



**ELO SURVEY REPORT OF FOOD SAFETY AND  
QUALITY MANAGEMENT TRAINING PROGRAM IN  
VIETNAM**

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## About the project

Funded by Global Affairs Canada, our project seeks to enhance the Vietnamese people (Ha Noi & Ho Chi Minh city) access to safe and competitive agri-food products, with an aim to improve the well-being of consumers as well as other agri-food actors. SAFEGRO project is implemented by Alinea International in partnership with the University of Guelph.

Food safety is a major public health concern. Many people do not trust food safety enforcement at informal markets where they buy most of their food. Trade for Vietnam's commodity exports also suffers due to a lack of compliance with international standards.

SAFEGRO project works with national and municipal governments to modernize food safety capacity among regulators, thousands of smallholder farmers, cooperatives, processors, retailers and consumers along specific meat and vegetables value chains in Ha Noi and Ho Chi Minh city. SAFEGRO supports Vietnam's Ministry of Agriculture and Rural Development, Ministry of Health and Ministry of Industry and Trade jointly.



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## LIST OF ABBREVIATIONS

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CCP	Critical Control Point
ELOs	Expected Learning Outcomes
FBOs	Food business operators
FSQM	Food Safety and Quality Management training program
GMP	Good Manufacturing Practices
HACCP	Hazard Analysis and Critical Control Point
IUFoST	International Union of Food Science and Technology
PDCA	Plan Do Check Act
SAFEGRO	Safe Food for Growth
SSOP	Sanitation Standard Operating Procedures

## EXECUTIVE SUMMARY

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In order to develop a food safety management training program, it is crucial to first determine appropriate learning outcomes that meet the training needs of the food industry. The objective of this survey was to provide evidence-based assessment of the expected learning outcomes (ELOs) for the Food Safety and Quality Management training program (FSQM) in Vietnam. The survey aimed to collect and evaluate the program's learning outcomes from relevant stakeholders to contribute to building a training program that is appropriate and aligned with practical needs in the food industry. The survey results demonstrate that all stakeholders recognize the importance of food safety and hygiene in the food industry, and they provided positive and significant feedback to contribute to the development of a better training program that is closely linked to practice. Finally, the survey results also show that the proposed learning outcomes are entirely appropriate.

# 1 Introduction

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## 1.1 Introduction

The Safe Food for Growth (SAFEGRO), a Canadian government funded project, will support the development of an undergraduate food safety curriculum to be adapted and adopted by at least two universities in Vietnam identified as stakeholders in the SAFEGRO project. The work is in support of the capacity building program for the Project and is directed at formal academic level training for future government food safety regulators and industry. Integrating expertise from other project components the curriculum will address gaps identified through a thorough needs assessment. The curriculum will be used to address the objective of a national food control system in Vietnam to protect the health of consumers and ensure fair practices in the food trade. It is based on Codex principles and guidelines for national food control systems (CAC/GL 82-2013). The curriculum will incorporate the international food safety curriculum and syllabus developed by the International Union of Food Science and Technology (IUFOST) and be informed by the FAO and other international organizations currently undertaking similar work related to piloting international food safety curriculum. This competency-based curriculum will address the needs of for food safety capacity building among regulators, inspection services and private sector food business operators (FBOs). The project will engage with key institutions in Vietnam to develop a generic curriculum to be endorsed by the Ministry of Education and Training and eventually adopted by those universities interested in promoting food safety programming. The project will also develop a learning management system to promote on-line learning.

## 1.2 Survey objective

The objective of this survey aimed to provide an evidence-based assessment of expected learning outcomes (ELOs) of Food Safety and Quality Management training program (FSQM) in Vietnam.

## 2 Survey methodology

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### 2.1 Method

To assess the expected learning outcomes (ELOs) of the FSQM training program, a group of domestic and international experts discussed and evaluated the ELOs of related food safety and hygiene training programs at universities in Vietnam and Canada. Then, they compared the training program, discussed, and developed the ELOs. The ELOs were divided into four main groups, including knowledge skills, cognitive skills, practical skills, and interpersonal skills.

Primary data for the survey were collected through direct interviews (10%) and sending questionnaires to stakeholders, including government agencies, universities, research institutes, and companies (small, medium, and large). The number of participating parties in the survey was 69. The structured questionnaire was designed with various sections, including: 1) General information about the stakeholders, such as organizational types, number of employees, production and business characteristics, and human resource needs, and 2) Reference opinions and evaluations based on different skills (Annex 1).

### 2.2 Data analysis

The collected data were synthesized into Tables and Figures using Excel 2021 software.

## 3 Proposed ELOs of the training program

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ELOs of the FSMS training program are divided into four main parts including knowledge skills, cognitive skills, practical skills, and interperson skills.

### 3.1 Knowledge skills

1. Demonstrate knowledge and understanding of food safety hazards and risks.
2. Demonstrate knowledge and understanding of food chains and food systems.
3. Demonstrate knowledge and understanding of the practices and principles of food hygiene, health promotion and cleaning and sanitation.
4. Demonstrate knowledge and understanding of food safety standards and regulations.

### 3.2 Cognitive skills

1. Analyze (Understand) a food system or value chain and assess potential food safety hazard assessment (for bachelor) and food safety risk assessment (for Engineer with 180 credits).
2. Propose tailored solutions (risk management) to food safety problems and challenges, taking into account multiple criteria and factors e such as effectiveness, acceptability, and implementability (risk management).
3. Demonstrate skills of critical analysis and review, logical thinking and reasoning, and clear and effective communication.

