

China's Corn Situation: Recent Trends and Implications for World Grain Trade

A Multi-Client Analysis and Outlook

July 2010

The Chinese economy has emerged strong from the world financial crisis due in part to its massive money injection into the economy and aggressive government investments, resulting in a GDP growth of 9.1 percent in 2009. The World Bank has projected that China will overtake Japan to become the world's second-biggest economy in 2010. China's rapid economic growth is stimulating demand for higher-value food products, including those produced from corn—which, in China, is used for food, feed, industrial products and for exports. China's booming corn feed and processing demand has the potential to fundamentally change the global corn balance situation. It is important to note that China recently has started to import corn and to date has purchased about 1 million metric tons of US corn. Now, the question becomes whether China's corn imports are a short-term phenomenon or the starting point of a long-term trend?

Please join Informa Economics, Inc. (Informa) and the National Grain and Oils Information Center (NGOIC) of China in this comprehensive multi-client study that will examine the entire Chinese corn complex and reach conclusions that will be critical to long-term strategic positioning of your firm.

Questions of Critical Concern

In this report, the study team will carefully and thoroughly evaluate all aspects of China's corn supply and demand situation and outlook with a focus on the following questions.

- Are current Chinese corn imports driven by last year's production shortfall in China or is actual demand outpacing supply? Many market observers attributed China's current corn import demand to last year's corn output shortfall, estimating that production declined anywhere from 10 to 25 million MT from the previous year. However, China's National Bureau of Statistics' official estimate was much larger, only down less than 2 million MT from the previous year. So, which is closer to the reality? If it is truly due to the output shortfall, will the import demand be short lived and similar to what we saw in 1995-96?
- The Chinese government appears committed to improving the welfare of farmers and low income families by eliminating agricultural taxes, subsidizing grain, oilseed and livestock production, raising agricultural commodity purchase prices, and by subsidizing farm income and raising minimum wages for workers. In addition, the government is planning to establish a national social security system and health care system in hopes of encouraging domestic consumption. A couple of years ago, many provinces announced they were planning to raise workers' income by 15 percent annually. But, the plan was stalled by the world financial crisis. Now that China's economy has shown a strong growth trend again, the plan has been revived to stimulate domestic demand. The Ministry of Commerce projected annual Chinese consumer purchasing power could reach US\$5 trillion by 2015, a level of purchasing power second only to the US. With rising domestic purchasing power, could there be potential for an explosive demand growth in grains and meats, which could lead to large, if not, massive corn import programs in the foreseeable future?
- China is using 7 percent of global arable land and 6 percent of global water resources to feed about 20 percent of the world's population. Food consumption has been growing rapidly over the past 10 years. With limited land and water resources, can China continue to maintain its self-sufficiency in grains and meat production over the next decade?
- Growth in China's protein meal consumption in its livestock and poultry sectors has been the major driving force behind China's enormous soybean importing volume in recent years. However, there appears to be a disconnect between the meal usage growth and corn feed usage growth. Taking the USDA balance table for example, USDA had projected that China's all meal demand would be up 9 percent (soymeal up 13 percent) in 2009/10 and up 8 percent (soymeal up 13 percent) in 2010/11. Meanwhile, it projected that China's all grain feed usage would only be up 1.3 percent (corn up 1.9

percent) in 2009/10 and up 0.8 percent (corn up 0.9 percent) in 2010/11, comparatively. Is USDA under estimating corn feed demand in its balance sheet?

- What policies (past, present and future) will shape China's future corn import program? This study will thoroughly examine the Chinese government's past policies and their impacts on corn supply and trade; summarize the government's new policies and initiatives related to the industry; provide an organizational chart of government branches and agencies that regulate the industry; and discuss new policy initiatives and their implications.
- The state reserve's role in China's grain purchasing and marketing has become increasingly important. Over the past few years the state has bought anywhere from 20 to 40 percent of the domestic grain crop and effectively sets a price band in the domestic market. Also, the government is considering consolidation of major agricultural commodity reserves including grains, oilseeds, vegetable oil, pork, sugar and cotton into one big conglomerate called China Agricultural Commodity Reserve Corporation. What is the future role of the state reserve corporation in China's grain market, and what will be its involvement in international trade?

