



LAB-MOVIE

Labour Market Observatory in Vietnam Universities

Report WP3.1

Vietnam National University of Agriculture

REPORT ON ANALYSIS DATA FROM LABOUR MARKET SURVEY IN THE AGRI-FOOD SECTOR

Vietnam, 11/2023

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LAB-MOVIE: Labour Market Observatory in Vietnam Universities

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SURVEY METHODOLOGY

This survey aims to collect data on the companies operating in the agri-food sector to determine their demand and human resources requirements in the labor market. In the future, this data will be used for matching between the supplier and employers in the labor market. The research team combined direct survey and indirect survey methods. At the beginning of 2021, we conducted a direct survey in the form of face-to-face interviews with 06 companies and in the form of interviews via Zoom of 05 companies. From mid-2021 onwards, due to a strong outbreak of the Covid-19 epidemic, the authorities of Hanoi and many neighboring provinces have applied blockade measures in many places. Therefore, we conducted an indirect survey using a questionnaire (created using Google Form application) for the remaining 47 companies. When surveying a number of companies, employers all said that it is necessary to adjust the questionnaire to suit the trend of recruitment demand and the output standards of the training program for the agri-food industry. Therefore, we have revised the questionnaire according to the comments of employers and alumni.

Key information of collected data as follow:

General information: organizational structure, activities, main products, and job profile;

Information on personnel structure: number of employees based on responsibilities, qualifications, gender, type of recruitment contract;

Recruitment information: number of employees (undergraduate degree) recruited based on job profiles and training sectors in 2020 and 2021, recruitment planning in the year 2022 based on job profiles;

Prediction: Agri-food industry development trends in the coming years, promising job profiles in the agri-food sector;

Description of job profiles: main tasks in charge, necessary professional knowledge and skills, requirements for computer skills, foreign language proficiency, soft skills, personal qualities, willingness to work out of hours;

ANALYSIS DATA OF SURVEY RESULTS

1. Results on general information

Out of 58 companies participating in the survey, 53 companies agreed to provide general information related to the company's activities, personnel structure and recruitment needs.

Survey area: The companies participating in the survey are mainly located in Hanoi and neighboring provinces such as: Bac Ninh, Thai Nguyen, Hung Yen, Ha Nam, Hai Duong, Hai Phong, Thai Binh, and Quang Ninh. , Ninh Binh, etc in which, the area with the most companies participating in the survey is Hanoi (19 companies).

Participants in the interview: Among 53 individuals representing companies participating in the interview, 19 are male, 34 are female; The interviewees hold different positions in the company: director, deputy director, head of administrative and human resources department, human resources specialist, head of human resources team, etc.

1.1. Company information

The survey results indicate that about 40% of the headquarters where the respondents work are the unique office, 32% of the headquarters are the operating offices have one or more branches, 15% headquarters are branches with operating offices in Hanoi and 13% of headquarters are branches with operating offices in provinces outside Hanoi.

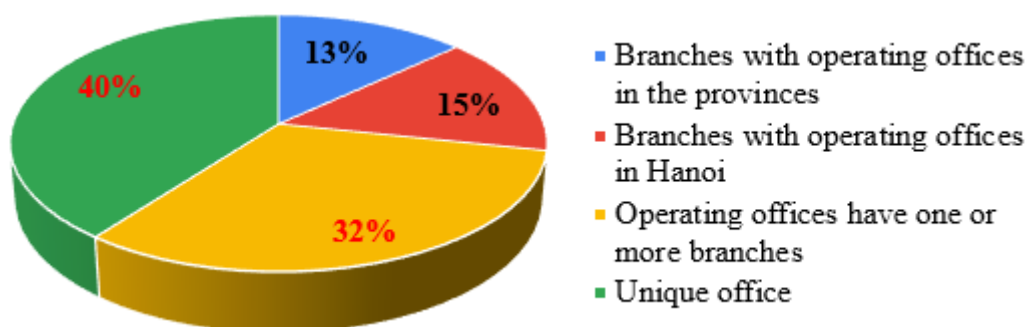


Figure 1. Headquarters of the companies participating in the survey

Surveying the company's main activities, the results show that 43% of companies have processing, distribution, and trading for food and/or beverages activities, 25% companies have food and/or beverage processing activities, 19% companies have food and/or beverage processing and trading activities, and 13% companies have food and/or beverage processing and distribution activities. Thus, the number of companies with all 3 activities of processing, distributing and trading food and/or beverages dominates over the number of companies with only 1 or 2 of the 3 activities above.

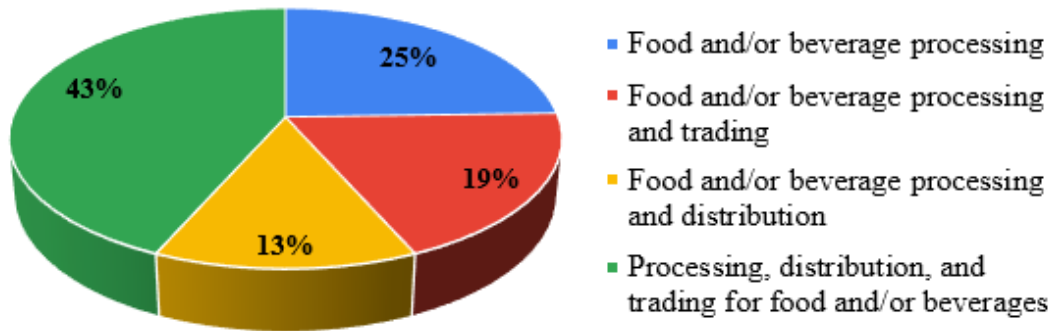


Figure 2. Main activities of the companies

Surveying the main food product industry groups of companies (according to the Vietnam Product Classification System, 2018), the results are shown in Figure 3.

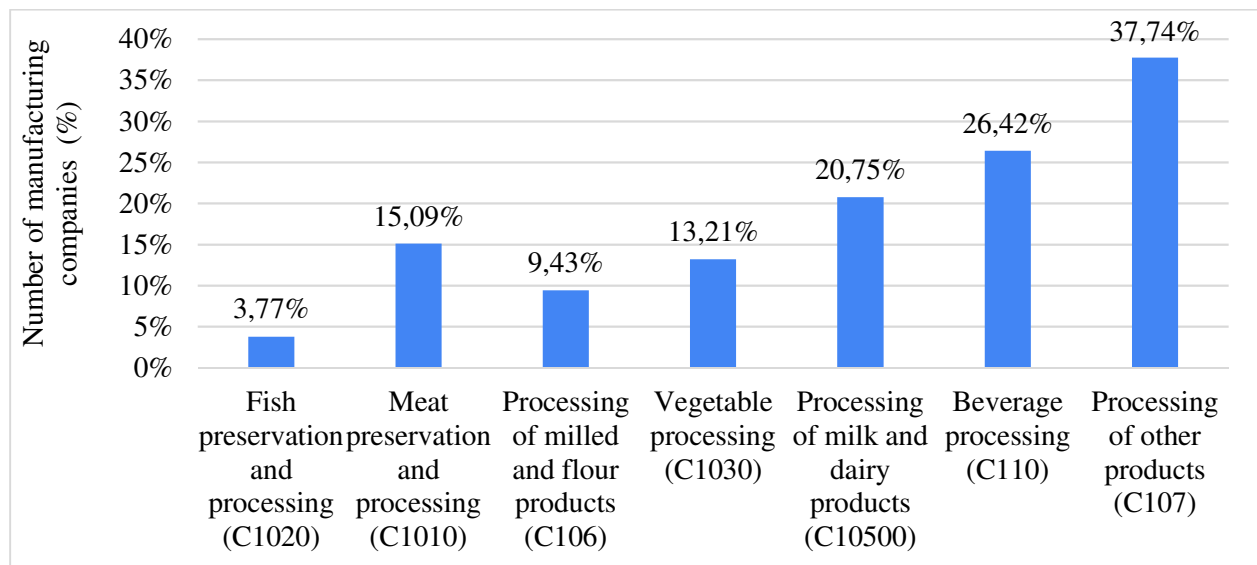


Figure 3. Main food products of the companies

Accordingly, industry group C107 dominated with the highest rate of 37.74%, with many different products such as: noodles, vermicelli, confectionery, jelly, bread, cakes, confectionery, jam, dried fruit, etc. Sugar, fish sauce, soup powder, etc. The second is the industry group C110 - beverage production - with a rate of 26.42%. Industry group C10500 - processing milk and dairy products - ranked 3rd with the rate of 20.75%. Industry group C1020 - fish preservation and processing - accounted for the lowest rate of 3.77%.

1.2. Staff information

We have surveyed 3 information about the human resource structure at companies: personnel structure by role, percentage of employees with university degrees by gender, percentage of employees employed in different forms- contract.

Regarding the structure of personnel by role, the survey results show that the rate of Employees/Workers (below undergraduate degree) is the highest - 51%, the rate of employees

(undergraduate degree) is 41%, the rate of Managers (excluding Business Owners/Shareholders) is 7%, and the rate of Business Owners/Shareholders is the lowest - 1%.

