

ANALYSIS OF THE FRUIT AND VEGETABLE PROCESSING SECTOR 2024

Prishtina

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List of acronyms

GIZ – *The Deutsche Gesellschaft für Internationale Zusammenarbeit*

IB – *Individual Business*

KAS – *Kosovo Agency of Statistics*

KIESA – *Kosovo Investment and Enterprise Support Agency*

LLC – *Limited Liability Company*

MAFRD – *Ministry of Agriculture, Forestry, and Rural Development*

PEPEKO – *The Association of Fruit and Vegetable Processors of Kosovo*

USAID – *U.S. Agency for International Development*

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Executive Summary

This report provides a comprehensive analysis of the fruit and vegetable processing sector in Kosovo for the year 2024. Commissioned by the PePeKo Association and supported by the “Promoting Private Sector Employment” (PPSE) program, it examines processing capacities, market trends, workforce dynamics, export potential, and the regulatory environment. It draws on primary data from 25 member companies of PePeKo and secondary research, offering actionable insights for industry stakeholders, policymakers, and investors.

Main Findings:

I. Company Profiles

- The study covers **25 key processing companies**, representing **60%** of Kosovo’s fruit and vegetable processing market, with most located in the southern and eastern regions, particularly Prizren (48%).
- 64% of companies were **established after 2007**, reflecting sector growth driven by investment and market demand, while **72% operate as LLCs**, indicating formal and scalable business structures.

II. Workforce Analysis

- Total sector employment stood at **1,797** in 2024, with **70% women**, highlighting the sector’s role in female employment.
- **68% of companies** reported difficulties in hiring qualified workers, especially in **production roles (48%)**.
- While **56% invest in human resources**, less than **0.5% of total investments** went to staff training, showing a gap between need and action.

III. Certification and Standards

- 64% of companies hold at least one international certification (primarily ISO 22000 and HACCP), underscoring a strong orientation toward food safety and quality management.

IV. Processing Capacities

- Total processing capacity reached **100,380 tons in 2024**, yet only **60% is utilized**.

- Underutilization is due to raw material shortages, limited storage space, labor constraints, and payment delays from local retailers.

V. Collection and Production Capacities

- 92% of companies collect vegetables, especially **peppers**; 36% collect fruits, with **apples** being dominant.
- Notable year-on-year declines in collection volumes suggest supply challenges or market changes.

VI. Supplier Contracts and Raw Materials

- 83% of raw materials are sourced locally, although reliance on imports has risen to 17%.
- Informal contracts still dominate, with farmers mostly, making up 65% of all supplier agreements in 2024,

VII. Local & Export Market Dynamics

- Sales are mainly conducted through supermarket chains, while smaller producers also sell via local shops, direct-to-consumer channels, and social media.
- **68% of companies** export their products, primarily to Germany, Switzerland, and Austria.
- Contractual export relationships are declining, but informal long-term partnerships remain strong.

VIII. Sales and Export Expansion

- **Sales reached €76.5M in 2024**, continuing a five-year growth trend, up from €59.91M in 2023 and €32.65M in 2020.
- 94% of companies plan to expand exports via increased production, product diversification, and new markets.

IX. Investment and Planning

- Total investments reached **€62M**; €5.3M was invested in 2024, mostly in machinery.
- Planned investments for 2025–2026 exceed **€11M**, focusing on facilities and machinery.

X. Forms of Product Sales & Private Labels

- 83% of products are sold as final goods; 60% of companies currently offer private label sales, expected to increase to 92% in the future.

XI. Product Promotion and Lobbying

- 92% of members engaged in promotional activities, with high participation in fairs.
- Members express strong support for continued and expanded lobbying, particularly to address fiscal and subsidy policies, export procedures, and market access.

Introduction

Background & Description of the Association

The fruits and vegetable processing industry plays a crucial role in Kosovo's agribusiness sector, contributing to economic development, employment, and export growth. This industry has witnessed significant transformations over the years, driven by increasing consumer demand for processed food products, evolving food safety standards, and advancements in processing technologies. Despite its potential, the sector faces challenges such as limited raw material supply, compliance with international food safety regulations, workforce skill gaps, and the need for greater investment in technology and infrastructure.

The PePeKo Association, representing key stakeholders in the industry, has initiated this sector study to provide an in-depth assessment of the current state of the processing industry. This study will evaluate production and processing capacities, market trends, workforce dynamics, and compliance with food safety standards. Furthermore, it will identify challenges and opportunities that can guide strategic interventions to support the industry's sustainable development and competitiveness in domestic and international markets. The findings will serve as a foundation for targeted policy recommendations and investment strategies to enhance the sector's growth.

Description of the Association

The Association of Fruit and Vegetable Processors of Kosovo "PePeKo"

The Association of Fruit and Vegetable Processors of Kosovo "PePeKo" was founded in 2014 as a non-profit entity and was formally registered as an association in 2015. It was established in response to the need for a unified platform to represent and advocate for the interests of businesses in the fruit and vegetable processing sector. Today, PePeKo plays a key role in strengthening the industry by supporting over 20,000 farmers engaged in fruit and vegetable cultivation and by fostering connections with domestic and international consumers.¹

¹ <https://pepeko.org/en/about-us/>

The association is committed to enhancing the development of the fruit and vegetable processing sector in Kosovo through various initiatives and projects. Its primary objectives are:

- Protecting the interests of the fruit and vegetable processing industry.
- Enhancing the business capacities of local processors and improving the quality of locally processed products.
- Supporting members in expanding their export capacities.
- Participating in government working groups to create and establish legislation related to the fruit and vegetable processing sector.

PePeKo carries out a range of activities to support its members, including organizing participation in trade fairs, coordinating meetings among industry stakeholders, facilitating study visits to regional and European markets, and advocating for supply chain improvements. Additionally, the association collaborates with both local and international organizations to implement joint initiatives of mutual benefit, while also working to combat informality in the processed fruit and vegetable market. Since becoming fully operational in 2015, PePeKo has grown to include approximately 30 members, four of whom are founding members.²

PePeKo was established as a non-profit entity in 2014 and legally registered as an association in 2015. Its establishment came in response to the need of local businesses to join associations that safeguard and advocate for their interests.

PePeKo is an organization that plays a significant role in the country's economy and serves as a bridge for over 20,000 farmers engaged in cultivating fruits and vegetables and consumers, both within and outside the country. This association aims to strengthen and contribute to the development of the fruit and vegetable processing sector in Kosovo through the implementation of various projects.

² <https://pepeko.org/en/about-us/>

Main objectives of the association

- Protecting the interests of the fruit and vegetable processing industry.
- Enhancing the business capacities of local processors and improving the quality of locally processed products.
- Supporting members in expanding their export capacities.
- Participation in government working groups to create and establish legislation related to the fruit and vegetable processing sector.

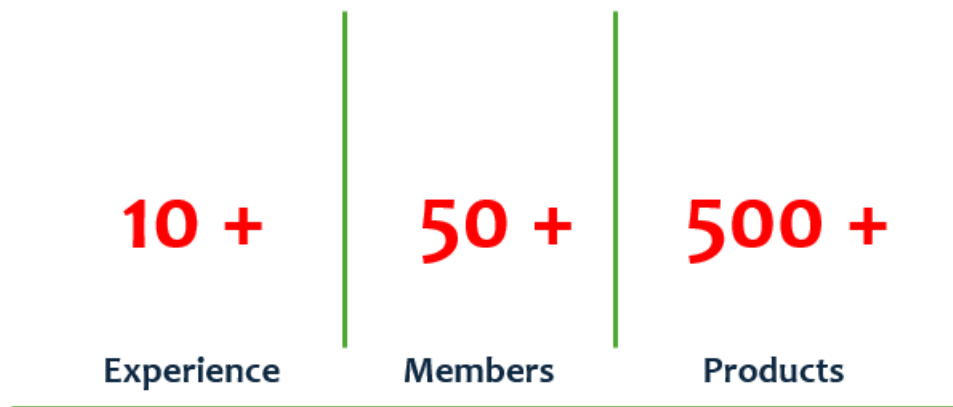
Association's Activities

- Organization of participation in fairs related to the fruit and vegetable processing sector
- Coordination of meetings with the main carriers of the fruit and vegetable processing sector
- Organization of visits to the region and countries of the European Union in order to find new markets
- Common application for supply chain organization
- Coordination of various activities of common interest with sister associations (local and international)
- Protection of processed fruit and vegetable products from informality.³

Since becoming fully operational in 2015, PePeKo has grown from an initiative started by just three companies into a well-established association with over 10 years of experience, now bringing together more than 50 members—four of whom are founders—and representing a portfolio of over 500 processed fruit and vegetable products (see Figure 1 below).

³ <https://pepeko.org/en/about-us/>

Figure 1: PePeKo Members



Source: Compiled and visualized by the author using data from PePeKo.

Objectives of the Study

This study has several key objectives, aimed at providing a detailed and comprehensive understanding of the sector's current landscape. The main goal of the study is to assess the overall state of the fruits and vegetable processing industry, identifying strengths, weaknesses, opportunities, and challenges that influence its growth and competitiveness.

The primary objectives of the study are:

- To gain a comprehensive understanding of the current state of the fruits and vegetable processing industry in Kosovo.
- To assess the adoption and implementation of food technology, including capacity-building initiatives within the sector.
- To evaluate workforce dynamics, including skill levels, employment trends, and labor practices among processing companies.
- To analyze the compliance of processing companies with food safety standards and regulatory requirements.

- To assess the production and processing capacities of key companies operating in the sector.
- To examine the supply chain of raw materials, identifying key sources and potential vulnerabilities that impact production.
- To evaluate the sector's performance in terms of domestic sales and exports.
- To identify planned investments, expansions, and developments in the processing industry that may influence future growth.

This study will provide evidence-based insights to support industry stakeholders, policymakers, and investors in making informed decisions to enhance the competitiveness and sustainability of the sector.

Scope & Coverage

The sector study will have a nationwide geographic reach, covering the entire territory of Kosovo. It will focus specifically on the fruits and vegetable processing industry, analyzing key aspects such as production capacities, market dynamics, and compliance with industry standards. The study is expected to be completed within a timeframe of three months. The primary target group for data collection and analysis consists of processing companies operating within the sector, with additional insights gathered from relevant stakeholders, including suppliers, distributors, and policymakers.

Structure of the Report

The final report will be structured as follows:

1. Executive Summary
2. Introduction
3. Background of the Study
4. Description of the Association
5. Objectives of the Study
6. Methodology
7. Results
8. Conclusion & Policy Recommendations

Methodology

This chapter outlines the research design, data collection process, analytical tools, and limitations of the study conducted to assess the current state of the fruit and vegetable processing sector in Kosovo. The methodological approach was tailored to gather both qualitative and quantitative insights, ensuring a holistic understanding of the sector's dynamics.

Main Approach of the Study

The study employed an inductive research methodology, focusing on collecting primary data directly from industry actors and supplementing it with secondary research. This bottom-up approach enabled the research team to capture ground-level realities, from operational challenges to strategic opportunities, while allowing patterns and insights to emerge naturally from the data collected. The inductive method was particularly suited for this sector-specific study, which aimed to understand evolving market dynamics and workforce trends.

Survey Design

A semi-structured questionnaire was developed as the primary instrument for data collection. The survey combined both quantitative questions—designed to capture numerical data such as workforce size, sales, and processing capacities—and qualitative questions, which explored more nuanced insights related to challenges, training needs, investment strategies, and policy recommendations. The questionnaire consisted of 42 questions grouped across key thematic areas: workforce and training, production and processing capacities, sales and export trends, raw material sourcing, certification, investments, and promotional activities. This structure ensured that all dimensions of the sector's functioning were adequately covered.

Selection and Participation of Companies

The study targeted members of the PePeKo Association, which represents key actors in the fruit and vegetable processing sector in Kosovo. Companies were selected based on their

membership in the association to ensure a focused analysis of processors directly involved in the industry and aligned with sector-wide development initiatives.

Participation in the study was voluntary and based on the availability of company representatives. Interviews were conducted primarily with business owners or senior managers who had the necessary insight into the operational, financial, and strategic aspects of their respective companies.

Geographic Coverage and Sample Size

The field research was conducted across six major regions of Kosovo, providing comprehensive national coverage. In total, 25 companies were visited and interviewed in person during the data collection period. The companies varied in size, production scale, and market focus, allowing for a representative cross-section of the industry to be captured in the study.

Data Analysis

The data collected was processed and analyzed using a combination of analytical tools:

- Stata was used for statistical analysis of quantitative data, such as employment figures, investment amounts, and sales trends.
- MaxQDA was employed for coding and analyzing qualitative responses, particularly open-ended answers that provided insight into challenges and opportunities.
- Microsoft Excel supported the organization, tabulation, and visualization of data, including charts and figures presented throughout the report.

This triangulated analytical approach enhanced the reliability and depth of the study's findings.

Limitations of the Study

While the study provides valuable insights, several limitations should be acknowledged:

- **Sample Size and Representativeness:** The study was limited to 25 companies affiliated with PePeKo. Although representative of this association, the findings may not fully reflect the situation of processors outside this network or in other segments of the agricultural sector. There was a slight change in the sample composition compared to previous years; however, the companies included remain similar in size and operational scope.
- **Response Bias:** Certain questions, especially those requiring specific numerical recall (e.g., volumes, sales figures), may have been subject to response bias due to participants' inability to recall or access accurate data at the time of the interview.
- **Exclusion of Soft Fruit Companies:** The study did not include companies specializing in soft fruits (e.g., strawberries, raspberries, blueberries), as these are represented by a separate industry association. As such, conclusions may not apply to the soft fruit processing segment.

Results

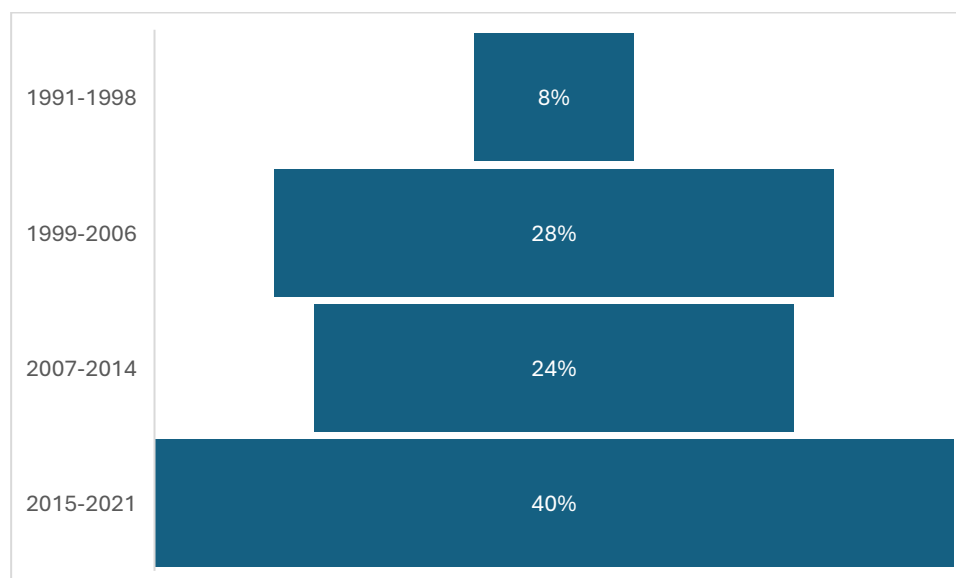
The findings and insights gathered from the questionnaire, which address various aspects of the fruit and vegetable processing sector, have been summarized and subsequently compared through secondary research. They include details regarding the workforce, collection and production capacities, the plans and investments made by the companies, as well as the way they sell their products and their strategies for strengthening this sector in the future. The findings are presented below under several key sub-chapters/indicators.

Company Profiles and Geographic Distribution

This study includes a representative **sample of 25 key companies** operating in the fruit and vegetable processing industry in Kosovo. **These companies together account for approximately 60% of the national market share**, ensuring that the findings reflect the dominant characteristics and trends within the sector.

The data reveal a clear trend in the growth of the industry over time. While only 8% of the surveyed companies were established before 1999, there was a notable increase in new enterprises in the subsequent decades.

Figure 2: Distribution of Companies by Year of Establishment (1991–2021), %



Source: Compiled and visualized by the author using survey data collected through PePeKo.

This indicates that a significant portion of businesses (64%) were founded after 2007, reflecting a wave of growth that corresponds with greater investment interest, donor support, and increasing demand for processed agricultural products in domestic and export markets.

