Consumer Attitudes Towards Genetically Modified Foods in Emerging Markets: The Impact of Labeling in Taiwan

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In 2001, Taiwan enacted a law for genetically modified food (GM foods) labeling beginning January 1st 2003. Under this regulation, food containing more than 5% of GM ingredients must be labeled. Over the last decade, Taiwan has imported most of its soybeans from the United States which is the world-leading country in research, development and sales of Genetically Modified Organisms (GMOs). In order to assess the effects of the new policy on trade, a telephone survey dealing with the consumer acceptance of GM foods was conducted in 2002. A total of 257 interviews were completed, using a random digit dialing.

Attitudes towards GM foods are studied through the use of a multiple correspondence analysis (MCA). This method is combined with a cluster analysis to construct a typology of consumers’ attitudes. Results show that only a minority of the population, 13% of the sample, are extremely opposed to GM foods. The rest of the population is composed of proponents of the technology, 52%, moderate opponents still in a decision-making process, 30%, and a fraction of non-involved consumers who have no opinion, 5.5%. The implementation of the mandatory labeling is not expected to have a significant impact on consumer purchase behavior: most consumers will continue to purchase the same food items even if they contain GM ingredients. The new regulation would therefore not affect significantly the agricultural trade relationships between Taiwan and the U.S.

Can the Private Sector Be Competitive and Contribute to Development Through Sustainable Agricultural Business? A Case Study of Coffee in Latin America

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Latin America’s conventional coffee producers have responded to the recent market crisis and to an increasing demand for sustainable food in North America and Europe by exploring sustainable coffee certification concepts. Some producers feel that by switching to sustainable production they can meet new quality demands from consumers, attain higher prices and improve their economic performance. However, most Latin American coffee producers lack the adequate differentiated
trade statistics and other market intelligence necessary to make an educated decision on their entrance into this market. Furthermore, if they do decide to enter the sustainable market, many lack knowledge about which certification concepts are best for their particular production capabilities.

By providing Latin American coffee producers with well-researched documentation on the different certification concepts and the market, these producers will be better informed to make intelligent decisions about coffee production. Informed decisions can both improve output and profit, helping local economic situations and also guiding local, national and international market flows for sustainable coffee.

The first part of the article introduces and describes the following main certification concepts: Organic, Fairtrade, Rainforest Alliance and Utz Kapeh and lists current Latin American coffee supplies for each certification. This general information is followed by a price analysis conducted to identify the price differentials being paid for certified coffee. Since certification impacts go beyond prices, a subsequent economic evaluation with emphasis on Central American farm conditions has been carried out to analyze farm income and cost structures and their relation to sustainable certifications. Additionally, other economic impacts are considered, such as access to credit, certification promotion, among others. Most information was gathered through primary source interviews and market analyses.

The findings show that in 2002/03 Latin America already produced approximately 250,000 hectares of certified coffee, which equals an export volume of around 90,000 tons/year. Among the four chosen certifications, organic is the most applied, with more than 60% of the total sustainable production. The Fairtrade certification reaches the highest price differentials of in average 62 US cents/lb; whereas, in the case of organically-certified coffee, only few producers are able to reach significant price differentials of occasionally even more than 100 US cents/lb, however the average amounts just for approximately 20 US cents/lb. Producers with Rainforest Alliance certification reach an average price differential of 15 US cents/lb, and those with Utz Kapeh, about 7 US cents/lb. The microeconomic analysis results prove that many coffee farmers in Central America, despite having sustainable certifications, are not able to reach positive farm incomes.

These analyses imply—for managers, but also for institutions working in certified coffee production—that certification needs to be seen only as one part of an entire farm management strategy to improve farm income. In general, higher farm incomes are derived from optimized farm management in combination with a higher-quality and more-flavorful product. Under these circumstances sustainable certifications then will help differentiate the coffee product even more, which is of high value given the recent maturation of the sustainable foods market.
Renee Kim and Milton Boyd

Korean Hanwoo beef producers are interested in improving the image of Hanwoo beef for Korean consumers, as the Korean beef market is becoming increasingly open to international competition. This study examines the consumer profile and positioning for the Hanwoo beef product in South Korea. A survey of 480 consumers is conducted to analyze preferences for 33 attributes of beef purchasing decisions. Factor analysis was used to determine factors that are important in beef purchasing decisions, and cluster analysis was used to identify a niche market for branded Hanwoo beef.