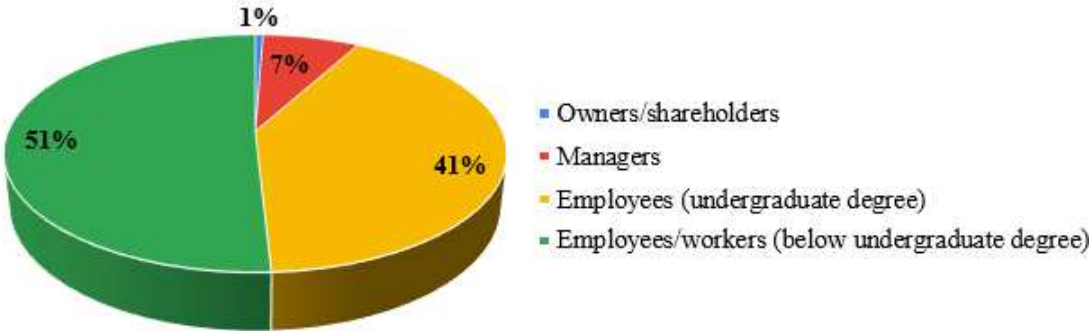


Figure 4. Structure of employees according to responsibility

Among employees with university degrees, female employees predominate at 54%, male employees have a lower rate at 46%.

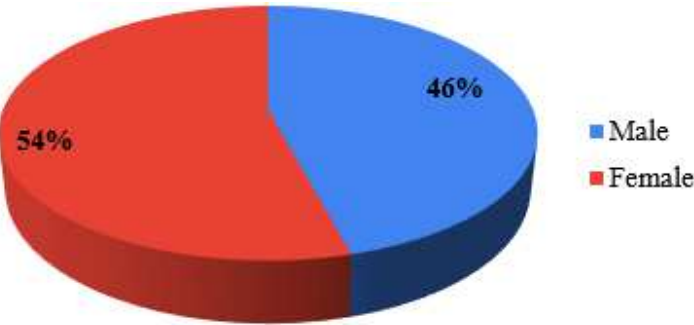


Figure 5. Structure of employees with undergraduate degrees according to gender

Regarding the form of recruitment, the majority of employees with university degrees sign contracts in one of two forms: indefinite - 74%, in term - 26%, other forms of contract signing account for a very low rate - approximately 0%.

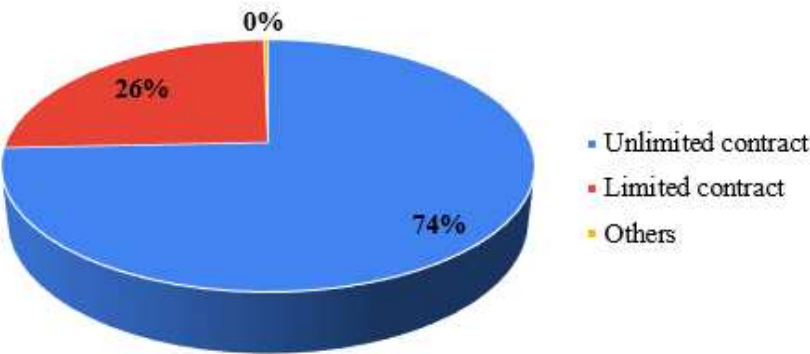


Figure 6. Types of recruitment

The results of the survey on the internal organizational structure of companies show that, depending on the company, there may be functional areas with different names. However, basically, companies will have the following main functional areas (Figure 7):

- Board of manager
- Administration and Human Resources (a few companies have 2 separate areas are Administration and Human Resources)
- Production
- Product Research and Development
- Quality Management (a few companies have 2 separate areas are QA, QC; a few companies give this room another name, ISO)
- Business (a few companies have 2 separate areas are Sales and Marketing)
- Accounting and Finance
- Technical areas
- Warehouse

A few companies have additional areas such as: Investment Planning, Purchasing, Logistics, Security, etc. Figure 7 depicts general information about the organisational chart. However, this organisational structure can change depending on how large or small, as well as the actual situation in the companies.

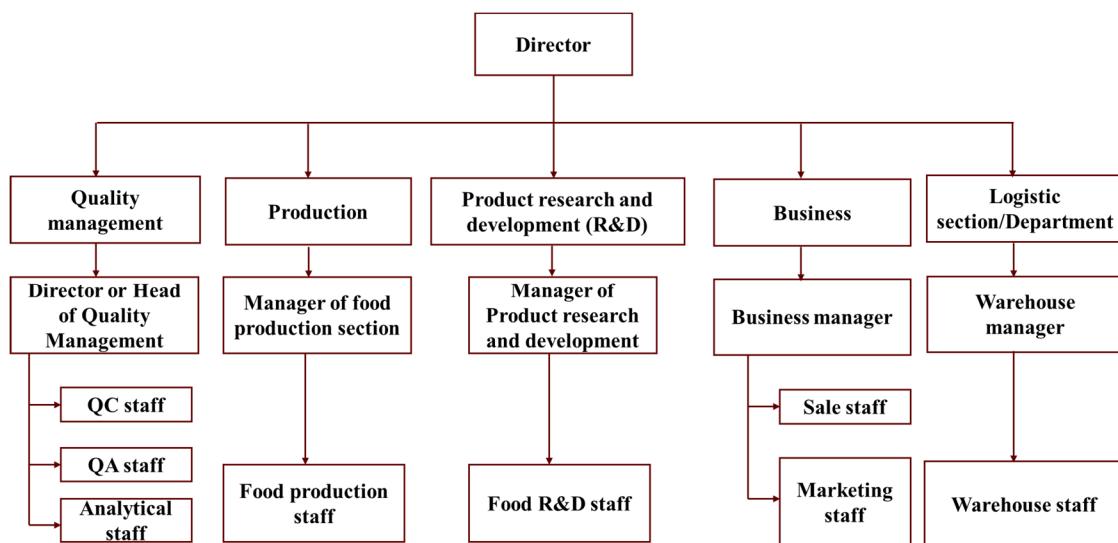


Figure 7. Organisational structure of companies

The areas employ university graduates with training majors in the agri-food sector include: Production, Research and Development, Quality Management, and Business.

Surveying the main job positions in functional departments of companies, 100% of companies have production positions and Quality Management positions (QA, QC, ISO, HACCP, ...), 65.38% of companies have “Product Research and Development (R&D)”, 63.46% of companies have Business position (marketing/sales, etc).

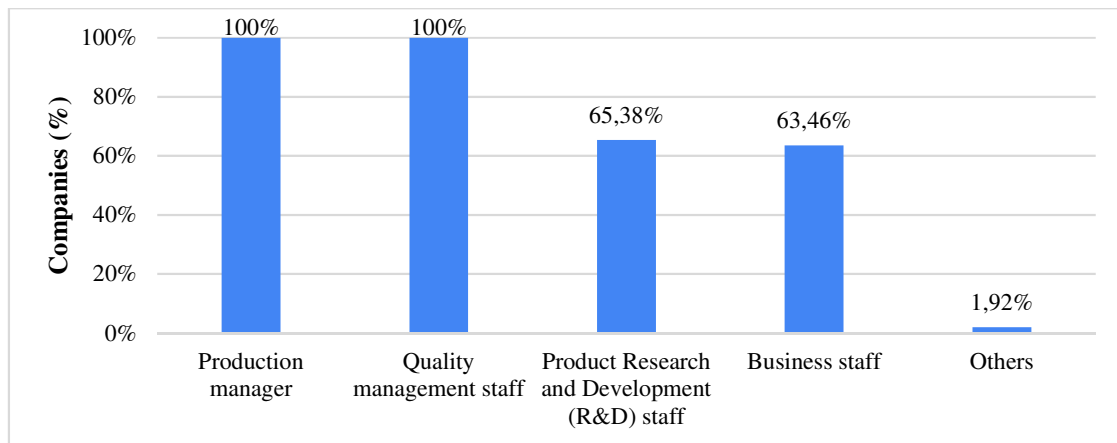


Figure 8. Job profiles at the companies

1.3. Predictions about recruitment needs

Surveying the recruitment situation in the past 2 years, the results show that the majority of companies have recruited more staff with university degrees (48 out of 53 companies), only 3 companies did not recruit more staff and 2 companies cut staff. The structure of personnel recruitment by job position is shown in Figure 9. Accordingly, in 2020, the number of personnel recruited for the position of Production and Business accounts for the majority. In 2021, in general, the number of recruited personnel will decrease (probably due to the impact of the Covid-19 epidemic), in which the number of personnel recruited for the position of Production will decrease significantly (nearly one half), while the number of personnel recruited for the Business position is still quite high. The number of employees recruited for the position of Product Research and Development is quite low due to the characteristics of this position that does not require many personnel. Some other job positions are also employed in small numbers (PR staffs, Animal husbandry engineer, Technical/ Machine operator/ Electrical maintenance staffs, Purchasing/ Delivery and Warehousing staff, Accountant, HR Administration/In charge of internal culture).

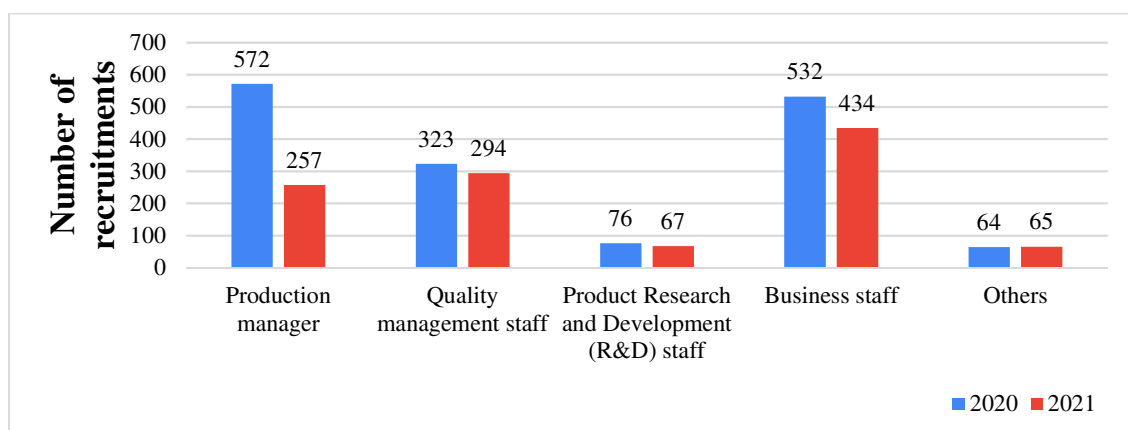


Figure 9. Recruitment according to job profiles - 2020 & 2021

Statistical results of the number of personnel recruited in 2020 and 2021 by tertiary training are shown in Figure 10. Accordingly, the number of employees with university degrees in Food Technology accounts for the majority - 69%, Post-Harvest Technology - 17%, and some other

industries have a relatively low rate - 14% (Veterinary and/or Animal Husbandry, Horticulture science, Biotechnology, Mechanic/ Electric/ Automation, Economics/ Accounting/...).