### 3.3 Practical skills

1. Understand methodology to Choose, design, or deploy tools and approaches to Predict/ Prevent/ Detect/ Assess/ Control/ Respond/ Communicate food safety hazards and risk in food systems.
2. Be able to solve food safety and quality issues through case studies, project based learning and real specific situation at the enterprise.

### 3.4 Interperson Skill

1. Work effectively as part of a team
2. Communicate, orally and in writing, effectively individuals, organizations and groups with diverse backgrounds and experiences and perspectives, both in technical and lay terms.
3. Demonstrate professional integrity, ethics, and respect for gender and cultural diversity.

### 3.5 Attitude

1. Show commitment to the practice and promotion of food safety culture across all professional activities.
2. Demonstrate a willingness to pursue continuing education to stay appraised of changes in technology, transitions in agricultural systems and emerging food safety threats.





## 4 General Information

There were a total of 69 stakeholders surveyed, primarily located in the Southern region (Ho Chi Minh City and surrounding provinces) and the Northern region (Hanoi and surrounding areas), which have been analyzed. The survey responses from the Southern and Northern regions account for approximately 60% and 40%, respectively. The common characteristics of the surveyed organizations and companies are presented in Figure 1. As shown in Figure 1, the types of organizations include those primarily involved in food-related businesses (approximately 57%), as well as those in science, academia, and research centers (15%), inter-governmental or supra-national organizations (9%), and other small-scale businesses (20%).

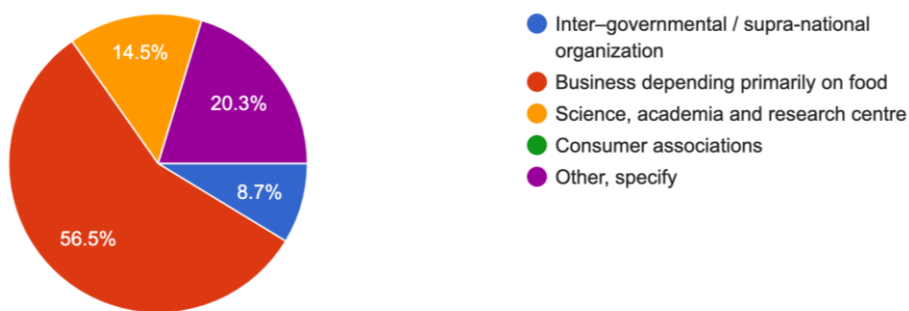


Figure 1. General characteristics of the surveyed organization

As demonstrated in Figure 2, businesses primarily dependent on food are dominated by processing industries (90%), followed by retailers (5%), production at the farm level (3%), and food machinery production (3%). Meanwhile, inter-governmental or supra-national organizations comprise national or Federal entities such as ministries and public agencies (67%), regional or provincial entities (17%), and private operators (17%).

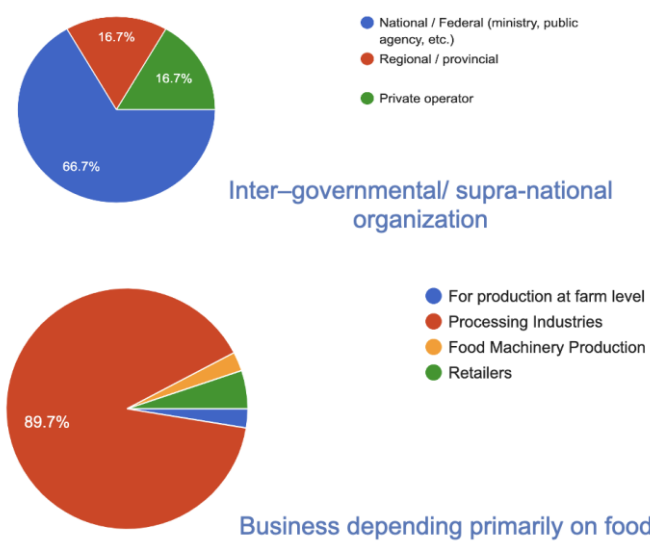


Figure 2. Type of the organization

The surveyed companies include many firms that have been established for a long time, for example, since 1912, but there are also newly established companies that have been operating for a few years. The majority of companies were founded more than 10 years ago. The number of employees in the surveyed organizations is presented in Table 1. Based on the scale of the number of employees, it can be observed that small companies account for 77%, while medium-sized and large companies account for 16% and 7%, respectively. Typically, processing companies require high school and bachelor's degrees for their employees' qualifications, while science, academia, and research centers often require master's and doctoral degrees.

Table 1 Number of permanent employee in the surveyed organizations

Numbers of permanent employee	Numbers of surveyed company	Percentage
<100	53	76.8
100 - 1000	11	15.9
>1000	5	7.2

The majority of the surveyed companies demonstrate awareness of food safety across various domains. As illustrated in Figure 3, the primary areas of interest in food safety include food ingredients/raw materials, food manufacturing processes, research and production development, food sanitation, and environmental protection. The findings indicate that the highest level of interest in food safety knowledge was observed in food production and food safety/sanitation. In addition, the surveyed companies expressed a desire to enhance the food service mindset and restaurant services provided to students, so that they align better with the requirements and needs of restaurant and food company chains. Moreover, they emphasized the importance of food safety knowledge in food storage and preservation.

