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## **SURVEY**

### **Stakeholder's Requirement for Employee in Food Safety and Quality**

#### **Introduction**

AsiFood is a project funded by the European Union (EU) in the framework of Erasmus+, Key Action 2 (Higher Education Capacity Building) aims to develop and implement EU's quality training programs on food safety at universities in ASEAN countries. The project includes 13 main partners from 7 countries including AGRENIUM, Montpellier SupAgro (France), University of Natural Resources and Life Science Vienna (Austria), Liege University (Belgium), Kasetsart University, Prince Songkla University, Asian Institute of Technology (Thailand), Institute of Technology of Cambodia, Royal University of Agriculture (Cambodia), Hanoi University of Science and Technology, Vietnam National University of Agriculture, Nong Lam University – Ho Chi Minh City (Vietnam).

#### **Objectives of AsiFood**

This survey aims to collect data on stakeholder engagement trends, drivers and practices to assess the impact on decision-making processes related to human resources working in the field of food safety and quality.

#### **Objectives of this questionnaire**

The objective is to provide evidence-based assessment to engage the stakeholders in recruitment and formulate the modules to train the professionals and students on food safety and food quality systems.

## NOTE

### A. **Respondents to the Survey are kindly requested to**

1. Provide their **contact details** for follow-up in case clarifications are needed;
2. **Answer as many questions as possible**
3. **Consult within their organization** if different inputs are needed to build consensus on the responses;

### B. **Respondents are informed that**

1. It is to notify that this questionnaire is solely for the research purpose to formulate the training courses to train the professionals as per needs of industrial requirements.

2. Responses are **confidential** and will only be treated quantitatively and qualitatively for the analysis; respondents and their organizations will not be quoted directly in the final report;

3. Stakeholders participating in the Survey will be **consulted throughout the project** cycle with several opportunities to comment on the draft report until the publication is completed ;

4. The survey **requires about 20-25 min only**

5. A **follow-up** to the questionnaire will give further opportunity to provide **stakeholder's need** in order to build up 3 modules for training programs and the courses for master program in Food safety and Food quality.

## QUESTIONNAIRE

**Direction: Please indicate your answers with each of these questions regarding your collaborations with the higher education institutes. Please fill in the blank or place a “√” mark in the box(es) of your answers, also give your opinion regarding targeted survey.**

### I. General information

- 1.1 Survey date .....
- 1.2 Organization/company’s name .....
- 1.3 Address.....
- 1.4 Phone:
- 1.5 E-mail:
- 1.6 Company’s website address (if any):
- 1.7. General characteristics of the organization/ company

<b>Inter-governmental / supra-national organization</b>	<input type="checkbox"/>
National / Federal (ministry, public agency, etc.)	<input type="checkbox"/>
Regional / provincial	<input type="checkbox"/>
Local	<input type="checkbox"/>
Private operator	<input type="checkbox"/>
Public-private partnerships/Associations/Networks	<input type="checkbox"/>
<b>Business depending primarily on food</b>	
For production at farm level	<input type="checkbox"/>
Processing Industries	<input type="checkbox"/>
Food Machinery Production	<input type="checkbox"/>
Retailers	<input type="checkbox"/>
<b>Science, academia and research centre</b>	<input type="checkbox"/>
<b>Consumer associations</b>	<input type="checkbox"/>
Other, specify	<input type="checkbox"/>

### 1.8. Organization/Company profile

- Established year .....
- Numbers of permanent employee .....
- Numbers of temporary employee:

Qualifications of employees:

Bachelor degree: .....

Master degree: .....

Doctoral degree: .....

Others: .....

(Please specify:.....)

1.9. What are your organization's primary areas of interest in food?

Please rank from 1 to 5, starting with the most important area of interest (1) to the least important one (5). If an item is not applicable, indicate "N/A".

Area of interest	N°
Food ingredients/Raw materials	<input type="checkbox"/>
Food Production/Manufacturing process (hardware, processes...)	<input type="checkbox"/>
Research and Production Development	<input type="checkbox"/>
Food safety/Sanitation	<input type="checkbox"/>
Environmental protection	<input type="checkbox"/>
Other, specify	<input type="checkbox"/>

1.10. Does your organization need to train your staff at Master or PhD degree level?

Yes

No

If yes, please mark the following box(es) for position needed:

Manager

Technician

Quality manager

Analyst

If no, please mark the following box(es) for the type of training

Do not need to be trained

Short time training at organization (in house)

Specific training at a University

## II. The need for training high-quality employee in food safety and quality

### 2.1. Does your company need employees in the field of food safety management?

Yes

No

#### *If Yes:*

- Has your company had employees in this field? If yes, what is the position?

