

China's Pork Industry: Recent Trends and Implications for World Meat and Grains Trade

A Multi-Client Analysis and Outlook

July 2008

China is by far the world's largest producer and consumer of pork. Historically, this well known fact has not had a large impact on the rest of the world, as China has, for the most part, maintained self-sufficiency in pork. However, since 2007 the situation has changed dramatically, leading to large impacts on the global pork market, as China for the first time began to import significant quantities of pork. The imports became feasible as a result of favorable price spreads between the Chinese and outside pork markets, and were facilitated by China's government attempt to build stocks and moderate the impacts of food inflation. High pork prices in China were attributed to a number of factors, including strong demand, disease outbreaks, a previous cyclical downturn in margins and, importantly, a fundamental shift from backyard production to commercial production systems as citizens migrate en masse from rural areas to the rapidly industrializing cities.

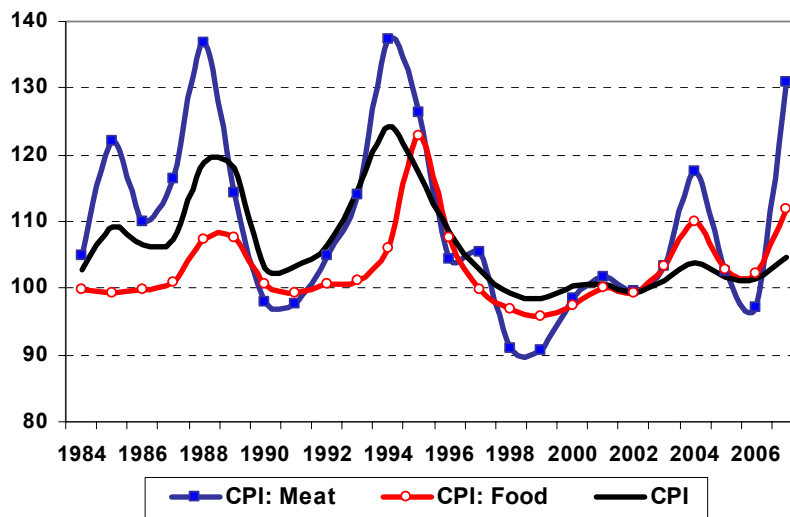
Building upon newly revised census-based data in China, this study will examine in detail the factors driving the major change in China's pork industry, providing our best opinion of future direction. The detailed analysis will be developed "on the ground in China" and integrated through cogent desk research. Implications for global pork trade as well as corn and meal trade will be presented to study participants.

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

Pork Inflation is a Critical Concern of the Chinese Government

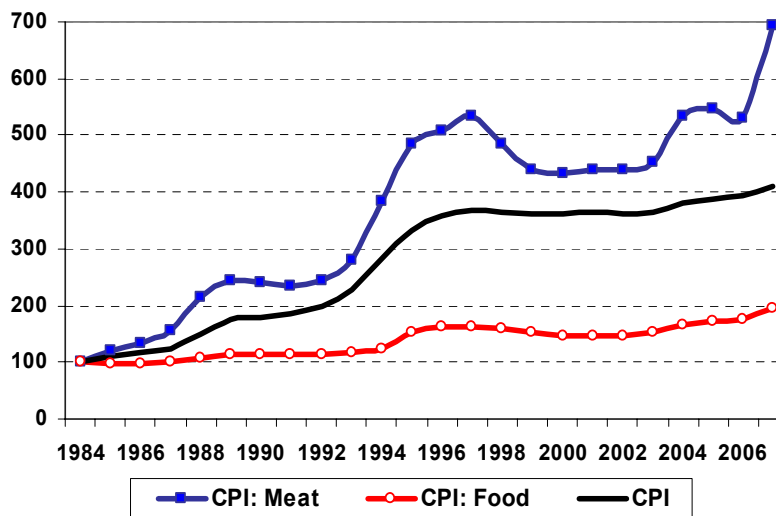
- Hog and pork prices have soared of late in China amid supply disruptions from disease outbreaks and from general economic growth and inflationary pressures. As pork demand flourishes behind a burgeoning middle class, the country must face alternatives to combat this volatile market after relative tranquility in recent years.