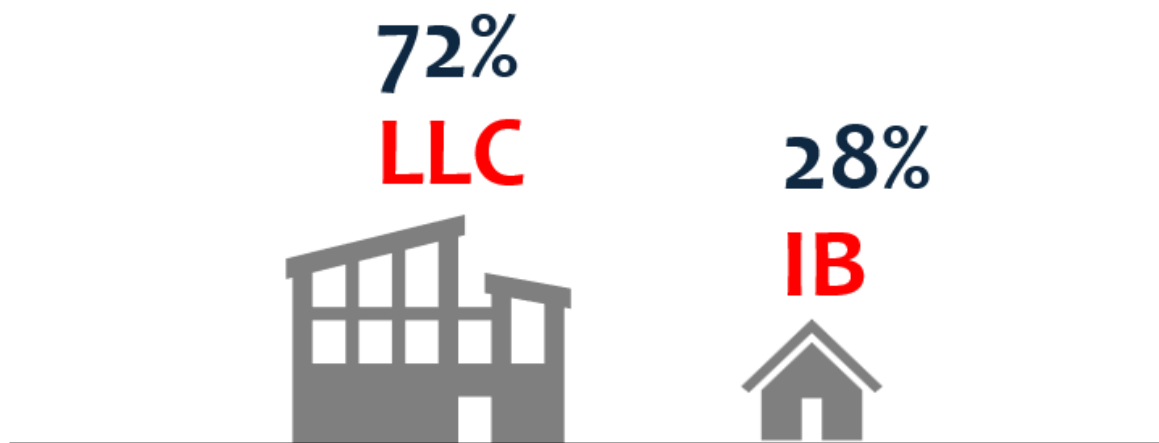
In terms of geographic distribution, the companies included in the study are spread across several key regions of Kosovo, with a concentration in the southern and eastern parts of the country. The distribution is as follows:

- **Prizren:** 48%
- **Prishtina:** 20%
- **Gjilan:** 12%
- **Ferizaj:** 8%
- **Mitrovica:** 8%
- **Gjakova:** 4%

This suggests that Prizren serves as the primary hub for fruit and vegetable processing, likely due to favorable agro-ecological conditions and early established infrastructure for raw material collection and processing.

The surveyed companies operate under two main legal structures. The majority of the enterprises (72%) **are organized as Limited Liability Companies (LLCs)**, indicating a more formalized structure with greater potential for scaling operations, accessing finance, and entering export markets (see the figure below):

Figure 3: Legal Organization of Surveyed Companies



Source: Compiled and visualized by the author using survey data collected through PePeKo.

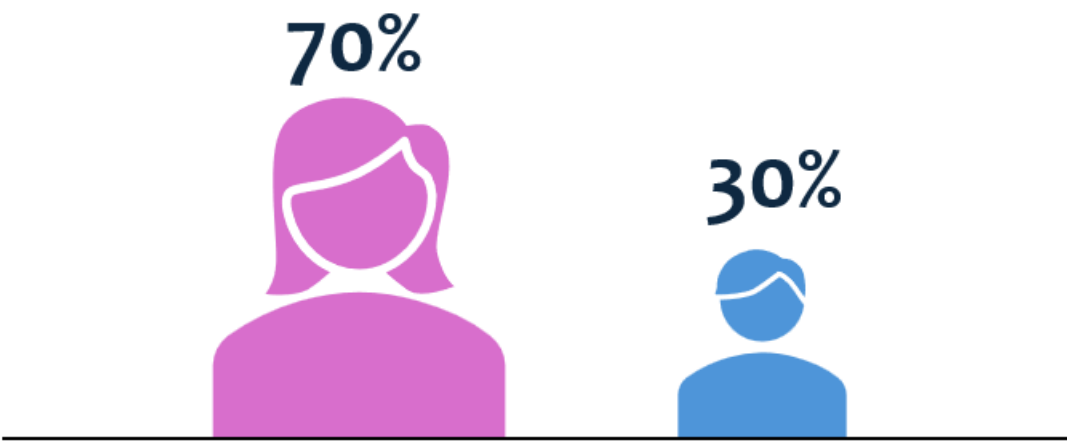
On the other hand, Individual Businesses, which make up 28% of the sample, typically operate on a much smaller scale—often at the household level—with limited production capacity and market reach.

Workforce Analysis

In recent years, the fruit and vegetable processing sector has employed approximately 10,000 workers. According to the Green Report 2023, the total number of people employed in agricultural activities in 2022 was 17,178. Of these, 9,050 workers were engaged specifically in the fruit and vegetable processing sector (MAFRD, 2023).

Based on the data collected from the 25 companies interviewed, the total number of employees within these enterprises is 1,797. Notably, **women constitute 70% of this workforce**, while men represent 30%.

Figure 4: Employment by gender in 2024 (%)

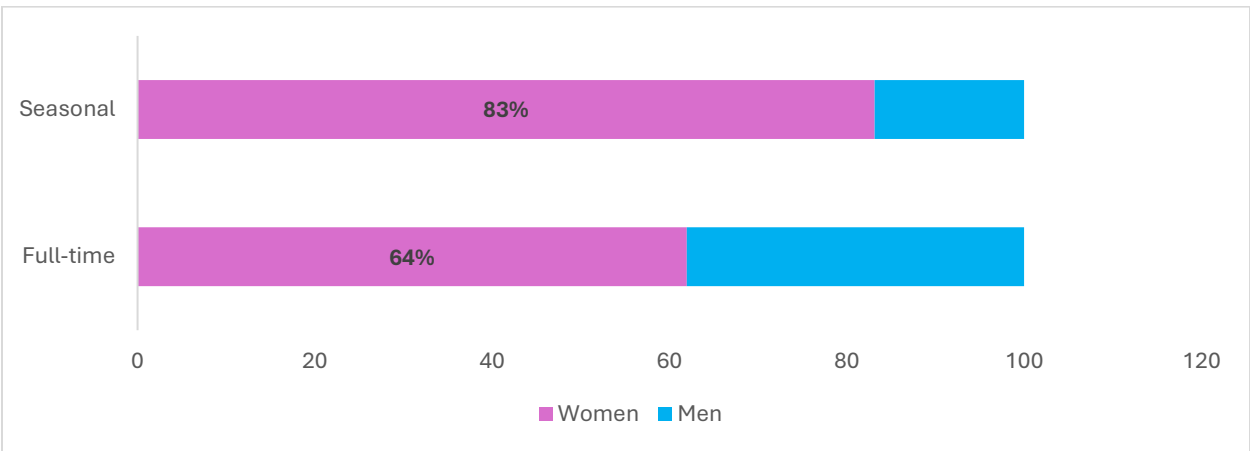


Source: Compiled and visualized by the author using survey data collected through PePeKo.

The data indicate that women make up the majority of the workforce in the fruit and vegetable processing sector in 2024. Specifically, women account for 64% of full-time employees and 83% of seasonal workers, as shown in **Figure 5**. This strong female presence is especially notable in seasonal roles.

The sector’s appeal to women is largely due to the **flexibility of seasonal work**, which allows them to balance employment with family responsibilities. Additionally, these jobs provide a source of income and require no formal qualifications, making them accessible to a broader segment of the female population.

Figure 5: Employment Type Distribution by Gender (%)



Source: Compiled and visualized by the author using survey data collected through PePeKo.

Qualitative interviews reveal several structural challenges in the workforce dynamics of the fruit and vegetable processing sector. **Seasonal workers are frequently replaced each year**, leading to a lack of continuity and experience within the labor force. Most companies do not operate **year-round**, which limits the duration of employment for both seasonal and full-time workers. As a result, even full-time staff often do not work continuously throughout the year, despite being officially registered and receiving social contributions for the full year—mainly to comply with tax authority requirements. Furthermore, **seasonal workers are typically employed informally**, without legal contracts or proper documentation, reflecting a widespread informality in the sector’s labor arrangements.

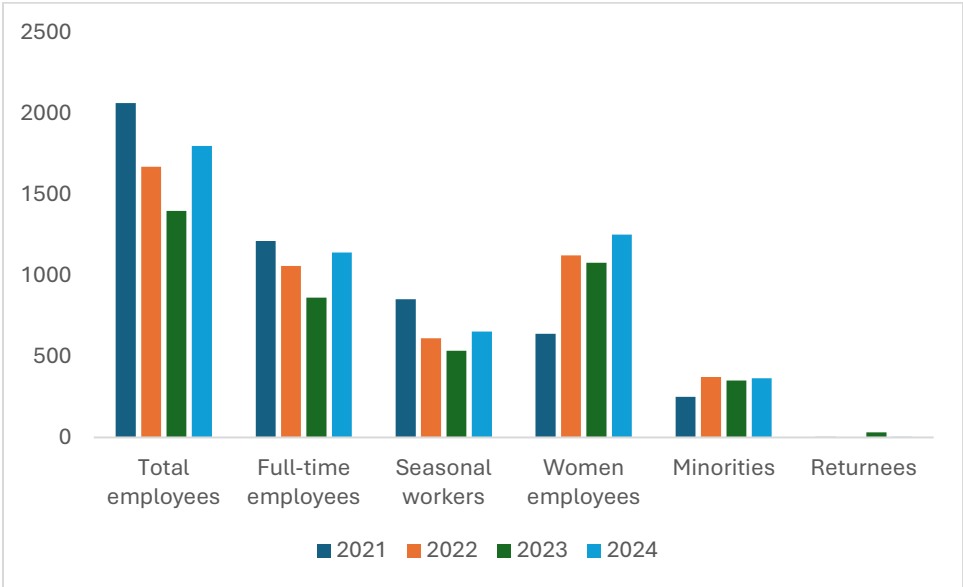
If we look at the development over the last four years, the figure below presents the evolution of employment types in the fruit and vegetable processing sector from 2021 to 2024. Total employment experienced fluctuations, initially decreasing from **2,063** employees in 2021 to a low of **1,397** in 2023, before recovering to **1,797** in 2024. A similar pattern is observed in the number of **full-time employees**, which declined from **1,211** in 2021 to **862** in 2023, followed by a significant rebound to **1,141** in 2024.

Seasonal employment also saw a notable decrease from **852** in 2021 to **535** in 2023, with a modest increase to **653** in 2024, suggesting some stabilization in temporary labor demand.

One of the most significant positive developments is the increase in **women's participation** in the workforce. The number of women employees nearly doubled, from **640** in 2021 to **1,251** in 2024, indicating major strides in gender inclusion and representation in the sector.

The number of **employees from minority communities** also increased steadily, from **250** in 2021 to **373** in 2022, and remained relatively stable in the following years, reaching **364** in 2024. As for **returnees**, their numbers varied considerably. From just **3** in 2021, the number slightly decreased in 2022, spiked to **31** in 2023—possibly reflecting targeted employment efforts—before settling back to **3** in 2024. In summary, while total and full-time employment levels have not returned to 2021 levels, the sector has made notable progress in inclusivity, especially with the **increased involvement of women and minority groups** (see **Figure 6** below).

Figure 6: Comparison of employees in 2021, 2022, 2023 and 2024

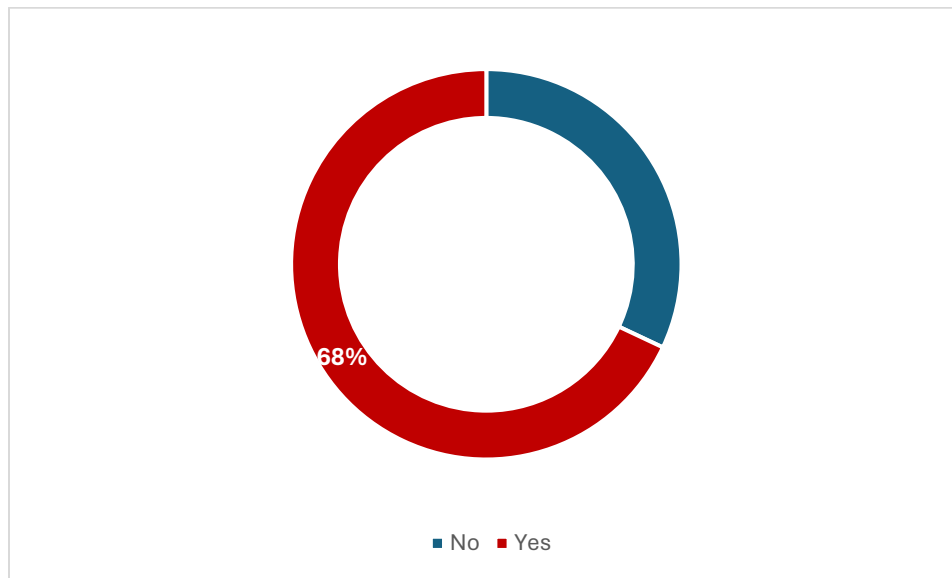


Source: Compiled and visualized by the author using survey data collected through PePeKo.

Further, analyzing workforce qualifications is essential for understanding the skills available in the labor market, enabling companies to make informed hiring decisions, address skill gaps, and enhance productivity and competitiveness.

The skill level of the workforce plays a crucial role in enhancing the efficiency, safety, and quality of operational processes. Adequately qualified employees can significantly boost overall productivity and improve the quality of products within this sector. However, the **majority of respondents** (68%) reported difficulties in finding suitably skilled workers to meet the demands of the industry.

Figure 7: Share of Respondents Reporting Difficulties in Finding Workers in 2024 (%)

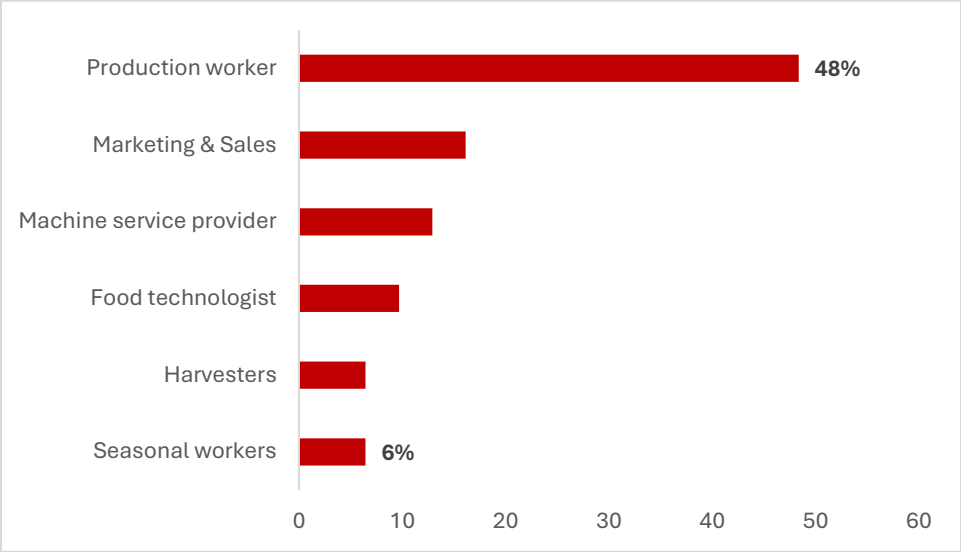


Source: Compiled and visualized by the author using survey data collected through PePeKo.

Companies face difficulties finding different profiles of employees. The figure below shows that companies experience the greatest difficulty in finding **production workers**, who account for **48%** of the reported shortages. **Marketing and sales professionals** are the next most challenging to recruit, followed by **machine service providers** and **food technologists**, each representing a smaller share of the total. **Harvesters** and **seasonal workers** are less frequently cited as hard to find, with **seasonal workers** making up **6%** of the reported shortages.

These results indicate that the most significant workforce gap is in production roles, while specialized and technical positions also present notable recruitment challenges.

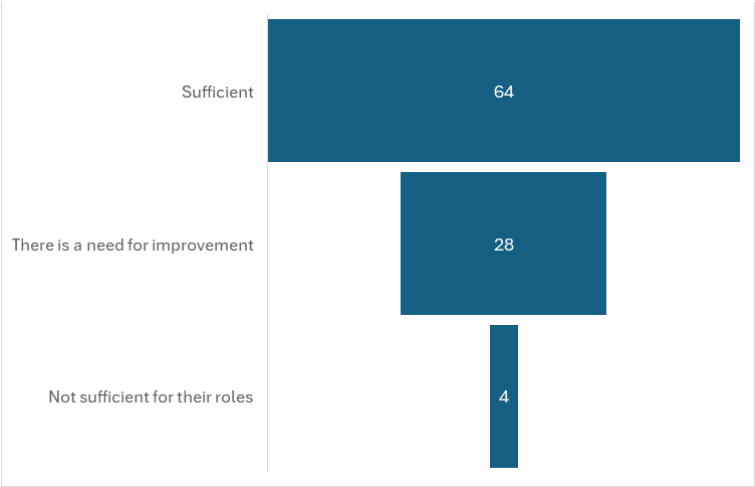
Figure 8: Profiles with the Highest Difficulty in Finding Qualified Workers in 2024 (%)



Source: Compiled and visualized by the author using survey data collected through PePeKo.

Regarding the current level of professional qualifications of their workforce, approximately 28% of respondents indicated that their **workforce requires improvement** in this area. About 64% stated that the existing qualification level of their employees is sufficient, while only 4% reported that the skill level of their workers is insufficient for the tasks they perform (see **Figure 9**).