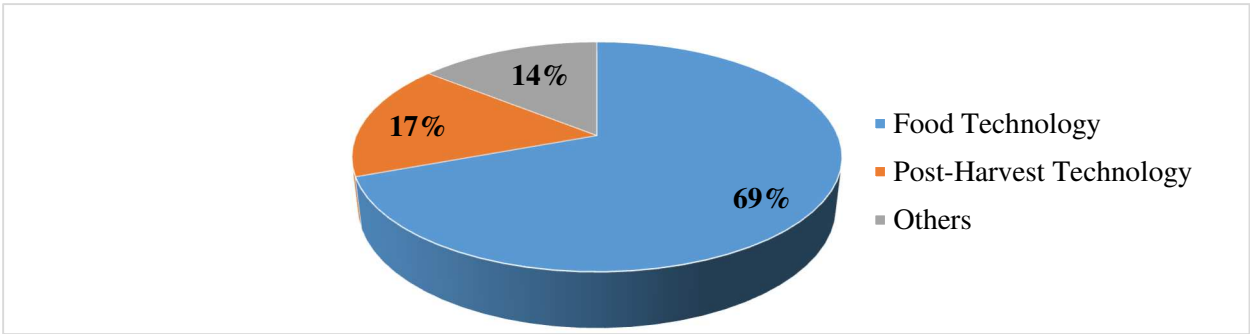


Figure 10. Recruitment according to training sectors 2020 & 2021

Survey of recruitment demand in 2022, 46/53 companies are expected to recruit new personnel, 5/53 companies are expected to remain unchanged, 2/53 companies are expected to cut personnel.

The results of the expected recruitment target statistics of companies in 2022 by job positions are shown in Figure 11. Accordingly, the recruitment target for the position of Business accounted for the highest proportion - 42%, followed by the position of Production - 25%, then the position of Quality Management - 18%, and finally the position of Product Research and Development - 11%. Other positions such as: Technical/ Operation/ Supervisor/ Electrical/ Machinery maintenance staffs, Procurement staff, Human Resource Management accounted for 11%.

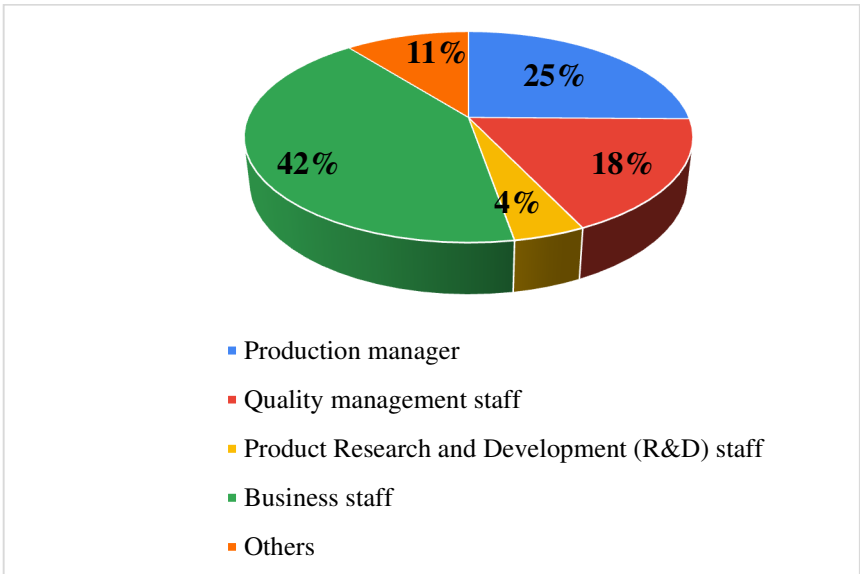


Figure 11. Expected recruitment target - 2022

In addition, it is predicted by the majority of interviewees that in the coming years the food industry will continue to grow (91% of interviewees predict that the food industry will continue to grow, only 9% of interviewees predict that the food industry will remain stable).

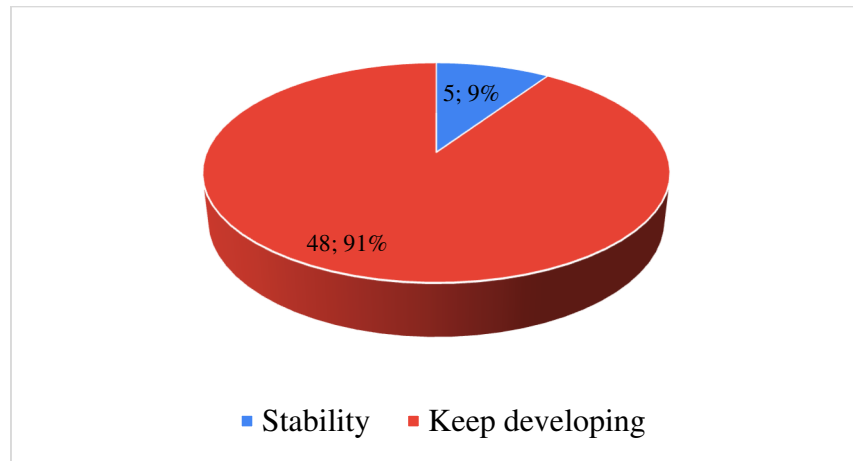


Figure 12. Predicting the development trend of the food industry in the coming time

The survey results for the positions with the best job prospects in the food sector in the near future are shown in Figure 13. The Product Research and Development staff position is widely predicted to have the best job prospects - 75.47%, followed by the Quality Management staff position - 64.15%, then Production manager position - 54.72%, and finally Business staff position - 50.94%.

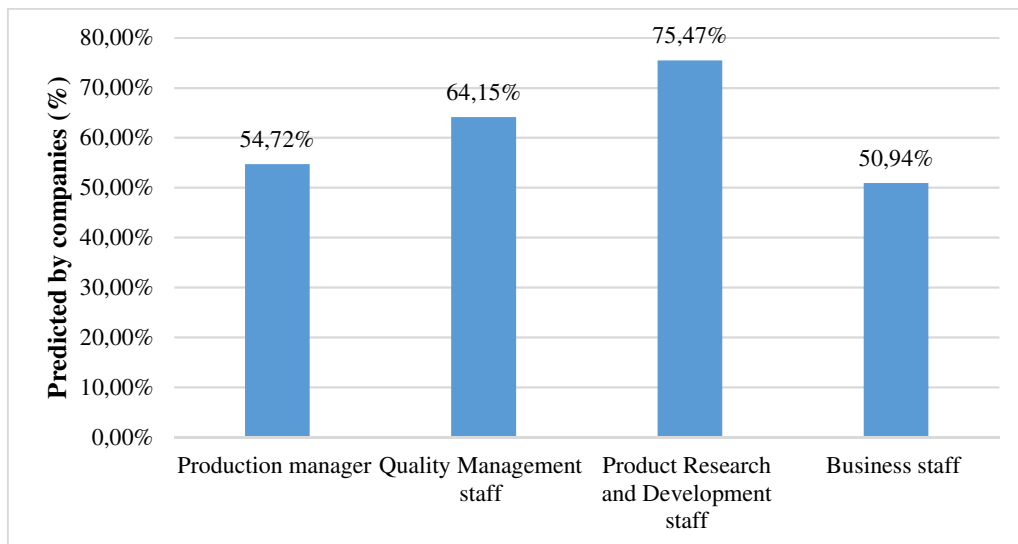


Figure 13. Predicting the best job prospects in the food sector in the near future

2. Results on job profiles

The survey results show that, at the food companies, almost have 4 main types of activities (corresponding to 4 functional areas): Production, Research and Development, Quality management, and Business. Depending on the size of the company is small or large, each activity group may have one or several different job profiles:

- Production activities: Production Manager (requires employees to have a university diploma in a relevant major)/Production worker (a university diploma is not required).

- Product Research and Development activities: Product Research and Development Manager/Staff.
- Quality management activities: Quality management Manager/Staff. In a small number of large companies, this professional figure can be subdivided into QA and QC staff. However, in most small and medium sized companies, this professional figure is collectively known as Quality management staff.
- Business activities: Manager/Sales officer. In a small number of large companies, this professional figure can be subdivided into Sales and Marketing staff. However, in most small and medium sized companies, this professional figure is collectively known as Business staff.

In addition, in reality, Management positions have a very small number of recruitment targets and often require employees to be competent and have a lot of work experience (number of years of work) in the professional field. For workers who have just graduated from university, the popular vacancies are Staff positions. When surveying directly at enterprises, the obtained results show that there are 4 main job profiles: Production Manager, Product Research and Development staff, Quality Management staff, Business staff.



Figure 14. Job profiles in companies

A. Food production section/department

A1. Experienced level

Manager of food production section

Food production managers are in charge of the processing and manufacturing of food products at food production companies. Job position requires an overseeing the operations at food processing industries to ensure optimal product quality and maximum profit for company management.