**Figure 1: China CPI: 1984-2007
(Previous year = 100)**



Source: National Bureau of Statistics of China

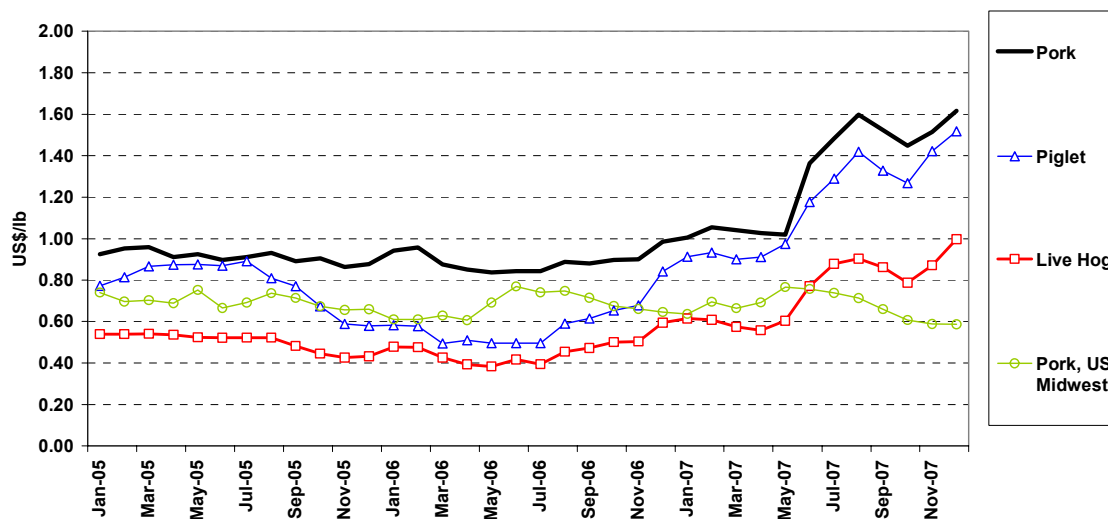
**Figure 2: China CPI: 1984-2007
(1984 = 100)**



Source: National Bureau of Statistics of China

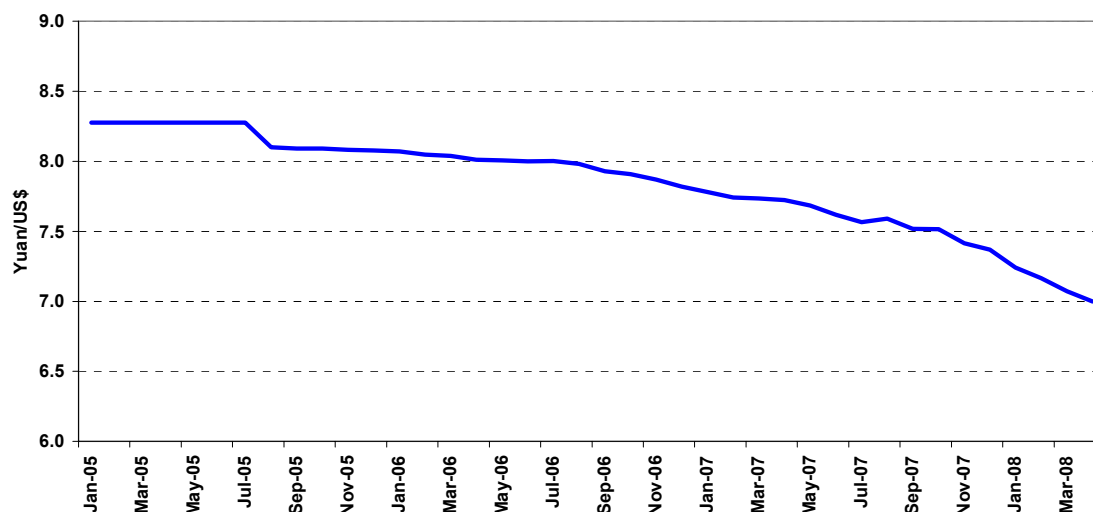
- The “food share” of all spending by the Chinese is under 40% for urban and affluent residents. For some rural and poorer citizens, that number is still close to 50%. Thus, food prices in China account for roughly one-third of the consumer price index. Pork is a vital component in the Chinese diet, accounting for 60% of meat consumption.
- A rapidly developing economy in China has brought a significant increase in purchasing power by the country’s lower and middle income citizens. As is typically the case, the dominance of food spending in Chinese budgets has diminished with income growth (“Engel’s Law”). However, food still remains the largest item in household budgets, and lower and middle income consumers generally consume more meat and protein products with income growth.