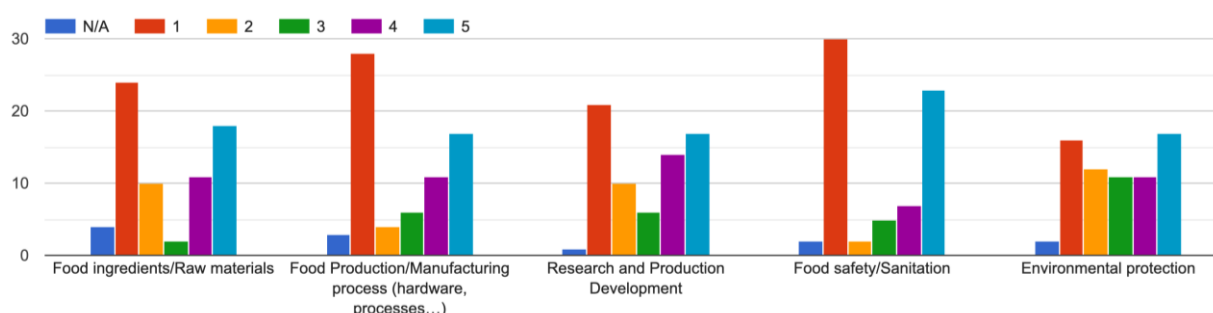


Figure 3. Organization's primary areas of interest in food safety

Ranking from 1 to 5, starting with the most important area of interest (1) to the least important one (5); NA is not applicable

## 5 The need for training high-quality employees in food safety and quality

### 5.1 Employee requirements

More than 88% of the surveyed companies reported a need for employees in the field of food safety management, as shown in Figure 4. These employees are primarily involved in quality management, quality assurance, quality control, and research and development. The companies require their food safety management staff to possess knowledge and skills in various areas, such as understanding of food safety and food quality management (97%), food quality analysis techniques including physical, biological, chemical, and sensory (77%), and understanding of material properties (approximately 75%) (Figure 5). In addition, the companies emphasized the importance of English language proficiency, knowledge of nutrition, ability to stay abreast of food trends, and proficiency in operating machinery and equipment.

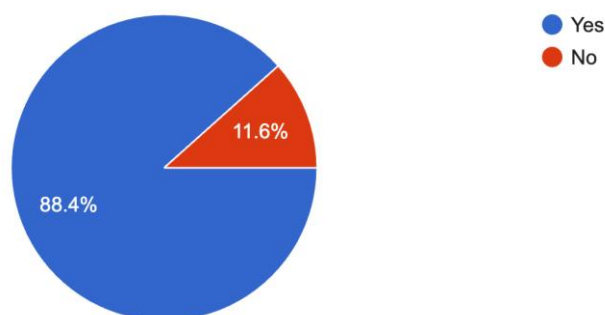


Figure 4. Percentage of surveyed companies require employees in the field of food safety management

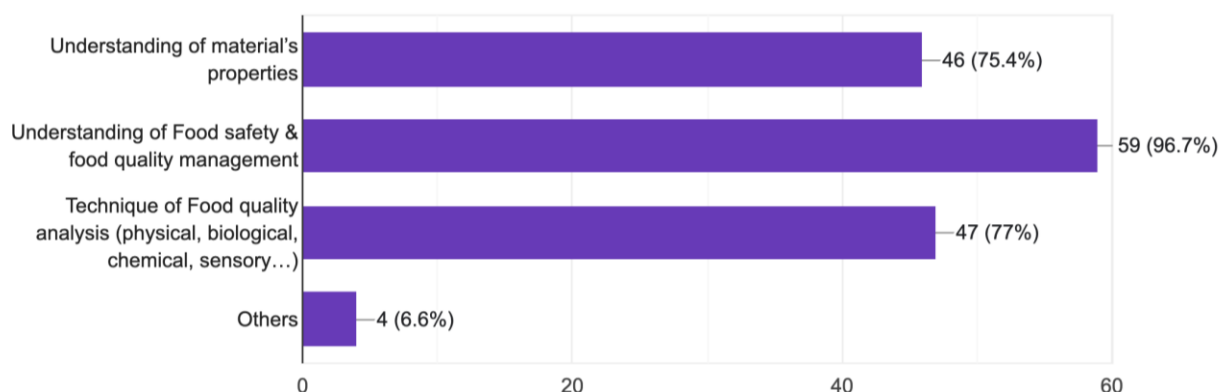
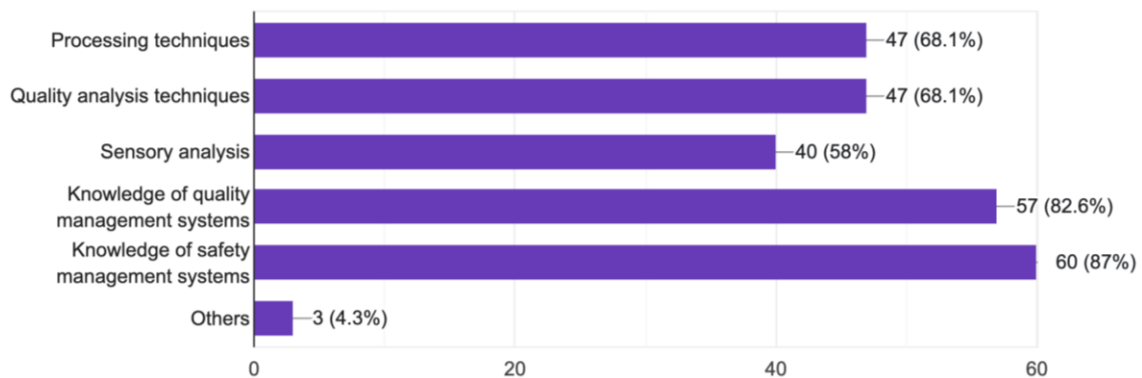
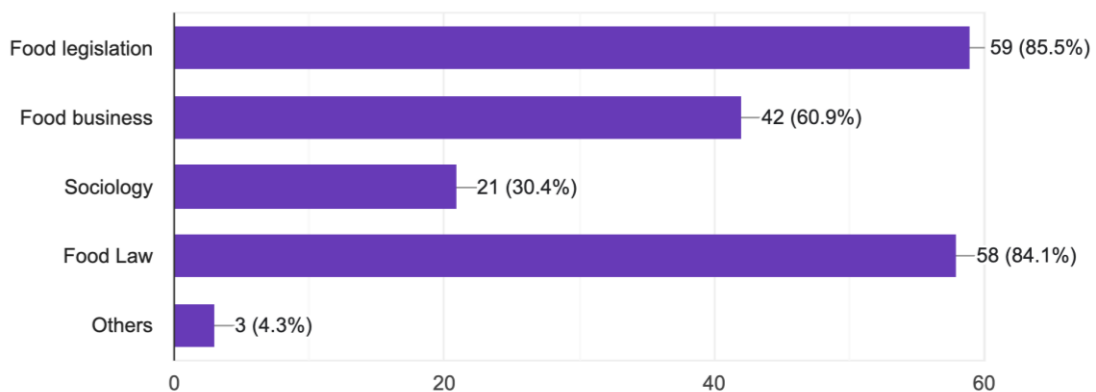