The Proposal

To help clients answer these questions, understand these dramatic trends, plan future investment and management strategies and take advantage of emerging market opportunities, Informa Economics, Inc. will join with the National Grain and Oils Information Center to undertake a comprehensive study of the dynamic Chinese corn market and the implications of current trends on global grain markets. While the final study work-plan will reflect input and suggestions for emphasis from study participants, key areas of expected study focus are described below in the Draft Study Outline.

Draft Study Outline

I. Review of China's Corn Supply, Demand and Trade Situation

- 1.1 Overview of China's corn production over the past ten years
 - China's corn production situation and distribution
 - Regional characteristics of corn production
 - Overview of corn production policy and subsidies
 - Changes in corn area and yields over the past ten years
 - Constraints of land and water resources
- 1.2 Domestic demand for corn
 - Review of China's corn supply and demand situation
 - Food and feed corn consumption in China
 - Corn industrial uses
- 1.3 Overview of China's trade situation and policies
 - Overview of China's corn imports and exports

- Major factors affecting China's corn trade
- China's corn trade policy and future trend
- Current corn import licensing procedure
- 1.4 Corn purchasing and marketing in China
 - China's corn marketing system
 - Seasonality of corn marketing and regional characteristics
 - Major players in domestic corn purchasing and marketing
 - Understanding government's corn purchasing and auction program
 - Regional corn surplus and deficit
- 1.5 Domestic corn storage and transportation system
 - Highway, railway, waterway and port systems in China
 - Domestic corn shipments and transportation costs
 - On-farm and commercial storage systems and storage costs
 - Development of grain storage system

II. Demand Situation and Outlook

- 2.1 Key Demand Drivers
 - Macroeconomic outlook
 - Investment sources
 - Growth of the Middle Class
 - Changing in food diet structure
- 2.2 Processing demand for corn and its products
 - Supply and demand for corn starch products
 - Supply and demand for corn sweetener products
 - Demand situation for alcohol/ethanol products

III. China's Livestock and Poultry Industry and Its Outlook

- 3.1 Overview of China's hog industry
 - Development of China's hog sector
 - Backyard vs. commercial hog production in China
 - Domestic cost of hog production in China
 - China's hog production policies
- 3.2 Domestic demand for pork
 - Review of China's pork supply and demand situation
 - Seasonality of pork demand
 - Overview of China's pork trade and policies
 - Projection of China's pork supply and demand
- 3.3 Overview of China's poultry industry
 - Development of China's poultry sector
 - Backyard vs. commercial poultry production in China
 - Domestic cost of poultry production in China
 - China's poultry production policies
- 3.4 Domestic demand for poultry meat and eggs
 - Review of China's poultry meat and egg supply and demand
 - Overview of China's poultry meat and egg trade and policies
 - Projection of China's poultry meat and egg supply and demand

- 3.5 Domestic supply and demand for aquatic products
 - Review of China's aquatic supply and demand
 - Projection of China's aquatic supply and demand

IV. China's Feed Industry and Its Outlook

- 4.1 Overviews of China's feed industry
 - Feed production in China
 - Changes of feed production structure
- 4.2 Outlook of China's feed industry
 - Driving force behind the feed industry development
 - Projections of China's feed production and demand

