



Co-funded by the
Erasmus+ Programme
of the European Union



Report of

**Stakeholder's Requirement for Employee in Food Safety and Quality
Vietnam National University of Agriculture (VNUA)**

List of Participants

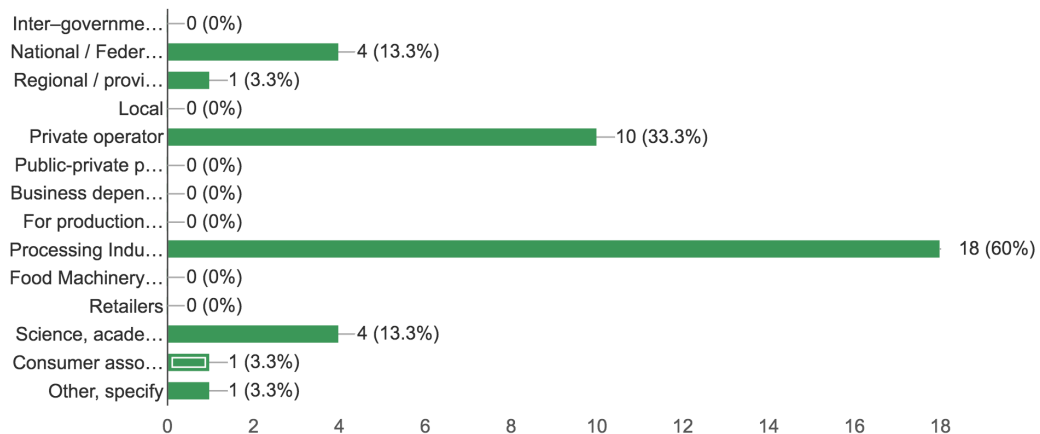
No	Public/Higher Education Institutes	No	Private food-related companies
1	Hue University of Agriculture and Forestry	1	Pepsico Vietnam Co., Ltd
2	Thai Nguyen University of Agriculture and Forestry	2	Ajinomoto Vietnam Co., Ltd
3	Food Industries Research Institute	3	CP Vietnam Co., Ltd
4	National Institute of Nutrition	4	Trang An Company
5	Department of Food Safety, Ministry of Health	5	An Dinh Company
6	Hanoi Sub-Department of Quality management	6	Nutricare Company
7	Phu Tho Sub-Department of Quality management	7	Biolife Company
8	Dong Thap University	8	Acecook Vietnam
9	Dong Thap Community College	9	Long Hai Company
10	Fruit and Vegetable Research Institute	10	Dabaco Group
		11	Welstory Company
		12	Hong Lam Company
		13	Ong gia KIA Co., Ltd
		14	Dong Nam Viet Company
		15	Masan One member Co., Ltd
		16	Vincomere Company
		17	Vina Yamazaki
		18	Asia joint stock company
		19	Hapro alcohol Company
		20	Bach Khoa food Co., Ltd

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Survey outcome

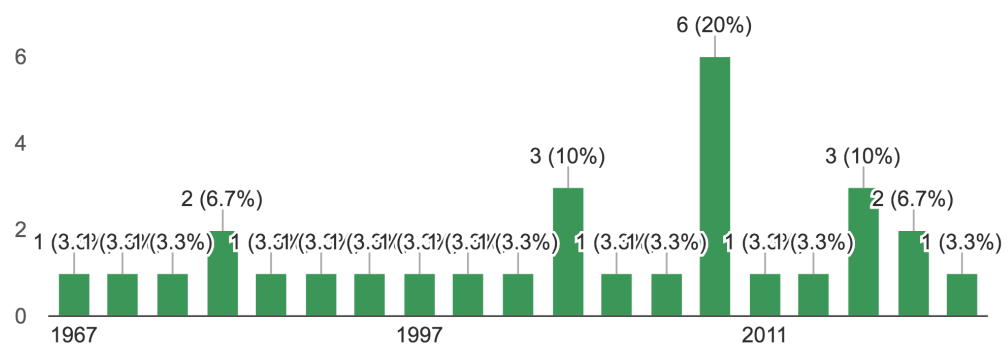
Summary of survey outcome from 30 participants

1.7. General characteristics of the organization/company



According to these data, 4 stakeholders are categorized as national/federal (ministry, public agency, etc.) accounting for 13,3% and 10 stakeholders are categorized as private operator accounting for 33,3%. The categories of survey stakeholders are diverged in which most are processing industry (18 out of 30 stakeholders) followed by Science and Academic (4 out of 30 stakeholders).

1.8.1. Established year



The established year was categorized into 4 categories as follows.

