June 18th

Arrivals

7:00pm – Evening Welcome Reception at the Concert Hall

June 19th

8:00am-5:30pm

8:00am – 8:30am – Registration

8:30am – 9:00am – Welcome And Opening Comments

9:00am – 10:30am – Session 1 – Consumer Behavior – Moderator Jessica Aschemann-Witzel

Natascha Loebnitz, Klaus G. Grunert “The Impact Of Subjective And Objective Knowledge On Consumers Risk Perceptions And Evaluation Of Food Shape Abnormalities ”

Franco Rosa, M. Vasciaveo “Language, ethnical identity and consumer behavior: a cross-cultural study of marketing communication in the region FVG”

Morten Heide, Themistoklis Altintzoglou “Consumer Segmentation Based On Knowledge About And Involvement In Fish Quality”

Natascha Loebnitz, Olivier Butkowski, Stefanie Bröring “The Relative Importance Of Experience Versus Credence Attributes In Consumers’ Acceptance Of New Food Technologies For Different Product Categories”

Session Discussion: 15 Minutes

10:30am-11:00am – Coffee Break

11:00am-12:30pm – Session 2-A – Students’ Workshop – Faculty Panel

Marilia Bonzanini Bossle, Fernanda Maciel Reichert, Ariane Mello Silva Avila, Deisi Viviani Becker, Marcia Dutra De Barcellos “Constraints And Perspectives For A Meat Geographical Indication In A Developing Country”

Caroline De Bondt, Anneleen Van Kerckhove, Maggie Geuens “Disrupting The Healthy-Tasty Trade-Off: How Healthy Food Is Perceived To Be Tasty By Means Of Shape Modification”


Gustavo Porpino, Juracy Parente “Food Waste Paradox: A Study Of The Antecedents Of Food Disposal In Low Income Households That Cook From Scratch”

Antje Korn, Ulrich Hamm “Impact Of Communicating Sustainable Production Qualities Of Extensively Produced Suckler-Cow Based Beef On Consumer Preferences In Discrete Choice Experiments”

Session Discussion: 15 Minutes
11:00am-12:30pm – Session 2-B – Product/Country Specific – Moderator Franco Rosa


Jens-Peter Loy “Price Promotions And Brand Loyalty: Empirical Evidence For The German Ready-To-Eat Cereal Market”

Marija Cerjak, Marina Tomić, Nina Fočić, Robert Brkić “Behaviour And Attitudes Of Sparkling Wine Consumers In Croatia”

Karla Marie Paredes “Consumers’ Perspectives On Food In Tubes In Sweden: An Exploratory Study”

Veena Goel “Age, Family And Income Influences Upon Consumers’ Emerging Grocery Purchase Patterns In Punjab State, India”

Session Discussion: 15 Minutes

12:30pm-1:45pm – Lunch

1:45pm-3:15pm – Session 3 – Labeling/Segmentation – Moderator Svetlana Bialkova

Svetlana Bialkova, Lena Sasse, Anna Fenko “Backfired Expectations: The Effect Of Labels And Advertising Claims On Consumers Response”
Teresa Del Giudice, Francesco La Barbera, Riccardo Vecchio, Fabio Verneau “Anti-Waste Labeling And Consumers Willingness To Pay”


Guang Huang, Dayin Lu, Klaus G. Grunert, Yanfeng Zhou “Chinese Urban Consumers Segmentation Based On Modified Food-Related Lifestyle”

Session Discussion: 30 Minutes

3:15pm-3:45pm – Coffee Break

3:45pm-5:15pm – Session 4 – Food Policy/Choice – Moderator Meredith Lawley

Themistoklis Altintzoglou, Siril Alm, Pirjo Honkanen “Parents Think, But Children Know; Reaching Child Consumers By Giving Them A Voice”

David Pearson, Thomas Pearson “UNESCO Gastronomic Cities: Using Food To Brand A City As A Cultural Icon”

Renee B. Kim, Yan Chao, Zhang Qiao “Comparative Analysis Of Food Risk Management Quality (FRMQ) Of The Public Vs. The Private Sectors: Chinese Consumers’ Perspectives”

Joanna Henryks, Julie Brimblecombe, Graham Bidstrup “Supporting Healthier Food Choices In Remote Indigenous Communities: Developing A Food Choice App”