V. China's Corn Processing Industry and Its Outlook

- 5.1 Overviews of China's starch industry
 - Starch production in China
 - Starch marketing and trading
 - Downstream products from starch
 - Foreign trade of starch and downstream products
 - Foreign investment in corn starch industry
- 5.2 Supply and demand outlook for corn starch industry
 - Demand outlook for corn starch
 - Demand outlook for downstream products
 - Projection of starch processing demand for corn
- 5.3 Overviews of China's alcohol/ethanol industry
 - China's alcohol production, demand and trade
 - China's ethanol production, demand and trade
 - Foreign investments in alcohol/ethanol industry
- 5.4 Policies of corn processing industry
 - China's policies for corn producing industry
 - China's policies for ethanol industry
 - China's policies on processed corn product trade
- 5.5 Supply and demand outlook for alcohol/ethanol industry
 - Projections of alcohol production and consumption
 - Projection of ethanol demand
 - Projection of alcohol/ethanol processing demand for corn

VI. Aggregate Corn Demand Outlook

- 6.1 Projection of corn demand from livestock and poultry industries over next ten years
- 6.2 Projections of corn processing demand over the next ten years
- 6.3 Summation of total demand
- 6.4 Interactions between sectors that can impact demand

VII. Development of China's Corn Supply

- 7.1 Total acreage and corn acreage projections
- 7.2 Yield projections for corn and other grains

- 7.3 Projections of domestic corn production over the next ten years
- 7.4 Impact of DDG and other grains on China's feed grain supplies

VIII. China's corn supply and demand summary

- 8.1 China's corn supply and demand situation over the next ten years
- 8.2 Assessment of the potential for China to becoming a major corn importer
- 8.3 Major implications to world corn trade

Primary Study Deliverables

Upon initiation of this multi-client study, a kick-off meeting for study participants will be held via webinar or conference call to discuss study approaches and priorities and provide an opportunity for client input concerning both focus and emphasis. In addition, participating clients may provide such input via email to the study team. Approximately four months after the kick-off meeting, the study team will provide a study draft and a conference call discussion of study results will follow the draft report.

Study Schedule

Conference call kick-off:	July 2010
Study begins:	August 2010
Draft study draft due:	October 2010
Study report client seminar:	November 2010

Who Should Buy This Study?

Because of the far-reaching impacts that China has on the global economy, a broad range of companies from many sectors will find this study valuable. Sectors where this study will be relevant include:

- Traders and merchants
- Livestock producers and processors
- Feed manufacturers
- Grain merchandisers
- Grain and oilseed processors
- Technology firms
- Transportation providers
- Fertilizer and chemical firms
- Banks and financial institutions
- Food processors
- Seed and genetics firms
- Infrastructure and engineering firms
- Investors

Informa Economics

Informa Economics, Inc., formerly known as Sparks Companies, Inc., is the world leader in broad-based agribusiness consulting and commodity market analysis. Founded in 1977, the company now serves hundreds of firms and institutions worldwide. In December 2003, Sparks was acquired by Informa plc, a global business information group. Informa Economics and its international divisions including: Agra CEAS in The UK and Brussels, FNP Brazil and Washington Policy and Analysis represents one of the world's most comprehensive agriculture, food and energy, Consulting groups.

Informa Economics offers several broad categories of services:

- Management Consulting for Agribusiness;
- Agricultural Commodity Market Analysis;
- Risk Management Strategies;
- Education and Training;
- Newsletters and Other Publications; and
- Energy Market Analysis.

Our Mission: "To Be a Vital Force in the Success of Agriculture, Food, Energy and Transportation Interests Around the World."

Commodity Market Analysis

Informa Economics offers a comprehensive package of well-respected, timely and highly detailed commodity market information. Informa Economics constructs estimates and forecasts of U.S. and world acreage and crop production, weather, crop and livestock/meat supply and demand fundamentals and prices, as well as assessing transportation and storage factors, agricultural policies and long-term agribusiness trends. The scope of this work covers the following areas:

- All major grains, oilseeds and products, cotton and fibers;
- Livestock, meat, poultry and dairy;
- Soft commodities, including sugar;
- Specialty vegetable oils;
- Transportation services;
- Weather services; and
- Long-term forecasting.

