# Food Security Postharvest, Processing and Quality Assurance of Selected Agro-Industrial Products

Pogramme Annual International Training Courses

Thai International Cooperation Programme

Course Title Food Security Postharvest, Processing and Quality Assurance of Selected

**Agro-Industrial Products** 

**Duration** June 14 - July 13, 2016

**Closing Date for Application** April 10, 2016

**Number of Participants** 18-20

Eligible Countries Asia: Afghanistan, Bangladesh, Georgia, Indonesia, Iran, Jordan, Kyrgyzstan,

Malaysia, Maldives, Nepal, Oman, Pakistan, Palestine, Philippines, Sri Lanka,

Tajikistan, Timor-Leste, Uzbekistan, Yemen, and Thailand

**Africa:** Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Congo, Djibouti, Egypt, Eritrea, Ethiopia, Gabon, Ghana, Guinea, Lesotho, Libya, Malawi, Mali, Mauritania, Mauritius, Morocco, Namibia, Rwanda, South Sudan,

Sudan, Swaziland, Togo, Tunisia, Zambia, Zimbabwe

Pacific: Cook Island, Fiji, Marshalls Island, Nauru, Palau, Papua New Guinea,

Vanuatu, Solomon Island, Tonga, Tuvalu

Member Countries; FEALAC, OAS and CARICOM

# **Objectives**

The course aim to:

- provide basic scientific knowledge of the principles and concepts of postharvest, food preservation processing, packaging, and quality measurement and quality control
- enhance knowledge and understanding of how to select appropriate technology to maintain food security
- upgrade human capacities in transferring technology to needed party
- promote collaboration, communication and foster a professional network among participants

### **Oualifications**

## Applicant for this course shold:

- Be nominated by their respective government;
- Age: less than fifty (50) years old;
- Education: equivalent to a bachelor degree of university/technical college, preferably possess B.Sc. level degree on food science, food engineering, agro-industry, agricultural science, home-economic, biotechnology, agricultural processing, agricultural product development, or have at least 5 years of related work experience;
- Language: proficiency in English (speaking, reading and writing).
- Health must be good in both physical and mental, each participant should have a health certificate provided by an authorized physician. This form is also attached together with the Nomination Form. Pregnancy is regarded as a disqualifying condition for participation in the course.

# **Course Contents**

The program consists of series of lecture, practical and study trip.

#### Lecture and practical outline

- Review of food security availability, accessibility, utilization and stability
- Production and postharvest of selected plants and animals for food
- Knowledge for production and preservation of nutritious foods from agricultural raw materials to promote food security for needed population
- Review of food safety emphasize on prevention of aflatoxin contamination in cereal crops as well as procedure to evaluate aflatoxin
- Packaging of raw materials and food products

- Review quality measurement of raw materials and food products including chemical, physical, microbiological and consumer preference
- Practicing and demonstration of how to measure specific qualities of raw materials and food products
- Case studies of how to implement food processing techniques in preservation of vegetable, fruit and fish
- Practicing in processing of selected agricultural raw materials such as vegetables, tropical fruits, soybean, peanut, rice and cassava

#### **Study Trips**

- visiting to the Royal Chitralada project and government agencies to observe activity related to postharvest practices and utilization of agricultural raw materials
- visiting Kasetsart experimental farms to understand on production system of agricultural raw materials prior to utilization
- visiting private companies related to production and commercialization of agro-industrial products
- visiting farm communities to observe their implementation of sufficient economic for Thai agricultural practices and processing value added products at village scale industries (OTOP)

## **Advance Assignment - Country Report**

Participants will be required to submit country report to the course coordinator at the first day of class as well as to present country report to the class at the second week of training. The country report format of this course is available on the TICA's website: http://www.tica.thaigov.net

#### Institution

## The course will be conducted by:

Department of Product Development, Faculty of Agro - Industry, Kasetsart University, Jatujak, Bangkok 10900 Thailand Tel. (662) 562-5006, Fax (662) 562-5005

E-mail: fagiavj@ku.ac.th