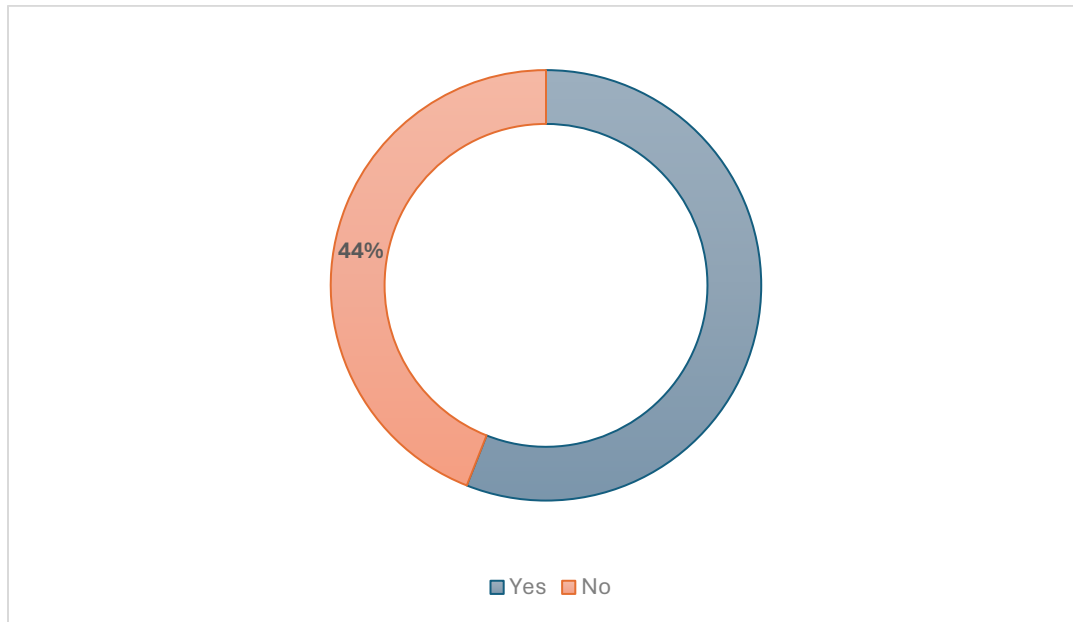
Figure 9: Employer Views on Workforce Training Adequacy in 2024 (%)



Source: Compiled and visualized by the author using survey data collected through PePeKo.

However, not all members are making adequate investments to achieve these improvements in their staff. **More than half of them (56%) invest in human resources**, while the remaining 44% have not made such investments, according to the results shown in **Figure 10**.

Figure 10: Share of Companies Investing in Human Resources in 2024 (%)

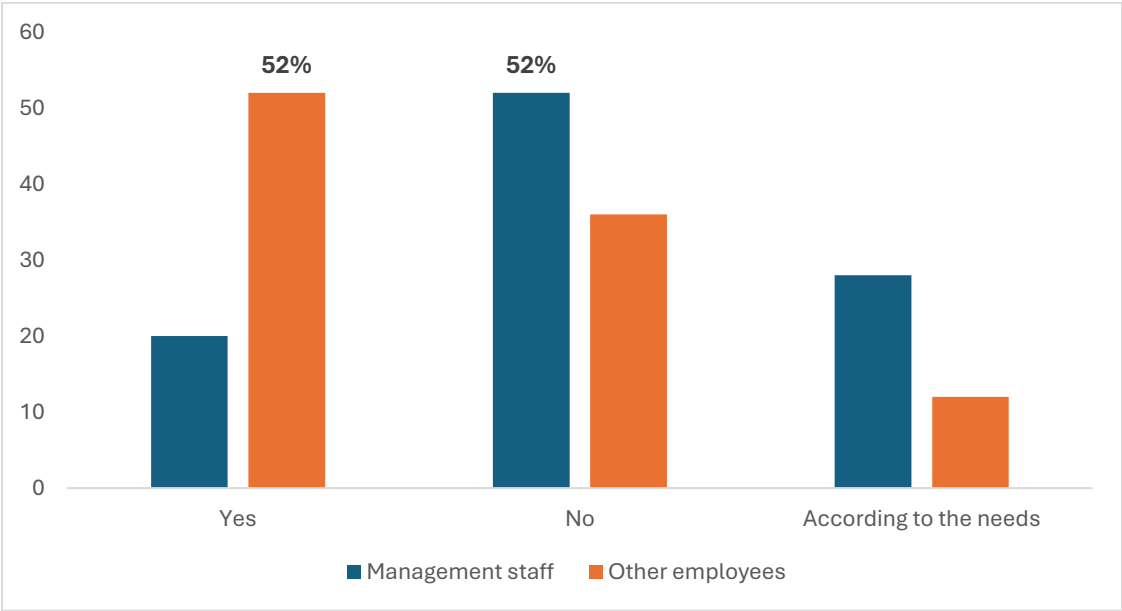


Source: Compiled and visualized by the author using survey data collected through PePeKo.

The total value of investments in human resources in 2024 amounted to **€42,700**. Among the companies that reported investments in this area, the amounts ranged from a minimum of €700 up to €30,000. These investments primarily cover payments to companies that provide training for employees, as well as study visits to regional countries.

Investments in the professional development of leadership staff have a direct impact on company performance and long-term strategic direction. Around **20%** of the interviewed members offer specialized education and training for their leadership staff, while **52%** do not provide any such training. Regarding the rest of the workforce, more than half of the members (**52%**) offer specialized education or training. Additional training is provided based on company needs, with **28%** offering it for management staff members and **12%** for other employees, respectively (see **Figure 11**).

Figure 11: Provision of Employee Training in 2024 (%)

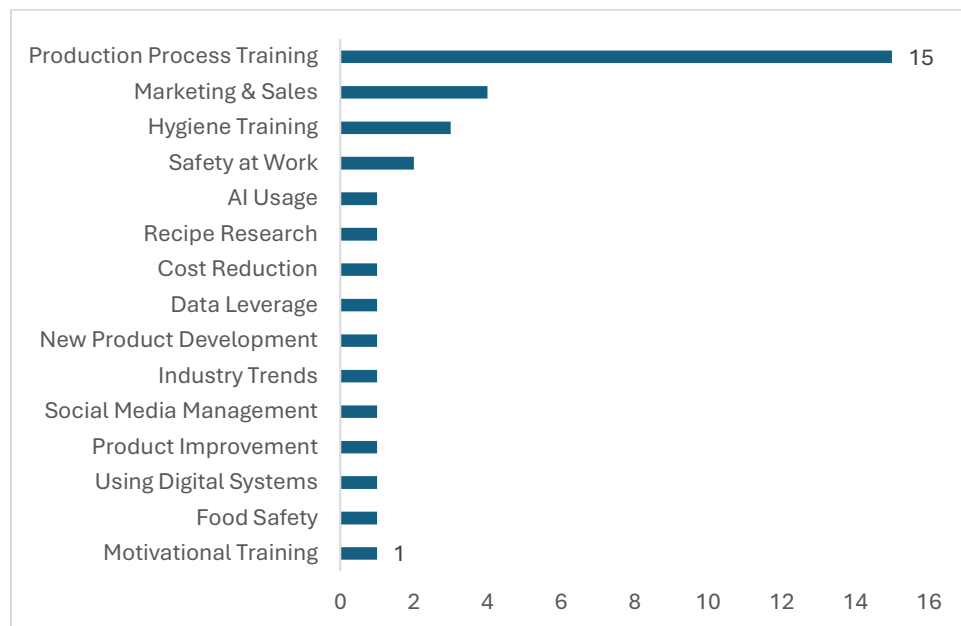


Source: Compiled and visualized by the author using survey data collected through PePeKo.

Training for the broader staff mainly consists of on-the-job training conducted by managers or more experienced workers for new employees. These trainings typically focus on work processes, hygiene, workplace safety, and requirements related to quality standards.

The most needed training areas identified by the workforce include several key areas. The figure below illustrates the areas where companies most frequently identified a need for employee training. **Production process training stands out as the top priority**, mentioned by 15 companies, indicating a widespread recognition of its importance for operational efficiency and quality. Marketing and sales training is the next most cited need, with 4 mentions, followed by hygiene training, which was highlighted by 3 companies. Other areas such as safety at work, recipe research, cost reduction, data leverage, new product development, social media management, product improvement, using digital systems, food safety, and motivational training were each mentioned by only one company. These results suggest that while there is a broad range of training needs, the greatest emphasis is placed on enhancing employees’ skills in production processes, with marketing, sales, and hygiene also seen as key areas for development.

Figure 12: Training Needs Identified by Companies (Frequency of Responses)

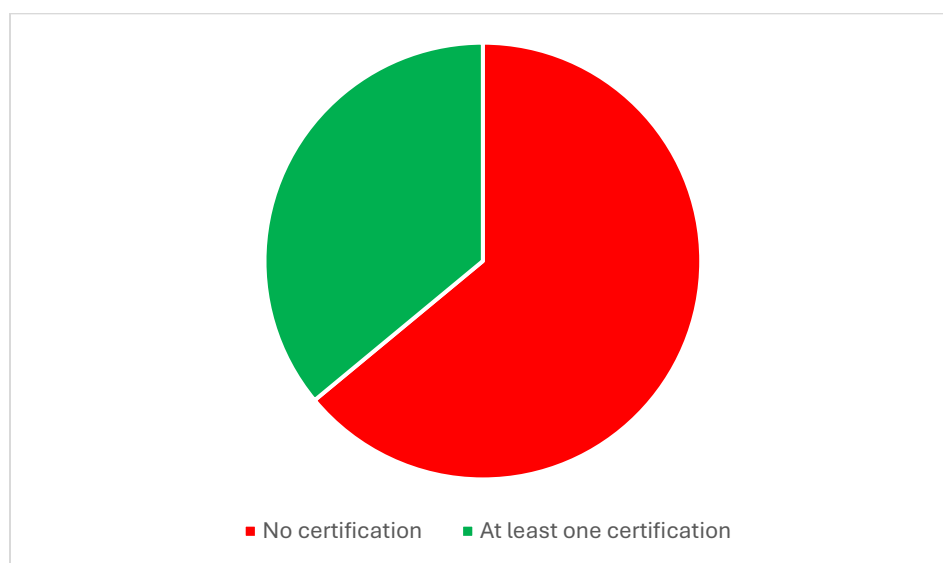


Source: Compiled and visualized by the author using survey data collected through PePeKo.

Certification with standards

In terms of international standard certifications, about two-thirds (64%) of the members surveyed possess at least one certification, whereas one-third (36%) have not obtained any certification, as illustrated in **Figure 13**.

Figure 13: Certification with standards until 2024 (%)

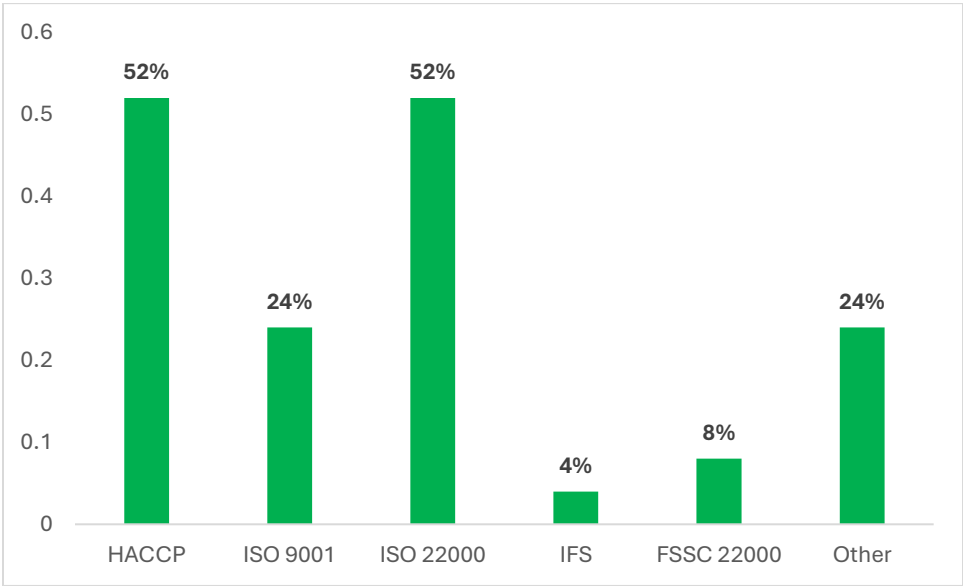


Source: Compiled and visualized by the author using survey data collected through PePeKo.

The figure illustrates the distribution of various certification standards among the surveyed enterprises in the fruit and vegetable processing sector. **HACCP** and **ISO 22000** are the most commonly adopted certifications, each held by **52%** of the companies. **ISO 9001** follows, with **24%** of enterprises reporting its implementation.

Other certifications appear less frequently: **FSSC 22000** is used by **8%** of companies, while **IFS** is reported by only **4%**. Additionally, **24%** of the companies hold other types of certifications, including **Halal**, **Organika**, and **FFC+**, indicating a degree of diversification in quality and product-specific standards within the sector.

Figure 14: Types of International Standard Certifications Held by Companies (%)



Source: Compiled and visualized by the author using survey data collected through PePeKo.

These results indicate a strong emphasis on food safety and quality management standards within the sector, with ISO 22000 and HACCP being the most prominent.⁴

Processing Capacities

Processing capacities play a crucial role in determining the overall productivity and operational efficiency of enterprises within the fruit and vegetable sector. These capacities define the maximum volume of raw materials that can be processed within a given timeframe,

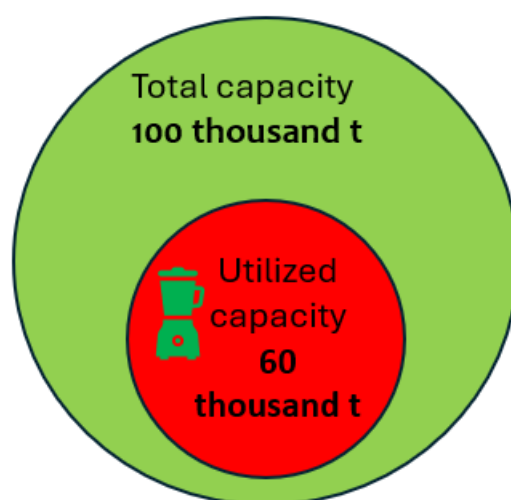
⁴ Some companies have certifications that have expired, yet they continue their processing activities.

directly influencing the ability to meet market demand and maintain product quality. A clear understanding of processing capacities enables producers to identify potential bottlenecks, streamline production workflows, and allocate resources more effectively. Moreover, optimizing these capacities can lead to cost reductions, improved turnaround times, and enhanced competitiveness in both domestic and international markets. Therefore, assessing and managing processing capacities is essential for sustainable growth and the long-term success of the sector.

The total processing capacity of the interviewed members for the year 2024 amounts to **100,380 tons**. This capacity has increased by **53% compared to a year earlier** – 2023,⁵ while it is significantly higher compared to the 51,221 tons recorded in 2022,⁶ with **95% higher** processing capacities.

However, according to the results shown in **Figure 15**, an average of **60% of this capacity is actually utilized**, which corresponds to approximately 60 thousand tons.

Figure 15: Total and utilized capacity in 2024 (t)



Source: Compiled and visualized by the author using survey data collected through PePeKo.

⁵ PePeKo – Sectoral Study 2023

⁶ PePeKo – Sectoral Study 2022

During interviews with members of this sector, several key obstacles limiting the utilization of production capacities were identified, including:

- Lack of raw materials & seasonal supply
- Insufficient space
- Shortage of workforce
- Issues with the local market, primarily delays in payment for sold goods.

The shortage of raw materials stems from the seasonal nature of vegetable production and the limited quantity available locally. Many companies reported that they are unable to fully **utilize their capacities due to this lack of raw materials. Interviewees confirmed that there is not enough raw material available in Kosovo, and that processing capacities remain underutilized—primarily due to shortages in raw materials and limited operational space.** Secondly, a significant number of companies lack the necessary space to expand or better utilize their existing capacities.

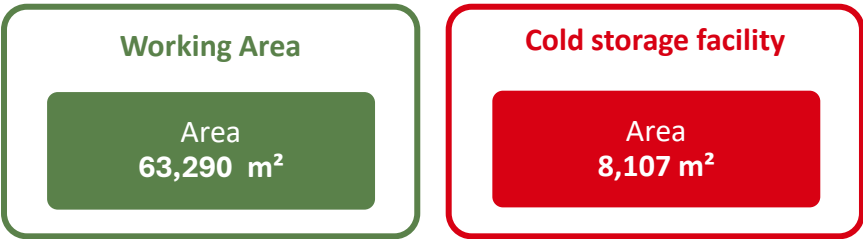
Workforce shortages, as previously mentioned, have been a prominent issue in recent years, and according to respondents, this trend is expected to intensify in the coming years, posing one of the greatest challenges for businesses in this sector.

Problems with selling goods in supermarkets are also very pronounced. Delays in payment terms, unfavorable conditions for businesses, failure to honor agreements, and fierce competition from imported products have made supermarket sales difficult. As a result, many businesses are shifting their focus toward establishing contracts with retail and wholesale traders and seeking new export markets.