Figure 3: Market Prices, Shanghai



- Further fueling the demand for imports, the Chinese Yuan continues to strengthen versus the US dollar, with most economists expecting further strengthening of the Yuan over time.

Figure 4: The Trend in Chinese Currency Favors Imports



Key Questions to Address

- (1) Can China expand the commercial sector fast enough to compensate for lost backyard production?
- (2) How rapidly is the industry structure changing?
- (3) Who are the key emerging players, domestic and foreign?
- (4) What are the hurdles for rapid commercialization of Chinese production?
- (5) Can severe disease issues be tamed?
- (6) Are pork imports a temporary solution or part of a new long term direction?
- (7) What is the current and future structure of the processing and retail sectors?
- (8) Who is going to supply the Chinese market for pork imports?
- (9) What impact will there be on corn and soy imports of an expanded commercial sector?

Strategic Implications

A major aspect of the study will be its strategic implications for firms interested in access to the growing livestock, genetics, and feed markets in China. Informa and the NGOIC will work closely to develop projections and evaluations that the project team will then use to develop strategic conclusions.

The Proposal

To help clients 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 pork market and the implications of current trends on global pork 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.

Draft Study Outline

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

- 1.1 Overview of China's pork production over the past ten years
 - Regional characteristics of pork production
 - Overview of China's pork production policies
 - Changes in pork production and productivity over the past ten years
 - Land resources and structural analysis
- 1.2 Domestic demand for pork
 - Review of China's pork supply and demand situation
 - Pork consumption in China and trends
- 1.3 Overview of China's trade situation and policies
 - Overview of China's pork imports and exports
 - Major factors affecting China's pork trade
 - China's pork trade policy and future trends
 - Review of Chinese pork import situation and key suppliers
- 1.4 Pork marketing in China
 - China's hog and pork marketing system
 - Primary Processing (slaughter) industry
 - Secondary Processing industry
 - Wholesale/Retail Markets for pork
 - Regional pork surplus and deficit
 - Seasonality of pork marketing and regional characteristics
 - Transportation and infrastructure
- 1.5 Domestic Cost of Production (COP) Dynamics
 - Backyard vs Commercial COP
 - Pitfalls of backyard production system
 - Constraints and hurdles to development of commercial system
 - Disease and productivity issues

II. Demand Situation and Outlook

- 2.1 Key Demand Drivers
 - Macroeconomic outlook
 - Investment sources
 - Growth of the Middle Class
 - Rural to urban migration
 - Modernization of market structure

III. Policies of Pork Processing Industry and Investment Environment

- 3.1 Chinese government's policies on pork production and processing industries
 - Government support policies for the industry
 - Foreign investment policies
 - General trade policies
- 3.2 Investment & development of feed industry
- 3.3 Environment policies and their impact on pork processing industry
- 3.4 Investment environment analysis of pork related industries
- 3.5 Key emerging players, Chinese & foreign

IV. Transition of China's Pork Industry and Its Implication to World Pork & Grains Market

- 4.1 Projections of domestic pork production over the next ten years
- 4.2 China's pork supply and demand situation over the next ten years
- 4.3 Assessment of the potential for China to become a major pork importer
- 4.4 Implications to world pork trade
- 4.5 Implications to world grains and feed 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. Approximately four months after the kick-off meeting, the study team will provide a study draft and a daylong discussion of study results.

Study Schedule

Kick off meeting: September 2008
Study begins: October 2008
Draft study draft due: January 2009
Study report client seminar: February 2009

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
- Pork processors
- Feed manufacturers
- Grain merchandisers
- Grain and oilseed processors
- Technology firms
- Transportation providers

- Fertilizer and chemical firms
- Banks and financial institutions
- Food processors
- Livestock companies
- Seed and genetics firms
- Infrastructure and engineering firms

Informa Economics

Informa Economics, Inc., formerly Sparks Companies, Inc., is the world leader in broad-based agribusiness consulting and commodity market analysis. Founded in 1977, the company now serves more than 750 firms and institutions worldwide. In December 2003, Sparks was acquired by T&F Informa plc, a global business information group. Informa Economics is part of T&F Informa's AGRA division, which also includes F.O. Licht, Agra Europe, Agra CEAS Consulting and Agra USA, creating an international network of services and clients with offices in the US, Canada, the United Kingdom, Belgium and Germany.