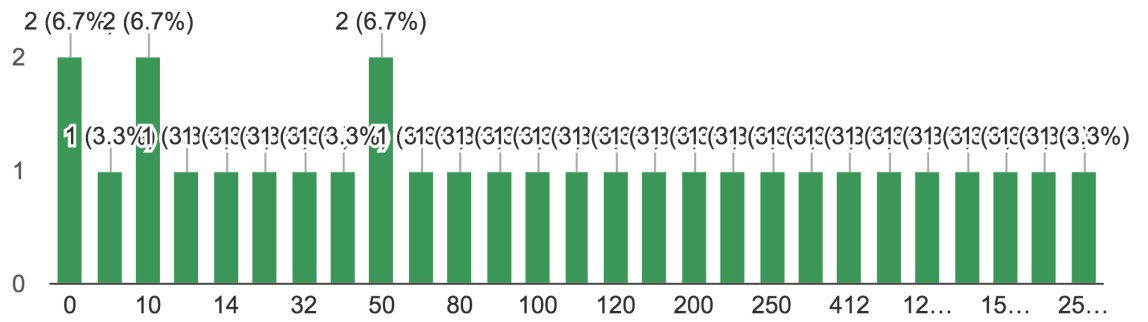
From 1967 to 1990: 5 stakeholders

1991 to 1995: 6 stakeholders

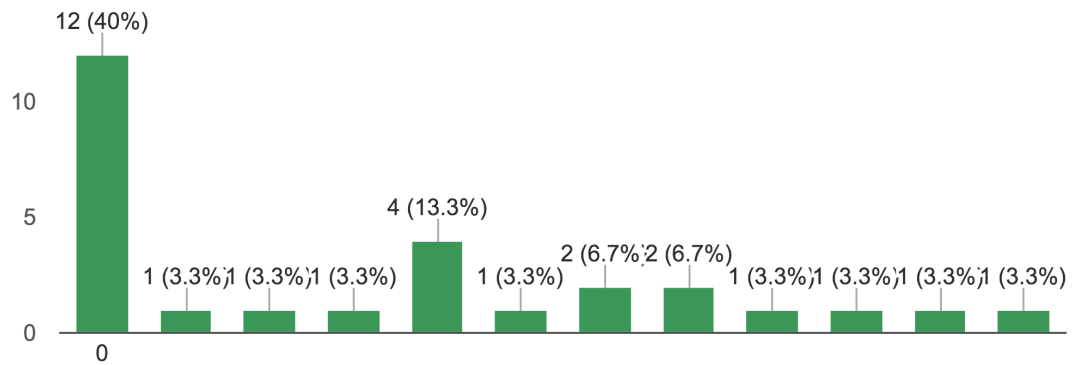
1996-1999: 11 stakeholders

From 2000: 8 stakeholders

1.8.2. Number of permanent employee (30 responses)

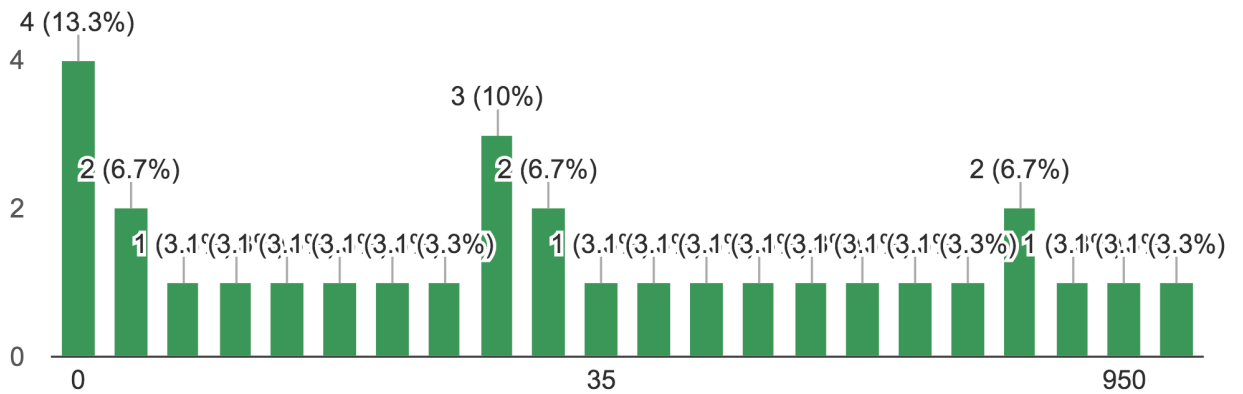


1.8.3 Number of temporary employee (28 responses)

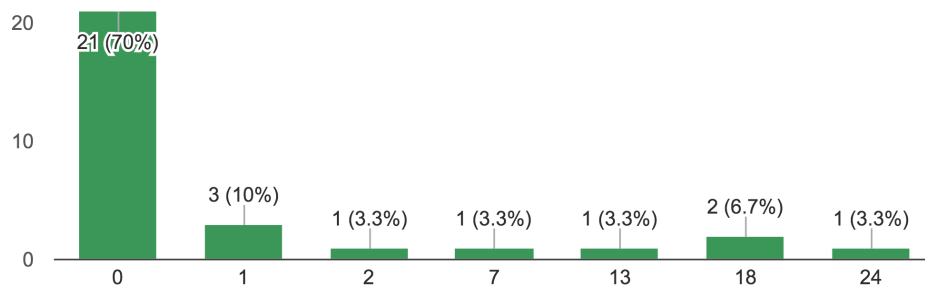


Qualification of employees

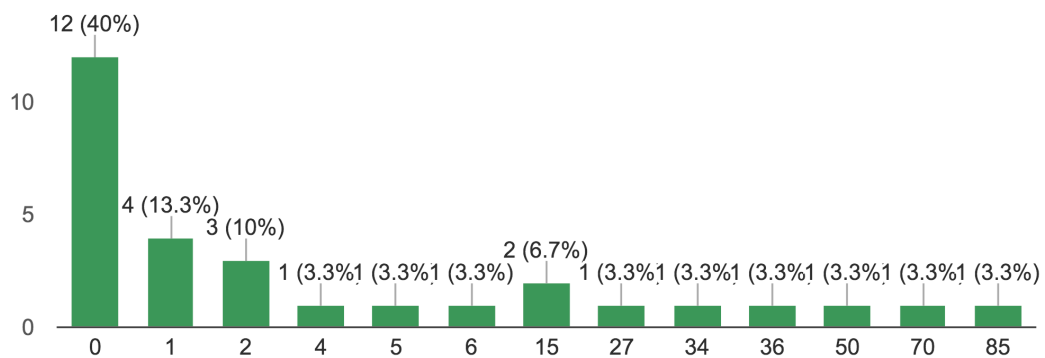
1.8.4a. Number of employees with Bachelor degree (30 responses)



1.8.4b. Number of employees with Master degree (30 responses)

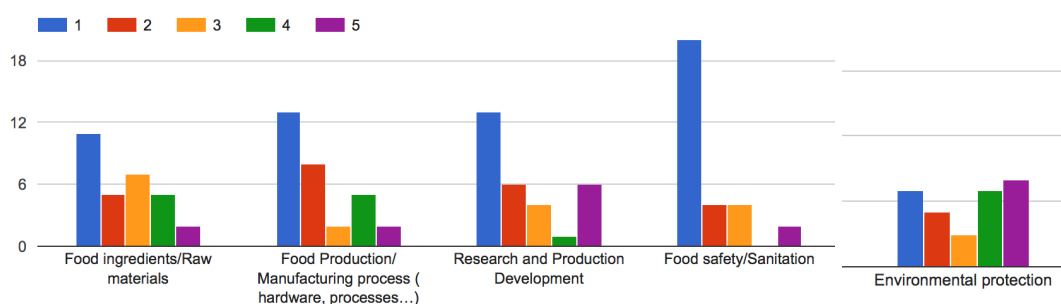


1.8.4c. Number of employees with Doctoral degree (30 responses)



Most stakeholders do not have employees holding a Doctoral degree, excluding higher education institutes and public agencies.