The total installed capacity in ambient temperature facilities covers an area of 63,290 m², ranging from as small as 50 m² up to 30,000 m². Meanwhile, the installed capacity in cold storage facilities, with temperatures down to -20°C (commonly known as freezing warehouses), amounts to a total area of 8,107 m².⁷

⁷ This area includes cold storage facilities operating at various temperature levels.

Figure 16: Facility processing capacities of the companies (m²)

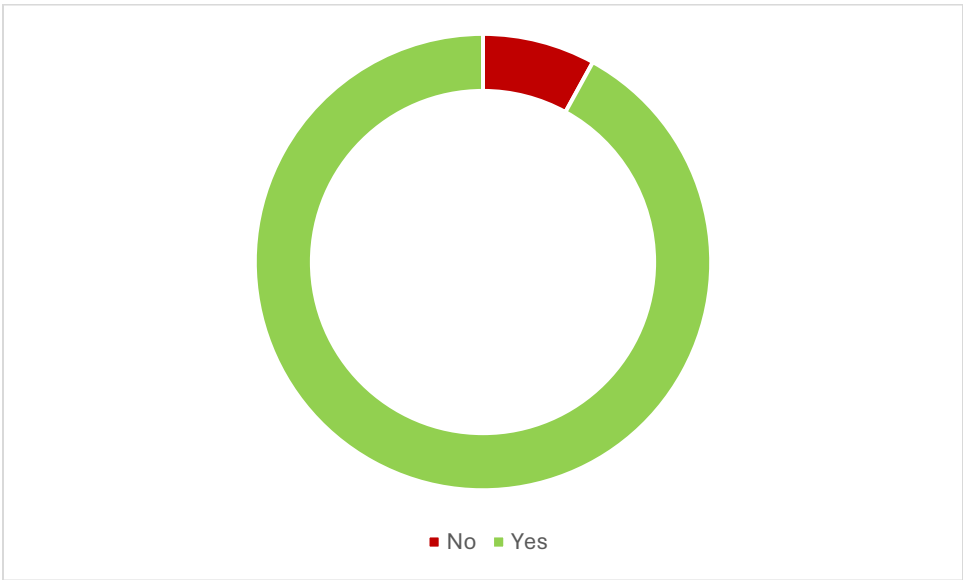


Source: Compiled and visualized by the author using survey data collected through PePeKo.

Collection and production capacities

Collection and production capacities determine the quantity and quality of products produced by companies in this sector. Analyzing these aspects helps identify potential supply chain issues, ensure a steady flow of raw materials, and maintain consistent production levels. Companies in this sector engage in the collection of **vegetables, fruits, or both**, depending on their specific activities. In some cases, certain companies also collect nuts.⁸ According to the results shown in **Figure 17** below, approximately 92% of the interviewed members are involved in vegetable collection.

Figure 17: Share of Companies Involved in Vegetable Collection in 2024 (%)

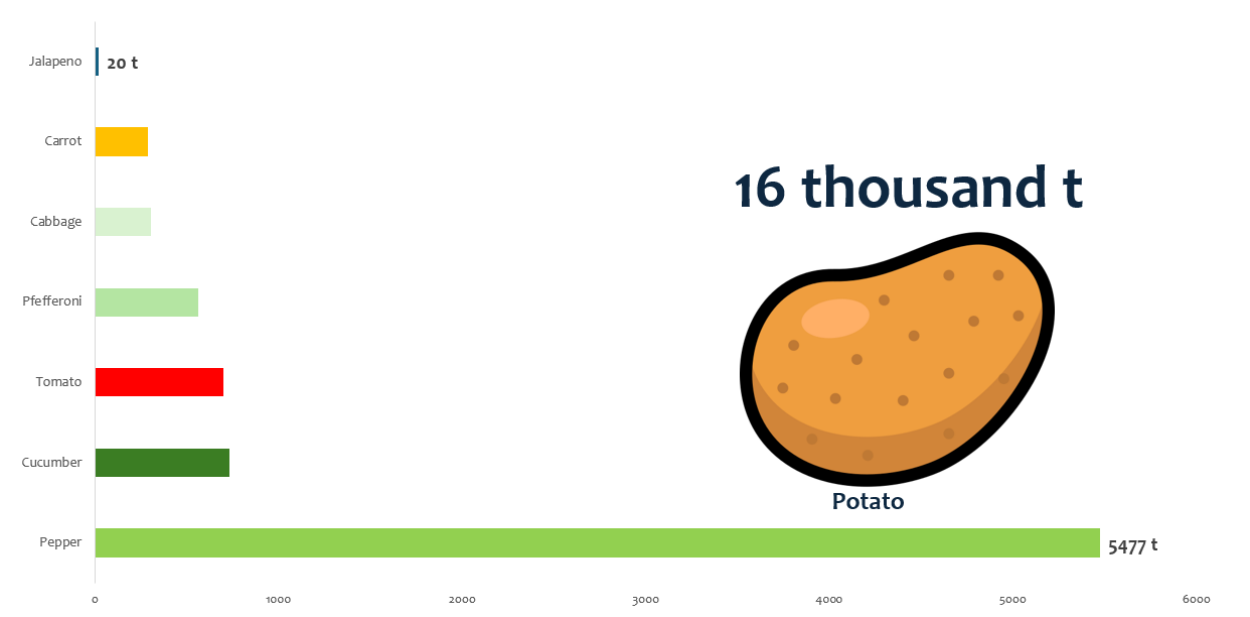


Source: Compiled and visualized by the author using survey data collected through PePeKo.

⁸ One company in the sample focuses exclusively on the collection and processing of nuts.

Figure 18 below represents the vegetables that were collected the most in 2024, based on the amount given in tons. The data presented in the figure highlight that **pepper**⁹ is by far the most commonly collected product among the surveyed companies, with a total volume of 5,477 tons. Other vegetables, such as cucumber, tomato, pfefferoni, cabbage, and carrot, are collected in significantly smaller quantities. **Cucumber** is the second most collected product, followed by **tomato**, while carrot and jalapeno are gathered in the lowest amounts. This distribution indicates a strong focus on pepper production within the sector, with other vegetables playing a comparatively minor role in the overall collection activities of these companies.¹⁰

Figure 18: Amount of Vegetable Crops Collected in 2024 (Tons)



Source: Compiled and visualized by the author using survey data collected through PePeKo.

When the data are compared across the four-year period from 2021 to 2024,¹¹ **pepper** consistently had the highest collection volumes, peaking at **6,870 tons in 2023** before decreasing to **5,477 tons in 2024**. **Tomato** collections showed a gradual increase from **1,149 tons in 2021** to **1,400 tons in 2023**, followed by a sharp decline to **699.3 tons** in 2024. **Cucumber**

⁹ Excluding potatoes, which represent the highest collected quantity at over 16,000 tons in 2024.

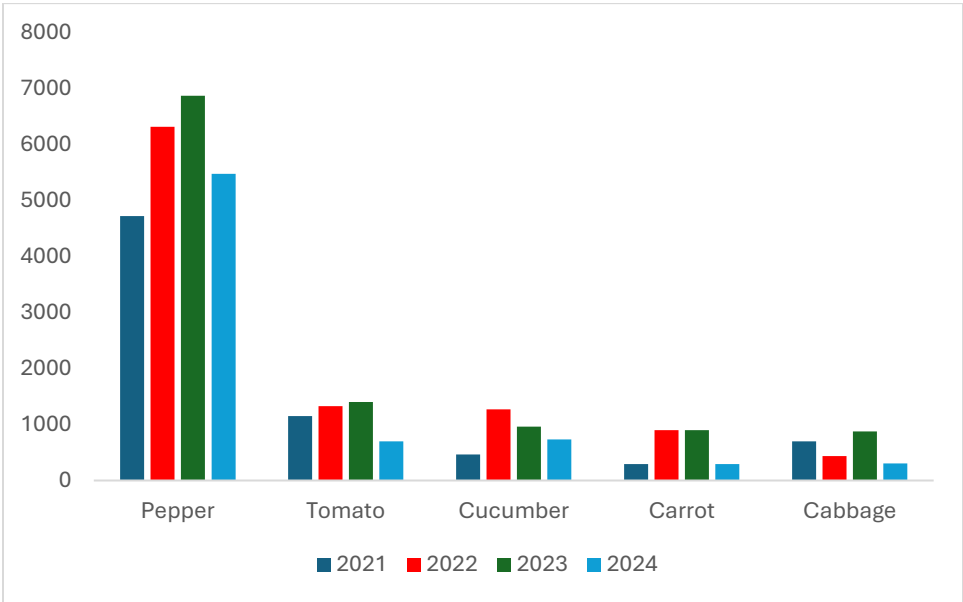
¹⁰ Other products include turnip, parsley, almond, and hazelnut.

¹¹ PePeKo – Sectoral Study 2023 & PePeKo – Sectoral Study 2022

volumes rose significantly from **467 tons in 2021** to **1,273 tons in 2022**, fluctuated in 2023, and reached **733 tons in 2024**. **Carrot** collections increased from **294 tons in 2021** to **900 tons** in both 2022 and 2023 but then dropped to **291.7 tons in 2024**. **Cabbage** showed variable trends, starting at **699 tons in 2021**, declining to **435.6 tons in 2022**, peaking at **875 tons in 2023**, and falling again to **303.7 tons in 2024** (see **Figure 19** below).

Overall, the data indicate that while collection volumes for most vegetables peaked in 2022 or 2023, there was a noticeable decrease in 2024. This trend may reflect emerging challenges in raw material supply, weather-related factors, or shifts in market demand.

Figure 19: Leading Vegetable Crops Collected, 2021–2024 (tons)



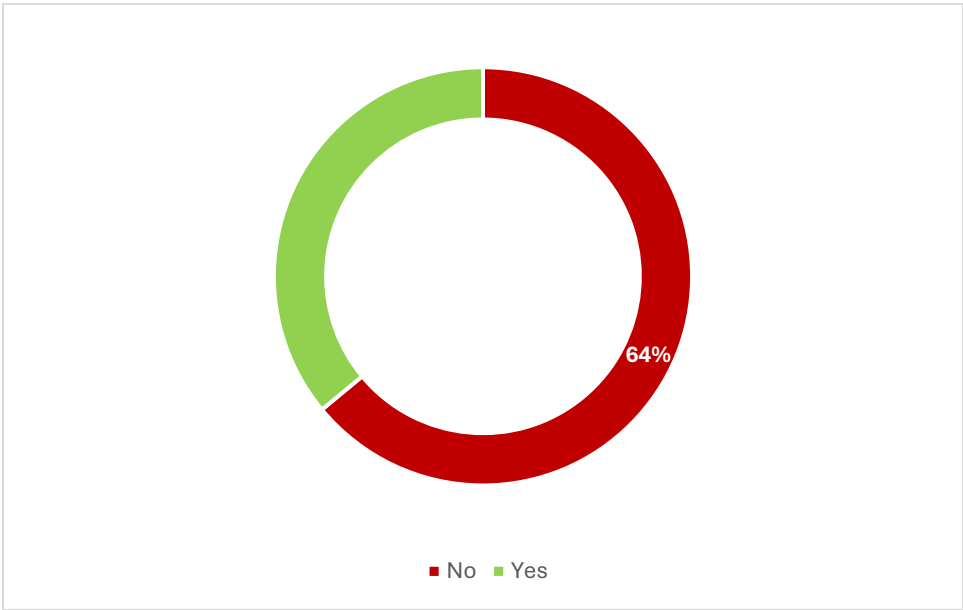
Source: Compiled and visualized by the author using survey data collected through PePeKo.

Besides vegetables, some companies also engage in the collection of fruits, primarily as a secondary activity. However, a smaller portion of the interviewed members-about 36% - are involved in fruit collection (see **Figure 20**).

Expanding on this, the involvement in fruit collection reflects a diversification strategy among companies to broaden their product base and reduce dependency on a single product type. While vegetable processing remains the core focus, fruit collection allows these companies to

tap into additional market opportunities and meet varying consumer demands. This dual focus can also help stabilize revenue streams throughout the year, especially considering the seasonal nature of agricultural production.

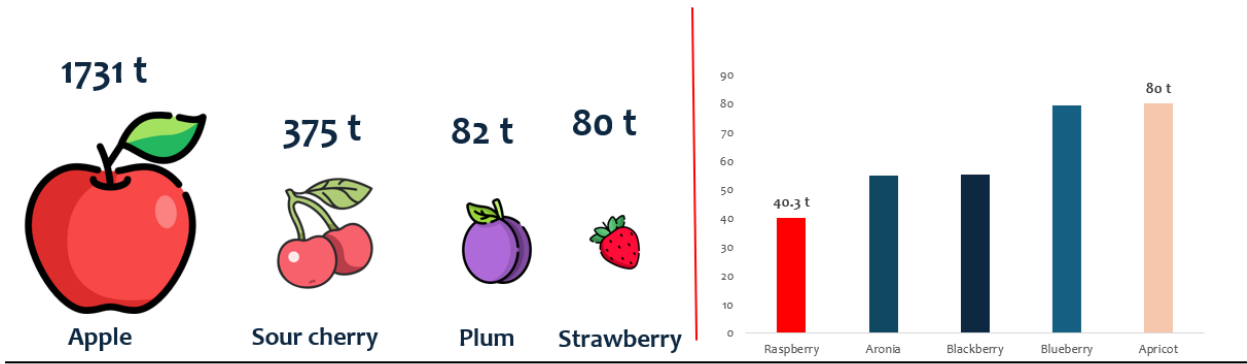
Figure 20: Share of Companies Involved in Fruit Collection in 2024 (%)



Source: Compiled and visualized by the author using survey data collected through PePeKo.

Similar to the previous year, **apple** is by far the most commonly collected fruit among the surveyed companies, with a total volume of 1,731 tons (see **Figure 21** below). Sour cherry is the next most significant fruit, though collected in much smaller quantities. Other fruits such as plum, strawberry, apricot, blueberry, aronia, and raspberry are gathered in minimal amounts, with raspberry reaching just over 40 tons. This distribution highlights a strong emphasis on apple collection within the sector, while other fruits represent a relatively minor share of the total collected volume.

Figure 21: Fruit Collection Volumes by Type in 2024 (t)



Source: Compiled and visualized by the author using survey data collected through PePeKo.

In general, the total amount of vegetables collected expressed in tons is significantly greater than the amount of fruits collected in 2024. This is indicated by the larger number of members engaged in vegetable collection as a primary or sole activity.

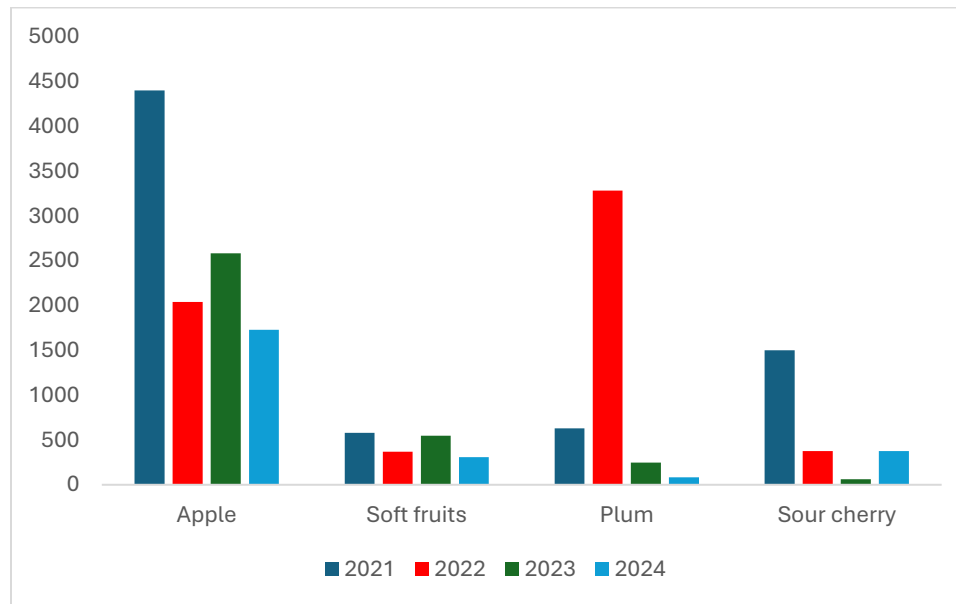
When the data across a four-year period are compared (2021–2024),¹² it can be observed that the quantities collected for most fruits have fluctuated significantly. The figure below (**Figure 22**) presents the annual quantities, in tons, of the most collected fruits by processing companies from 2021 to 2024. **Apples** consistently represent the most collected fruit, although volumes have declined over time—from **4,400 tons in 2021** to **1,731 tons in 2024**. **Soft fruits** also show a general downward trend, decreasing from **579 tons in 2021** to **310 tons in 2024**. **Plum** collection saw a dramatic peak in **2022**, reaching **3,283 tons**, while other years remained significantly lower—**630 tons in 2021** and only **82 tons in 2024**. **Sour cherry** volumes began at **1,500 tons in 2021**, dropped sharply to **375 tons in 2022**, hit a low of **61 tons in 2023**, and then returned to **375 tons in 2024**.