Consulting Services

The Informa Economics Consulting Group provides management and economic consulting services to organizations in the agriculture, renewable fuels, food processing and foodservice sectors. Clients include corporations, cooperatives, trade associations and government agencies in the United States, Canada and overseas. Informa Economics advises clients on a broad range of economic, marketing, financial, strategic planning and regulatory issues.

In order to meet client objectives, Informa Economics utilizes a variety of methods, including:

- Financial statement preparation;
- Business plan development;
- Site selection studies;
- Market research;
- Strategic planning;
- Econometric analysis; and
- Risk management strategies.

In addition to business-related services, the Informa Economics Consulting Group conducts analyses of government policies and regulations. Informa Economics consults with government agencies, non-government organizations, multinational organizations and agribusinesses regarding the impacts of policies and regulations on agricultural markets and industries. Informa Economics consultants also participate in a variety of international economic development projects. Additionally, Informa Economics provides expert testimony for legal cases and government hearings.

National Grain and Oils Information Center (NGOIC)

China National Grain and Oils Information Center (NGOIC) was a division within the State Grain Bureau, a government branch mainly in charge of macro control of grain and oil supply and demand; arranging grain procurement; setting trade policies and standards; and managing state grain and oil strategic reserves.

NGOIC is the premiere grain and oilseed production, trade and policy research institute in China. Its subscribers include all government branches that oversee the grain and oilseed industry as well as most of the leading players in the grain and oilseed industry.

NGOIC's publications include Grain Market Daily, Oilseed Market Daily, Daily Grain Price Report, Daily Oilseed Price Report, Weekly Grain Report, Weekly Oilseed Report, Weekly Wheat Report, Weekly Pork Report, Weekly Rice Report, World Agricultural Report, Monthly Grain Market Report and Monthly Oilseed Market Report.

It has a nationwide network that collects firsthand information, including: crop conditions and development, more than 300 market price series, regional supply/demand situations, industry developments and government policies.

NGOIC routinely organizes conferences and forums between government officials and industry leaders to discuss the supply/demand situation and exchange views on the government's policies and regulations.

Its research findings are frequently quoted by the national and international news media such as Reuters, Bloomberg, Dow Jones, China Daily, People's Daily, and CCTV. The

NGOIC's research findings are used by the central government in its policy formulating process.

The Market Monitoring Group under the NGOIC, which is collaborating on this project, is responsible for organizing and setting up the national grain and oilseed information system, tracking the dynamic market movements. It provides short-term market monitoring as well as intermediate and long-term grain and oilseed market analysis and projection. In addition, the NGOIC serves as a government think-tank to provide firsthand grain and oilseed information and in-depth market analysis to assist the government in setting its agricultural production and trade policies and conducting macro supply/demand management.

Project Team

The project study team will consist of a unique combination of specialists from Informa and the NGOIC. From Informa, Dr. Bruce Scherr, Chairman of the Board and CEO of Informa, will serve as overall project director. Mr. Tom Scott, President and COO, will coordinate the research efforts within Informa and between Informa and the NGOIC. Dr. Don Frahm, Senior Vice President within Informa's crops group will be the primary researcher for Informa. These senior project team members will draw on the full resources of Informa for this study as required.

Mr. Jay Lou will serve as the liaison between Informa and the NGOIC and will assist in the overall project development and execution of the research. Mr. Lou worked previously at Informa Economics (formerly Sparks Companies, Inc.), Dunavant Enterprises Inc. and currently operates a private consulting practice that specializes in Chinese agriculture issues.

The project team from NGOIC will include Mr. Xiaohui Wang, Director and Senior Analyst of the Market Monitory Division of NGOIC; Mr. Zhi Cao, Deputy Director and Senior Market Analyst; Mr. Xigui Li, Senior Analyst and Mr. Haoran Zhang, Senior Analyst. All of these individuals have substantial experience analyzing and forecasting all aspects of the Chinese grain and oilseed economy. Brief biographies of the individuals as well as the project team members from Informa are included at the end of this document.