Duties:

- Planning and arranging suitable personnel for specific position in the production shift to ensure sufficient staffing for the production line.
- Manage and supervise the factory, equipment, and machinery in production
- Organize and manage occupational safety;
- Prepare dossier of product quality announcement
- Report work to shift leader

Specialized knowledge

- General food industry knowledge.
- Food law and food quality management systems

Professional skills

- Predict and analyze possible problems in production, and provide solutions or preventive measures
- Apply technical standards, technological processes, equipment, hygiene and occupational safety requirements... in the field of production

Computer and language literacy

- Advanced computer skills
- Basic English

Soft skill requirements

- The ability to organize work for others
- Teamwork skill
- Personnel Management
- Report writing skills.
- Presentation skills
- Problem summary skills

Personal qualities and availabilities

- Discipline
- Flexible

A2. Entry level

Food production staff

Duties

- Implement production plans including preparation of input and auxiliary materials production/processing of products, to ensure punctuality and quality
- Implement shift production control, monitor compliance for production processes, and correct problems occurring during the production
- Manage hygiene in the production process
- Operate machinery and equipment

Specialized knowledge

- Processes and equipment in food technology
- Food-production technology

Professional skills

- Apply general, basic and specialized knowledge to the field of production
- Calculate production balance and efficiency
- Apply technical standards, technological processes, equipment, hygiene and occupational safety requirements... in the field of production

Computer and language literacy

- Basic computer skills
- Basic English

Soft skill requirements

- Problem solving skills (decision making, handling complex situations)
- Personal organization skills

Personal qualities and availabilities

- Carefulness
- Creation

B. Quality management section/department

B1. Experienced level

Manager of quality management section

Duties

Employees working in this position should be responsible for controlling input materials (main materials, additives, chemicals, stamps, labels...), conditions of raw materials, food, and machinery condition, cleaning tools and workshops before, during, and after the production process, and at the same time, they need to inspect, take samples and analyze physical, chemical, and microbiological criteria of raw materials, final products, and semi-finished products. In addition, employees working in this position should get other duties such as inspecting, monitoring, and recording all stages in the production process from defrosting, preparing ingredients, mixing, shaping, cooking, cooling, packing, warehousing, storage, and export; inspecting the cleaning process of machines, tools, workshops, take notes and keep records; and analyzing of hazards affecting product quality and remedial measures. The manager functions as an in-house expert to address food safety-related issues and QA trends, including store-level food safety, supply chain food safety, regulatory environment, and law. The manager needs to handle the lawsuits of the parties involved

Specialized knowledge

The manager must have knowledge of processes, equipment and technology in food production, quality management systems, and food standards, regulations and laws. They also have in-depth knowledge of biochemistry, analytical chemistry, packaging, sensory evaluation.

The skills:

- The ability to observe, analyze and evaluate problems occurring in production, and coordinate with related parties to promptly handle incidents.
- Manipulate knowledge well about food quality management systems in production
- Operate and perform food analysis equipment and instruments competently
- Apply knowledge of traceability, standards and food law in production

Computer and language literacy

This professional figure requires computer skills in high level. Most companies recommend that foreign languages are necessary. However, English is more popular than other languages. Employees in this professional figure require computer skills and only have an intermediate level of English to be able to meet the recruitment.

Soft skill requirements

All soft skills including communication skills with customers and suppliers, problem solving skills (decision making, handling complex situations), skills to organize work for others, personal work organization, teamwork, report writing, presentation, analytical, and problem summarization skills are required for this specific professional figure, but the problem solving skills (decision making, handling complex situations) is the most important.

Personal qualities and availabilities

This position requires the ability to organise one's own and others' work, work in groups, and solve problems. Characteristics such as careful, flexible, honest and disciplined qualities are prioritized, but carefulness and discipline are high demand. The manager must also be willing to work overtime and weekends or go on business.

B2. Entry level

B2.1 Quality control (QC) staff

Duties

Depending on the requirements of the company, QC staff will have specific and detailed jobs. The duties of the QC staff are to directly inspect, control and evaluate the quality of products and goods in each stage of the production process to ensure that the products meet the required quality standards before being sold on the market. QC staff often work directly on the food product production line. The quality control process is carried out in parallel with the production process to ensure time and cost savings. In addition to the quality assurance in the production process, the person working in this position is also responsible for dealing with complaints about the quality of the company's goods.

QC staff in companies with large scale, high volume of products and goods, will be divided into 3 different positions as follows:

- QC staff who control the quality of input agricultural food materials
- QC staff who control during product production
- QC staffs who control the quality of output products.

Specialized knowledge

Employees should have knowledge of processes, equipment and technology in food production, quality management systems, and food standards, regulations and laws.

The skills:

QC staff has the ability to analyze and select food materials entering the production process so that the raw materials must meet the standard and best quality, then in the production process, if there

are errors, they must request an immediate repair. Along with that, it must be able to choose the output products carefully to ensure the quality meets the required standards.

Soft skill requirements for this specific professional figure

The analytical and problem solving skills are high demand.

Computer and language literacy

English is more popular than other languages. Employees in this professional figure require computer skills and only have an intermediate level of English to be able to meet the recruitment

Personal qualities and availabilities

This professional figure require careful, flexible, honest and disciplined qualities, but carefulness and discipline are high demand. Staff must also be willing to work overtime and weekends.

B2.2. Quality assurance (QA) staff

Duties:

The main tasks of QA staff are to:

- Develop and ensure that the implementation of food safety and monitoring programs meets the standards set by the company. Monitor and track the implementation of the quality assurance program
- Review all quality control test results and provide final product treatment to ensure excellent product delivery to customers.
- Develop, implement and monitor the ongoing performance of all product-related testing and product retention related to food safety or quality issues. There should be direct responsibility for the identification and performance of the final treatment of the finished product.
- Provide direction for product testing process and test laboratory systems for product quality analysis and product sales.
- Function as an in-house expert to address food safety-related issues and QA trends, including store-level food safety, supply chain food safety, regulatory environment, and law.
- Ensure the company makes any necessary internal adjustments to its processes and training to ensure proactive compliance and ensure food safety and quality
- Constantly learning new technologies, updating know-how, and applying them to work.

Participate in training and facilitate the annual staff training on GMP, HACCP, ISO, and other food safety of the quality management system.

Specialized knowledge

QA staff should have knowledge of processes, equipment and technology in food production, quality management systems, and food standards, regulations and laws. They also have in-depth knowledge of biochemistry, analytical chemistry, packaging, sensory evaluation.

The skills:

QA staff is able to observe, analyze and evaluate problems occurring in production, and coordinate with related parties to promptly handle incidents. She/He can manipulate knowledge well about food quality management systems in production, operate and perform food analysis equipment and instruments competently, and apply knowledge of traceability, standards and food law in production. Staff also need to master some statistical tools to process data in this quality management position in addition to the necessary skills

Computer and language literacy

English is more popular than other languages. Employees in this professional figure require computer skills and only have an intermediate level of English to be able to meet the recruitment.

Soft skills

She/He should have soft skills including communication with customers and suppliers, problem-solving and personal work organization, teamwork, analytical, and problem summarization skills are necessary.

Personal qualities and availabilities

This professional figure require careful, flexible, honest and disciplined qualities, but carefulness and discipline are high demand. He/she must be courteous and patient, able to self-control and manage stress, attentive to details and able to handle customer complaints. Staff must be available to work outside hours and on weekends or go on business.

B2.3. Analytical staff

Duties

Analytical staff work in company's laboratories to perform activities such as collecting samples, conducting experiments, manipulating machines, analyzing and researching. Laboratory staff all work with laboratory equipment to analyze samples or substances, test and report findings and changes.

In most small companies, analytical staff can act as QC or QA staff. Analytical staff performs the following duties:

- Collecting, receiving, labeling, and/or analyzing samples and compounds using the correct laboratory equipment.

- Designing and performing experiments, and laboratory tests in accordance with standard procedures, recording observations, and interpreting findings.
- Storing all test data and test results accurately, in the specified format (written and on a computer system).
- Organizing and storing all chemicals, liquids, and compressed gases according to safety guidelines.
- Ensuring that safety instructions are followed at all times in the laboratory.
- Maintaining daily logs and equipment notebooks.
- Cleaning, disinfecting, maintaining, and calibrating laboratory instruments.
- Order laboratory supplies when required.
- Technical support when needed.
- Staying up to date with relevant scientific and technical developments.

Specialized knowledge

Staff must have in-depth knowledge in the field of agri-food and food analysis (food chemistry and food microbiology). In addition, staff need to understand the operating principles of the equipment systems used in the analysis.

Skills

Staff must operate and perform food analysis equipment and instruments competently. Laboratory staff need to be able to detect problems and have a solid grasp of sampling procedures and methods. In addition, staff should have in-depth knowledge of laboratory safety management systems, laboratory precautions and best practices.

Computer and language literacy

People working in this field require computer skills to analyze statistical data and good command of English to stay up to date with relevant scientific and technical developments in the world. They need to be proficient in using some statistical software in food analysis.

Soft skill requirements

Soft skills such as independent or teamwork, report writing, presentation, and analytical skills are essential for laboratory staff.

Personal qualities and availabilities

Carefulness and honesty with analytical data to give reliable data play an important role in analyzing and dealing with risks occurring in food production. They must be available to work outside hours and on weekends or go on business.