Overall, the data indicate considerable year-to-year variation in fruit collection, with a general declining trend across most types. These fluctuations may point to challenges in raw material

¹² PePeKo – Sectoral Study 2023 & PePeKo – Sectoral Study 2022

availability, shifting market demand, or production-related constraints faced by processing companies during this period.

Figure 22: Most Collected Fruits from 2021 to 2024 (t)



Source: Compiled and visualized by the author using survey data collected through PePeKo.

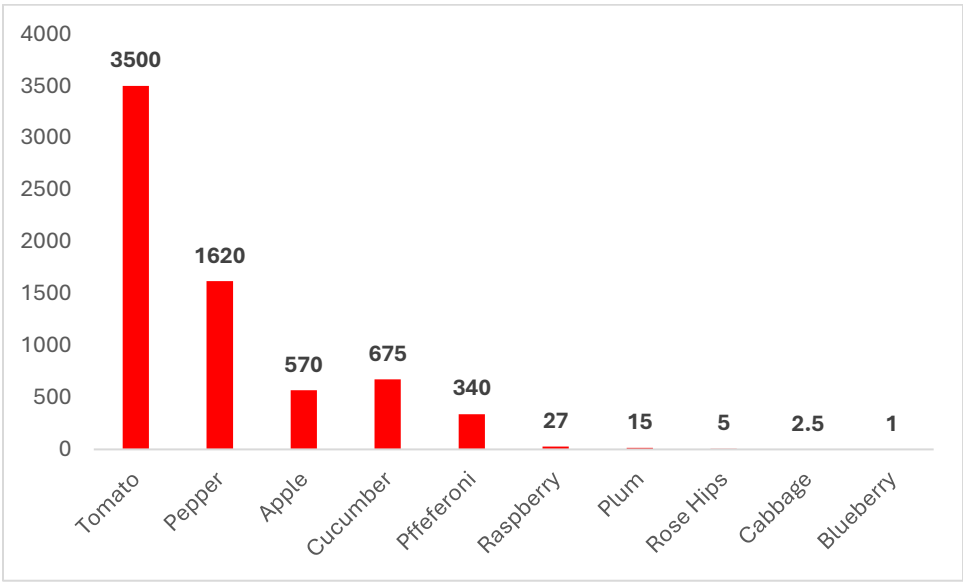
One company noted that fluctuations in fruit collection volumes are largely driven by changing consumer preferences. For instance, plum marmalade, once a top-selling product a decade ago, has seen a significant decline in demand. This shift is likely linked to **evolving diets** and **rising living standards**, which influence **consumption patterns** and product popularity over time.

Further, increasing the number of growers or expanding cultivation areas is crucial for the sustainability of the agricultural value chain. By broadening the base of producers, companies can ensure a more stable and reliable supply of raw materials, which supports continuous production and market responsiveness. This expansion contributes to the resilience of the value chain by reducing risks associated with supply shortages and enabling farmers to increase their cultivated areas, thereby enhancing rural livelihoods and promoting economic growth.

The majority of interviewed members (88%) indicated that they need to increase the number of growers (contractors) for the crops they collect or increase the amount of collected products. Among the crops that companies aim to expand in terms of quantity, **tomatoes** top the list, with a targeted increase of **3,500 tons**, followed by **peppers** at **1,620 tons**, and **cucumbers** at **675 tons**. **Apples** are also a high-priority crop, with an intended expansion of **570 tons**, while **pfefferoni** is targeted for an additional **340 tons**. The figure below (**Figure 23**) presents the target quantities for expansion identified by the surveyed companies, reflecting their plans to increase production and collection of specific crops. Smaller, yet still notable, targets include **raspberries** (**27 tons**), **plums** (**15 tons**), **rose hips** (**5 tons**), **cabbage** (**2.5 tons**), and **blueberries** (**1 ton**).

These figures highlight a strategic focus on scaling up the production of tomatoes and peppers, while also gradually increasing the availability of a more diverse range of fruits and vegetables. This approach supports the sustainability and resilience of the value chain by ensuring a broader and more secure supply base.

Figure 23: Company-Reported Needs for Product Expansion (t)



Source: Compiled and visualized by the author using survey data collected through PePeKo.

Contracts with Suppliers for Raw Materials

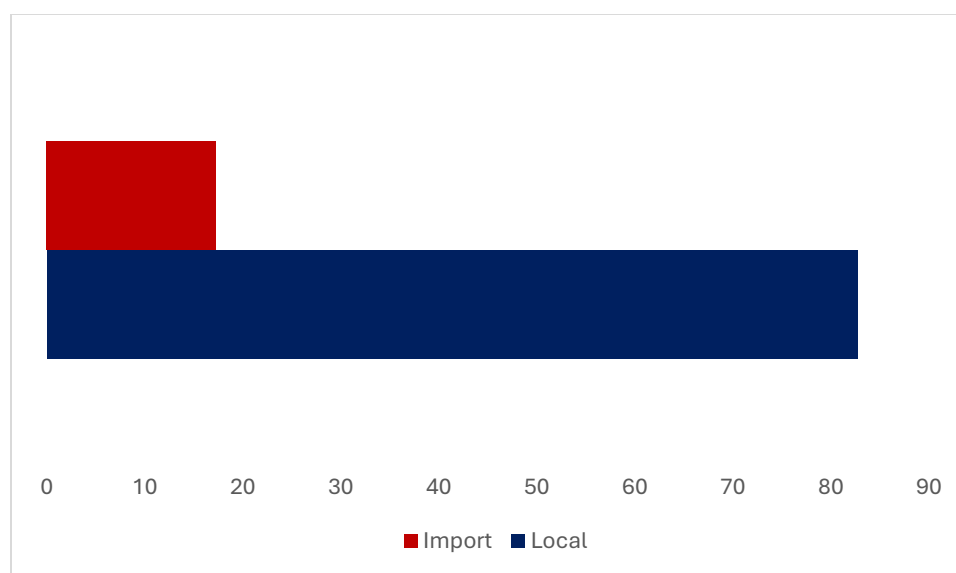
Raw materials and their supply are fundamental to the operations of this sector, directly affecting the **stability of the supply chain** and the continuous fulfillment of product demand.

Sourcing raw materials from local producers enhances quality control, reduces transportation costs and time, and supports the economic development and growth of the country. However, the capacities of local producers are currently insufficient to fully meet the sector's needs. According to the Agricultural Household Survey (KAS, 2023), in 2022, the area planted with vegetables in Kosovo was 19,571 hectares, producing a total of 295,802 tons of vegetables. In contrast, both the cultivated area and production volume for fruits were lower, with 10,619 hectares planted and 75,713 tons produced.

To cover the sector's demand, the interviewed members reported that part of their raw material supply must come through **imports**. The majority of respondents rely also on import to fulfill their demand for raw materials (about 64%). Only one third of the companies (36%) source their raw materials solely from local suppliers.

However, on average, in terms of amount, **83% of the raw materials is sourced locally**, while the remaining 16% is sourced from imports.

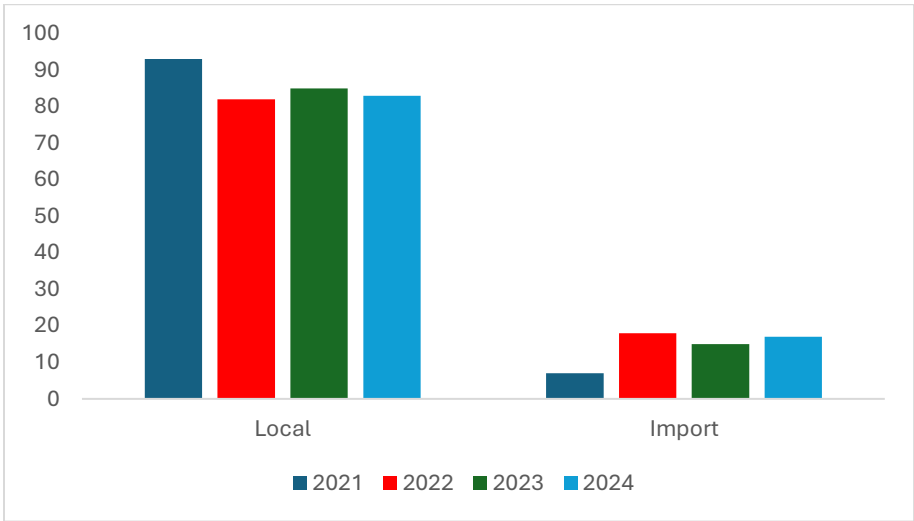
Figure 24: Types of Raw Material Sourcing in 2024 (%)



Source: Compiled and visualized by the author using survey data collected through PePeKo.

The figure below shows the sourcing trends of raw materials by processing companies from 2021 to 2024, distinguishing between local and imported supplies. Throughout this period, the **majority of raw materials have consistently been sourced locally**, accounting for between 82 and 93 percent each year. However, there is a gradual increase in the share of imported raw materials, rising from 7 percent in 2021 to 17 percent in 2024. This indicates a growing reliance on imports, possibly due to limitations in local supply or changing production needs, while local sourcing remains the primary source for raw materials in the sector.

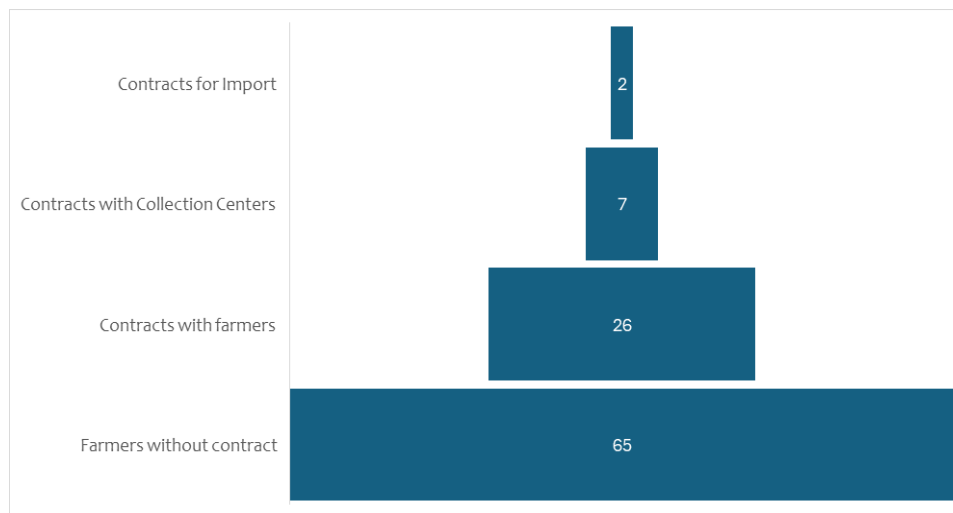
Figure 25: Types of Raw Material Sourcing 2021- 2024 (%)



Source: Compiled and visualized by the author using survey data collected through PePeKo.

The total number of contracts that these members had with suppliers in 2024 is 1,569. The majority of these contracts are with **farmers**, both formal and informal, while a smaller portion consists of contracts with collection centers and import suppliers. **Figure 26** presents the distribution of contracts with suppliers by type, expressed as percentages.

Figure 26: Share of Supplier Contracts by Type in 2024 (%)



Source: Compiled and visualized by the author using survey data collected through PePeKo.

The majority of contracts reported by the surveyed companies are with farmers **without formal agreements**, making up the largest share at **65%**. These are typically **informal, verbal arrangements** that are still considered "contracts" by the enterprises. **Contracts with farmers (formal agreements)** represent **26%**, while **contracts with collection centers** account for **7%**. The **smallest share** comes from **contracts for import**, which constitute only **2%**. It is important to note that **half of the interviewed companies (50%)** also produce raw materials themselves, either partially or entirely, which reduces their reliance on external sourcing.

Additionally, many companies rely on **long-standing, trust-based relationships** with farmers, built over time through **verbal agreements rather than written contracts**. As one respondent noted, "We have been working together for years based on mutual trust." In fact, three types of contracting practices are commonly used in the industry: **formal contracts**, **verbal agreements**, and **ad-hoc sales**. Several companies emphasized that formal contracts with farmers are often ineffective, as farmers may not honor them if market prices shift—choosing instead to sell their products elsewhere. This has led to the widespread belief that **written contracts do not function well in Kosovo's context**, with most businesses preferring **oral arrangements** they consider more realistic and flexible.

These informal arrangements, though not legally binding, play a **significant operational role** in the sector's supply chain and are treated by companies as a **pragmatic adaptation** to the realities of the local agricultural market.

The table below details the number and type of contracts used by processing companies to source their products from 2021 to 2024. The **total number of contracts peaked in 2022 at 2,356**, before declining significantly to **989 in 2024**. **Contracts with farmers** were highest in **2023 at 1,291**, following a slight dip in 2022 (1,022), before sharply decreasing to **328 in 2024**. This decline may reflect the long-standing trust built over the years, reducing the perceived need to renew formal contracts. The number of **farmers without contracts** was also highest in **2022 at 1,246**, but declined to **515 in 2024**, suggesting some level of progress in formalizing supplier relationships, though informal sourcing remains significant. **Contracts with collection centers** decreased from **46 in 2021 to 0 in 2023**, but then rose again to **112 in 2024**, indicating renewed efforts to consolidate and professionalize sourcing through intermediaries. **Contracts for import** remained modest throughout the period, starting at **42 in 2021**, dropping to **0 in 2023**, and slightly recovering to **34 in 2024**. Overall, the data show fluctuating dynamics in sourcing strategies, with a notable decrease in total contracts and formal agreements with farmers in 2024. At the same time, the renewed use of collection centers and steady levels of informal procurement suggest a hybrid sourcing model shaped by seasonal, market, or supply-side pressures.

Table 1: Type of supplier contract by number and year

Type of contract	2021	2022	2023	2024
Total No. of Contracts	1701	2356	2340	989
Farmers without contract	604	1246	978	515
Contracts with farmers	1097	1022	1291	328
Contracts with Collection Centers	46	41	0	112
Contracts for Import	42	30	0	34

Source: Compiled by the author using survey data collected through PePeKo & earlier datasets.

While the number of contracts has decreased, overall formality in sourcing agreements has increased. The reduction in contract quantities with farmers and collection centers mainly

reflects **long-standing collaborations**. According to qualitative data, these enduring relationships have built strong trust between parties, making formal contract signing less necessary—particularly between companies, collection centers, and large-scale farmers.

Regarding partnerships with other farmers, some companies reported that formal contracts are often seen as unnecessary because they are frequently not honored by the farmers. Farmers tend to sell their products to the highest bidder, even when they have active contracts with the processing companies. This behavior highlights challenges in enforcing agreements and suggests a need for improved contract management and trust-building measures to secure more reliable supply chains.

Local market

The **primary local market** for the surveyed companies consists of **supermarket chains**, which serve as the **main distribution channels**, particularly for larger processors, due to the **high sales volumes** they generate within the domestic market. In addition to these large retailers, many companies also supply **smaller retail stores**, predominantly within their own municipalities, ensuring **local accessibility and brand presence**. A notable portion of sales also takes place through the **gastronomy sector**, with **fast food outlets, pizzerias, and restaurants** representing important customers for these producers. Moreover, several **smaller processors** reported selling directly to **individual consumers** from their homes, especially products like **pickled vegetables, ajvar, and feferoni**, which are often purchased in bulk. Some companies also use **social media platforms such as Facebook and Instagram** to facilitate direct sales, reaching customers beyond traditional retail points. One of the interviewed businesses has even established **two retail stores of its own**, demonstrating a **direct-to-consumer model** that complements its traditional distribution network.

These findings highlight the **diverse strategies** used by companies to access the local market—ranging from large-scale retail partnerships to informal, community-based and digital sales channels.

Long-term agreements with local market sellers are another important aspect for these companies, as they support pricing strategies and help ensure a steady supply of their products. In 2024, the total number of contracts that these members have in the local market is 4,050. **Two-thirds (75%) of these contracts are with retail stores**, while the remainder are with wholesale traders and supermarket chains. Only a small portion of the contracts are with distributors.

The attached figure (**Figure 27**) illustrates the distribution of local market contracts by type. It clearly shows that retail stores account for the vast majority of contracts, followed by wholesale traders. Contracts with supermarkets are relatively few, and there are almost no contracts with distributors.

Figure 27: Number of Contracts in the Local Market by Market Type in 2024



Source: Compiled and visualized by the author using survey data collected through PePeKo.

Although retail stores represent the majority in terms of the number of contracts, **supermarket chains dominate the market in terms of sales volume**. In 2024, the total number of contracts in the local market decreased 53% compared to 2023.¹³ The main reason for the decline in the number of contracts may be that most formal agreements are with large

¹³ PePeKo – Sectoral Study 2023

supermarket chains in the local market, while the majority of sales to other buyers are conducted without contracts.