Informa Economics offers several broad categories of services:

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

Multi-client studies such as the one described in this prospectus are a regular feature of Informa's overall product offerings. In past multi-client studies, Informa has accurately predicted the rising demand in China for agricultural products and goods as well as the transition of China to net corn import status. This work enables Informa to be uniquely positioned to be a collaborator with NGOIC on this study.

Our Mission: "To Be a Vital Force in the Success of Food and Agricultural Interests Around the World."

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. Mr. Ron Gietz, Vice President and head of Informa's pork analysis will assist in the development of the Chinese and international pork market information. Dr. Richard Andersen, Executive Vice President and co-executive of Informa's livestock meats dairy group will contribute to the development of long-term forecasts. Dr. William Motes, Senior Vice President and head of Informa's Washington based consulting group and Mr. Joe Somers, Senior Consultant, will provide policy and trade analysis for the study.

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 October 2008 and will conclude in February 2009. 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 pork analysis and the projected outlooks 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. We hope to see you in Memphis for the kick-off meeting!

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.

Ronald E. Gietz, Vice President. Mr. Gietz is responsible for research and market analysis in the pork industry. During his tenure of over 10 years with Informa, he has worked closely with many of the largest producers and consumers of pork and pork products in North America, with a focus on risk management solutions. In addition to a wide range of project work, Mr. Gietz helped launch and service MarginQuest™, providing risk management services to North American hog producers. Mr. Gietz came to the company from Alberta Agriculture where he held positions as the provincial livestock market analyst and market economist. While there, Mr. Gietz conducted market analyses of meat and livestock as well as grains and forages. Prior to joining Alberta Agriculture, Mr. Gietz worked in the range management section of the Alberta Forest Service. He received his bachelor's degree in agriculture and his master's degree in agricultural economics from the University of Alberta.

Richard S. Andersen, Executive Vice President. As co-executive of Informa's Livestock, Meat, Poultry and Dairy activities, Dr. Andersen's primary responsibilities include research, client service and consulting. Prior to joining the company, Dr. Andersen was a regional extension economist for the Alberta Agriculture Department, a livestock market analyst and policy advisor to the Alberta Minister of Agriculture, and a research economist for Cook Industries, Inc. He received his bachelor's and master's degrees in agriculture from the University of Alberta and his doctorate degree in agricultural economics from The Ohio State University.

William C. Motes, Executive Vice President. Dr. Motes is co-executive manager of the Informa Economics Washington, D.C., office, where his primary responsibilities include client consulting for international commercial clients and development projects. Formerly, he was a principal member of Economic Perspectives, Inc. and served as director of policy analysis for the Secretary of Agriculture (1979-81). Dr. Motes was associate director of USDA's Budget and Program Evaluation Office and also was legislative assistant for agriculture for US Senator Dick Clark. He holds degrees in agricultural economics from Kansas State University and received his doctorate in agricultural economics from Iowa State University.

Joe F. Somers, Senior Consultant. Mr. Somers is responsible for economic analyses and agricultural policy consultant work out of the Informa Economics Washington, D.C., office. He came to the company with 27+ years' experience with USDA's Foreign Agricultural Service as a foreign service officer and as a private sector consultant. While at FAS, he served in Brazil and Argentina and extensively traveled on FAS overseas fact-finding trips. In Washington, D.C., he supervised and conducted world supply/demand and trade policy analyses for a wide range of commodities and managed publication of several analytic circulars. Most recently, he was director of research and marketing for the GIC Group, Alexandria, Virginia, where he was responsible for business development and economic and market analyses. He received his bachelor's degree in political science from Northeastern University, Boston, and master's in agricultural economics from the University of Massachusetts, Amherst.

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 Pork Processing Industry: Its Future Development 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 Pork Processing Industry: Its Future Development 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: _____

Telephone: _____ Fax: _____

E-mail Address: _____

Please feel free to contact us with questions:

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