Joseph Karugia, Julliet Wanjiku, Michael Waithaka, Suresh Babu “Persistence Of High Food Prices In Eastern Africa: What Role For Policy?”
Session Discussion: 15 Minutes

5:15pm-5:30pm – General Closing Discussion

June 20th

9:00am-5:30pm

8:30am – 9:00am – Keynote Address – Co-Host Dr. Klaus Grunert, MAPP

9:00am – 10:30am – Session 5 – Local – Moderator Felix Adamu Nandonde

Chrisopher M. Whartson, Renee Shaw Hughner, Lexi Macmillan, Claudia Dumitrescu “Community Supported Agriculture Programs: A Novel Venue For Theory-Based Health Behavior Change Interventions”


Jeffrey M. Campbell, Elisa Martinelli, Ann Fairhurst “Italian And U.S. Consumers Of Local Foods: An Exploratory Assessment Of Invariance”

Johanna Lena Hasselbach, Jutta Roosen “Talking To The Sustainable Consumer – Motivations Behind Preferences For Local Or Organic Food”
Session Discussion: 30 Minutes

10:30am-11:00am – Coffee Break

11:00am-12:30pm – Session 6-A – Students’ Workshop – Faculty Panel

Felix Adamu Nandonde, John Kuada “Empirical Studies Of Food Retailing In Developing Economies”

Alexandra Festila, Polymeros Chrysochou, Aleksandra Georgieva, Diana Todorova “Should It Be Green Or Not? A Content Analysis Of Packaging Design Of Organic Food”


Corinna Feldmann, Ulrich Hamm “Local And/Or Organic: A Study On Consumer Preferences For Organic Food And Food From Different Origins”

Session Discussion: 30 Minutes

11:00am-12:00pm – Session 6-B – Sustainability – Moderator Ulrich Jürgens
Beate Richter, Wolfgang Bokelmann “Significance Of Food Losses In The German Food Industry: A Qualitative Research”

Anne C. Bech, Maruxa Garcia, Thorkild Nielsen, Bianca Pop, Grace Viera, Begoña Perez Villarreal “Consumers’ Perception Of Sustainability In Food Chains: Perspectives For Future Marketing”

Meredith Lawley, Dawn Birch, Jane Craig “Sustainable Seafood: Understanding Current Stakeholder Perspectives”

Session Discussion: 15 Minutes

12:30pm-1:45pm – Lunch

1:45pm-3:15pm – Session 7 – Retailing – Moderator Lars Esbjerg

Justin Beneke “Developing A Profile Of Private Label Brands In South Africa And Beyond: Market Insights And Trends”

Ulrich Juergens “Discounter Versus Supermarket Customers In The Food Retail Industry – A German Case Study”

Veena Goel “Emergence Of Organized Retail Chains And Reorientation In The Existing Practices Of Traditional Grocers In Punjab State, India”

Cristina Calvo-Porral, Selena Bellosta-Benedetto, Andrés Faiña, Paulino Montes-Solla “Relational, Functional Benefits And Customer Value In Large Retailing: A Cross-Format Comparative Analysis”
Justin Beneke “Key Influencers Of Private Label Branded Breakfast Cereal: A South African Perspective”

Session Discussion: 15 Minutes

3:15pm-3:45pm – Coffee Break

3:45pm-5:00pm – Session 8 – Product/Country Specific – Moderator Anne Bech

Daniele Asioli, Maurizio Canavari, Luca Malaguti “Fruit Branding: Factors Affecting The Adoption Of New Pear Variety Angelys® In The Italian Food Market”

Luis A. Ribera, Mechel S. Paggi, David P. Anderson, Marco A. Palma, Ronald D. Knutson “Potential Impacts Of Transatlantic Trade And Investment Partnership (T-TIP) On The Fresh Vegetable And Beef Trade”

Graham H. Roberts “Collective Memories, Imaginary Geographies And Brand Identities In The New Russia: The Case Of AB-Inbev’s ‘Siberian Crown’ Lager”

Mary Luz Olivares Tenorio, Anita Linnemann, Stefano Pascucci, Ruud Verkerk, Martinus A.J.S. Van Boekel “Misaligned Preferences And Perceptions On Quality Attributes Of Cape Gooseberry (Physalis Peruviana L) Supply Chain Actors”