In terms of competition in the local market, companies report facing **intense competition in the domestic market**, particularly from **foreign producers**. The **main competitors are international companies**, primarily from **Serbia and North Macedonia**. Although these imported products often do not offer superior quality, they tend to **enter the market at significantly lower prices**, creating a pricing pressure that local producers struggle to match. Respondents consistently identified **Serbia and North Macedonia** as the **leading sources of competition**, especially in retail segments. This dynamic has positioned foreign producers as important players in the local market, challenging the competitiveness and market share of domestic processing companies.

Export Market

Export market is the main market for most of the surveyed companies. Even for the future, their focus is to expand their export market, and rather lessen their efforts on the local market. In 2024, **about two thirds (68%) of respondents export their products**.

Figure 28: Share of Companies Engaged in Exporting in 2024 (%)



Source: Compiled and visualized by the author using survey data collected through PePeKo.

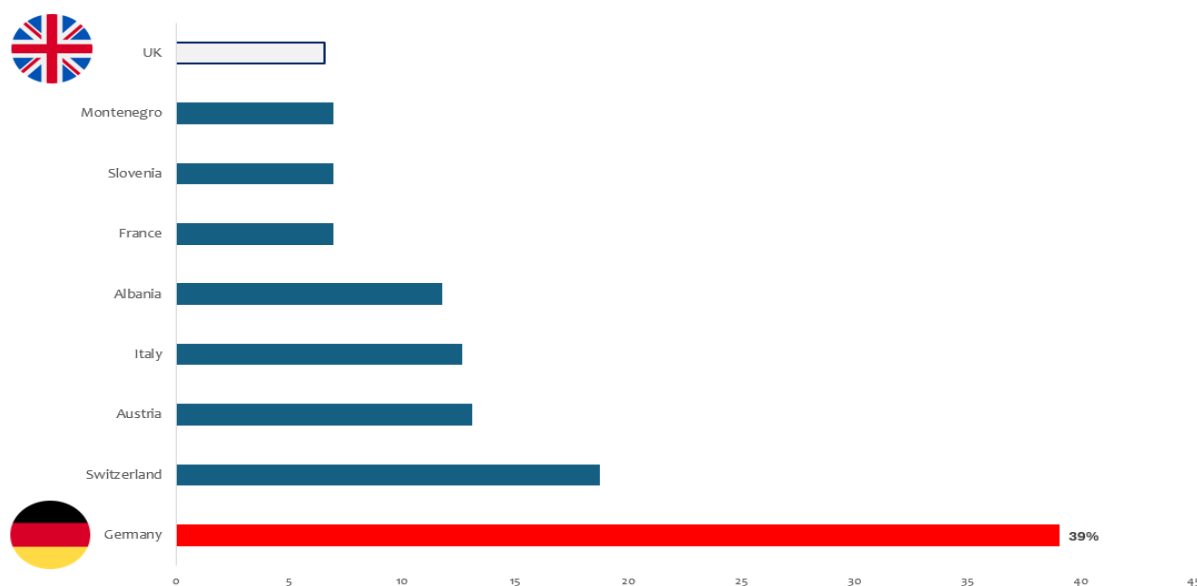
Exports are primarily carried out by larger companies, as smaller producers typically do not engage in export activities. In total, association members hold 100 contracts with foreign markets in 2024. This reflects a continued downward trend compared to previous years—137

contracts in 2022 and 168 in 2023.¹⁴ Even though, the decline may indicate challenges in maintaining international partnerships or reduced export demand; however, this is not the case as there are cases also in export, where there are no contracts between parties, due to long-term partnership, trust and the built relationship throughout the years.

The analysis of export destinations, based on combined responses from the surveyed companies, shows a clear concentration of exports toward Western and Central European markets. **Germany** emerges as the **dominant export destination**, accounting for **39.1%** of the total reported share. This is followed by **Switzerland** with **18.7%**, **Austria** at **13.1%**, and **Italy** at **12.6%**, highlighting a strong regional focus on **German-speaking** and neighboring EU countries.

Albania also represents a significant export market, comprising **11.8%** of the total share, suggesting a notable level of regional trade within the Western Balkans. Other destinations with smaller, yet relevant shares include **France**, **Slovenia**, and **Montenegro**—each contributing **7%**—as well as the **United Kingdom**, which accounts for **6.5%** of total exports (see **Figure 29** below).

Figure 29: Main Export countries by share of exports in 2024 (%)



Source: Compiled and visualized by the author using survey data collected through PePeKo.

¹⁴ PePeKo – Sectoral Study 2023 & PePeKo – Sectoral Study 2022

These results underline the sector's strong orientation toward established European markets, particularly **Germany and Switzerland**, which consistently appear across company export strategies as primary or secondary destinations. At the same time, the presence of markets such as **Albania, the UK, and Montenegro** suggests opportunities for maintaining and diversifying regional and diaspora-linked trade channels.

In terms of **competition**, companies report that **there is no real competition in export markets**; competition is primarily concentrated to the domestic market. However, export activities among surveyed companies are largely concentrated in **German-speaking countries**, particularly **Germany, Austria, and Switzerland**. This is primarily due to the **high number of migrants from the Balkans** residing in these countries, especially **Albanian-speaking communities**, who maintain strong demand for traditional food products. Respondents noted that these markets feature **numerous Balkan-owned businesses**, including **restaurants, pizzerias, fast food outlets, and butcher shops**, which serve as key distribution points for their products.

Another important factor is the **shared food culture** between producers and consumers in these destinations. Products like **pickled vegetables “turrshi”, ajvar, and feferoni** are well understood and appreciated in these communities. Interviewees emphasized that their products are primarily consumed by people from the Balkans due to **similar culinary traditions**, but in recent years, they've also seen growing interest from **Western European consumers**, including **Germans, Turks, and even Arab communities**. This emerging cross-cultural demand, particularly for pickled products, is expanding the potential of these export markets beyond diaspora-based consumption.

Trends in Sales and Export Expansion

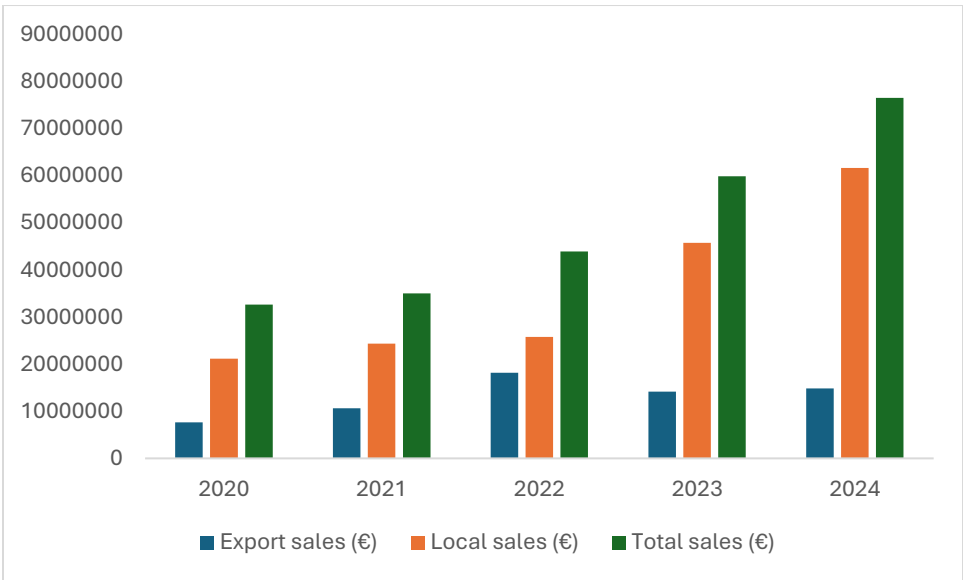
The total sales of the surveyed companies have shown consistent and significant growth over the past five years. In **2020**, total sales amounted to **€32.65 million**. This figure increased by **7.2%** in **2021**, reaching **€34.99 million**. The growth continued in **2022**, with sales rising by **25.5%** to **€43.92 million**. The most substantial increase occurred in **2023**, when total sales jumped by

36.4% to €59.91 million. In 2024, the upward trend persisted, with total sales reaching €76.50 million, marking an additional 27.7% increase compared to the previous year.¹⁵

This strong performance has been driven by steady growth in both **local** and **export sales**. **Local sales** consistently made up the majority of total revenue, increasing from €21.1 million in 2020 to over €61.7 million in 2024—almost tripling within five years. This trend highlights growing domestic demand for processed fruit and vegetable products, likely supported by improved distribution networks and consumer preferences for local goods. At the same time, **export sales** have also seen a positive trajectory, rising from €7.65 million in 2020 to €14.83 million in 2024. This nearly twofold increase reflects the sector’s expanding presence in regional and Western European markets, as companies continue to diversify their export destinations and respond to international demand.

Overall, these figures demonstrate a dynamic and rapidly growing sector, with robust gains in both domestic and international markets. The figure below illustrates the evolution of **local sales**, **export sales**, and **total sales** from 2020 to 2024.

Figure 30: Local, export and total sales for the period 2020-2024 (€)



Source: Compiled and visualized by the author using survey data collected through PePeKo.

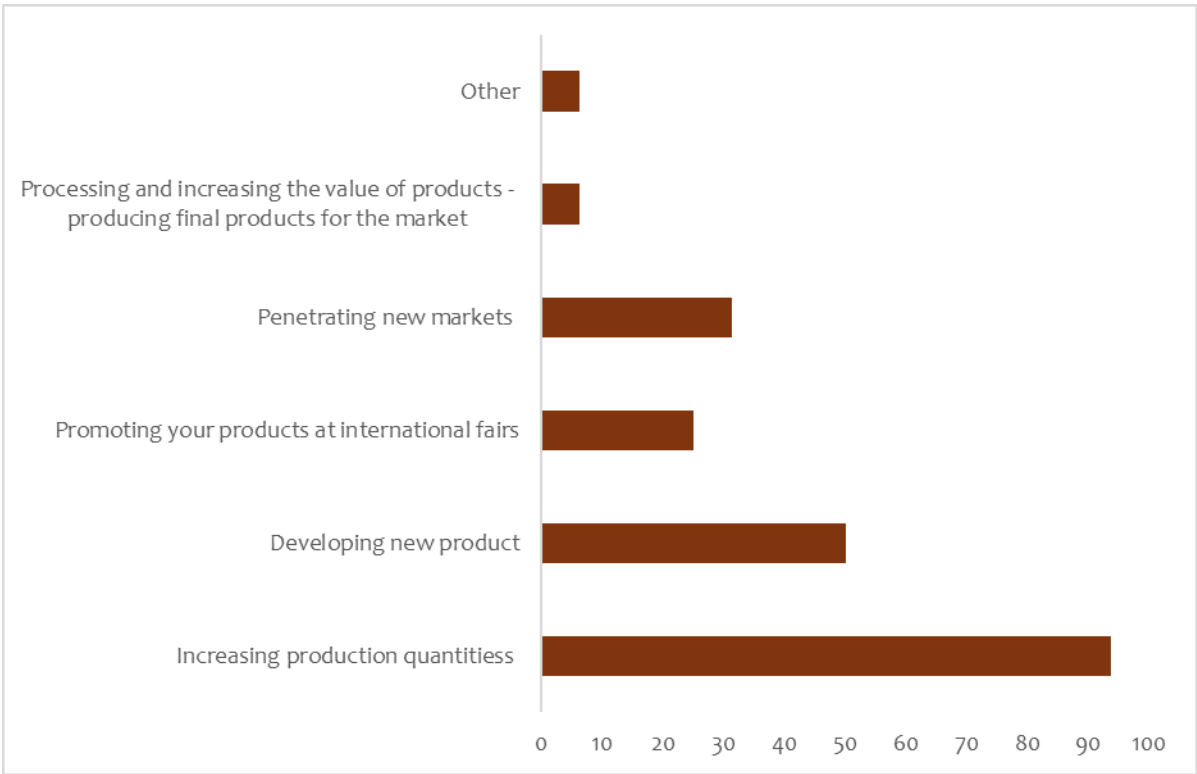
¹⁵ PePeKo – Sectoral Study 2023

Sales have been steadily increasing year by year, driven primarily by rising demand in export markets, but also supported by growing consumption and interest within the local market.

Based on the interviews conducted, the majority of companies (94%) expect to increase their current exports, both in quantity and value, by entering new markets over the next three years. In contrast, only 6% stated that they were not sure whether they can anticipate such growth.

Companies plan to achieve this increase primarily by boosting their production volumes-a strategy chosen by almost all of the interviewed companies (94%), followed by developing new products (50%), penetrating new markets (31%) and promoting products at international fairs (25%), as per results shown in **Figure 31**.

Figure 31: Planned Strategies for Production Growth in 2025 (% of Yes/No Responses)



Source: Compiled and visualized by the author using survey data collected through PePeKo.

Only in 6 percent of cases do they plan to increase the value of their products, of production as a final product.

Investments and plans

Investment and planning are critical pillars for ensuring the sustainability and long-term growth of the sector. They enable technological advancement, infrastructure improvement, and the ability to adapt to changing market conditions. Without strategic investment and forward-thinking planning, companies may struggle to stay competitive and respond effectively to evolving demands.

Since the establishment of the interviewed companies, total reported investments have reached approximately **€62.11 million**, with individual investment amounts ranging from a **minimum of €40,000** to a **maximum of €20 million**. The **average investment per company** stands at around **€2.48 million**. In **2024 alone**, member companies reported a total investment of **€5.3 million**, with values per company ranging from **€5,000** to **€2 million**. These figures reflect continued commitment among producers to invest in the growth and modernization of their operations, although the variability in investment size suggests differing capacities and strategies across member companies.

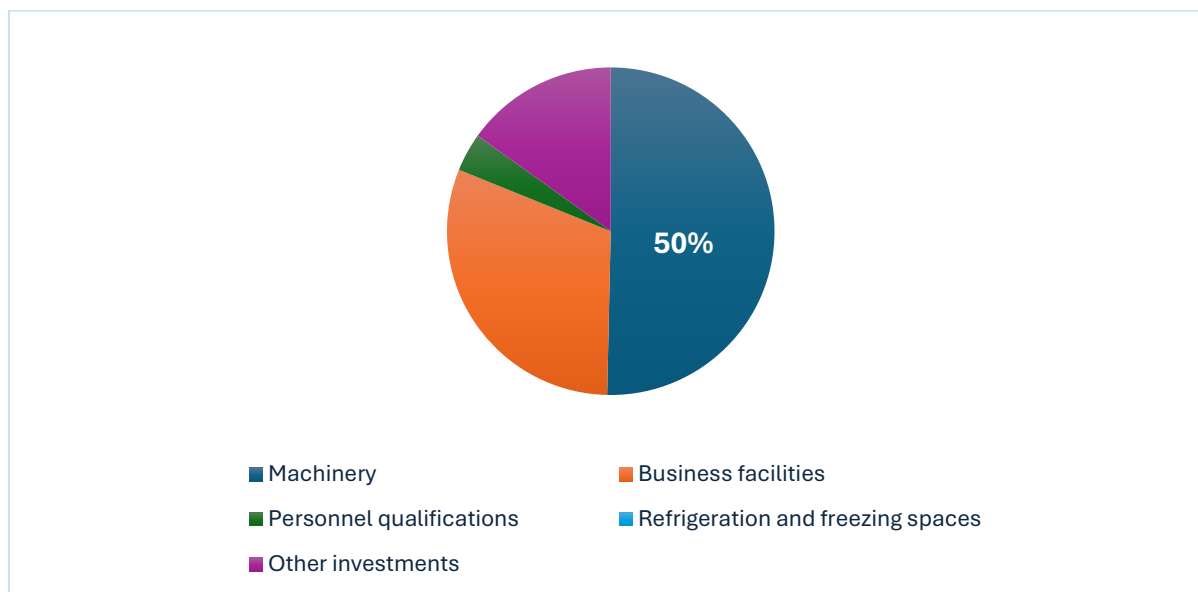
In 2023, the total value of reported investments was **€4,352,000**,¹⁶ which is **21% lower** than the amount recorded in 2024. The increase observed in 2024 may be attributed to ongoing investments aimed at expanding production capacities, operational space, and the range of processed products.

In 2024, the majority of investments by member companies were directed toward **machinery**, accounting for **50%** of the total investment volume. This was followed by **business facilities** at **31%**, **other investments** at **15%**, and **personnel qualifications** at **4%**. Notably, there were **no reported investments in refrigeration and freezing facilities**, indicating limited focus on post-harvest infrastructure for this year (see

Figure 32 below). This could be due to the fact that most investments on this infrastructure have been implemented on the previous years.

¹⁶ PePeKo – Sectoral Study 2023

Figure 32: Distribution of Investment Amounts for 2024 as a share of total Investment Amount (%)



Source: Compiled and visualized by the author using survey data collected through PePeKo.