Factor analysis results indicated that effective labeling and quality assurance of Hanwoo products, the meat quality, price and branding are important to the positioning and marketing of the Hanwoo beef product. Thus, policy makers and Hanwoo marketers should enhance these aspects of beef attributes in developing policy and marketing strategies of Hanwoo beef.

According to cluster analysis, half of the sample respondents chose either Hanwoo or imported beef for specific positive factors (i.e. price or quality). These were the Price Import Buyers, the Quality Import Buyers and the Quality Hanwoo Buyers. The other half of the sample respondents included consumers who purchased Hanwoo due to safety concern or quality assurance (the Safety Hanwoo Buyers) and consumers who were indeterminant (the Middle of the Road Shoppers).

Special attention has to be paid to the Safety Hanwoo Buyers, the Quality Import Buyers and the Middle of the Road Shoppers. They represent a potential for market growth for Hanwoo beef, and specific marketing strategies should be addressed to them. An important task for Hanwoo marketers is to increase consumers’ knowledge of how Hanwoo’s quality is different from imported beef since knowledge level of the quality of Hanwoo was found to be relatively low among consumers. Hanwoo producers and marketers would need to clearly communicate distinct and observable benefits of Hanwoo to consumers such as high level of marbling in High Quality Beef (HQB) Hanwoo products. This marketing strategy should be targeted to the Middle of the Road Shoppers who are indecisive on beef choice and the Quality Import Buyers who perceive Hanwoo and imported beef as comparable substitutes.

Hanwoo producers and marketers might also organize generic promotion activities periodically with public institutions to increase awareness of branded Hanwoo beef. This marketing strategy should be effectively communicated to the Safety Hanwoo Buyers who had the highest demand for branded Hanwoo and for quality assurance. The Safety Hanwoo Buyers also had a high level of distrust in labeling system of beef products and may perceive branding of Hanwoo beef as an extension of quality assurance and safety measure.
Hanwoo producers could sell HQB Hanwoo directly to specialty stores (e.g. HQB Hanwoo-only retail outlets) as an alternative to address consumer concern for quality assurance of Hanwoo. These specialty stores should be located in residential area where residents’ socio-economic characteristics match with targeted consumer profile—consumers who have relatively high income (US$2000 to 5000) per month, have children and who are younger (30 to 39 years old) and married.

**California Strawberry Production and Methyl Bromide**

*Gregory A. Baker*

This teaching case describes the challenge facing the California strawberry industry over the potential loss of methyl bromide, a key chemical fumigant. The case, set in 1997, describes the importance of methyl bromide to the California strawberry industry. The impacts of methyl bromide usage on key constituent groups, including environmentalists, farmworkers, and communities, are described.

The case is ideal for teaching the application of stakeholder analysis in undergraduate classes, graduate classes, and management seminars. Students may be asked to identify the principal stakeholders and their perspectives, develop alternatives, and recommend a course of action.

**Saskatchewan Wheat Pool**

*Marv Painter*

Saskatchewan Wheat Pool is a teaching case which provides an in-depth look at the grain handling and farm input sectors in western Canada. A history of Saskatchewan Wheat Pool is provided to show how the company and the industry have evolved to current day. The companies in this industry, including Cargill, Agricore United (Archer Daniels Midland), Saskatchewan Wheat Pool, and others, have significantly grown their capacities in the last ten years, to the point where competition is fierce. The capacity in the industry is currently overbuilt and rationalization is taking place. This has put severe financial pressures on each industry participant.