Session Discussion: 15 Minutes

5:00pm-5:30pm – General Closing Discussion

7:00pm – Closing Dinner In The Old Town
Comparative Analysis of Food Risk Management Quality (FRMQ) of the Public vs. the Private Sectors: Chinese Consumers’ Perspectives

Renee B. Kim, Yan Chao & Zhang Qiao
Comparative Analysis of Food Risk Management Quality (FRMQ) of the Public vs. the Private Sectors: Chinese Consumers’ Perspectives

Abstract

Despite increasing development of food risk management scheme in China, Chinese consumers are found to be skeptical and concerned about the food risk management quality (FRMQ) both at the public and the private sectors. Effective risk communication of food risk requires consumers’ acceptance and understanding of the current FRMQ as consumers are the ultimate judge and the target audience of the FRMQ of government and the food industry. The purpose of this paper is to approximate the psychological framework of Chinese consumers in their evaluation of the current system of Food Risk Management Quality (FRMQ), which are operated by the public and the private sector. By comparing how consumers perceive these systems differently, strength and the limitations of each system can be determined and recommendation for future direction of food risk management strategies and policies can be derived.

Keywords: Chinese Consumers evaluation, food risk management of the Public vs. the Private Sectors

JEL classification: H41, I18, I28, Q18

Summary

China initiated reformation of its institutional and regulatory systems in 2004 by proposing modalities for a new administrative organization necessary for ensuring food safety. To protect the public health, a new comprehensive law, called ‘the Food Safety Law’ was elaborated in 2009 to ensure food safety with an objective to protect consumers. This new system of Food Risk Management reinforces the current conditions of China’s food safety status and intends to enhance consumers’ confidence in the food supply chain. Worldwide, consensus is shaping toward an effective risk management system which covers the whole process of food production from ‘farm to fork’, and emphasizes the role of the private industry. Consequently, the scope of food safety regulations has expanded in recent years to the entire food supply chain, thus the role of the private sector in the food risk management has been substantially emphasized. Despite increasing development of food risk management scheme in China, Chinese consumers are found to be skeptical and concerned about the food risk management quality (FRMQ) both at the public and the private sectors. Effective risk communication of food risk requires consumers’ acceptance and understanding of the current FRMQ as consumers are the ultimate judge and the target audience of the FRMQ of government and the food industry. The purpose of this paper is to approximate the psychological framework of Chinese consumers in their evaluation of the current system of Food Risk Management Quality (FRMQ), which are operated by the public and the private sector. By comparing how consumers perceive these systems differently, strength and the limitations of each system can be determined and recommendation for future direction of food risk management strategies and policies can be derived.
Introduction

International trade of agri-food products is increasing continuously, driven by trade liberalization, internationalization of retailing and manufacturing. This leads to increase in perceived risk concerns about products sourced from high risk countries and food safety laws are increasingly placing legal liability onto food risk managers. Concurrently, food incidents in one particular country gets reported worldwide with globalized media coverage, which could have detrimental impact on reputation of both country and specific companies. With the occurrence of a series of food safety incidents as well as the associated extensive media coverage of these incidents, public concerns about the safety of food are increasing (Frewer et al., 2002; Liu et al., 1998; Pennings et al., 2002; Verbeke, 2001; Verbeke & Viaene, 1999) and public trust in the government and regulatory institutions as well as farmers, manufacturers and retailers is in decline (Frewer & Salter, 2002).

After joining the WTO in 2001, China aimed to expand its agri-food exports which were hindered by major food safety incidents as they had significant negative impacts on country image and reliability. These food safety incidents in China also heightened public distrust and concerns for the food safety system both by Chinese consumers and international agri-food buyers. For instance, Ryu et al. (2010)’s study found out that 80 percent of the respondents changed their consumption behavior to avoid food risk in China upon the Melamine-tainted milk incident, and consumers began to pay more attention to food safety certification (Ryu et al. 2010).