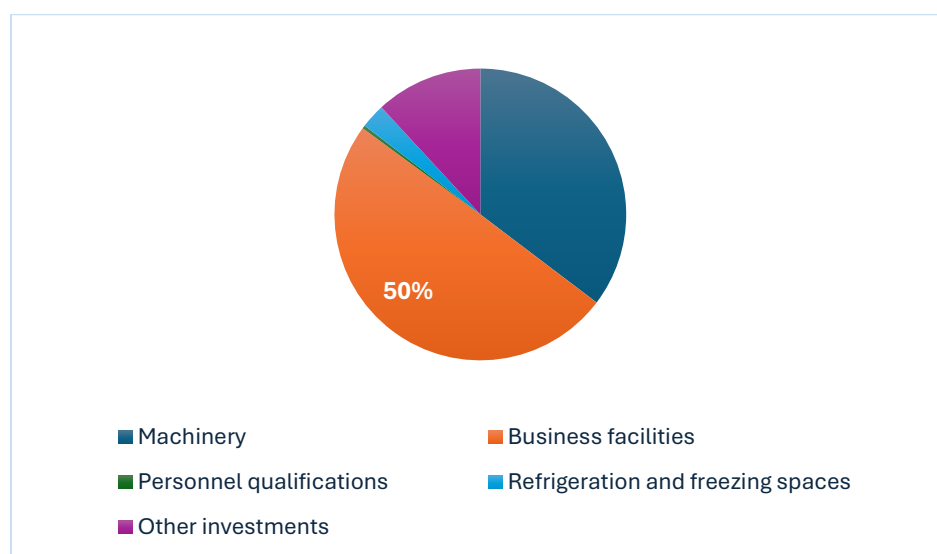
Other investments mainly include offices for administration, raw material, greenhouses, ventilation, floor, marketing, transport vehicles and investments on land purchases.

Looking ahead to 2025–2026, the total planned investments for the period 2025–2026 are expected to exceed **€11 million**, marking a **79% increase** compared to the projected investments for 2024–2025.¹⁷ This upward trend reflects growing confidence and ambitions among companies to expand operations, modernize equipment, and explore new market opportunities. However, compared to previous years, the structure of planned investments shows a noticeable shift in 2024. While **business facilities** now take the lead—absorbing **49.75%** of total planned investments—**machinery** remains a significant focus, accounting for **35.31%**. This redistribution suggests a growing interest among companies in expanding or upgrading their operational spaces, while still prioritizing equipment modernization. Other categories receive relatively smaller shares: **refrigeration and freezing infrastructure** account for **2.71%**, and **personnel qualifications** remain notably underfunded, with only **0.36%** of

¹⁷ PePeKo – Sectoral Study 2023

planned investments allocated to training. **Other types of investments** make up **11.87%**, continuing to reflect a meaningful share in diversified capital spending plans (see **Figure 33**). These figures suggest a broadening of investment priorities beyond machinery, with increased attention to infrastructure and auxiliary needs within the processing sector.

Figure 33: Distribution of Planned Investment Amounts for 2025-26 as a share of total Investment Amount (%)



Source: Compiled and visualized by the author using survey data collected through PePeKo.

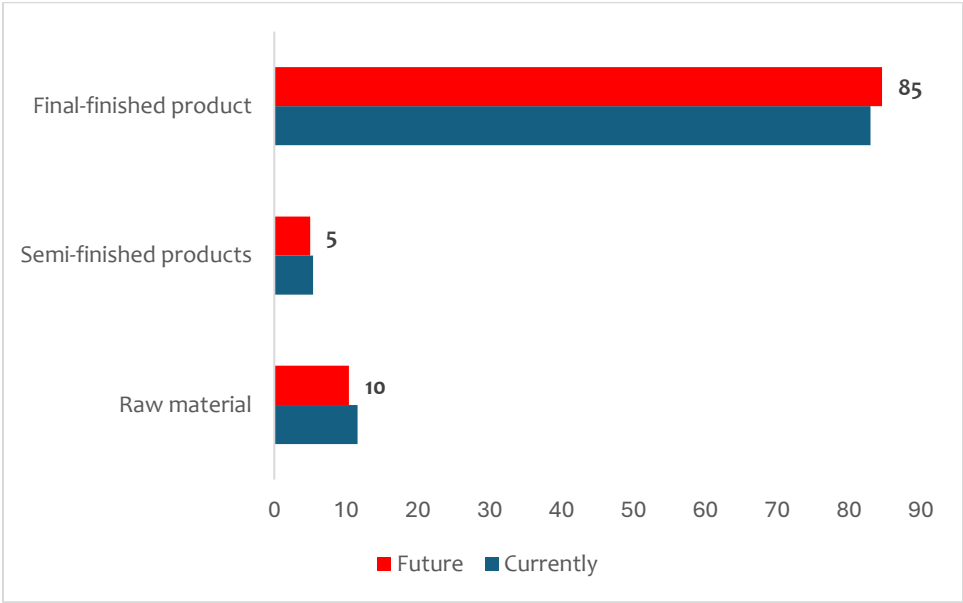
From the qualitative interviews, the main investments planned by companies for the coming years include **purchasing new processing equipment**, such as **machines for removing vegetable stems**, as well as **investments in new production and processing lines**. Additionally, several companies indicated plans to **upgrade or expand their freezing storage facilities** and to **increase the physical size of their factories** to accommodate higher production volumes.

Modes of Product Sales

Analyzing the forms in which products are sold provides valuable insights into companies' market strategies and helps inform future distribution planning. In this sector, the majority of products—**approximately 83%**—are currently sold as **final products**, a share that is expected to increase to **85%** in the coming years. Around **12%** of products are currently sold as **raw materials**, with this share projected to drop to **10%** (see **Figure 34**).

Only 5% of surveyed members currently sell their products in **semi-processed form**, and this share is expected to stay the same in the future.

Figure 34: Forms of Product Sales (%)



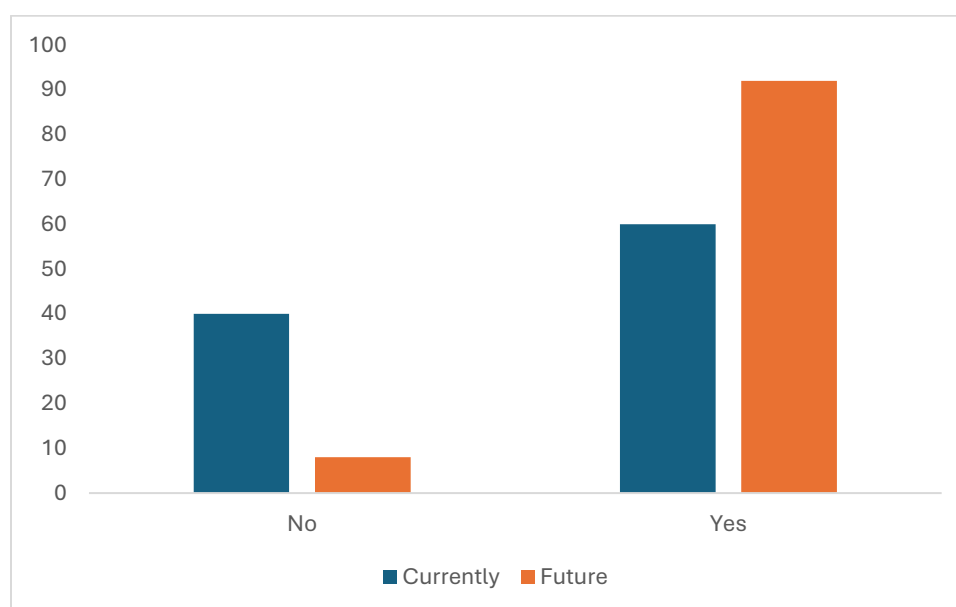
Source: Compiled and visualized by the author using survey data collected through PePeKo.

The analysis revealed a significant divide among companies when it comes to **private label sales**—selling their products for other companies under a different brand. Currently, **60%** of companies provide private label sales, while **40%** do not (**Figure 35**). This is an increase of 4 percentage points, compared to **56%** in 2024.¹⁸

Looking ahead, opinions remain clear on using private label sales: **92%** of respondents indicated interest in adopting private label sales in the future, while the other **8%** stated they do not plan to pursue this approach. This signals an evolving understanding and openness toward alternative branding and marketing strategies within the sector.

¹⁸ PePeKo – Sectoral Study 2023

Figure 35: Private label sales in 2024 and in the future (%)



Source: Compiled and visualized by the author using survey data collected through PePeKo.

Product Promotion and Lobbying Activities

Participation in promotional events has been an important part of marketing strategies for the companies surveyed. The vast majority (**92%**)¹⁹ of members reported engaging in promotional activities, with **84%** having participated in **fairs**, **64%** participated in **B2B meetings**, **28%** participated in **sales missions**, and about 4% in other promotional activities (**Figure 36**).

International trade fair participation included events in **France, Germany, UK, Italy, Greece, Turkey, and Dubai**. Most participation was **self-financed**, although some companies received support from organizations such as, **PePeKo, USAID, GIZ** and **KIESA**. Domestically, companies participated in events like **Agrokos**, the **Food Sector Forum in Pristina**, and different small municipal fairs.

Participation in promotional events and fairs varies significantly across companies, particularly between small and large producers. **Small producers mainly attend local or municipal fairs**, which offer limited exposure but serve as accessible platforms. Among the more notable

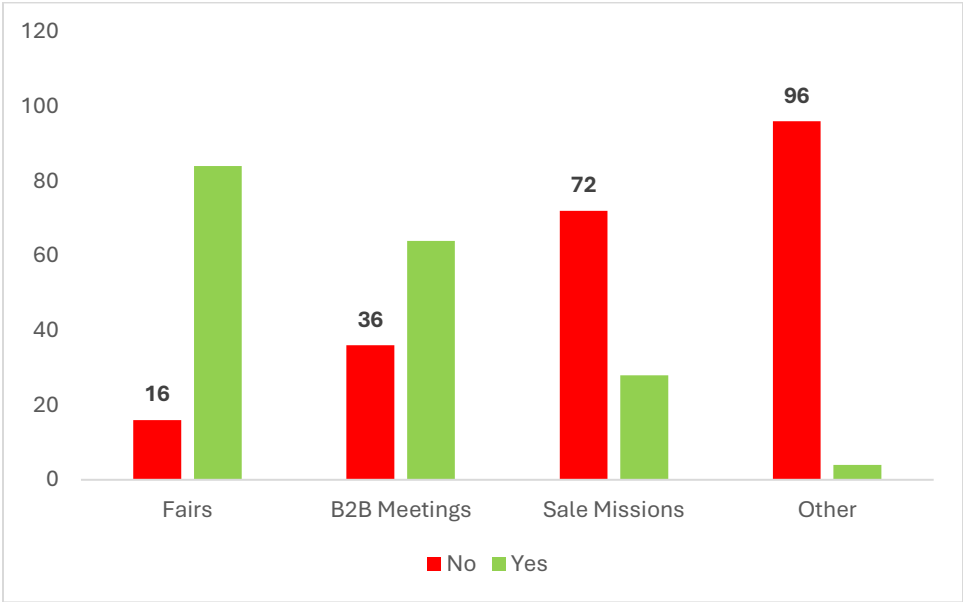
¹⁹ Two (2) interviewed companies have not participated in any event.

events, the **Food Forum organized by PePeKo** was frequently mentioned. Companies highlighted its usefulness in creating **new contacts, opportunities to share product samples,** and in some cases, establishing **new sales channels.** Most companies had either **heard of or participated in the Food Forum,** which stands out as a more **structured and impactful initiative.**

In contrast, **participation in other fairs and trade missions appears largely ad hoc,** with no clear strategy or planning in place. Many companies struggled to recall the names of past events they had attended, suggesting a **lack of structured follow-up or engagement.** This same unstructured approach was noted for **sales missions,** which similarly lacked long-term planning or defined objectives.

Overall, the participants tend to note that the Food Sector Forum fair and the international fairs have yielded better results for them, especially in terms of finding new buyers, making contacts, and contracting future sales.

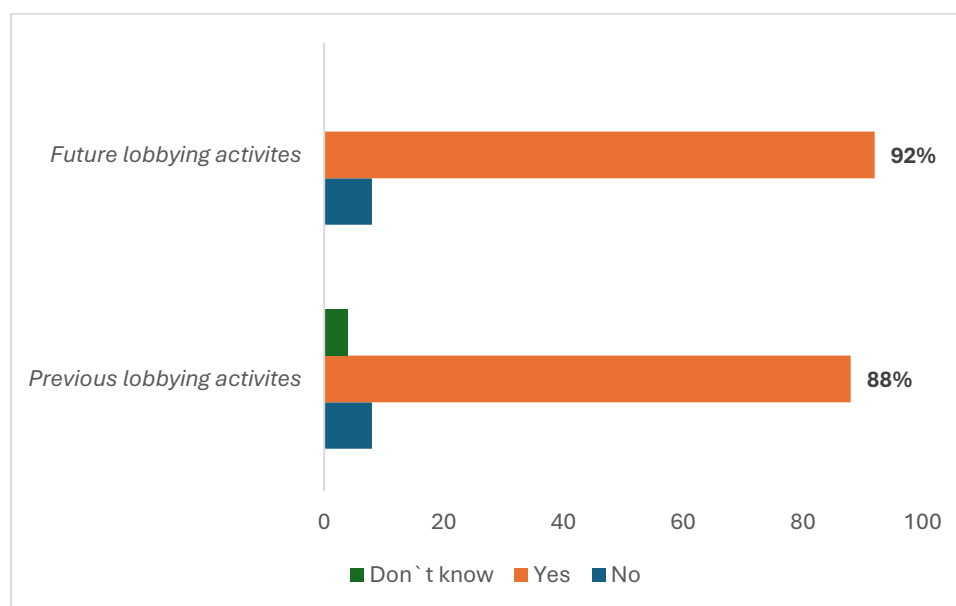
Figure 36: Participation in promotional events in 2024 (%)



Source: Compiled and visualized by the author using survey data collected through PePeKo.

Going further, when asked whether they believe there have been lobbying or advocacy efforts in the past—and whether such initiatives should exist in the future to influence legislation or policies relevant to their field—**88% of the respondents** confirmed the existence of **past lobbying or advocacy activities**. Meanwhile, **8% stated there had been no such efforts**, and **4% were unsure**. Looking ahead, the support for future lobbying and advocacy is even stronger: **92% of respondents** believe that there **should be efforts** to influence policy and legislation in the future, while only **8% do not see a need** for such activities. The share of undecided respondents drops to zero, indicating a growing consensus on the importance of proactive engagement in policy advocacy. These results reflect a clear recognition among sector actors of the role that lobbying can play in shaping a more enabling policy environment for their work (see **Figure 37**).

Figure 37: Opinion shares on previous and future lobbying activities (%)



Source: Compiled and visualized by the author using survey data collected through PePeKo.

Based on the responses collected, the companies have provided a broad yet converging set of priorities where future lobbying and advocacy efforts should focus. A central theme is the **need for stronger fiscal and subsidy policies**. This includes demands for **quantity-based subsidies**, such as per-kilogram support for products like milk, and the **recognition of**

production losses (up to 30%) as legitimate business expenses. Companies also call for **facilitation of tax policies**, both through tax relief for producers and the removal of burdens like the **gas excise tax**.

Trade and market access also emerge as strong areas of concern. Respondents emphasize the need for **simplified export procedures**, particularly **phytosanitary certifications**, and more support in **gaining shelf space in supermarkets without excessive market margins**. There is also interest in **regulating internal trade**, especially through adjustments to the **law on internal trade** and ensuring **fair pricing structures in local markets**.

Several respondents suggest enhancing the **promotional ecosystem**, with calls for **better organization of fairs**, **preventing repeated participation by the same companies**, and **facilitating broader participation**, including **engagement with international retailers like LIDL**. Additionally, they see value in continuing platforms like the **Food Forum**, but recommend **expanding participation to include a wider variety of companies**.

Support in **capacity building and innovation** is another recurring theme, particularly in the form of **training on standards**, **access to advisory services**, and the **development of a common online platform**. There is also a clear push for **investment in infrastructure**, such as **support with equipment and greenhouses**, and stronger collaboration models, like **dual learning systems linking companies with vocational schools**.

In summary, companies are advocating for a **comprehensive lobbying agenda** that tackles **fiscal reform, trade facilitation, market access, producer protection, promotional strategies, and skills development**—with an emphasis on inclusivity and expanding collaborative platforms like the Food Forum.

Key Factors Influencing Their Development

The analysis of the responses regarding the key development drivers identified by companies reveals a consistent pattern centered around several interlinked themes. **Product quality** clearly stands out as the most frequently mentioned factor, appearing in multiple forms such as *"quality"*, *"product quality"*, *"focus on quality and food safety"*, and *"purity"*. This highlights

the industry's strong orientation towards maintaining and enhancing product standards as a cornerstone of growth.