C. Product research and development section/department

C1. Experienced level

Manager of Product research and development (R&D)

Duties

- Planning and organizing product research and development
- Developing a process to guide technology transfer training
- Developing a standardization procedures, standard regulations for products and check.
- Write report of new product development and report work to company's leader

Specialized knowledge

- Understand the market situation and trends to develop new products
- Having ability to evaluate and forecast new products

Professional skills

- Being able to predict and analyze the market for new products
- Having ability to practice, make samples to deploy test production

Computer and language literacy

- Advanced computer skills
- Advance English

Soft skill requirements

- The ability to organize work for others
- Personnel Management
- Report writing skills.
- Presentation skills

Personal qualities and availabilities

- Discipline
- Flexible

C2. Entry level

Food R&D staff

Duties

- Implementing product research and development
- Organizing testing of new products on the production line

- Organizing testing on production lines and improving technology
- Organizing surveys and evaluating new products on the market
- Researching and adjusting new products according to the Company's product development orientation

Specialized knowledge

- Specialized knowledge of Food Technology and related knowledge
- Understand the market situation and trends to develop new products

Professional skills

- Proficient in calculations to build new product in manufacturing processes
- Good application of knowledge about process equipment, physical, chemical and biological changes of products in processing
- Applying food law in new product development

Computer and language literacy

- Basic computer skills
- Basic English

Soft skill requirements

- Personal organization skills

Personal qualities and availabilities

- Creation

D. Business section/department

D1. Experienced level

Business Manager

Duties

Business section plays an important role in promoting and marketing products to customers in order to bring profits to the company. Employees must be responsible for:

- Marketing and promoting products to customers.
- Receiving, managing orders and tracking debts of customers.
- Working with the transportation staff to arrange the delivery vehicle on time, with the correct vehicle weight so that the transportation cost is the lowest.
- Combining with the planning department, the warehouse department to control the goods in the warehouse without shortage of goods and not leaving the goods near the date.

In addition, the manager needs to find customers, building business and sales plans, and manage company assets in the market, and support customer complaint settlement.

Specialized knowledge

The manager has in-depth knowledge of business administration principles, accounting, and finance marketing. Besides they need have basic knowledge in the field of food science.

Skills

It is important for the manager doing this position that they have the ability to predict and analyze the company's product market. They can establish plans to solve practical situations in the food business and should be proficient in statistics and using application software in business. They can be able to make reports fast, easy to understand.

Computer and language literacy

- Having advanced computer skills because they need to make reports and statistics processing quickly and easily.
- Having a good English level to communicate with customers when they need to trade for export and import.

Soft skill requirements

Employees need to have communication skills with customers and suppliers, problem solving skills, skills in organizing work for others, teamwork skills, report writing, presentation skills, and analysis skills. and summarizing the problem. In particular, communication skills with customers and suppliers play an important role

Personal qualities and availabilities

Creativity, flexibility, acumen and expressiveness in communication are important personal qualities for employees working in this position. In addition, they should be willing to participate in other activities.

D2. Entry level

D2.1. Sale staff

Sales staff directly contact with customers, answer questions about products - services, and persuade customers to help customers choose the right products - services to increase revenue. for companies.

Sale staff must be responsible for:

- For direct sales positions at stores, showrooms, etc., sales staff need to consult, introduce directly to customers as well as monitor the speed of product and service consumption in the field. agri-food, collect data, and report information on food products.

- Pay attention and learn about market fluctuations in the field of agriculture and food to understand the needs of customers, thereby increasing sales productivity, increasing business revenue.

- Searching for customers, giving a list of individuals and organizations (mainly agents and grocery stores dealing in the field of agriculture and food) who are in need of buying the products that their business provides. provide, negotiate quotes and negotiate related issues when customers buy products and services of your business

Specialized knowledge

Having full information which related to the products and services that your business provides: product code, origin, color, design, use, usage, ...

Skills

Having the ability to predict and analyze the company's product market. They can establish plans to solve practical situations in the food business.

Computer and language literacy

- Sales staff need to have good computer skills to make reports and summarize data clearly and easily.

- Depending on the customer, the foreign language requirements are also different for sales staff. However, they do need a basic level of English to communicate when required.

Soft skill requirements for this specific professional figure

- The ability to communicate and negotiate: this is one of the most important skills for a salesperson because this skill helps sales staff to approach, exchange and negotiate with customers, and build relationships with customers, helping customers to trust when buying and using products.

Personal qualities and availabilities

- Flexibility and responsiveness: sales staff to be able to exchange and advise on suitable solutions for customers need to be flexible and sensitive to the needs of customers.

- Withstand work pressure: everyday sales staff have to interact with customers and sometimes they also have to face rejection or unfriendly attitudes from customers.

- Sale staffs need to go on business when required to understand the market as well as develop new products.

D.2.2 Marketing staff

Marketing staff, also known as market developers, whose main task is to collect information. Through market survey activities in the field of agri-food, they will collect information from customers doing business in this field and the actual situation from the market. Then, this information will be provided to the marketing department to build and develop effective food product communication strategies. Marketing staff need:

- Collect, research and analyze the dynamics of the market and target customers through market visits, surveys, etc., and then synthesize them into reports.
- Maintain information about customers and partners to facilitate the working process.
- Assess the potential of the market, thereby building orientations and policies for current and future work.
- Based on the orientation and goals of the enterprise, proceed to develop a market development plan for all products that the business is providing.
- Coordinate with other departments to implement market development programs.
- Exploit new sources of customers through the meeting, introduce and consult about the products that the company offers.

Specialized knowledge

The staff must have good knowledge of food science and principles of business administration, accounting, finance, and marketing.

Skills for this figure

Marketing staffs are directly involved in marketing and driving sales. Therefore, they need to have market judgment and analysis skills. They need to have relationship-building skills in customer acquisition and direct contact with customers to build relationships with them, convincing them to use the company's products.

Computer and language literacy

Sales staff need to have good computer skills to make reports and summarize data clearly and easily. A basic level of English is necessary for this Figure

Soft skill requirements

- Good communication skills are important because they often meet with customers and partners
- Know how to handle situations flexibly.
- Mentally strong when rejected

Personal qualities and availabilities

The acumen, quick assessment, and analysis of good information serve as the foundation for revenue promotion or as a premise for businesses to enter new and potential markets.

Marketing staffs need to go on business when required to understand the market as well as develop new products.

E. Logistic section/Department

Warehouse manager

Warehouse manager direct receiving, warehousing and distribution operations. The manager needs to oversee the efficient receipt, storage, value-adding servicing and dispatch of a wide variety of products. Ultimately, the manager should be able to ensure productivity targets are achieved and that all warehouse processes are running smoothly and promptly.

Duties

- Strategically manage warehouse in compliance with company's policies and vision
- Oversee receiving, warehousing, distribution and maintenance operations
- Setup layout and ensure efficient space utilization
- Initiate, coordinate and enforce optimal operational policies and procedures
- Adhere to all warehousing, handling and shipping legislation requirements
- Maintain standards of health and safety, hygiene and security
- Manage stock control and reconcile with data storage system
- Liaise with clients, suppliers and transport companies
- Plan work rotas, assign tasks appropriately and appraise results
- Produce reports and statistics regularly (IN/OUT status report, dead stock report etc)
- Receive feedback and monitor the quality of services provided

Specialized knowledge

- Expertise in warehouse management procedures and best practices
- Knowledge of logistics and supply chain
- Strong knowledge of warehousing Key Performance Indicators (KPIs)
- Knowledge of hygiene and food safety
- Knowledge of occupational safety

Skills

- Goods counting skills
- Skills and experiences with warehouse management software and databases
- Communication skills

Computer and language literacy

- Skills and experiences with warehouse management software and databases

- Basic English

Soft skills requirements

- Ability to communicate with customers and suppliers.
- Problem-solving skills (decision making, handling complex situations)
- Leadership skills and ability manage staff
- Report writing skills.

Personal qualities and availabilities

- Careful
- Honest
- Discipline
- Work overtime

2.1. Main tasks in charge, necessary professional knowledge and skills

a) Production manager

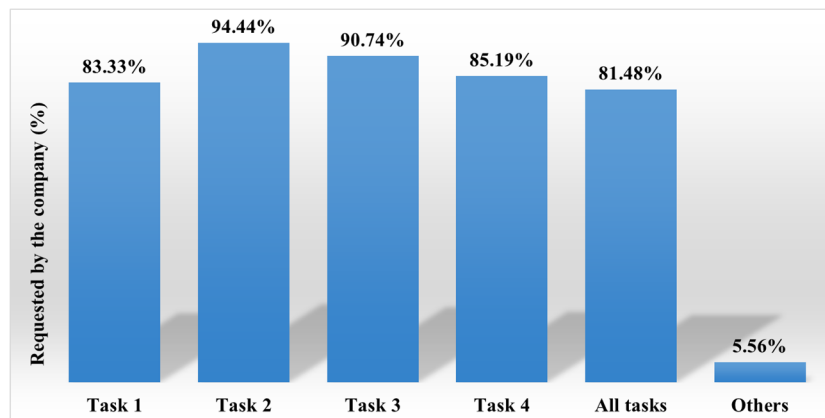


Figure 15. Main tasks for production manager

Notifications:

Task 1: Planning and arranging suitable personnel for each position in the production shift to ensure sufficient staffing for the production line.

Task 2: Implement production plans including preparation of input and auxiliary materials production/processing of products, to ensure punctuality and quality

Task 3: Implement shift production control, monitor compliance for production processes, and correct problems occurring during the production

Task 4: Manage and supervise the factory, equipment, and machinery in production

Others:

- *Organize and manage occupational safety;*
- *Manage hygiene in the production process*
- *Operate machinery and equipment*
- *Prepare dossier of product quality announcement*

As shown in Figure 15, most companies suggested that employees should do all main tasks when working in production. Some companies focused on task 2 (94.44%) and/or task 3 (90.74%) more than others. However, they also suggested that almost employees need to focus on implementing production plans including preparation of input and auxiliary materials production/processing of products, to ensure punctuality and quality when working in this position. Some companies answered that employees working in this position need to perform other tasks such as organizing and managing occupational safety; managing hygiene in the production process; operating machinery and equipment, and preparing a dossier of product quality announcements.