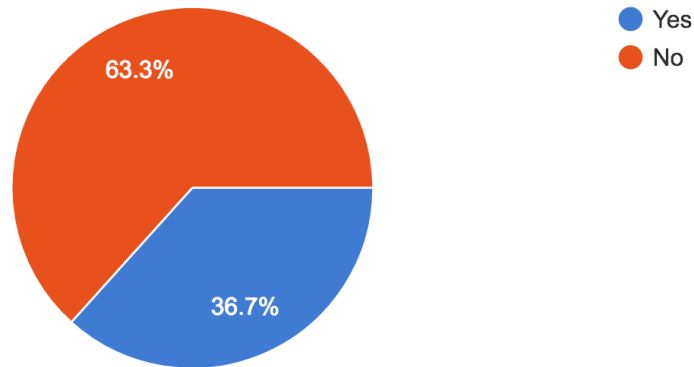
1.9. Organization's primary area of interest



According to the data, the areas that most attract organization's interest are summarized in the following order:

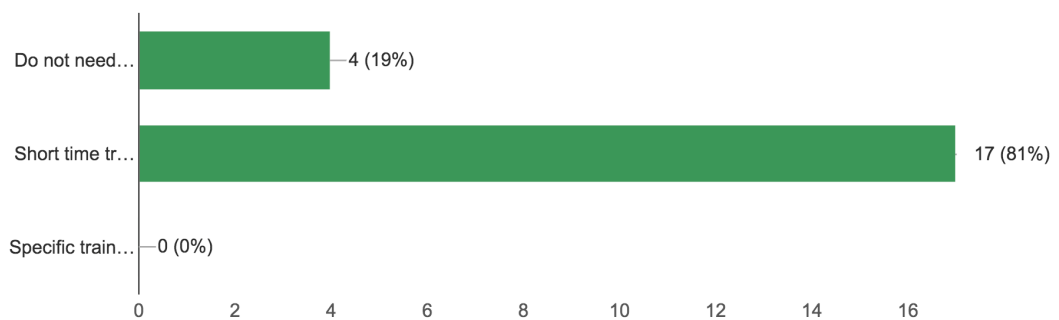
- 1) Food safety and sanitation
- 2) Food production/Manufacturing process
- 3) Research and production development
- 4) Environmental protection
- 5) Food ingredients/Raw materials

1.10. The requirement for staff training at the Master or Ph.D. level



According to the data, most stakeholders (63.3%; 19 out of 30 stakeholders) give precedence that their staffs do not need to be trained at the Master or PhD, while the rest (36.7%; 11 out of 30 stakeholders) said they need it.

