Building Food Safety Capacity Worldwide:  
An Example of International Extension Opportunities

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Abstract

There is an identified need for developed countries to help build food safety capacity and provide professional development for the international community (World Trade Organization (WTO), 2001; Food and Agriculture Organization of the United Nations (FAO) & World Health Organization (WHO), 2004). This article outlines how Extension specialist in the United States are working to provide international outreach and institutional building activities for professionals interested in food science, food laws, and agriculture and food industry development. Several spin-off activities have developed including conducting similar courses in major developing areas: Africa, Latin America and Eastern Europe.

Key words: Adult Education, Africa, Development, Eastern Europe, Extension Specialist, Food Safety, International
Introduction
Consumers all over the world are concerned about the safety of their food. Extension specialist and international agriculture development programs have a growing opportunity to work together and help developing and developed countries build their capacity in food safety, improve food systems and facilitate food industry development (American Council on Education, 1995). Food safety issues create an enormous social and economic burden on communities and their health systems (Mead et al., 1999). The presence of contamination or adulterated food is a major factor affecting free trade (Crutchfield, Buzby, Frezen, Allshouse, & Roberts, 2000). In addition to public health costs and international trade problems, consumers are questioning new technologies with biotechnology (GMOs). These emerging food safety concerns are causing rapid changes to legislation and bring new challenges to food suppliers in global marketplaces. Therefore, the global community is seeking new information, updates and advanced knowledge in international food safety and food systems.

Development and Implementation of the International Food Safety Short Course
The Institute of International Agriculture (IIA) at Michigan State University (MSU) has responded to the international community by developing and implementing a unique food safety short course designed for professionals who have a working knowledge of food safety. The IIA collaborated with MSU Extension, academia, industry representatives and government agencies to design and deliver an International Short Course in Food Safety on the campus of MSU. The format is a short-term professional development and training program with a broad range of in-depth topics, delivered in small-group settings. The course was designed to address the needs of adult learners and provide hands-on experience through field visits and presentations describing at every step how stakeholders work together to solve food safety issues.

Instructors were selected from across disciplines to allow the international participants insight into how Extension specialists, food safety scientists, government regulators and industry experts work together to ensure safe food. The program provides ample opportunities for one-to-one interactions and group discussion to help clarify questions or issues that participants raise.

Once the instructional program took shape, a brochure describing the program was developed and distributed worldwide at meetings, conferences and through websites. Since the inception of the International Short Course in Food Safety in 1999, more than 200 professionals from government, industry and NGOs from 47 countries and 75 institutions have attended. Funds for scholarships and fellowships from international donors such as USAID, Cochran Fellowship, USDA-Foreign Agriculture Service (FAS), the Rockefeller Foundation and other supporters including home institutions have provided funds to some participants to help with their travel and course registration costs.

Course Components
The food safety course components are relevant to food safety production, quality, packaging, labeling, and other requirements of foreign, regional and domestic markets. This capacity building program works with the National Food Safety and Toxicology Center researchers and selected government officials to help participants deepen their understanding of risk assessment and risk management. The Institute for Food Laws and Regulation at MSU is able to provide participants with a session aimed at understanding how trade agreements, international food laws and regulations impacts the free flow of goods and services across their national boundaries. Risk communication experts
address consumer food safety perceptions, product approval, and labeling issues. A practical approach to implementing Hazard Analysis and Critical Control Points (HACCP) systems is delivered by incorporating teaching laboratories and Extension specialists. Interactive visits to local food industries and Extension field visits allow for discussion, comparison, and problem-solving training of real world situations. In this way, industry and government experts discuss emerging issues such as new technologies (for example agriculture biotechnology) and their impact on trade.

Each participant receives a certificate upon completion, information package and a CD containing resources, key documents and all of the PowerPoint presentations from the course. These materials serve as useful resources for the participants who are encouraged to implement food safety trainings, policy workshops and media programs in their home countries and regions.

**Impacts from the International Short Course in Food Safety**

It has been reported by the participants of the course that the knowledge, information and experience gained has created a greater awareness of food safety, better understanding of local food safety issues and fostered linkages with others working in food safety programs. As one participant stated, “Food safety is a very important issue to my country in order to improve our agriculture and strengthen trade relations. The short course has helped me as a policy maker, to better understand all of the food safety issues.” Upon returning home to East Asia, one participant linked the other participants to a web-based dialog and information exchange page. Participants have also reported once they return home they have implemented training programs, written articles for the media, worked on revisions to local food laws and in Africa, one participant returned to his home country to help to set up a national Codex office.

Based on the success of this course, MSU has taken the training program on the road by working with local collaborators and individuals who have attended the course at MSU. This partner driven – in-country food safety trainings have been a cost-effective way of training a large number of people and tailored to meet the needs of small scale producers. For example, an in-country training held in Eastern Europe has resulted in a number of rigorous training programs in HACCP and food industry development. One course participant from this program has shared her experience and actively participated with other regional partners to implement training and workshops. This collaborative approach across countries has worked to regionalize food systems and strengthen food safety.

**Summary**

This article outlines how MSU’s food safety short courses have integrated U.S. Extension specialist while responding to the international community. The training requests have greatly increased over the past seven years and now include many more activities in other countries. Lessons learned throughout the seven years of delivering this course have included providing plenty of time for in-depth discussions amongst the participants and presenters and limiting enrollment to 35 participants. This allows for country specific concerns and time to address terminology or language differences. Over time, the program components have changed to include sessions on the economics of food safety, rising phenomenon of supermarkets and the impacts private standards and grades.

International food safety and agriculture development is expanding at a rapid pace. In the U.S., Extension educators are trained to work with adults in food safety and many other areas of agriculture and community development. Extension educators who would like to offer...
international training courses in other content areas should contact their international programs established at their university. Community outreach is an essential mission for land-grant universities - international extension included.

References