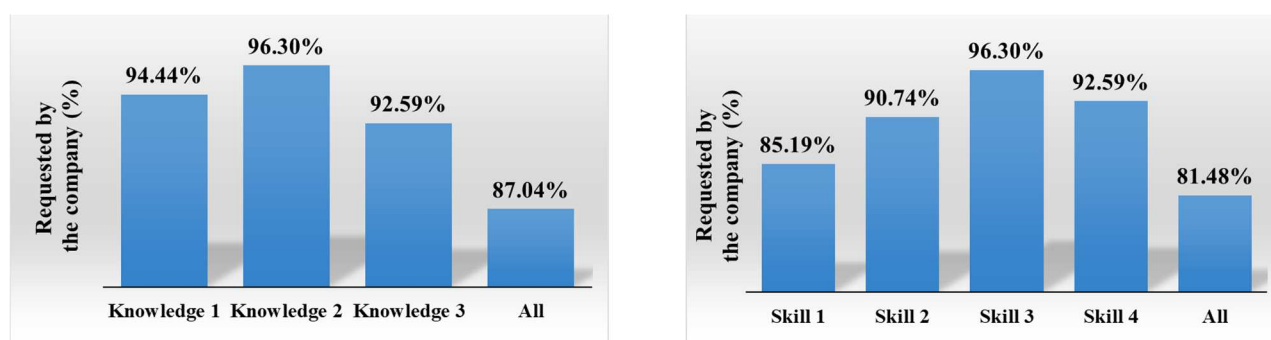


Figure 16. Specialized knowledge and skills for the production manager

Notifications:

<i>Knowledge 1: processes and equipment in food technology</i>	<i>Skill 1: Apply general, basic and specialized knowledge to the field of production</i>
<i>Knowledge 2: food-production technology</i>	<i>Skill 2: Calculate production balance and efficiency</i>
<i>Knowledge 3: food law and food quality management systems</i>	<i>Skill 3: Apply technical standards, technological processes, equipment, hygiene and occupational safety requirements... in the field of production</i>
	<i>Skill 4: Predict and analyze possible problems in production, and provide solutions or preventive measures</i>

When interviewing all companies participating in the survey, they replied that employees working in production positions should have in-depth specialized knowledge of processes and equipment in food technology, technology food production and knowledge of food law and quality

management systems. Depending on the requirements of each company, they need one of the three knowledge mentioned above, however, many companies require undergraduate students to have all this specialized knowledge.

For specialized skills, some companies suggested that employees should apply technical standards, technological processes, equipment, hygiene and occupational safety requirements... in the field of production (skill 3, 96.30%). However, many companies required them to master all skills.

b) Quality management

The survey results are shown in Figure 17.

Notifications:

Task 1: Monitor input materials (main materials, additives, chemicals, stamps, labels...), storage conditions of raw materials and food, status of machines, tools and cleaning of the factory before, during and after producing process

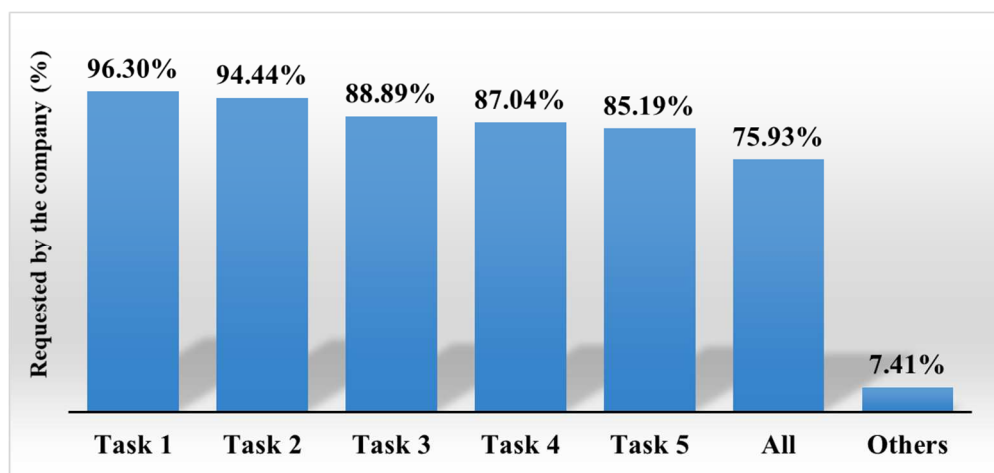


Figure 17. Main task for quality management staff

Task 2: Inspect, collect samples and analyze the physicochemical, chemical and microbiological criteria of raw materials, finished products, semi-finished products...

Task 3: Coordinate with related parties to overcome and handle problems occurring in production

Task 4: Establish basic standards of materials, finished products, and semi-finished products; set up work instructions, build and operate quality management systems

Task 5: Urging the implementation of the occupational health and quality management system, remedial measures

Others:

- Inspect, monitor, record all stages in the production process from defrosting, preparing ingredients, mixing, shaping, cooking, cooling, packing, warehousing, storage and export.

- *Inspect the cleaning process of machines, tools, workshops, take notes and keep records*
- *Analysis of hazards affecting product quality and remedial measures*

In their opinion, employees working in this position should be responsible for checking input materials (main materials, additives, chemicals, stamps, labels...), conditions of raw materials, food, and machinery condition, cleaning tools and workshops before, during, and after the production process (task 1, 96.30%), and at the same time, they need to inspect, take samples and analyze physical, chemical, and microbiological criteria of raw materials, final products, and semi-finished products (task 2, 94.44%). Some companies suggested that employees need to be responsible for all tasks mentioned above. In addition, they also recommended that employees working in this position should get other duties such as inspecting, monitoring, and recording all stages in the production process from defrosting, preparing ingredients, mixing, shaping, cooking, cooling, packing, warehousing, storage, and export; inspecting the cleaning process of machines, tools, workshops, take notes and keep records; and analyzing of hazards affecting product quality and remedial measures.

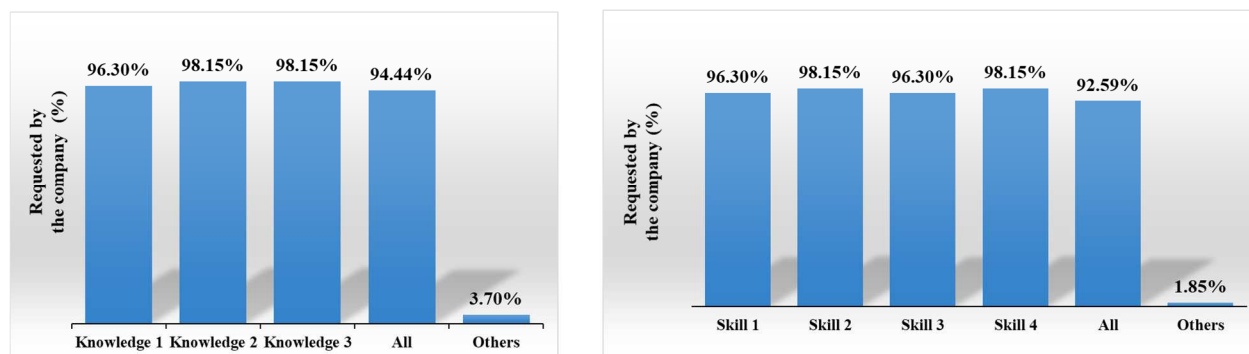


Figure 18. Specialized knowledge for quality management staff

Notifications:

<i>Knowledge 1: Processes, equipment and technology in food production</i>	<i>Skill 1: Able to observe, analyze and evaluate problems occurring in production, and coordinate with related parties to promptly handle incidents.</i>
<i>Knowledge 2: Quality management systems</i>	<i>Skill 2: Manipulate knowledge well about food quality management systems in production</i>
<i>Knowledge 3: Food standards, regulations and laws</i>	<i>Skill 3: Operate and perform food analysis equipment and instruments competently</i>
<i>Others: In-depth knowledge of biochemistry, analytical chemistry, packaging, sensory evaluation</i>	<i>Skill 4: Apply knowledge of traceability, standards and food law in production</i>
	<i>Others: Proficient in using statistical tools: learn six sigma.</i>

Based on the questionnaire we have provided information about the knowledge and skills required for workers in this position, companies suggested that all these knowledge and skills are important. Some companies responded that employees should have in-depth knowledge of biochemistry, analytical chemistry, packaging, sensory evaluation. Some companies also have recommended that students after graduation need to master some statistical tools to process data in this quality management position in addition to the necessary skills mentioned above.

c) Product research and development (R&D) staff

The survey results are shown in Figure19.