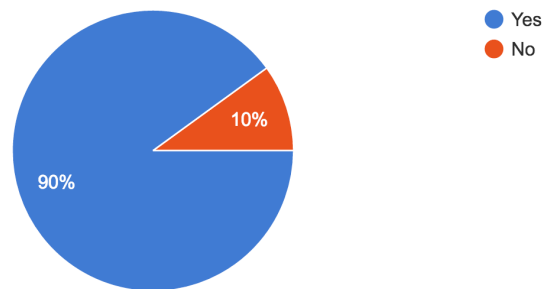
1.10.2. In accordance to (1.10), the reason(s) for the unrequited staff training at the Master and Ph.D. level (21 responses)



Most of the responses give the reason that the short training is sufficient for performing tasks, while 4 response states that staffs do not need to be trained.

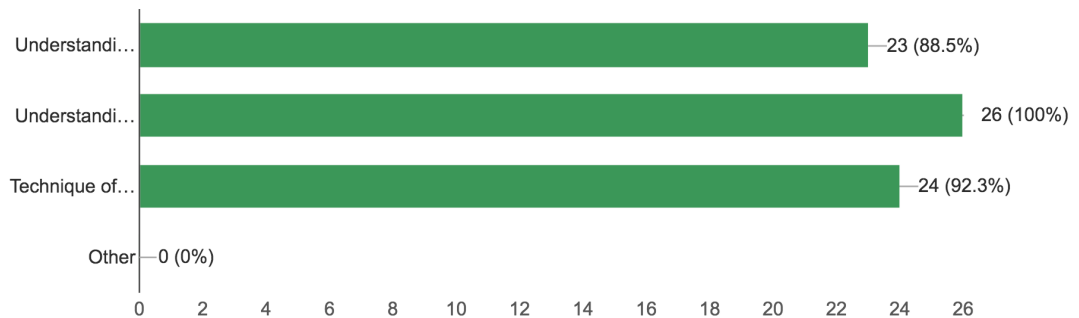
The need for training high-quality employee in food safety and quality

2.1. The requirement for employees in the field of food safety management (30 responses)



90% stakeholders surveyed need employees in the field of food safety management.

2.1.1.b. Specific requirements of the company for working in the field of food safety management (26 responses)

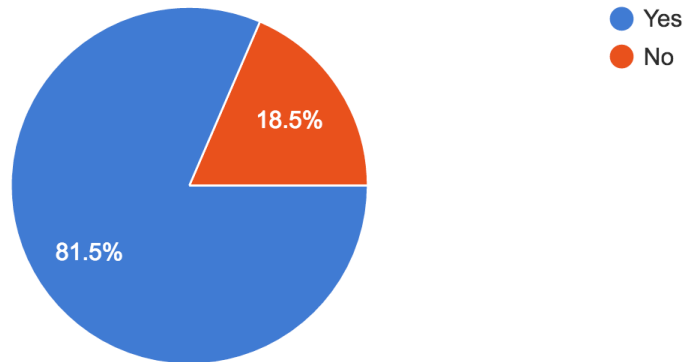


According to the acquired data, the knowledge that most required by the company regarding food safety management is in the following order.

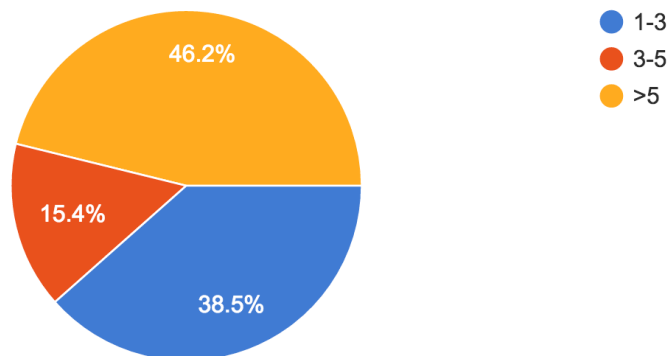
* Please note that some stakeholders gave more than 1 response for this question.

- 1) Understanding of Food Safety and Food Quality Management
- 2) Technique of Food Quality analysis
- 3) Understanding of materials properties
- 4) Others

2.1.1c. Most surveyed **stakeholders have sufficient manpower for performing tasks** relating to food safety management (81.5%), whereas 18.5% still have not had sufficient manpowers (27 responses)



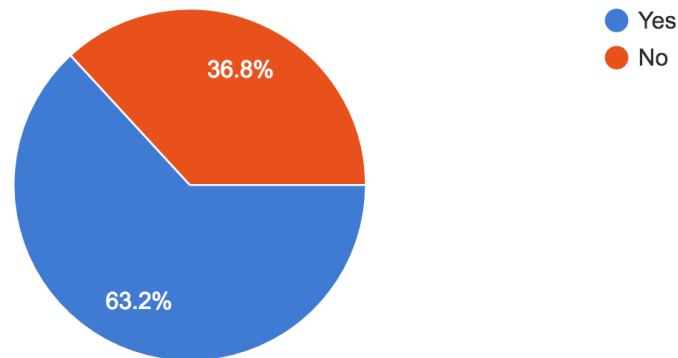
2.1.1d. **Future plan for recruiting food safety and food quality experts in the next 3-5 years** (26 responses)



46.2% stakeholders plan to recruit additional >5 employees in the field of food safety and food quality management in the next 3-5 years.