Saskatchewan Wheat Pool had a long and proud history as Saskatchewan’s largest co-operative. Up until 1998, it had been very successful both financially and in providing service to farmer-members. However, in the mid 1990s the company embarked on an aggressive expansion plan that left it in severe financial distress. Mayo Schmidt was brought in as CEO to turn the company around. The case illustrates to students how quickly a company can go from good profitability to large losses and bankruptcy. Students are asked to assess what went wrong and provide a strategy (or critique the current one) for the company. The main focus of the case is on the events that led to the financial distress and on Mayo Schmidt’s plan to turn the company back to profitability. His strategy was to sell off all non-core assets and focus on the core businesses that built the company; grain handling and supplying farm inputs. By 2004, it appeared that his strategy was working.
A Local Cooperative's Financial and Strategic Analysis of the Evaluation of Potential Merger Partners
Joan Fulton, Susan Hine, Jennifer Vandeburg and Kevin McNamara

The Research Question

Locally owned agricultural cooperatives are a mainstay of the business sectors of our rural communities, and face challenges of survival. As agriculture continues to industrialize, local cooperatives are being squeezed from two directions. The agribusinesses with which they must deal at the national and regional level are pushing for efficiency, often forcing the local cooperatives to operate with smaller margins. In addition, local cooperatives face the challenge of losing business as their farmer members get larger, and have sufficient volume to buy directly from the manufacturer. Local cooperatives are responding by consolidating through mergers and acquisitions. In some cases, a local cooperative has a choice of merger partners and the management and Board of Directors must evaluate their different strengths and weaknesses.

Study Description

The case at hand involves a locally owned cooperative in the United States, Alton Valley, involved in farm supply and grain marketing. This is a two-part teaching case that has been written so that each part can be used individually or together at the discretion of the instructor. This two-part case is designed to be used in either the undergraduate classroom or in extension programming with cooperative managers and directors. Part I (case one) focuses on how to use financial analysis in business reorganization decisions and Part II (case two) focuses on how to analyze alternative business reorganization possibilities from a strategic management perspective. The material for this case was developed through in-person interviews which were conducted with the managers of locally owned farm supply/grain marketing cooperatives in Indiana and Colorado (35 in each state) in the spring of 2000. This case is representative of locally owned cooperatives in the United States. It is not a reporting of a specific business, but rather is hypothetical in nature.

Findings/Results

A teaching note provides direction as to how this case could be used in both the classroom and with cooperative directors.

Management Implications

Finding new ways to conduct extension programming is extremely important in today’s agricultural environment. The competition for producers’ time is steadily increasing and they need to know that the time they dedicate to extension programs is going to be worthwhile. Thus a case format such as this should help directors learn through a hands-on experience how to handle some of the more difficult issues facing them in their cooperatives today. This case can also be an effective teaching
tool in undergraduate cooperatives or agribusiness courses, where students are increasingly concerned about the real world relevance of what they are being taught.

**Traceability and Assurance Protocols in the Global Food System**  
*Arsen Poghosyan, Francisco Gonzalez-Diaz and Yuliya Bolotova*

In the 21st century, food industry no longer concentrates its efforts only on food production and distribution systems. In the last decade, food contaminations and food borne illnesses have provided clear economic and regulatory incentives for producers and processors to create and supply improved quality products in the marketplace in order to satisfy consumers’ concerns for safer foods. Food supply chain participants responded by improving their technologies and increasing transparency from farmers to producers, and to the retail chain to gain consumers’ trust and comply with new guidelines on food safety. Participants in the food supply chain had already discovered that in order to improve product quality, it was imperative to determine the main factors of the entire chain that significantly affected the quality of the final product and even to lower the costs of production by improved processes that traceability offered. Over the last decade, the concept of traceability and assurance expanded to incorporate whole agribusiness supply chains, which was later adopted as the basis for any food safety programs and regulated by laws. The motivation towards implementing traceability and assurance protocols was clear – to stay competitive in existing markets, and to expand into new ones which now demanded higher quality foods to meet consumers’ perceived quality and safety requirements. Traceability and assurance certification was becoming a precondition for market access to an increasing number of retail and manufacturing companies globally.

To analyze the current state of the agribusiness firms with regard to their level of implementation of, and compliance with, food traceability and assurance protocols, a student survey project was conducted during the 2004 IAMA World Forum and Symposium conference in Montreux, Switzerland, June 2004. Focus interviews were conducted with seventeen industry leaders based on an interview guidelines designed and developed by Dr. Eluned Jones, an Associate Professor of Agricultural Economics at Texas A&M University, and the IAMA scholarship students.