Notifications:

Task 1: Planning, organizing and implementing product research and development

Task 2: Establishing and developing processes; technology training and transferring

Task 3: Organize testing of new products on the production line

Task 4: Organize testing on production lines and improve technology

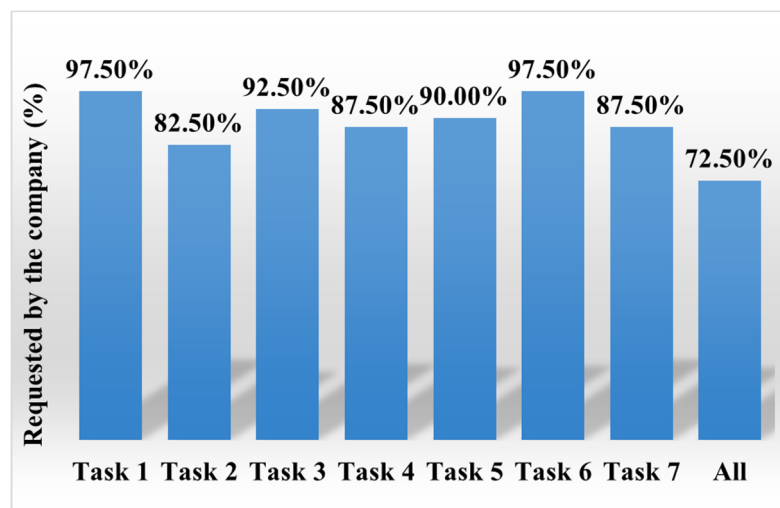


Figure 19. Main task for product research and development (R&D) staff

Task 5: Conduct surveys and evaluate new products on the market

Task 6: Research and adjust new products according to the Company's product development orientation

Task 7: Establish conformity and standardization procedures for products

According to Figure 19, when interviewing managers as well as employees working in product research and development positions, some companies said that employees working in this position need to fully perform the above tasks (72.50%). Depending on the company, they may need employees to be responsible for some typical tasks. However, the percentage of companies that want employees to work in this position has been constantly conducting research and

development of new products (task 1) as well as always researching and adjusting new products according to the company's product development orientation (task 6).

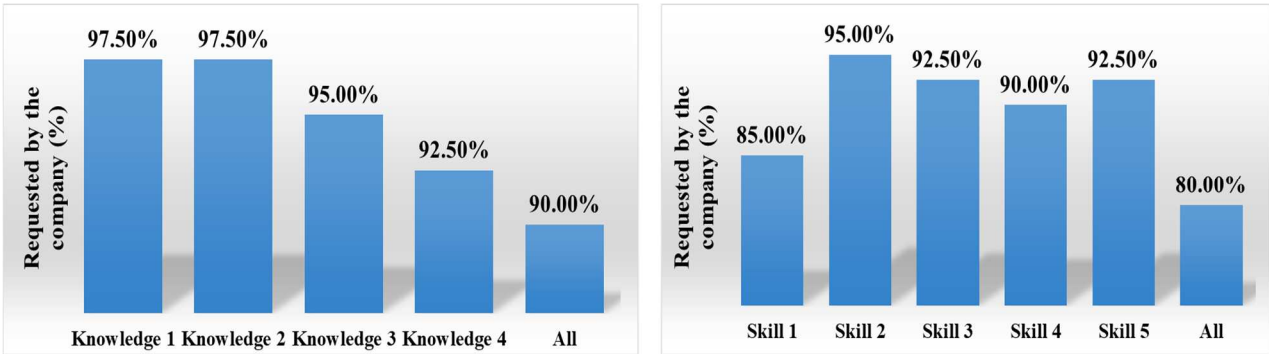


Figure 20. Specialized skills for R&D staff

Notifications:

<i>Knowledge 1: Specialized knowledge of food technology and related knowledge</i>	<i>Skill 1: Proficient in calculations to establish new product manufacturing processes</i>
<i>Knowledge 2: Firmly grasp the market situation and new product developing trends</i>	<i>Skill 2: Manipulate knowledge well about process equipment, physical, chemical and biological changes of products in processing</i>
<i>Knowledge 3: Strong understanding of food law and new product formulation standards</i>	<i>Skill 3: Apply food law in new product development</i>
<i>Knowledge 4: Ability to evaluate and forecast new products</i>	<i>Skill 4: Ability to predict and analyze the market for new products</i>
	<i>Skill 5: Ability to practice, make samples to deploy test production</i>

Many companies suggest that employees working in product research and development, in addition to knowledge of the food industry and related knowledge, need to firmly grasp the situation and market trends to develop new products (Figure 20). Some companies said that employees in this position who want to develop new products need to have a deep understanding of food laws and new product development standards. In addition, they need to be able to evaluate and forecast new products. For specialized skills, employees working in this position need to focus on skills 2, 3, and 4 more (Figure 20). However, about 80% of companies require them to have all these skills.

d) Business position

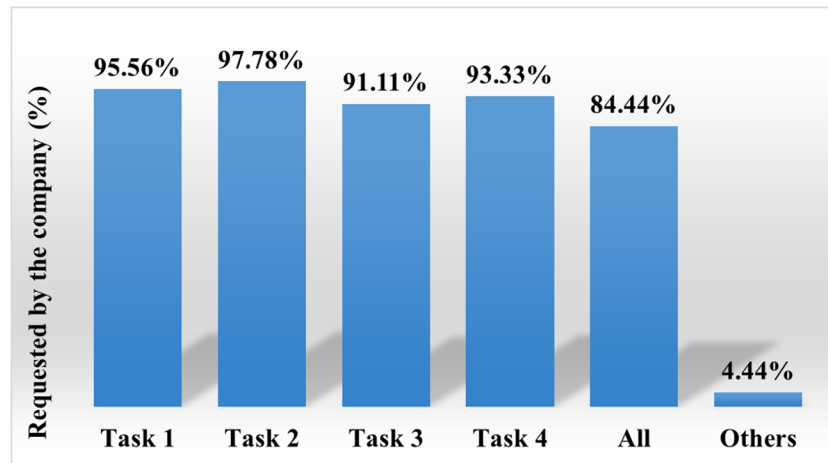


Figure 21. Main task for business staff

Notifications:

Task 1: Marketing and promoting products to customers

Task 2: Receiving, managing orders and tracking debts of customers

Task 3: Working with the transportation staff to arrange the delivery vehicle on time, with the correct vehicle weight so that the transportation cost is the lowest

Task 4: Combining with the planning department, the warehouse department to control the goods in the warehouse without shortage of goods and not leaving the goods near the date

Others:

- Find customers, building business and sales plans

- Manage company assets in the market, and support customer complaint settlement

Business position plays an important role in promoting and marketing products to customers in order to bring profits to the company. When interviewing managers as well as employees working in this position, they all want their employees to be able to focus on one of the above jobs. However, some companies want employees to perform all four tasks. In addition, some companies offer employees to perform some other tasks depending on the specific situation of the company.

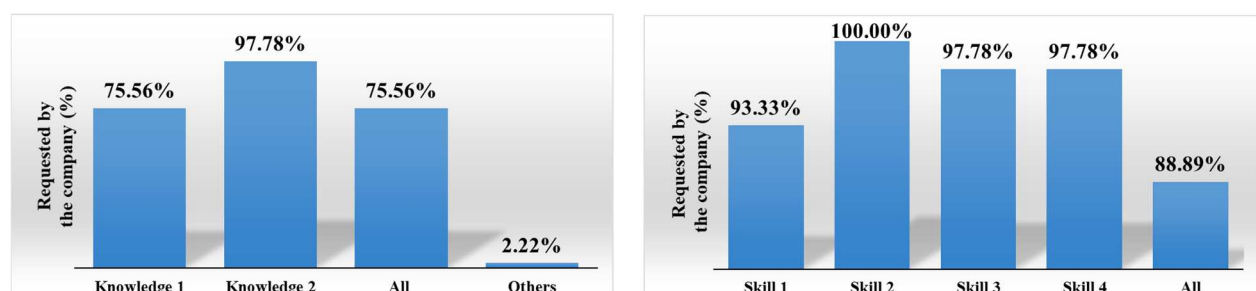


Figure 22. Specialized knowledge

Notifications:

<i>Knowledge 1: Basic knowledge of food science</i>	<i>Skill 1: Establish plans to solve practical situations in the food business</i>
<i>Knowledge 2: Knowledge of principles of business administration, accounting, finance, and marketing</i>	<i>Skill 2: The ability to predict and analyze the company's product market</i>
<i>Others: Dairy food expertise</i>	<i>Skill 3: Proficient in statistics and using application software in business</i>
	<i>Skill 4: Make reports fast, easy to understand</i>

Based on the questionnaire on knowledge and skills when interviewed, most companies said that employees in this position have in-depth knowledge of business administration principles, accounting, and finance marketing (97.78%). Besides, some companies suggest that they need basic knowledge in the field of food science (75.56%). It is important for employees doing this position that they have the ability to predict and analyze the company's product market (100%). Most companies recommended that all skills are essential for peoples working in this position.

4.2.2. Computer literacy, language, soft skills, personal quality, and required availabilities for the activity

In addition to the necessary tasks, knowledge and skills, employees working in all job profiles including production, food research and development, quality management need to be trained in computer skills, foreign language proficiency, soft skills, personal qualities, and willingness to work out of hours.

a) Computer skills

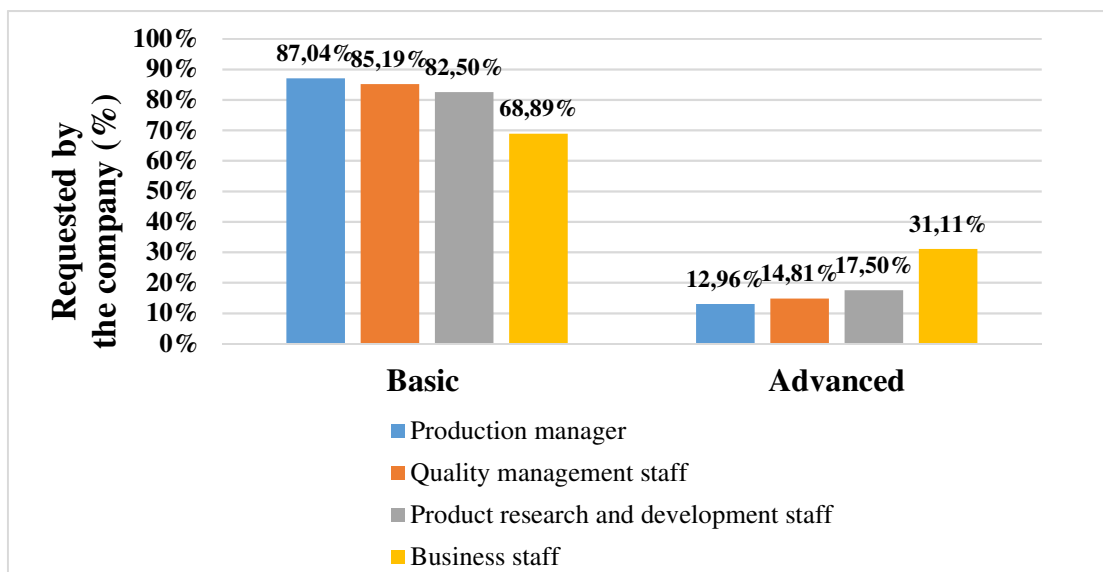


Figure 23. Computer literacy requirements for all job profiles

Figure23 showed that all employees working in these positions need computer skills, but only at a basic level. Companies require them to have advanced computer skills when working in the business position (17.11%), because they need to make reports and statistics processing quickly and easily.