.....  
.....  
.....

- What are the *specific requirements* of the company for working in the field of food safety management?

Understanding of material's properties

Understanding of Food safety & food quality management

Technique of Food quality analysis (physical, biological, chemical, sensory...)

Others: .....

- Does your current manpower in the field meet their functions and tasks?

Yes

No

- In the next 3-5 years, how many employees do your company intends to recruit in food safety and food quality experts?

1-3

3-5

>5

#### *If No:*

- In the field of food safety management, if your company does not need people, who will be in charge of the related functions and tasks?

.....  
.....  
.....

- If the staff has multiple functions, do they able to complete their work well?

Yes

No

- If your company currently operates in this way, how many years after your company are expected to recruit?

< 12 months

12-24 months

> 24 months

## 2.2. The requirement for quality manpower in the field of food safety Management

In your opinion, what are the criteria for an undergraduate student to work in your company?

### - **Knowledge:**

+ What is the *social knowledge* needed to work in the field of food safety management?

- Food legislation
- Food business,
- Sociology
- Food Law
- Others .....

+ What is the *basic knowledge* needed to work in the field of food safety management?

- Processing techniques
- Quality analysis techniques
- Sensory analysis
- Knowledge of quality management systems
- Knowledge of safety management systems
- Others .....

### - **Skill**

+What is the *basic skill* needed to work in the field of food safety management?

- Communication
- Soft skill
- Language
- Information technology (IT)
- Time management
- Others .....

+ What is the practical skill needed to do a good job?

.....

### - **Attitude:**

What is the *attitude* needed to work in the field of food safety management

- Collaborative and cooperative with colleagues
- Discipline
- Honesty and punctuality at work
- Progressive Team workers
- Others .....

**2.3. We intend to train students in food safety management, in the aim to achieve the following basic capabilities. Please tell us your perspective and evaluation of the level of importance of these competencies.**

Please select the number below that best present how important are the following issues related to training of high-quality employee in food safety and quality

**1-5: Less Important (1) to High Important (5)**

		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>A.</b>	<b>Knowledge</b>					
<b>1.</b>	<b><i>Food safety &amp; food quality upstream of the food value chain</i></b>					
1.1	Recognize and identify pre-harvest and post-harvest factors that influence quality and safety of agricultural/livestock/aquaculture products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.2	Demonstrate how to operate handling system to ensure quality and safety of agricultural/livestock/aquaculture products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.3	Design management system for quality and safety of agricultural/livestock/aquaculture products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4	Understanding the basic requirements for Good Agriculture/Aquaculture/Livestock practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2.</b>	<b><i>Food safety and quality analysis</i></b>					
2.1	Understand the food safety legislations and regulations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.2	Recognize and identify physical, chemical and biological hazards in food systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.3	Understand to validate methods to monitor physical, chemical and biological hazards in food (according to international guidelines)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.4	Understand to perform chemical analysis using advance techniques (HPLC, LC-MS, GC-MS, PCR,	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Western Blot etc)					
<b>3.</b>	<b><i>Food Safety and Quality Assurance in Processing Industry and Distribution</i></b>					
3.1	Recognize the critical components of the food safety and food quality systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.2	Recall the required pre-requisite program(s) to warrant the safety of food systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.3	Interpret the simulated problem-based food safety problem(s) in the food manufacturing facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.4	Illustrate the importance of food-related hazards and standard regulations and procedures in food processing practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.5	Apply the basis of safety issues in food production and supply chain systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.6	Analyze the hazards and risks associated with food and beverages	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.7	Analyze and use traceability system in the food chain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>B.</b>	<b>Skills</b>					
1	Implement, in testing laboratories, a quality management system according to ISO 17025	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Implement parts of standard analytical method to monitor biological hazards in food	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Perform laboratory analyses for routine chemical and/or biological testing, in the framework of an accredited laboratory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Implement a sampling plan to monitor chemical and biological hazards in food	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Apply the relationship between pre-requisite programs and HACCP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Apply and perform the HACCP methodology and food safety verification programs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



7	Synthesize and apply the relevant food safety or food standard legislation in both local and international levels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Apply and analyze the risks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>C. Attitude</b>						
1	Actively seek and evaluate the literatures on food quality and food safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Propose research plan and identify issues related to food quality and food safety in the industries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Access independently the standards and regulations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Commit to apply HACCP principles in food operation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Encourage to keep the confidentiality of analytical results	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**2.4. In your opinion, what should universities train students to meet requirement of the labor market (knowledge, practical skills, soft skills...)?**.....  
.....  
.....  
.....