting for an estimated two-thirds of world imports.

![Chart 9. World Soybean Trade](image)

China’s imports are expected to increase sharply to 69 million tons in 2013/14 as China replenishes stocks that are being drawn down this year. In contrast, little demand growth is expected in EU-27, Japan, and South Korea.

Modest growth is expected in world soybean meal trade, supported by stronger demand in the EU-27 and Southeast Asian countries. Soybean oil trade is expected to be limited by continued strong growth in palm oil availability. As a result, soybean oil imports by top importers India and China are expected to rise only modestly from 2012/13.

With respect to China, it is noteworthy that this country has not increased domestic soybean production during this period of rapid growth in soybean demand. Fueled by rising incomes and increased demand for meat in the diet, protein consumption by livestock in China has more than tripled since 1997/98. China’s growing protein consumption has been fueled by a massive increase in imported soybeans, not by an increase in domestic soybean production. The expansion in China’s soybean crush has been achieved exclusively through increased soybean imports. In 1997/98, China crushed 8 million tons of soybeans and imported 3 million tons. Fifteen years later, China crushed 66 million tons, and imported nearly 60 million tons.

As shown in **Chart 10**, China’s 2013/14 soybean production is projected at 12 million tons while
imports from all sources are projected at nearly 70 million tons.

In the United States, soybean stocks remain very tight largely due to drought-reduced yields last year and continued strong exports following the 2011/12 drought in South America. This year, soybean planted area is projected slightly above last year. With normal abandonment, soybean harvested area is projected at 31 million hectares, about the same as last year. With yields forecast at 3.0 metric tons per hectare, soybean production is projected 12 percent higher at 92 million tons. Soybean supplies for 2013/14 are projected at 96 million tons, up 10 percent from 2012/13 as larger soybean production more than offsets lower projected beginning stocks and imports. Domestic use is projected at 49 million tons, up 5 percent from 2012/13. Crush is projected to increase to 46 million tons reflecting expected increases in both meal exports and domestic demand. Despite stronger competition from South America, U.S. soybean exports are projected to rise to 39 million tons in 2013/14 reflecting larger supplies and increasing foreign demand.

Given the decline in soybean prices and increased global supplies, the average price of soybean meal is expected to decline to $331 per metric ton in 2013/14, down sharply from $468 in 2012/13. U.S. soybean meal exports are projected to grow 3 percent in 2013/14 to slightly above 9 million metric tons. Soybean meal exports by Argentina are expected to expand from drought-reduced levels in 2012/13, while exports by Brazil and India are likely to remain near recent levels due to continued growth in domestic use. In contrast, U.S. soybean oil exports are projected to decline more than 40 percent in 2013/14, as South American exporters dominate trade with larger supplies.
U.S. soybean ending stocks for 2013/14 are projected at 7 million tons, the highest since 2006/07 and more than double the beginning level. With a sharp increase in production and ending stocks and lower corn prices, the season-average farm price for soybeans is projected at $386 per ton, down from $525 in 2012/13.

**Rice Situation and Outlook**

World 2013/14 rice production is projected at a record 479 million tons (milled basis), up 2 percent from 2012/13. World consumption is projected to grow 1 percent to a record 477 million tons. As shown in **Chart 11**, world production has exceeded consumption every year since 2007/08.

![Chart 11. World Rice Production & Consumption](image)

Global exports in 2013/14 are forecast at 39 million tons, nearly the same as 2012/13, but slightly below the 2011/12 record. China, the world’s largest rice producer, has become a significant importer of rice in recent years from Vietnam, Burma, and Pakistan. Imports are attractive to China when foreign rice becomes available at prices below China’s internal government-supported prices.

World rice ending stocks for 2013/14 are forecast at 108 million tons, representing 83 days of use, unchanged from 2012/13. Rice stocks held by the major exporters, including India, Pakistan, Thailand, the United States, and Vietnam are projected to be record high at nearly 41 million tons. In 2013/14, China and India are projected to account for about 43 and 22 percent of global carryout stocks, respectively.

Thank you.