b) Language literacy



Figure 24. Language literacy requirements for all job profiles

When interviewed about the foreign language requirements for these positions, most companies responded that foreign languages are necessary. However, English is more popular than other languages. In particular, only some companies required foreign languages other than English such as Japanese, Korean and Chinese when these companies associate with countries using these languages. Employees in all these positions only have a basic level of English to be able to meet the recruitment requirements of companies. In contrast, some foreign enterprises require employees with advanced English efficacy.

c) Required soft skills

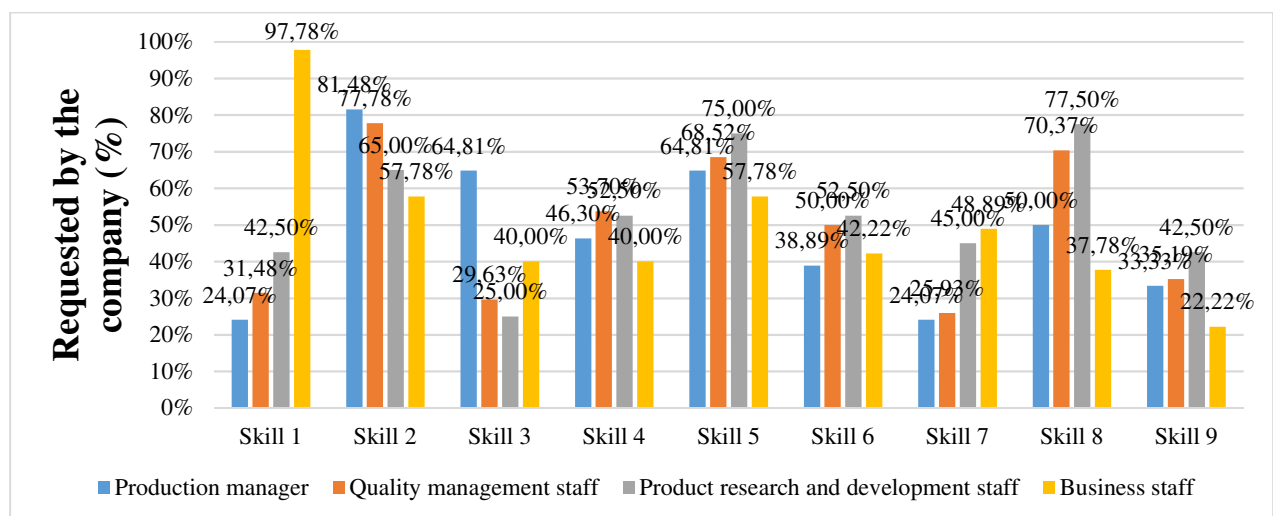


Figure 25. Soft skill requirements for all job profiles

Notifications:

Skill 1: Communication skills with customers and suppliers

Skill 2: Problem solving skills (decision making, handling complex situations)

Skill 3: Skills to organize work for others

Skill 4: Personal work organization skills

Skill 5: Teamwork skills

Skill 6: Report writing skills

Skill 7: Presentation skills

Skill 8: Analytical skills

Skill 9: Problem summarization skills

Surveying results on soft skills showed that all these skills are necessary for each job profile. In particular, depending on the job profile, employers expect employees to have different soft skills. For example, for the business position, Communication skills with customers and suppliers are most important (97.78%). On the other hand, more than 75% of companies requested employees have skill 5 (teamwork skills) and skill 8 (analytical skills). Besides, more than 57% of companies recommend employees should have all these skills in all job profiles.

d) Personal qualities

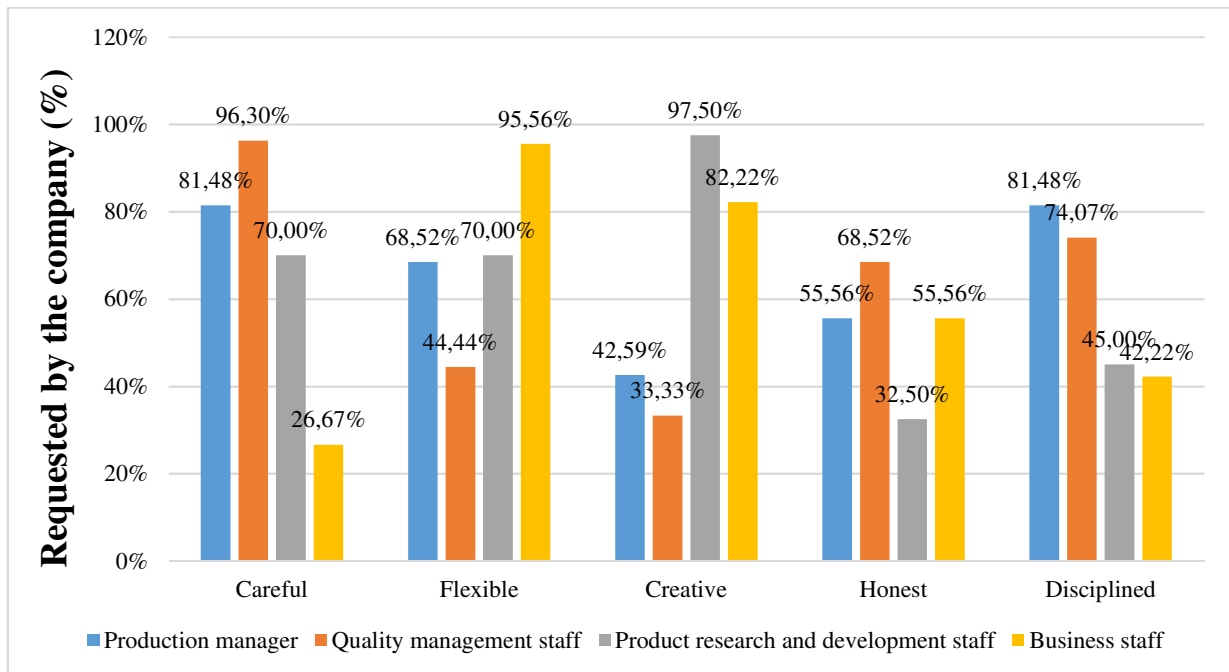


Figure 26. Personal qualities for all job profiles

Based on the survey results on the personal qualities of employees in all job profiles, almost all employers responded that employees should have all these personal qualities. In particular, in

the position of production and quality management, employees appreciate carefulness and discipline. In contrast, 95.56% of companies require employees in business positions to have flexibility. For product research and development positions, creativity is most important (97.50%).

e) Required availabilities for the other activity

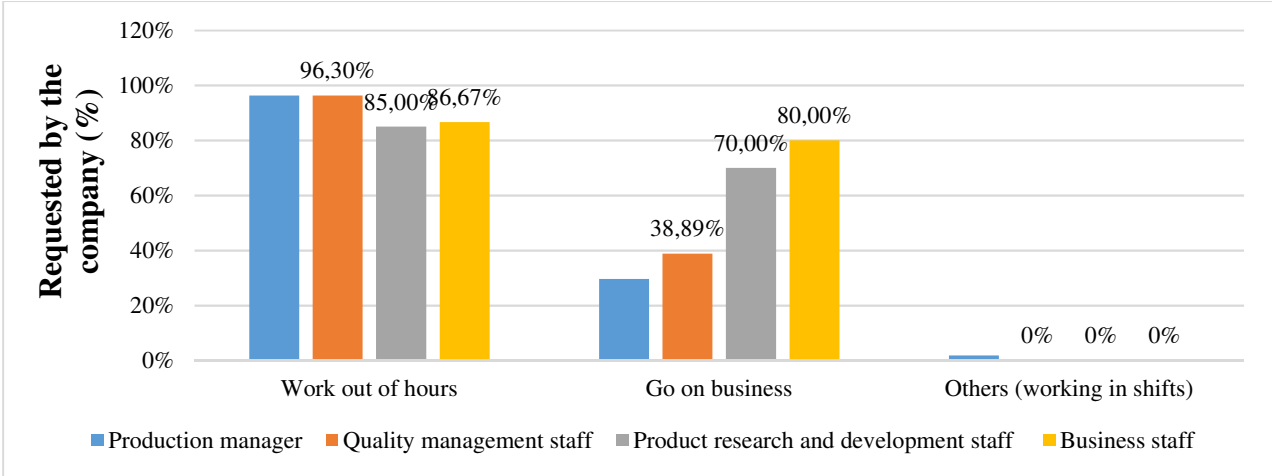


Figure 27. Required availabilities for the other activity

Due to the nature of the agri-food sector, employees may have to be willing to work out of hours. Most employers suggest that employees working in this position should be willing to participate in other activities. Especially, R&D and business staffs need to go on business when required to understand the market as well as develop new products.