Figure 5. The specific requirements of the surveyed company for working in the field of food safety management

The survey objective is to provide students with training in food safety management, aimed at achieving the following outcomes: 1) knowledge, 2) cognitive skills, and 3) practical skills. Companies were required to provide their perspective and evaluation of the importance of these competencies. Figure 6 shows the basic knowledge (A) and social knowledge (B) required for working in the field of food safety management. The results (Figure 6A) indicate that knowledge of quality and safety management systems is considered important by most companies, at approximately 83% and 87% respectively. Furthermore, techniques of processing and quality analysis are also deemed necessary for the field of food safety and management, with approximately 68% agreement. Additionally, Figure 6B shows that food legislation (86%) and food laws (84%) are the two most important social knowledge requirements contributing to food safety management, followed by food business (70%) and sociology (30%). Based on the above-mentioned requirements, it is crucial to design the food safety management program to incorporate quality and safety management systems, food legislation, and food laws.



(A) Basic knowledge



(B) Social knowledge

Figure 6. The basic knowledge (A) and social knowledge (B) needed to work in the field of food safety management

The basic and practical skills required for the food safety management were also surveyed by companies. The basic skills are presented in Figure 7. The results indicated that knowledge of safety

management systems (93%) and communication (74%) are the most important basic skills needed. Furthermore, other basic skill such as soft skills, time management, language, and information technology, which are more than 50% surveyed companies agreed. For the practical skills, As such, those required skills should be included in the proposed training program.

To excel in food safety management, students need a diverse skill set that includes both technical and soft skills. Technical competencies such as knowledge of quality system standards, risk assessment, safety management systems, and processing techniques and equipment are essential for working in the industry. Students should also have analytical and problem-solving skills, knowledge of statistics and sensory analysis methods, and the ability to communicate effectively. Practical skills like quality and sensory analysis, GMP (Good Manufacturing Practices) and SSOP (Sanitation Standard Operating Procedures) guidelines, CCP (Critical Control Point) analysis, and HACCP (Hazard Analysis and Critical Control Point) plan and validation are necessary to do a good job. Furthermore, practical skills in processing techniques, equipment techniques, and food microbiology are also necessary for companies in the food safety industry Soft skills such as communication, teamwork, time management, and leadership are equally important. Good communication skills are crucial, as students must be able to effectively communicate with team members, stakeholders, and regulatory bodies. Additionally, knowledge of food laws and regulations, public speaking, good attitude, computer skills, data analysis, situational skills, research skills, and the ability to work independently and in a team are valuable assets. Students should also focus on continual learning, be motivated and self-disciplined, and have experience working in a food factory. To gain deeper understanding and develop leadership skills, students should consider studying to become auditors and learn about root cause analysis, PDCA (Plan Do Check Act), and data-driven management. Finally, having professional knowledge and proficiency in English are essential for success in the field of food safety management.

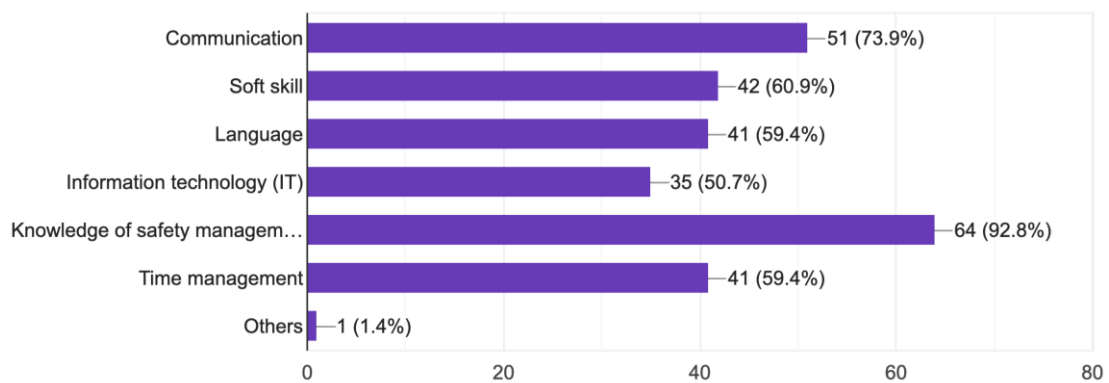


Figure 7. The basic skills needed to work in the field of food safety management

Figure 8 displays the attributes necessary to work effectively in the field of food safety management. It is evident that being collaborative and cooperative with colleagues is the most essential trait, as

indicated by over 91% agreement. Honesty and punctuality at work, along with being disciplined and a progressive team worker, also rank high on the list of important attributes.