China initiated reformation of its institutional and regulatory systems in 2004 by proposing modalities for a new administrative organization necessary for ensuring food safety. To protect the public health, a new comprehensive law, called ‘the Food Safety Law’ was elaborated in 2009 to ensure food safety with an objective to protect consumers. Chinese government established a legally binding food safety management system with this new law which specified the organizational framework, legal liability of food processors and managers, implementation of food safety assurance standards and food risk management system. In addition to this, China sets up the Food Safety Commission in 2010 which enacted the Food Safety Law. This commission is responsible for monitoring and managing the national status of food safety management, allocating tasks relevant to food risk management of local governments and providing overall regulatory policies for food risk management in China.

Food law in many countries has traditionally consisted of legal definitions of unsafe food, and the prescription of enforcement tools for removing such food from markets and penalizing responsible parties post market, yet food laws do not provide food control agencies with a clear mandate and authority to prevent food safety problem (FAO, 2004). The result is that many countries have food regulatory systems that are reactive and focus on the enforcement of legislation rather than directing and encouraging the use of preventive and holistic approaches to reducing the risk of food borne illness (FAO, 2004). To be effective in protecting public health and facilitating domestic food market and trade, food safety regulation should have consistent principles and mandates and should be based on science-based food safety objectives.
The scope of food safety regulations has expanded in recent years to the entire food supply chain, thus the role of the private sector in the food risk management has been substantially emphasized. Food risk management by the private sector aims to identify the multiple points along the food supply chain which may potentially compromise food safety and to provide coordinated intervention to assure food safety. With this approach, the private sector can gain consumer trust and firm reputation which may lead to desirable outputs (i.e. profits).

In the private sector, HACCP, GAP and other international safety certification standards are increasingly adopted by the private firms on a voluntary basis, while Quality Safety (QS) is the only officially implemented safety certification on a mandatory basis. By 2005, 2,846 food companies in China have implemented HACCP certification (Zhi-gan Wang, 2006), and the number of food processing firms in China continues to increase and officially registered companies were estimated to be 19,022 in 2003, thus the proportion of Chinese food companies with HACCP certification remains relatively low. This may primarily be due to the fact that introduction of HACCP based systems may be difficult in small and medium sized food businesses with limited capacity and knowledge. As developing countries have increased their adoption of HACCP system to facilitate trade with developed countries, it may be necessary for China to increase HACCP implementation to compete at the playing level field with its trading partners.

Despite increasing development of food risk management scheme in China, Chinese consumers are found to be skeptical and concerned about the food risk management quality (FRMQ) both at the public and the private sectors. Effective risk communication of food risk requires consumers’ acceptance and understanding of the current FRMQ as consumers are the ultimate judge and the target audience of the FRMQ of government and the food industry. In order to develop successful food risk management system, it is imperative to evaluate how consumers perceive the FRMQ in China and whether or not their perception would differ for the public and the private food risk management system. The purpose of this paper is to empirically assess how Chinese consumers evaluate the quality of the food risk management system which is run by the public and the private sectors and to determine whether they differentiate the FRMQ of the public and the private sector.

**Method**

The empirical model of this study (Figure 1) follows previous studies by Frewer and colleagues (Hughton et al. 2006; Van Kleef et al. 2007) and Kim (2012). Frewer’s research focused on European consumers’ perception of the food risk management quality in EU and they run a comprehensive survey study on twenty five EU member countries to determine what drives consumers’ perception of the FRMQ in EU. Kim’s research focused on Chinese and Korean consumers’ perception of the FRMQ in China and Korea by conducting an identical survey study in these two countries to compare the difference in consumers’ perception. This study follows particularly on Chinese market to elaborate further on Chinese consumers’ perception of the FRMQ by government and the food industry. By comparing two related yet different systems of the private and the public sectors, the important factors driving Chinese consumers’ perception for each food risk management can be identified. This finding may provide guideline for how two different systems can be developed more effectively.
Figure 1. Structural Model for Food Risk Management Quality (FRMQ) Evaluation