2.1.2.b. In case that stakeholders do not specifically need to have an employee in the field of food safety and food quality management (19 responses)

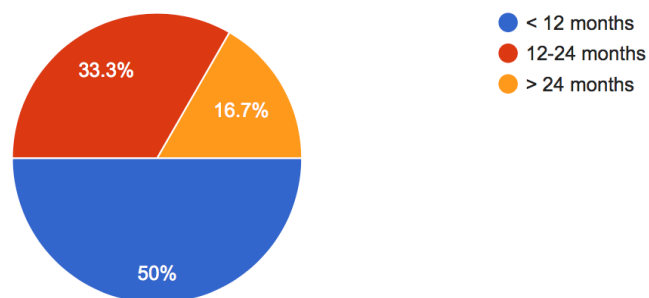
* Based on (2.1), all stakeholders require having personnel in food safety and food quality management. However, 19 stakeholders gave response to this question.



12 stakeholders (63.2%) stated that their employees are able to perform multiple functions, while 7 stakeholders (36.8%) reported that staffs are currently unable to perform multiple functions.

2.1.2.c. The period that stakeholders required to start recruiting personnel in food safety and food quality management (18 responses).

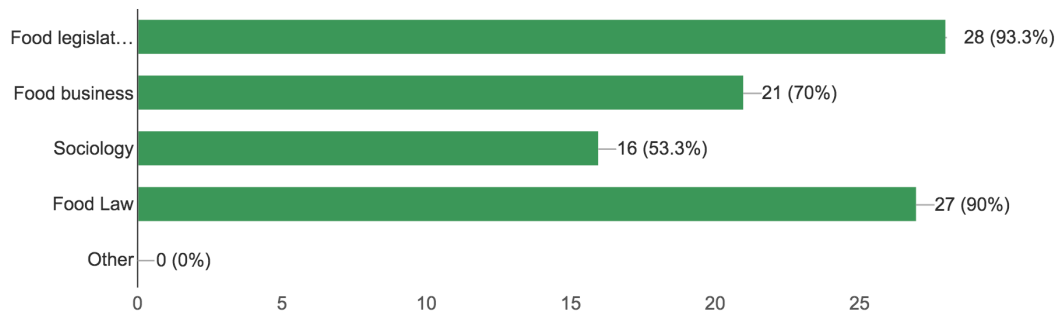
* Based on (2.1), all stakeholders require having personnel in food safety and food quality management. However, 3 stakeholders gave response to this question.



9 stakeholders (50%) have a short-term plan (within 12 months) to recruit employee(s) in the field of food safety and food quality, while 3 stakeholders (16.7%) has a long-term plan (> 24 months) to recruit that particular position.

2.2.1.a. Persons who work in the field of food safety management should comprehend the social knowledge as follows (30 responses):

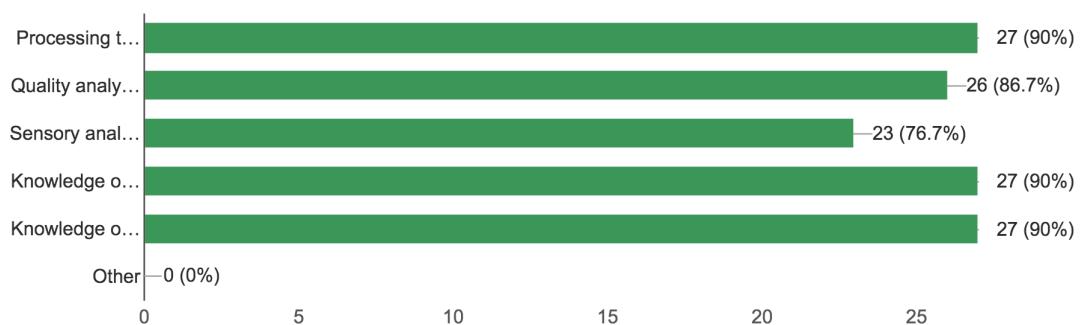
* Please note that some stakeholders gave more than 1 response for this question.



Food legislation followed by food business are the social knowledge of which majority stakeholders need.