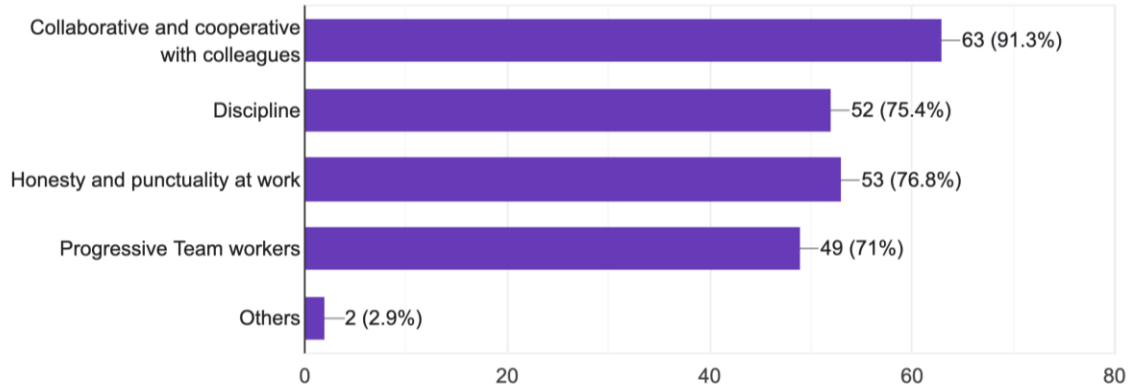
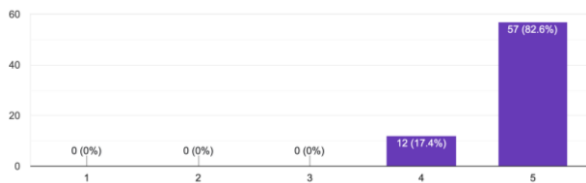


Figure 8. The attribute needed to work in the field of food safety management

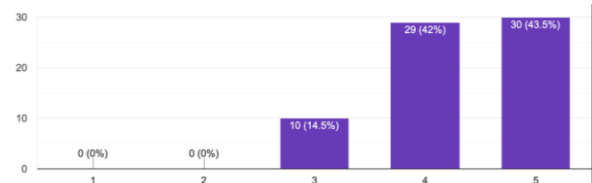
## 5.2 The requirements for quality manpower

### 5.2.1 Knowledge

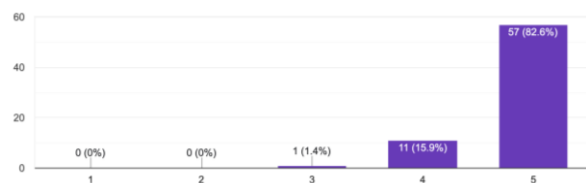
To achieve quality manpower in the field of food safety management, it is important to have competencies in knowledge, cognitive skills, practical skills, interpersonal skills, and attitude. The companies were asked to provide their perspective and evaluation of the level of importance of these competencies on a scale ranging from 1 (less important) to 5 (highly important) (Figure 9).



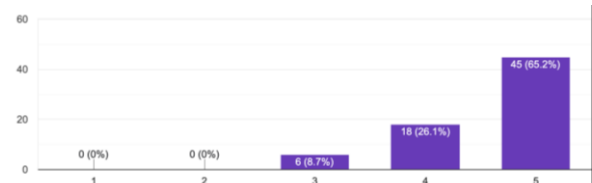
(A) Food safety hazards and risks



(B) Food supply chains and food systems



(C) The practices and principles of food hygiene, health promotion and cleaning and sanitation



(D) Food safety standards and regulations

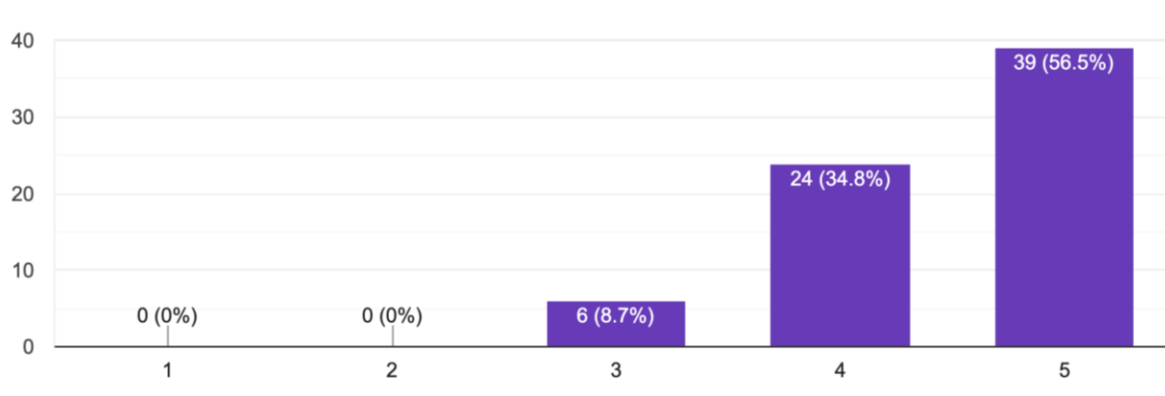
Figure 9. Evaluation of knowledge and understanding of different food safety areas  
a scale ranging from 1 (less important) to 5 (highly important)

Figure 9 shows the evaluation of the level of importance of knowledge in food safety and quality. It can be seen that knowledge and understanding of food hazards and risks (Figure 9A), food supply chains and food systems (Figure 9B), practices and principles of food hygiene, health promotion, and cleaning and sanitation (Figure 9C), and food safety standards and regulations (Figure 9D) are rated as high level of importance (4 or 5 on the scale). Therefore, these knowledge areas should be incorporated into the proposed training program in food safety management.