Table 1. Definition of Six Constructs of FRMQ Model

<table>
<thead>
<tr>
<th>Variables</th>
<th>Definition</th>
<th>Previous Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proactive consumer protection (PCP)</td>
<td>The management systems that consumers perceive to be functioning with respect to food safety - consumer’s perceptions of whether there is an established system for controlling food risks - the rapidity of responses to food safety problems - efforts made to prevent food risks occurrence The efficient enforcement of food safety laws</td>
<td>Van Kleef et al., Hans van Trijp., 2007</td>
</tr>
<tr>
<td>Opaque and reactive risk management (ORR)</td>
<td>Captures the concepts of responsiveness to food safety problems - negative measures taken or lack of management actions taken in food safety</td>
<td>J.R. Houghton., 2007</td>
</tr>
<tr>
<td>Skepticism in risk assessment and communication practices (SCEP)</td>
<td>Capture consumers’ doubts about food safety assessment and the uncertainties surrounding this</td>
<td>A.Krystalis; Janneke de Jonge., 2007</td>
</tr>
<tr>
<td>Trust in honesty of food risk managers (TRUSTH)</td>
<td>The degree to which an audience perceives the assertion made by a communicator to be ones that the speaker considers valid</td>
<td>Hovland et al., 1953</td>
</tr>
<tr>
<td>Trust in expertise of food risk managers (TRUSTE)</td>
<td>The extent to which a food risk manager is perceived to be capable of making correct assertions</td>
<td>Hovland et al., 1953</td>
</tr>
<tr>
<td>Food Risk Management Quality (FRMQ)</td>
<td>Consumers’ evaluation of the regulatory system to manage food hazards</td>
<td>Van Kleef et al., Hans van Trijp., 2007</td>
</tr>
</tbody>
</table>

1 This table reports definition of constructs in Van Kleef et al. (2007) and Kim (2012).
Our research model includes five constructs (Table 1), which adopted the measures of Frewer’s (Hughton et al. 2006; Van Kleef et al. 2007) and Kim’s studies (2012). The five constructs - Proactive consumer protection (PCP); Opaque and reactive risk management (ORR); Skepticism in risk assessment and communication practices (SCEP); Honesty of food risk managers (TRUSTH); and Expertise of food risk managers (TRUSTE) were considered to be major constructs which have impacts on Food risk management quality (FRMQ).

The survey date was collected in three major cities in China – Beijing, Shanghai and Shimyang and 350 survey questionnaires were distributed in 2012 and 282 data was used in empirical analysis. Structural Equation Modeling (SEM) was used to elicit the empirical estimates of two separate models (the private sector vs. the public sector). Two models of the public and the private sectors were found to have a reasonable reliability in the selected constructs (Table 2). AMOS 18.0 software was used to estimate a maximum likelihood function to derive a comprehensive structural model for the public and the private sectors. The overall fit statistics of the measurement model show that a good fit for both models (Table 3). For instance, the RMSEA value for the private sector model and the public sector model were 0.049 and 0.048, indicating a close fit of the model to the data.

### Table 2. Coefficients of Reliability for the Six Final Scales for Two Models

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cronbach’s α</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Private Sector</td>
</tr>
<tr>
<td>Proactive consumer protection (PCP)</td>
<td>0.772</td>
</tr>
<tr>
<td>Opaque and reactive risk Management (ORR)</td>
<td>0.746</td>
</tr>
<tr>
<td>Skepticism in risk assessment and communication practices (SCEP)</td>
<td>0.813</td>
</tr>
<tr>
<td>Trust I honesty of food risk Managers (TRUSTH)</td>
<td>0.884</td>
</tr>
<tr>
<td>Trust in expertise of food risk Managers (TRUSTE)</td>
<td>0.625</td>
</tr>
<tr>
<td>Food risk management quality (FRMQ)</td>
<td>0.545</td>
</tr>
</tbody>
</table>

### Results and Discussion

Table 3 shows Chinese consumers’ perspectives on Food Risk Management Quality (FRMQ) of the private and the public sectors. From Chinese consumers’ perspectives, the Proactive consumer protection (PCP) was found to be the most important factor determining the quality of food risk management of both private and the public sectors. However, the consumers consider different factor to be the second most important driver for the FRMQ. For the public sector, the Expertise of food risk managers (TRUSTE) was found to be important, while the Opaque and reactive risk management (ORR) was found to be important for the private sector. This illustrates a critical difference of consumers’ expectations toward the public food risk officer versus the private food risk managers. For the public food risk officer, consumers tend to expect high level of expertise and professionalism in handling food risk management issues, leading them to build trust toward the public health & food risk management system. It appears that public health & food risk management system is public goods which need to be established as a benchmark and parameter for the food industry to follow, providing a guide line.
Table 3. Standardized Estimates of Path Coefficients of the FRMQ Model for the Public and the Private Sectors

