2013 ILRI/ RGU/ CENPHER Joint Program

Announcement of 2 weeks training course

Food safety risk assessment for informal value chains

26th August - 6th September, 2013
at Hanoi School of Public Health, Vietnam

August 2013

Introduction

In almost all developing country cities and towns, majority of foods are sold in informal markets. Worldwide, 2 billions of diarrhea cases occur for all age groups and 1.5 million children under five die each year due to this illness, of which majority of the cause is zoonotic pathogens. Food borne diseases include other zoonotic diseases such as brucellosis and *Mycobacterium bovis* tuberculosis and the total disease burden is much greater than the single figure of diarrheal diseases. The producers selling to informal markets are usually poor small-holders and thus improvement of food safety along informal value chain will have significant positive impacts not only on public health but also on poverty alleviation because of the expected enhanced market access by such farmers and traders. Participatory risk assessment is a powerful tool to understand the risks of informally-marketed foods and to plan effective intervention strategies.

Course contents

This course uses a good mixture of teaching and hands-on styles. After learning overview of food borne disease issues, the course will move into useful participatory methods and risk analysis. In risk assessment, participants will learn about stochastic processes, how to build and run a risk model and how to conduct sensitivity analysis in @Risk. Later in the course, risk assessment using R will be introduced.

Week 1 (26-30 August: 5 days)

- Food safety issues in developing countries and risk analysis
- Probabilistic sampling
- Parametric and non-parametric distributions
- Bayesian inference and Monte Carlo simulation
- Stochastic process

Week 2 (2-6 September: 5 days)

- Building a value chain model
- Biological pathway to illness
- Dose-response relationship
- Building and run a risk model
- Sensitivity analysis
- Use of R in risk assessment

Who should attend

The targeted audience is expected to be Postgraduate students working on animal- source food

safety risk analysis in informal value chains in developing countries under the International Livestock Research Institute (ILRI) programs and members of the Vietnamese Risk assessment Taskforce for Food Safety. However, this course is also open for other students with some statistical background as well as animal and public health professionals (maximum 15 attendants in total for practical exercise) and other risk assessment practitioners in Vietnam. The course will be provided in English and university level of English fluency is required.

Course fee

This course is provided for free but travel and accommodation have to be met by the participants.

Venue

The course will be run at Pullman hotels (40 Cat Linh street, Hanoi, Vietnam) and Hanoi School of Public Health (138 Giang Vo, Hanoi, Vietnam).

Accommodation

For ILRI students, accommodation will be booked by ILRI, Vietnam.

For more information

Please contact:

Dr. Kohei Makita: kmakita@rakuno.ac.jp; tel +81-(0)11-388-4761

Dr Hung Nguyen-Viet, hung.nguyen@unibas.ch, tel +(84) 973445050

Trainer team

Dr. Kohei Makita – the lead trainer - is the Associate Professor of Veterinary Epidemiology in Rakuno Gakuen University and at the same time Joint Appoint Scientist in ILRI, Kenya. Dr. Makita is an expert of stochastic food safety risk analysis in developing countries and also is familiar with other applied epidemiological analyses of zoonotic and animal diseases. His group uses One Health approach in order to respond wide range of problems concerning multiple sectors both in developed and developing countries.

Dr. Hung Nguyen-Viet holds a PhD in Life and Environmental Sciences. He is working on the interface between environment and health, focusing on environmental health and food safety with an integrative approach (Ecohealth and One Health). He is currently leading the Center for Public Health and Ecosystem Research (CENPHER) at Hanoi School of Public Health and is a joint appointee of Swiss Tropical and Public Health Institute (SwissTPH) and International Livestock Research Institute (ILRI).

Dr. Silvia Alonso is a Post-doctoral Scientist in the food safety and zoonoses team at ILRI. She is a veterinarian with postgraduate training in epidemiology and public health. She graduated in veterinary medicine in Spain and completed a PhD in food safety at the University of Bologna, Italy. Silvia has worked for 5 years as a lecturer at the Royal Veterinary College where she gained experience in teaching and training at undergraduate and postgraduate level, both nationally and internationally. Her research looks at the epidemiology and control of different zoonoses, and has an interest in zoonosis impact and control in developing countries. She has also a special interest in the Ecosystems approach to health (EcoHealth), a novel holistic approach to the investigation of human health.

Dr. Cristobal Verdugo joined ILRI as a post doc on 2013 at the Food Safety and Zoonosis group. Cristobal is veterinarian from the University of Chile, Master in Preventive Veterinary Medicine from the University of California, and recently has been awarded a PhD degree from Massey University, New Zealand. Main areas of expertise include Veterinary Epidemiology, Bayesian inference, and Simulation modeling. Cristobal has previously worked in relevant diseases as Highly Pathogenic Avian Influenza, Foot-and-Mouth disease and Paratuberculosis.

Dr. Johanna Lindahl is a veterinary epidemiologist with a degree from the Swedish University of Agricultural sciences. She did her PhD working on the epidemiology of Japanese encephalitis virus in South Vietnam. Johanna has previously been working both as a clinician and in food safety and disease control work for Swedish authorities. Her main interests are in infectious diseases, especially vector-borne viruses. Since April 2013 Johanna has been working in ILRI. At ILRI she is involved in risk assessments of aflatoxins in the dairy chain, and in a number of other projects.

Dr. Fred Unger is a German veterinarian for almost 20 years with working experience in veterinary epidemiology and veterinary public health gained predominantly in developing/emerging countries of Africa and South East Asia. After graduation in veterinary medicine at the Humboldt University Berlin (HU Berlin) he worked in Uganda. Gambia and Germany. Since 2007 Fred works for ILRI in Bangkok and Jakarta with the main objective to build up epidemiological capacity for the control of Emerging Infectious Diseases and promoting the Eco-Health concept. Current activities include six South East Asian countries (Indonesia, Thailand, Cambodia, Laos Viet Nam and South East China) and range from epidemiological surveys, risk assessment up to capacity building on OneHealth/EcoHealth.