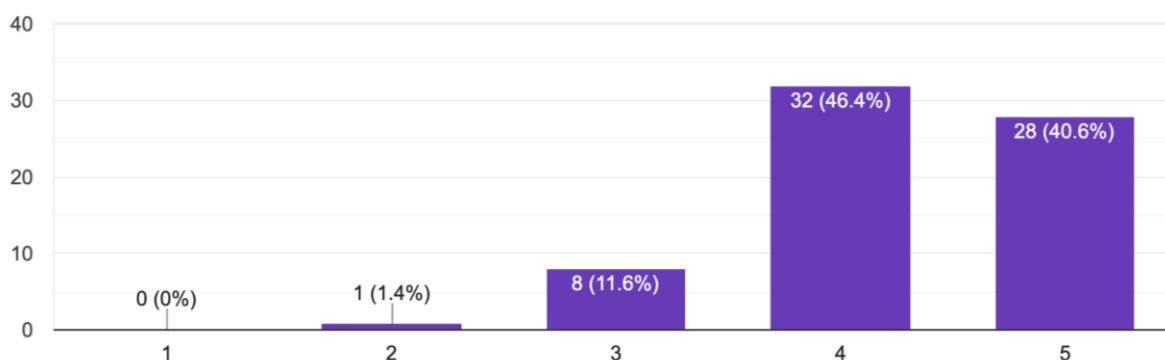
### 5.2.2 Cognitive skills

The results of the evaluation of cognitive skills in terms of risk assessment (Figure 10A), risk management (Figure 10B), and risk communication (Figure 10C) indicate that, in general, the majority of surveyed companies (approximately 90%) agree on the importance of cognitive skills in these areas.

Regarding risk assessment, students in the potential food safety and quality training program should demonstrate knowledge of the food system or value chain and assess potential food safety risks. They should also propose tailored solutions (risk management) to address food safety problems and challenges, considering multiple criteria and factors, including effectiveness, acceptability, and implementability. Moreover, students should exhibit critical analysis and review skills, logical thinking and reasoning abilities, and clear and effective communication skills (risk communication) to effectively convey their findings and recommendations.



(A)





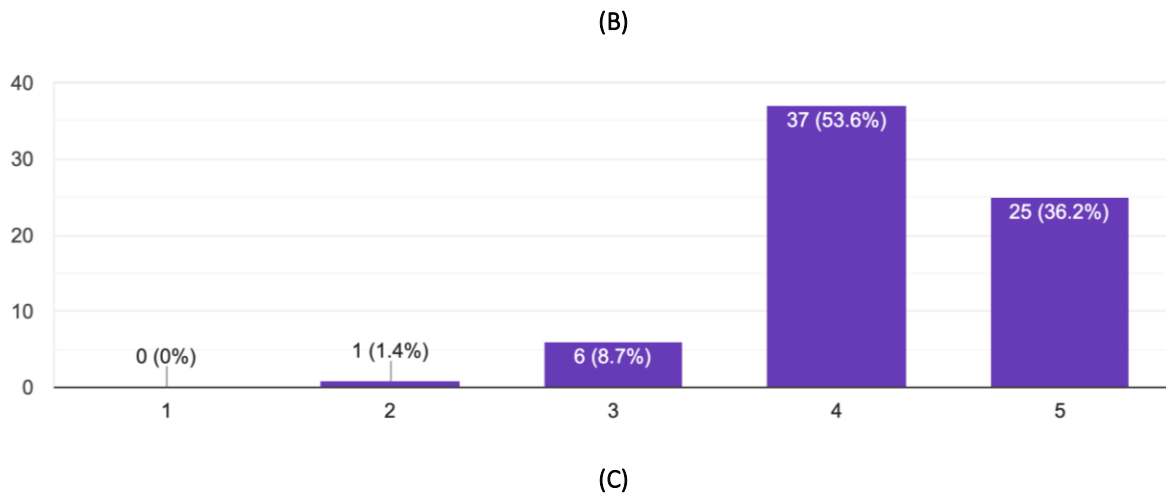


Figure 10. Evaluation results of cognitive skills: risk assessment (A), risk management (B), and risk communication (C)

### 5.2.3 Practical skills

According to Figure 11 illustrates the the survey results of practical skills. The results show that most companies acknowledged the significance of practical skills in food safety management. It is crucial to comprehend the methodology for selecting, designing, and/or implementing tools and approaches to identify, assess, control, predict, and prevent food safety hazards and risks in the food supply chain. The evaluation results for practical skills indicate a strong agreement level (over 91%) among respondents.

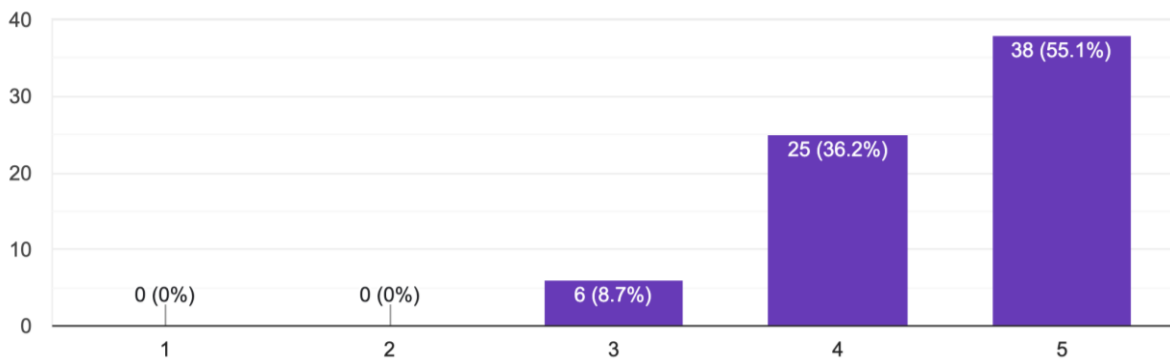
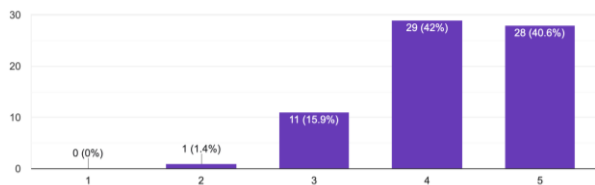