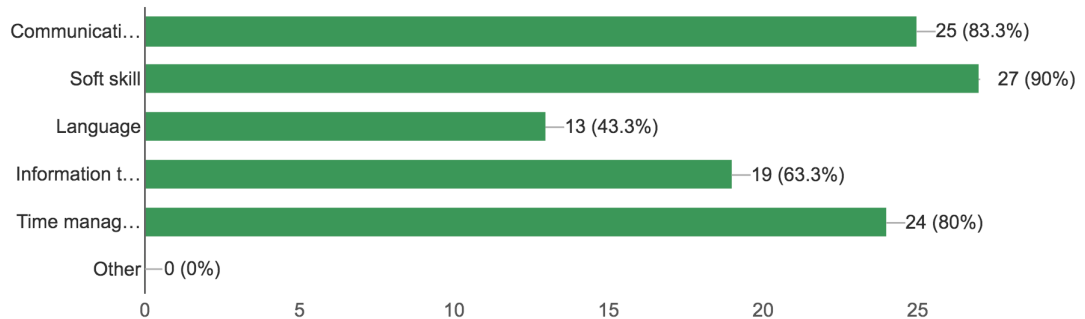
2.2.1.b. Undergraduate students who will work in the field of food safety management should comprehend the basic knowledge as follows (30 responses):

* Please note that some stakeholders gave more than 1 response for this question.



Quality management system, followed by quality analysis technique and processing techniques are the most important basic knowledge of which stakeholders need.

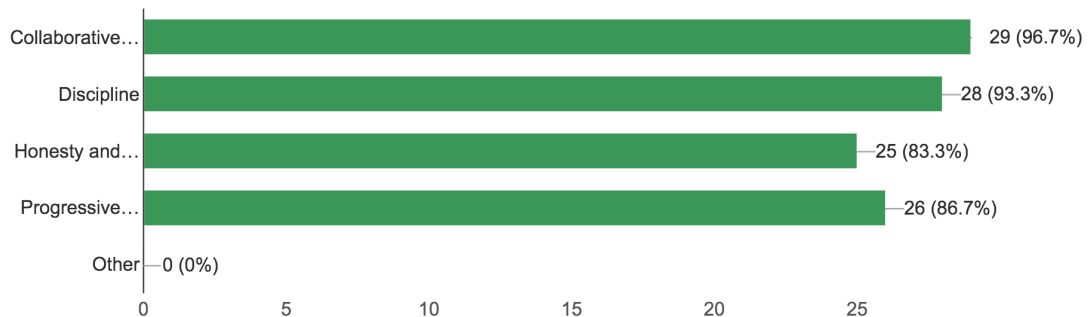
2.2.2.a. Undergraduate students who will work in the field of food safety management should comprehend the basic skills as follows (30 responses):



According to the data, the soft skill, communication skill and Time management is the most important basic skills for undergraduate students who will engage in the field of food safety management in the future. The trend towards language is comparable and followed in order by IT and time management skills.

2.2.3.a. The attitude required for working in the field of food safety management (30 responses)

*Please note that some stakeholders gave more than 1 response for this question.

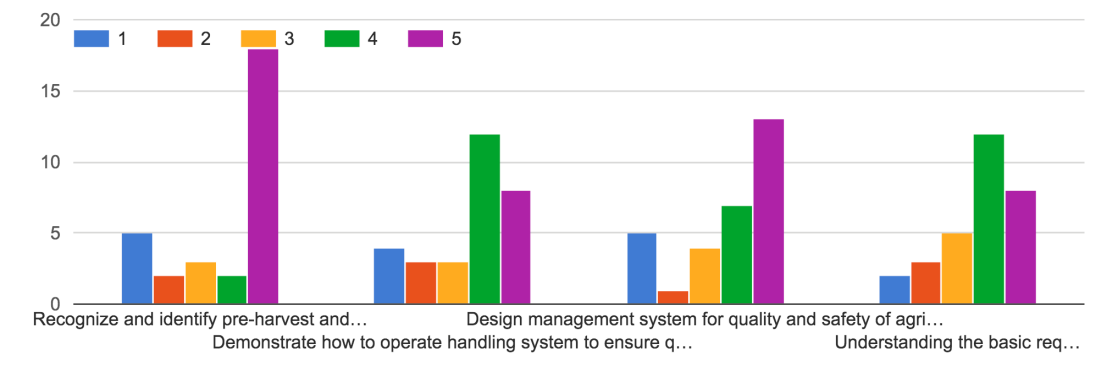


According to the required attitude, the honesty and punctuality at work is considered as the most important attitude, followed by discipline and collaborative and cooperative colleagues, respectively.

Relevant competencies evaluation

We calculate the weighted scores based on the degree of importance with topic(s) with the highest total scores is considered the most important aspect of its particular category.

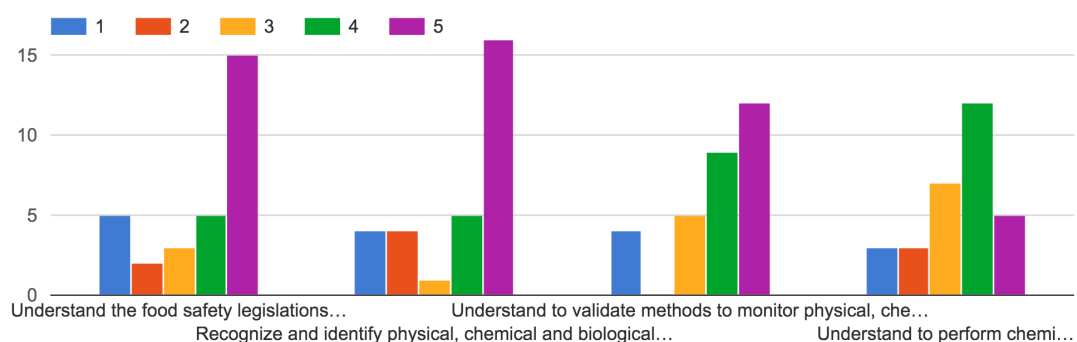
2.3.A. Knowledge: Food safety and food quality upstream of the food value chain



• Remark: the question regarding understanding the basic requirement for good agricultural/livestock/aquaculture products does not have the complete set of answer; therefore, the analysis of results was omitted.