Project Timing and Cost

The project will kick-off in July 2010 and will conclude in November 2010. The cost for Informa clients is \$15,500 and \$19,500 for non-clients. One-half of the project cost (\$7,750 for clients and \$9,750 for non-clients) is due upon project initiation and one-half is due upon completion of the project. Travel and related expenses for company specific meetings after the presentation of results to the whole group will be billed separately.

Join Us For This Critical Study!

This is a unique opportunity to get inside first hand knowledge of this dynamic sector of the global agriculture economy. The overlay of Informa's global feedgrain analysis and the projected outlooks from NGOIC will give participating companies and organizations unique insights into an area that will be critical to future strategy development. The attached project initiation form will enable you to be a participant in this exciting work.

Informa Biographies

Bruce A. Scherr, Chairman of the Board and Chief Executive Officer.

Dr. Scherr has been with Informa Economics, Inc. (formerly Sparks Companies, Inc.) since 1987 in several executive capacities including President and CEO. In addition, he is an Advisor for Metalmark Capital LLC, a private equity fund. Formerly he was president of Sparks, Jacobs, Scherr, Inc. (SJS), a sister company to Sparks, and president of Agri-Commodities, Inc., an agriculture consulting firm based in Andover, Massachusetts, which was acquired by SJS. Prior to forming Agri-Commodities, Dr. Scherr was a divisional vice president at Data Resources, Inc., where he developed and utilized for the public and private sectors the first commercially available econometric model for US agriculture. Dr. Scherr received his bachelor's degree from Rutgers University and his master's and doctorate degrees from Purdue University, all in agricultural economics. Currently, he is a member of the Board of Trustees of the North American Electric Reliability Corporation (NERC) and serves as a member of the Global Strategy Institute Advisory Council of the Center for Strategic and International Studies. He served as a member of the Board of Directors for Desert STAR Inc., an electrical transmission Independent System Operator for the Desert Southwest from January 2000 through February 2002. In addition, Dr. Scherr has served as a member of The University of Tennessee's (UT) Institute of Agriculture Agricultural Development Board and UT's Committee for the Future. He was recently named a 2007 Distinguished Agriculture Alumni from Purdue University and he is a member of several honorary research and agricultural societies, a member of the National FFA Foundation Sponsors' Board 2000 through 2001 and a former advisor to the President's Council of Economic Advisers and National Aeronautics and Space Administration.

Thomas P. Scott, President and Chief Operating Officer.

Mr. Scott has been with Informa since 1989 with the majority of that time being the head of the Informa Economics Memphis-based Project Consulting Group. Mr. Scott's specialized work has included business strategy, agribusiness economic development, feasibility and site selection work, as well as various market analyses. In addition to his work in North America, Mr. Scott has extensive experience in the agribusiness sectors of Central Europe, Southeast Asia and South America. He has been involved in many training programs developed and delivered by Informa Economics. Prior to joining the company, he had various assignments in management, trading, logistics and merchandising with Continental Grain Company. He received his bachelor's degree in agricultural economics and business from Cornell University and a master's degree in business administration

from the Amos Tuck School of Business Administration at Dartmouth College where he was an Amos Tuck Scholar.

Donald G. Frahm, Senior Vice President. Dr. Frahm has been with Informa Economics since 1980 where his primary responsibilities are acreage and production research, client service and consulting as well as long-term forecasting and planning. Prior to joining the company, Dr. Frahm worked with two grain merchandising and brokerage companies and as a senior economist with the American Soybean Association. Earlier, he held positions at the University of Nebraska and Purdue University. He received his bachelor's degree at The Ohio State University and his master's and doctorate degrees from Purdue University, all in agricultural economics.