Figure 11. Evaluation results of practical skills

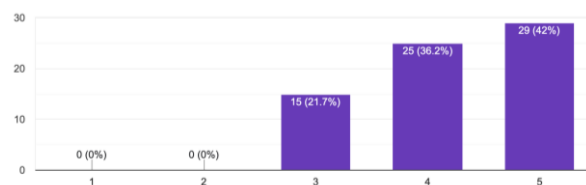
### 5.2.4 Interpersonal skills

Figure 12 depicts the assessment of companies on the required interpersonal skills for effective food safety management. A majority of the companies surveyed rated their proficiency level on a 5-point scale from 3 to 5 for critical interpersonal skills, including the ability to work collaboratively as part of a team, communicate effectively (both orally and in writing) with individuals, organizations, and groups

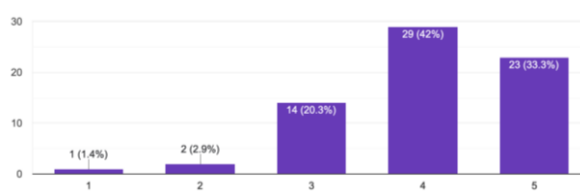
of diverse backgrounds, experiences, and perspectives, using both technical and lay language, and demonstrating professional integrity, ethics, and a deep regard for gender and cultural diversity.



(A) Work effectively as part of a team



(B) Communicate, orally and in writing, effectively individuals, organizations and groups with diverse backgrounds and experiences and perspectives, both in technical and lay terms

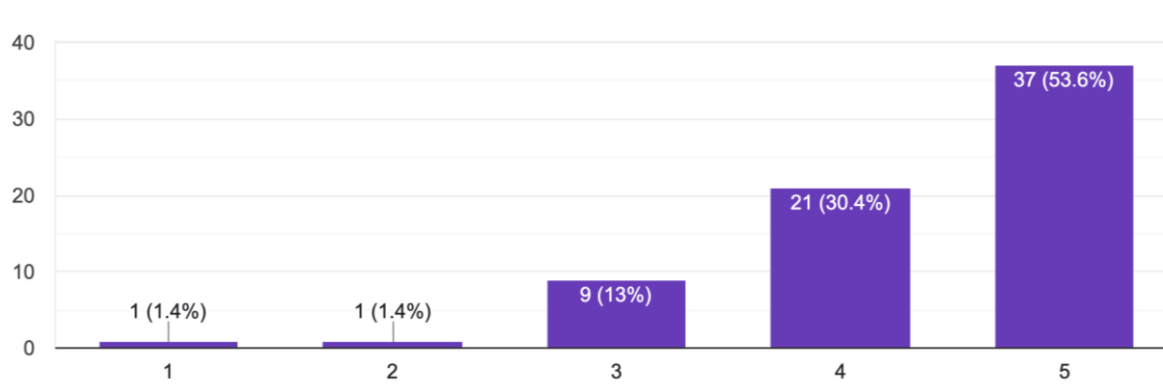


(C) Professional integrity, ethics, and respect for gender and cultural diversity

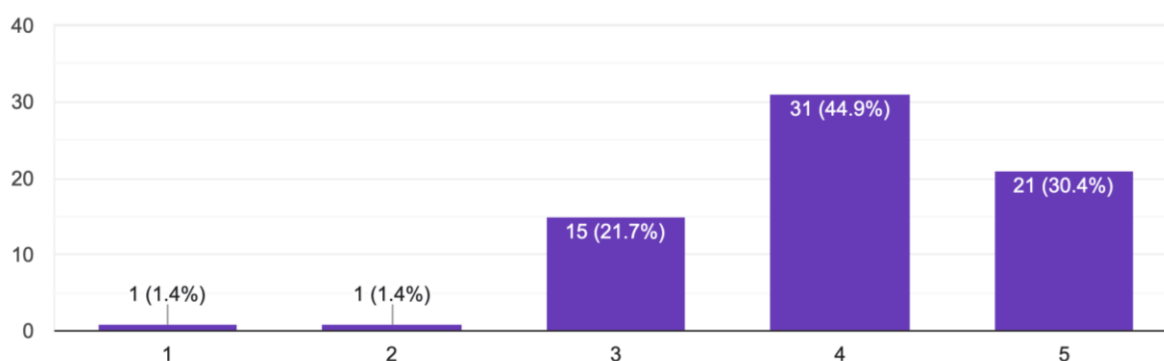
Figure 12. Evaluation results of interpersonal skills

### 5.2.5 Attitude

The results of the survey on the expected training program's attitudes, as presented in Figure 13, indicate that over 83% of participating companies agreed and encouraged a food safety culture in all aspects of their operations. Only a very small number of companies (less than 1.4%) provided ratings of 1 or 2, with the majority of companies giving higher ratings. Furthermore, the willingness to pursue ongoing education to keep abreast of changes in technology, transitions in the agricultural system, and emerging food safety threats was also highly rated, with a very high proportion of 97% agreeing (rated between 3 and 5 on a 5-point scale) with this attitude.