<table>
<thead>
<tr>
<th>Construct</th>
<th>The Private Sector</th>
<th>The Public Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Standardized</td>
<td>t-value</td>
</tr>
<tr>
<td>Proactive consumer protection (PCP)</td>
<td>0.316</td>
<td>3.517(**)</td>
</tr>
<tr>
<td>Opaque and reactive risk Management (ORR)</td>
<td>0.314</td>
<td>1.968(*)</td>
</tr>
<tr>
<td>Skepticism in risk assessment &amp; Communication practices (SCEP)</td>
<td>0.011</td>
<td>0.060</td>
</tr>
<tr>
<td>Honesty of food risk managers (TRUSTH)</td>
<td>-0.239</td>
<td>-1.672</td>
</tr>
<tr>
<td>Expertise of food risk managers (TRUSTE)</td>
<td>0.213</td>
<td>1.025</td>
</tr>
</tbody>
</table>

Goodness of Fit

- $\chi^2=415.020$, df=246
- RMR=.084, GFI=.895
- NFI=.866, CFI=.940
- RMSEA=.049

- $\chi^2=314.212$, df=190
- RMR=.086, GFI=.910
- NFI=.882, CFI=.949
- RMSEA=.048

***p<0.01, **<0.05, *<0.10

On the other hand, consumers may tend to perceive the food risk managers in private firms to have profit seeking orientation and to have potential to hide information in case of food risk crises occur within the firm. Food manufacturing firms recognize substantial negative impact of the highly publicized food risk incidents on company’s reputation and industry performance. Thus, some food manufacturing companies tend to use opaque approach to manage food scarce incidents in order avoid potential negative impact in longer term. Consumers demand more transparency in how private firms operate their food risk management and food safety issues. Another important factor determining the FRMQ of the private firm was found to be the Honesty of food risk managers (TRUSTH). This is consistent with aforementioned suggestions that Chinese consumers may have difficulty in trusting the food risk managers due to their tendency to hide information to the public in the case of food risk crises. This finding suggests that transparency of risk communication prior to food scarce incidents and during the incidents is a critical factor in sustaining food manufacturing firm’s reputation and trust by consumers.

Implications

It is important for the policy makers to change their approach to food risk issues from responsive to proactive way. In the past, policymakers and food risk managers tend to respond to food risk issues after food risk incidents occurred and their solutions were short-term oriented. Food safety incidents are occurring these days at much more frequent and
larger scales, and passive short-term approach has limitation in dealing with these intensifying food risk issues. Overall, the food risk management system is shifting from post-crisis risk management to pre-crisis (i.e. proactive) risk management worldwide.

Policy makers may need to increase strategic preparedness for potential food safety crises as they may have both short-term and long-term implications. This suggests that policymakers should have forward looking approach and foster both proactive and protective capacities in the FRMQ. Nonetheless, administrators and relevant staffs in the FRMQ system are heavily entrenched in the daily administration of specific duties which may hinder them from developing long-term strategic perspectives on the FRMQ. In order to facilitate development of an improved FRMQ system, it may be necessary to take into account diverse and strategic stakeholder groups in identifying directions for the future FRMQ system.

The public policy makers may need to recognize the importance of being perceived by the public as having effective risk communication efforts. Risk communication makes stakeholders aware of the process at each stage of risk assessment, ensuring the logic, outcome, significance and limitation of the analysis are clearly understood by all the stakeholders (FAO, 2004). These risk communication outputs would include information about the risks and benefits associated with a particular activity or policy and might also include details about how decisions leading to the policy were made (Arvai, 2003). One of the effective ways to gain the public acceptance of government’s FRMQ is to have public participation the process of food risk management. From open public forums to the creation of specialized stakeholder committee, citizen participation is viewed as a means of democratizing the process of decision making and improving the quality of resulting decisions (Arvai, 2003). It is argued that participatory decision-making approaches legitimize policy decisions because they foster the inclusion of differently formulated values, objectives, claims, and arguments in the decision making process (NRC, 1996; Renn, 1999; Gregory, 2000; Chess & Purcell, 1999). Involvement of various stakeholders in the decision making process has resulted in a high degree of satisfaction in a various decision contexts (McDaniels, Gregory & Fields, 1999; Gregory, Arvai & McDaniels, 2001; Arvai, Gregory & McDaniels, 2001). Thus, it is only when comprehensive risk communication efforts by the policy makers need to be effectively delivered and understood by the public, then consumer trust and confidence in the public FRMQ may be improved. However, this may be challenging particularly in China as the institutional and regulatory system in China is fundamentally based on a communist framework which may hinder the extent of public participation in the process of policy making.