In order to ensure Food safety and food quality upstream of the food value chain, stakeholders considered the 3 issues of recognize and identify pre-harvest and post-harvest factors, how to operate and handling system, and lastly design of management system

2.3.A. Knowledge: Food safety and quality analysis



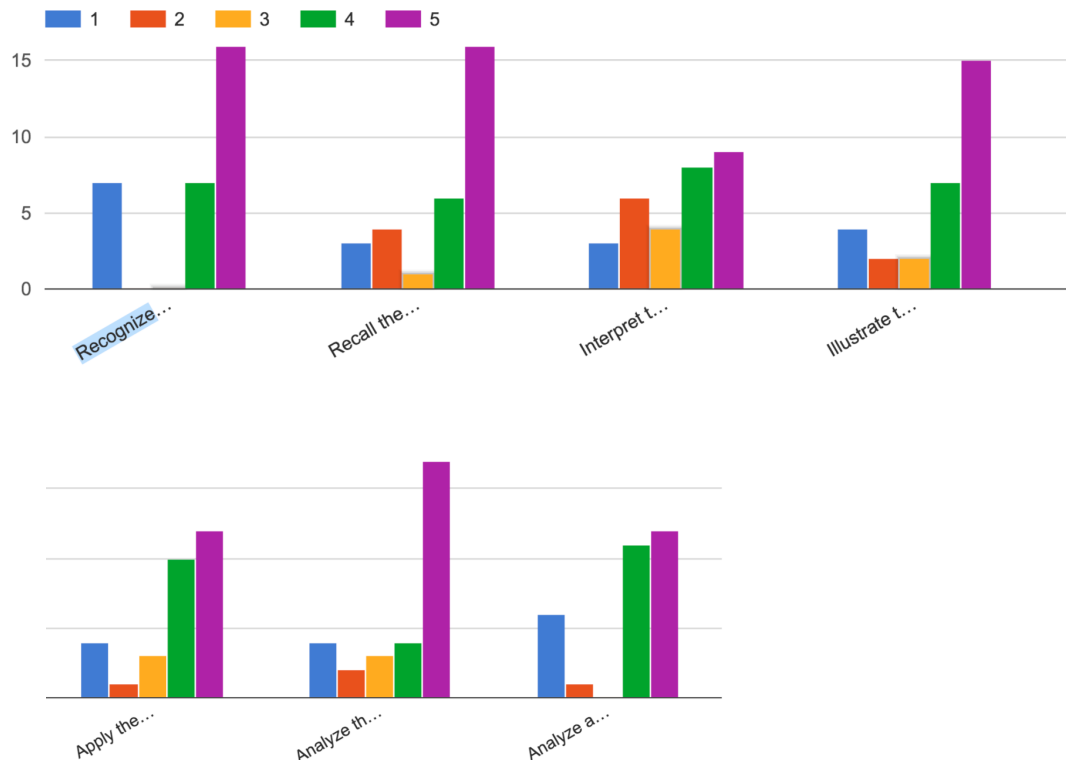
Based on the 4 issues, stakeholders considered the importance of issues in the following order.

- (1) Recognize and identify physical, chemical, and biological hazards in food system
- (2) Understand the food safety legislations and regulations

(3) Understand to validate methods to monitor physical, chemical, and biological hazards in food (according to international guideline)