(A) Commitment to the practice and promotion of food safety culture across all professional activities



(B) A willingness to pursue continuing education to stay appraised of changes in technology, transitions in agricultural systems and emerging food safety threats

Figure 13. Evaluation results of attitude

### 5.2.6 Other requirements

In addition to the information provided in the survey regarding knowledge, attitudes, and skills, the independent opinions of businesses on the food safety system are also very important. The overall results of businesses' opinions on the requirements are as follows. To prepare students for the labor market, universities should focus on providing them with a combination of specialized knowledge, practical skills, and soft skills such as communication, teamwork, and problem solving. Practical skills should be emphasized in the curriculum, including the ability to anticipate and prevent mistakes, knowledge of quality and safety management systems, and the ability to conduct risk assessments. Internships and professional practice should be increased to provide more opportunities for students to apply their knowledge and skills in real-world settings. Additionally, students should be encouraged to identify clear career objectives and pursue them with determination. Finally, universities should work closely with businesses to align their curricula with industry needs, and provide students with opportunities to practice and develop their skills in a realistic business environment.

## 6 Conclusion

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In conclusion, the survey assessed the training needs against the established learning outcomes for the food safety management training program, with relevant stakeholders including food processing companies of various scales, universities, and state management agencies. The results of the investigation collected and summarized training needs related to quality management and food safety. All stakeholders demonstrated that food safety and hygiene is necessary and important in the food industry. At the same time, they also provided positive and important feedback to contribute to the development of a better training program that is closely linked to practice. Finally, the survey results also showed that the learning outcomes were entirely appropriate. It can be concluded that the current ELO version is suitable for training purposes in response to actual food production, supply, and service in Vietnam. The training program should include knowledge, practice, and skills specific to food safety and quality management.

## Annex A. Questionnaire

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### SURVEY on ELOs of Food Safety and Quality Management training program

Dear Lecturers, Company, and Organization,

The Safe Food for Growth (SAFEGRO), a Canadian government funded project, will support the development of an undergraduate food safety curriculum to be adapted and adopted by at least two universities in Vietnam identified as stakeholders in the SAFEGRO project. The work is in support of the capacity building program for the Project and is directed at formal academic level training for future government food safety regulators and industry. Integrating expertise from other project components the curriculum will address gaps identified through a thorough needs assessment. The curriculum will be used to address the objective of a national food control system in Vietnam to protect the health of consumers and ensure fair practices in the food trade. It is based on Codex principles and guidelines for national food control systems (CAC/GL 82-2013). The curriculum will incorporate the international food safety curriculum and syllabus developed by the International Union of Food Science and Technology (IUFoST) and be informed by the FAO and other international organizations currently undertaking similar work related to piloting international food safety curriculum. This competency-based curriculum will address the needs of for food safety capacity building among regulators, inspection services and private sector food business operators (FBOs). The project will engage with key institutions in Vietnam to develop a generic curriculum to be endorsed by the Ministry of Education and eventually adopted by those universities interested in promoting food safety programming. The project will also develop a learning management system to promote on-line learning.

More information about SAFEGRO can be found at <https://safegroproject.com>.

The objective of this survey is to provide evidence-based assessment to ELOs of Food Safety and Quality Management training program (FSQM).

#### 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 15 min only**
5. A **follow-up** to the questionnaire will give further opportunity to provide **stakeholder's need** in order to build up curricula training programs and the courses for Food safety and Quality Management.

Thank you.

## 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.

### 1. 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"/>
<b>Business depending primarily on food</b>	<input type="checkbox"/>
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"/>
<b>Other, specify</b>	<input type="checkbox"/>

1.8. Organization/Company profile

Established year .....

Numbers of permanent employee .....

Numbers of temporary employee: .....

Qualifications of employees: .....

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"/>

**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: .....

.....

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 outcomes. 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)

		1	2	3	4	5
<b>A.</b>	<b>Knowledge</b>					
1	Demonstrate knowledge and understanding of food safety hazards and risks.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Demonstrate knowledge and understanding of food supply chains and food systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Demonstrate knowledge and understanding of the practices and principles of food hygiene, health promotion and cleaning and sanitation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Demonstrate knowledge and understanding of food safety standards and regulations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>B.</b>	<b>Cognitive Skills</b>					
5	Analyze (Understand) a food system or value chain and assess potential food safety risks (Risk assessment) (Risk assessment is for Engineer with 180 crd)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Propose tailored solutions (risk management) to food safety problems and challenges, taking into account multiple criteria and factors e such as effectiveness, acceptability, and implementability (Risk management).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



7	Demonstrate skills of critical analysis and review, logical thinking and reasoning, and clear and effective communication (Risk communication).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>C Practical skills</b>						
8	Recognize the critical components of the food safety and food quality systems Understand methodology to choose, design, and/or use tools and approaches to detect, assess, control, predict and prevent food safety hazards and risks in the food supply chain.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>D. Interpersonal skills</b>						
9	Work effectively as part of a team	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	Communicate, orally and in writing, effectively individuals, organizations and groups with diverse backgrounds and experiences and perspectives, both in technical and lay terms.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	Demonstrate professional integrity, ethics, and respect for gender and cultural diversity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>E. Attitude</b>						
12	Show commitment to the practice and promotion of food safety culture across all professional activities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	Demonstrate a willingness to pursue continuing education to stay appraised of changes in technology, transitions in agricultural systems and emerging food safety threats.	<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 other requirements of the labor market (knowledge, practical skills, soft skills...)?

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