NGOIC Biographies

Xiaohui Wang, Director and Senior Analyst. Mr. Wang heads the Market Monitoring Division of China Grain and Oils Information Center, a government think tank researching grain and oilseed supply and demand. Mr. Wang has been with National Grain and Oils Information Center since 1997. He frequently consults and involves in the government's grain and oilseed policy decision-making processes. He is the author of the *Weekly China Oilseed Market Express*, *Weekly China Wheat Market Express*, *Weekly China Rice Market Express* and *Monthly China Agriculture Supply and Demand Estimate Report*. He also participated in China Agriculture Science Academy's China Rural Economy Analysis and Forecast project, China Pork Market Monitoring and Early Warning System and State Grain Bureau's China Grain Development Report. He was frequently invited to speak at various national and international grain and oilseed outlook conferences and enjoyed a very good reputation in China. Mr. Wang has extensive consulting experiences with China's grain and oilseed industry. He received his Master Degree from China Agricultural Science Academy. He also received training at Economic Research Service, USDA in 2001.

Zhi Cao, Deputy Director and Senior Oilseed Market Analyst. Mr. Cao is the deputy director of the Market Monitoring Division of China Grain and Oils Information Center. Mr. Cao has been specializing on China's oilseed and vegetable oil supply and demand at National Grain and Oils Information Center. He frequently consults and involves in the government's oilseed and vegetable oil policy decision-making processes. He is the author of the *Monthly China Grain and Oilseed Supply and Demand Report*, *Weekly China Grain and Oil Market Monitor*, *Weekly China Oilseed and Vegetable Oil Market Express* and the State Grain Bureau's *Annual Oilseed and Oil Market Report*. He is the co-author of *China's Trade of Soybean and Soybean Products: Soybean Imports Expected to Grow Despite Short Term Disruption* published by USDA. He was frequently invited to speak at various national and international grain and oilseed outlook conferences and recognized as a very reputable oilseed market specialist in China. Mr. Cao has extensive consulting experiences with China's soybean and other oilseed industry. He received his Master Degree from China Industrial and Commercial University. He also received training at Economic Research Service, USDA in 2003.

Xigui Li, Senior Analyst. Mr. Li is a senior grain market analyst at National Grain and Oils Information Center. Mr. Li specialized in nation's grain market monitoring, analyzing and forecasting for the government and industry. He is the author of *Weekly China Pork Market Express* and *Monthly China Pork Supply and Demand Report*. He also participated in various government research projects regarding grain/oilseed supply and trade, sustainable agriculture development, price monitoring and warning system. He published several articles in various national journals. He received his Master Degree from China Agricultural University. He also received training at Economic Research Service, USDA in 2003.

Haoran Zhang, Senior Analyst. Mr. Zhang is a senior analyst at National Grain and Oils Information Center specializing on grain and oilseed policy analysis and rice supply and demand analysis. He participated in various government grain and oilseed policy researches. He is the author of *Weekly China Rice Market Report*, *Daily Rice Price Report*, and *Monthly China Rice Market Report*. Mr. Zhang received his Master Degree from China Social Science Academy.

ENROLLMENT FORM

Yes, I want to participate in the special multi-client study, entitled "**China's Corn Situation: Recent Trends and Implications to World Trade.**" The cost of the study for current Informa clients will be \$15,500. One-half will be billed upon initiation of the study and the remaining one-half upon my acceptance of the final report.

Yes, I want to participate in the special multi-client study, entitled "**China's Corn Situation: Recent Trends and Implications to World Trade.**" The cost of the study for non-clients will be \$19,500. One-half will be billed upon initiation of the study and the remaining one-half upon my acceptance of the final report.

Please have someone contact me to provide further information.

Return Form Via FAX to Informa Economics (901) 766-8158

Name: _____ Signature: _____

Title: _____

Company: _____

Street Address: _____

City, State, Zip: _____

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E-mail Address: _____

Please feel free to contact us with questions:

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