(4) Understand to perform chemical analysis using advanced technique

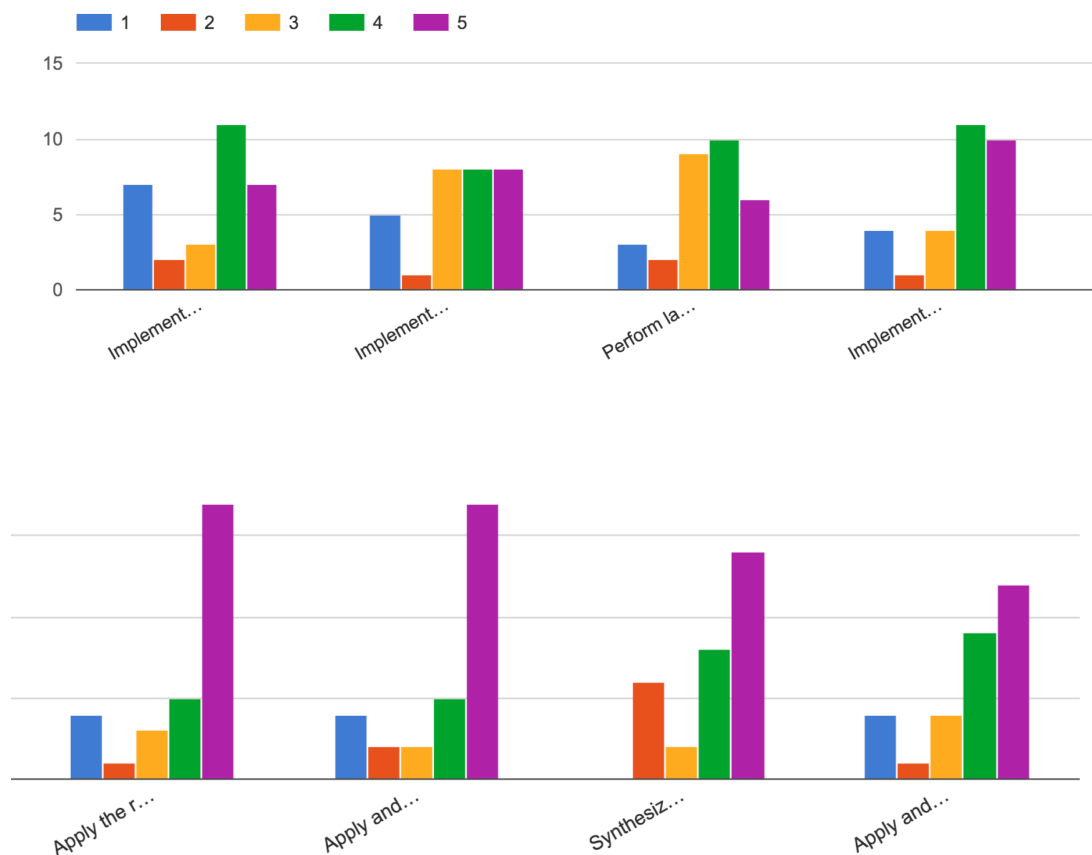
2.3.A. Knowledge: Food safety and quality assurance in processing industry and distribution



Based on the 7 issues, stakeholders considered the importance of issues in the following order.

- 1) Recognize the critical components of the food safety and food quality systems
- 2) Analyze the hazards and risks associated with food and beverages
- 3) Illustrate the importance of food-related hazards and standard regulations and procedure in food processing practices
- 4) Recall the required pre-requisite program(s) to warrant the safety of food systems
- 5) Analyze and use traceability system in the food chain
- 6) Apply the basis of safety issue in food production and supply chain systems
- 7) Interpret the simulated problem-based food safety problem(s) in the food manufacturing facilities

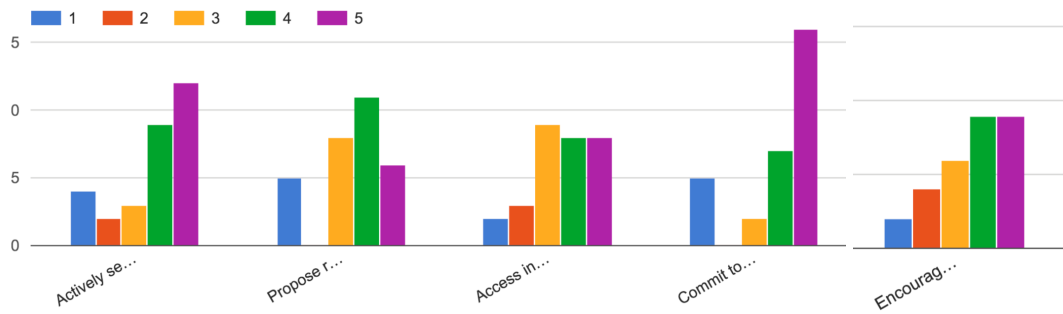
2.3.B. Skills



According to the obtained results, the important skills considered by stakeholders (30 responses) based on the scores provided can be ranked in order as follows.

- 1) Implement HACCP methodology and food safety verification programs
- 2) Implementation of pre-requisite programs and HACCP and Implementation of risk analysis (Equal scores)
- 3) Synthesize and implement the relevant food safety or food standard legislation in both local and international levels
- 4) Implement a sampling plan to monitor chemical and biological hazards in food
- 5) Implement microbiological methods to monitor biological hazards in food
- 6) Implement a quality management system according to ISO 17025 in testing laboratories
- 7) Routinely perform chemical and/or biological testings in the framework of an accredited laboratory.

2.3.C. Attitude



According to the obtained results, the important attitudes considered by stakeholders (30 responses) are presented as follows.

- 1) Capable of accessing the standards and regulations
- 2) Encourage to keep the confidentiality of analytical results
- 3) Commit to apply HACCP principles in food operation
- 4) Frequently search and evaluate the literatures on food quality and food safety
- 5) Propose research plan and identify issues related to food quality and food safety in the industries
- 6)

2.4. Additional opinion regarding the recommended training issues that universities should provide in order that students will be able to meet the requirement of the job market.