The private sector in the agri-food industry is concerned with two conflicting important issues such as convergence of standards (i.e. consolidation of food safety system) and improvement of cost efficiency through the supply chain. Numerous local small medium food processing firms in China are faced with challenges in China’s agri-food markets due to their limited scalability, resulting in lack of competitiveness. Emergence of Trans-National Corporations (TNCs) such as global retailers and major production chains have weakened competitiveness of some of these SMEs food processors as they are unable to comply to food risk and quality management standards which are set at international level. SMEs food processors are well aware of food quality and safety issues, however the smaller ones with cost disadvantages sometimes take the risk of not follow them (Unido,
In several food safety crises, the lack of information disclosure by the private firms, defective food safety controls, a lack of sense of crisis and inappropriate communication with consumers were identified as major problems (FAO, 2004 b). Often major food safety incidents in China are the outcomes of these SMEs food processors in local markets that choose not to comply with the food safety standards. Although compliance to the food safety standards add cost pressure on tight margins of the food industry, failure in the FRM system lead to food safety incidents involving recalls, litigation, brand damage, closed stores and other lost businesses. Thus, the food industry must recognize the importance of food safety standards in managing the FRMQ and appropriate food safety management practice such as HACCP and traceability system should be implemented. Proper training and education of personnel are prerequisites to an effective food safety management system in food processing firms and regardless of the size and complexity of the operation, the basic principles must be applied by the private firms and reinforced by the public sector. To accommodate financially limited SME food processing firms, the public policy makers may need to arrange a pool of fund which is available for SME food processing firms in implementing a food risk management system which may be compatible with the public food safety standards and HACCP.

The globalizing food supply chain and increasing trade of agri-food products cross border may lead to increased pressure on the food processing firms and producers in China to adopt attitudes and standards of food safety in the developed countries. The high quality and safety standards imposed by importing countries may pose a new level of protectionism for agri-food trade. Accordingly, the food safety standards in China may be anticipated to be converged to the Codex Alimentarius along with other major trading partners. As the world food supply chain becomes increasingly interconnected through open trade, international agencies such as the UN Food and Agriculture Organization (FAO) and the World Health Organization (WHO) and Codex increase their guideline and support to member states. Codex is a joint body of the FAO and WHO that is charged with developing international food norms (such as standards, guidelines and code of practice) to enhance global public health and assist in the harmonization of standards to facilitate international trade (FAO, 2004). These agencies elaborated objective risk-based decision-making criteria for establishing transparent and proactive food safety regulations. Thus, China may conform to the internationally acknowledged safety standards to enhance its food market functions and agri-food trade capacity.

This implies that the policymakers in China may need to formulate a joint action plan both at national and regional levels which would be also in compliance with the firm level strategies. At initial step, the private firms may need to undertake a large scale regional assessment to recognize the gap existing among different regions both at the public and private sectors. Based on this assessment, the public and the private sectors can derive a detailed action plan in order to provide a guideline for future directions of food risk management system in China which may meet the standards of global food supply chain.

It is also important that information regarding food safety must be accurately collected and effectively exchanged between and among research institutes, government bodies, the food production and food processing industries and consumers in order to improve transparency.
At large, the information regarding food safety should be shared among major trading partner countries as international trade of agri-food products continue to increase. Concurrently, education in food safety is critical in successful food risk management and efficient marketing and trade of agri food products. Through effective communication and education, a culture of food safety should be fostered in each country at ground level. For instance, the government should continue to provide education for small medium scale food producers/processors and food vendors regarding food hygiene and other relevant food safety issues to coordinate the overall food risk management system throughout the entire food supply chain.
References:


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