Closely linked to this is the emphasis on **work ethic and dedication**. Many respondents cited factors such as "work", "commitment", "willingness", "dedication", and "continuous work", suggesting that internal team efforts, consistency, and perseverance have played a vital role in sustaining development.

Another prominent category includes **support mechanisms**, both external and internal. Numerous companies credited **donor support** (USAID, World Bank, and other foreign donors), **government subsidies**, and **grants** as critical enablers. Similarly, **family support** and **customer loyalty**, especially through *word of mouth*, were also recognized as instrumental contributors.

Marketing and market-related drivers were frequently mentioned as well, including *advertising, media promotion, developing a trusted brand*, and the *ability to meet market demands*. These elements show that visibility and responsiveness to consumer preferences have been essential to business success.

Additionally, **strategic investments in modern technology, cooperation with local farms, and access to raw materials**—such as blueberries—also surfaced as tangible enablers of development. Participation in **fairs, B2B meetings**, and building **networks** helped companies expand their exposure and business opportunities.

In conclusion, the development of these companies appears to be driven by a **synergy of internal strengths (quality, dedication, consistency), external support (donors, subsidies), market orientation (branding, demand responsiveness), and strategic investments (technology, raw materials, and partnerships)**. This multifaceted foundation has enabled sustained growth and provides a clear framework for future advancement.

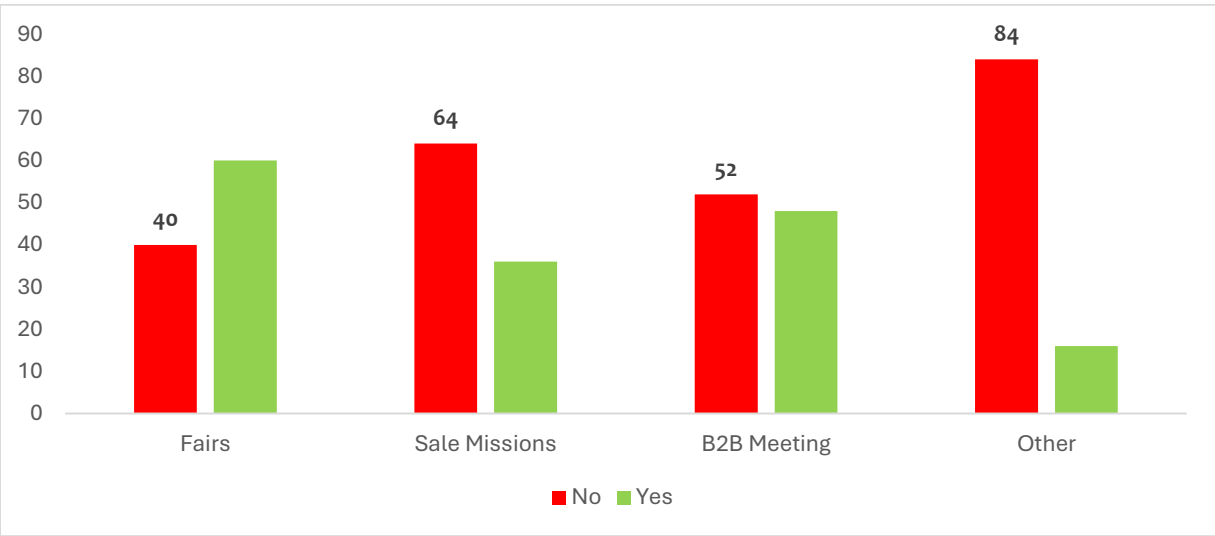
Future promotion and competitiveness

Companies find it important to discover new export markets because expanding internationally offers access to a much larger customer base, diversifies market opportunities

to reduce dependence on domestic demand, and drives growth and profitability by tapping into global revenue streams.

The results indicate that companies have differing preferences regarding the most suitable forms for finding new markets. **"Fairs"** and **"Sale Missions"** are the most divisive: 60% of companies consider **fairs** appropriate, while 40% do not; conversely, only 36% of the companies see **sale missions as suitable**, compared to 64% who do not. For **"B2B Meetings,"** opinions are more balanced, with 44% viewing them as appropriate. The most striking result is for the **"Other"** category, where only 8% of the companies consider alternative methods suitable, while a significant majority of 92% do not. Other includes study visits abroad and also state investments in huge warehouses in the most concentrated markets – countries. Overall, this suggests that traditional methods like fairs remain popular, while unconventional approaches are less favored. Overall, fairs are the most widely accepted method, and sale missions and B2B meetings are more contested, with a clear reluctance toward alternative options.

Figure 38: Most suitable channels for finding new export markets (%)



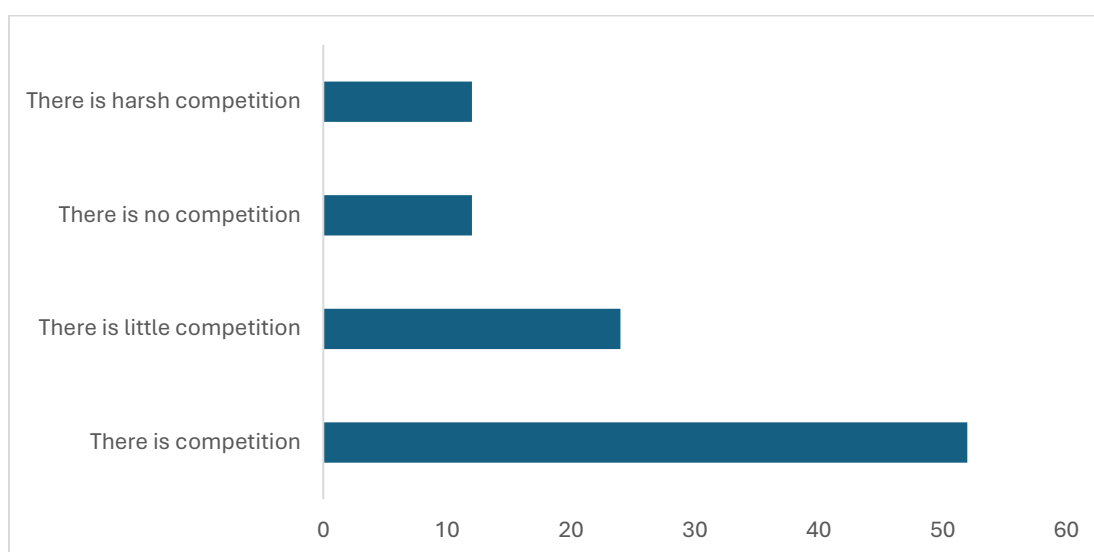
Source: Compiled and visualized by the author using survey data collected through PePeKo.

All interviewed members agree that it is important to continue using these forms of promotion and market exploration for exports.

Such collaborations have strong potential for success, as more than half of the respondents **(72%) believe their company** has sufficient capacity for exporting, reflecting their ability to manage and expand operations in foreign markets. However, 28% of members feel that their company lacks adequate export capacity. According to the responses received, the main reasons for this are the lack of appropriate technology, lack of facilities, warehouses, shortage of skilled workers and workers in general, lack of raw materials, limited processing capabilities and lack of food security standards. These findings highlight both the strengths and obstacles companies face in expanding their export activities.

In terms of perceived competition, the study results reveal that most companies **perceive a significant level of competition in their markets**. Specifically, **half of the companies - 52% of respondents indicated that there is competition**, making this the most common perception among participants. Meanwhile, 24% of companies believe there is little competition, and 12% characterize the environment as having harsh competition, suggesting that a notable portion of companies face particularly intense market pressures. Similarly, about 12% of respondents reported that **there is no competition**, indicating that such situations are relatively rare. Overall, the data demonstrates that competition-ranging from moderate to harsh-is a prevailing feature for the majority of companies surveyed (see **Figure 39**).

Figure 39: Opinions on competition (%)



Source: Compiled and visualized by the author using survey data collected through PePeKo.

Members also reflected on their perception of the main source of competition in the market. More than half of them (68%) think that the main competitors are international companies, while the rest (20%) think that their main competitors are local companies, while 12% of the respondents think that type of companies – local and international companies constitute the main source of competition for them.

Challenges & Constraints Faced by Processors

The survey results reveal a broad set of challenges faced by companies in their efforts to further develop, with several key themes consistently emerging across responses. **Human resources shortages**, particularly the lack of skilled or available **workers**, stand out as the most frequently cited challenge. Businesses note difficulty in finding qualified staff, especially during peak seasons, and report issues with warehouse and point-of-sale workers, technologists, and collaboration with traditional local farmers. This labor shortage is not only a barrier to day-to-day operations but also limits long-term growth and scalability. **A critical gap** identified by several companies is the severe **lack of skilled machinery technicians in Kosovo**. Respondents explained **that when machinery breaks down, they are often forced to send equipment to Serbia for repair or wait for technicians from Serbia or Turkey to arrive**. This dependence on external service providers causes costly **delays** and highlights a major structural weakness in local technical support capacity.

Another major theme is the **lack of adequate infrastructure and space**. Many companies struggle with **insufficient processing and storage capacity**, lack of modern equipment and machinery, and **limited physical space** to expand operations. These logistical bottlenecks are compounded by **inconsistent electricity supply** and outdated technology, which affect production efficiency and product quality.

Financial limitations are also common. Firms report a **lack of financial resources** both for daily operations and for larger investments, such as capacity expansion and technological upgrades. Access to financing, particularly during the startup phase, remains a critical hurdle.

On the **market side**, companies express concern over **market instability, competition**—especially from regional markets like Serbia and Turkey offering lower prices—and **high fees**

imposed by local supermarkets. Additionally, unfamiliarity with **European markets**, difficulties in distribution, and **seasonal production cycles** further restrict their ability to reach and sustain broader market access.

The local market also presents significant **financial and operational challenges, particularly regarding delayed payments from large supermarket chains**—often the only buyers with formal contracts. Interviewed companies consistently reported that **payment delays are a major issue**, with funds for delivered goods sometimes withheld for extended periods. In stark contrast, **export transactions are described as far more reliable**, with part of the payment typically made in advance and full payment for shipments completed before dispatch. Beyond delays, **supermarkets impose substantial additional costs**, including **bonuses of up to 15%**, deductions for **annual product losses (around 5%)**, and payments ranging from **€5,000 to €7,000 for store anniversaries** or **premium shelf placement fees**. These practices significantly erode profitability and increase the financial burden on local processors. As several respondents noted, **it is rare to find a local retail chain that does not present payment or cost-related issues**, making the domestic retail environment one of the most challenging aspects of doing business.

Raw material availability is another recurring issue. Respondents highlighted **inconsistent supply** of key inputs such as peppers, as well as **fluctuating quality of inputs**. This shortage is often linked to **climatic conditions**, including natural disasters like hail and reduced production caused by weather variability, underlining the sector's vulnerability to environmental factors.

Lastly, climate variability and extreme weather events have emerged as increasingly significant challenges for processors, particularly those who also cultivate their own raw materials. Several respondents highlighted that **climate change has become a growing concern in recent years**, directly impacting harvest volumes and production reliability. For example, in **2023**, one company reported a **significant drop in pepper quantities due to excessive rainfall**, which disrupted the harvest season. Another producer, who is also a primary cultivator, emphasized that **hail has become a major annual threat**, frequently

damaging crops and increasing financial risk. Companies also noted that **the quantity of key vegetables, such as peppers, fluctuates considerably from year to year**, underscoring the sector's vulnerability to climatic conditions and the urgent need for better risk mitigation strategies.

Also, another recent emerging challenge is the **new energy billing structure and the requirement to transition to an open energy market**, which could pose a substantial burden for many processors. Interviewees expressed concern that **the new electricity pricing model** may result in **higher operational costs**, particularly for energy-intensive activities like freezing, refrigeration, and processing. The anticipated shift toward a more liberalized market—while potentially beneficial in the long term—was perceived as **a short-term risk**, especially for small and medium-sized processors that may lack the financial flexibility or technical capacity to adapt quickly to such regulatory changes.

Finally, a number of companies pointed to **institutional shortcomings**, such as a **lack of stimulating policies**, weak innovation support, and limited backing from **state institutions**.

Opportunities for Growth & Innovation

The fruit and vegetable processing sector in Kosovo demonstrates **strong potential for future growth and innovation**. Through qualitative interviews with industry representatives, three key dimensions have been identified as strategic priorities: **value-added products**, **market diversification**, and **sustainability**. Each of these areas holds untapped opportunities for strengthening competitiveness, expanding market reach, and improving resilience in the long term.

Potential for Value-Added Products

Many companies report that demand for **processed products is increasing**, particularly in both domestic and export markets. However, the sector has yet to fully exploit its potential for product diversification and innovation. Most companies **currently offer similar or overlapping product lines**, and in some cases, they simply replicate one another's offerings rather than developing differentiated products. Respondents emphasized the need to

introduce **new products** and adapt to **changing consumer preferences**, especially among **younger generations**. For instance, some interviewees noted that demand for traditional products like marmalade has declined, pointing to a shift in eating habits and market expectations. To remain competitive, companies will need to align their production with emerging **taste preferences** and develop **value-added products tailored** to evolving **market needs**.

The industry also sees opportunities to expand existing product categories. Products such as **pickled cucumbers** and **fresh vegetables for export**, as well as **Ajvar**, were cited as high-potential items with strong export appeal. Companies also recognize the importance of being prepared to develop new products beyond traditional Balkan or diaspora-targeted goods, particularly if they wish to penetrate broader international markets. Overall, the findings suggest that the diversification of product lines is far from exhausted, and that innovation in this area can serve as a key driver of growth and market differentiation.

Market Diversification Strategies

The interviews revealed that most companies currently pursue **market access on an ad hoc basis**, often without a **structured export or distribution strategy**. As a result, they tend to target the same countries and customer segments, primarily in Western Europe and the Western Balkans, and rely heavily on **diaspora demand**. However, there is recognition that **individualized strategies** tailored to **different markets** could offer a **competitive edge**. Companies see value in developing distinct marketing and sales approaches for various export destinations, particularly as they aim to reach new customer segments beyond diaspora communities. Developing more **targeted, data-informed market entry strategies** will be essential for reducing reliance on a few select countries and for unlocking access to **high-value markets**.

Sustainability

Sustainability remains an underdeveloped area in the sector, but also one with substantial untapped potential. Currently, most companies **lack long-term partnerships with farmers**, which limits their ability to secure **consistent and high-quality raw material supply**.

Interviewees noted that no clear strategies exist for sustainable sourcing or structured collaboration with primary producers. In addition, **digitalization** and **automation** are still **largely unexplored by most firms**, despite their potential to improve efficiency and traceability in production. Companies expressed limited awareness of how digital tools could enhance operations, signaling a need for greater capacity building in this area.

Environmental practices such as **waste reduction** and ecological responsibility are also not systematically considered. However, respondents acknowledged that there is clear potential to reduce **waste** and **diversify outputs from by-products**, which could contribute to both environmental **sustainability** and business **profitability**.

Conclusion & Policy Recommendations

The fruit and vegetable processing sector in Kosovo is dynamic and vital to rural employment, female labor force participation, and export potential. While companies have demonstrated resilience and growth, particularly in processing capacities and export orientation, they face structural challenges related to labor shortages, underutilized capacities, and raw material constraints.

Key Policy Recommendations:

Human Capital Development

- Address the persistent skills gap by fostering formal vocational training programs in collaboration with the Ministry of Education and industry associations.
- Promote non-formal education through certified training providers focusing on production, food technology, and machinery operation.

Supply Chain Strengthening

- The Ministry of Agriculture should increase subsidies for key crops (e.g., peppers, apples) to ensure raw material availability and reduce import dependence.
- Support farmer organization and formalization of supplier contracts to enhance trust and predictability in sourcing.
- Introduce **export-based subsidies**, or **subsidies per-kilogram incentives** for quantities sold to collection centers or processors, similar to the subsidy model currently applied in the dairy sector.

Investment in Market Access

- Expand support for trade fair participation and develop economic diplomacy mechanisms (via embassies) to link processors with foreign markets.
- Encourage partnerships with foreign sector associations to boost credibility and outreach.

Infrastructure and Technology

- Provide targeted incentives for investment in storage infrastructure, particularly refrigeration and freezing facilities.
- Facilitate access to financing for modernization and scaling up, particularly among smaller or newer processors.

Policy and Regulatory Environment

- Simplify and digitize export procedures, particularly for phytosanitary certifications.
- Reevaluate fiscal policies affecting the sector, including VAT, fuel excise duties, and recognition of product losses in tax calculations.
- Encourage a unified legal framework on internal trade and retail relations to improve fairness and pricing transparency.

Strategic Promotion and Branding

- Invest in a unified “Made in Kosovo” branding for agricultural products to boost competitiveness and visibility.
- Strengthen platforms like the Food Sector Forum and expand their scope to include broader industry representation.

By implementing these strategic and policy-oriented recommendations, Kosovo’s fruit and vegetable processing sector can overcome its current constraints and fully realize its potential as a growth engine for the national economy.

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