



# THE FRUIT AND VEGETABLE INDUSTRY SERIES



FRUIT AND VEGETABLES SCHEME



## OECD-COLEAD Fruit and Vegetables Industry Series

### Session n°9 Impact of Labour Shortages in the Fruit and Vegetable Industry

Thursday 10 April 2025

9:00-10:30 UTC/11:00-12:30 CET (*time in Paris/Brussels*)

[Online \(Zoom\)](#)

*Live interpretation in English and French*

#### 1. Context

Labour shortages in the Fruits & Vegetables (F&V) industry have become a pressing challenge worldwide and may impede the sector's productivity growth, resilience, and sustainable development. The crop sub-sector most closely associated with hired farm workers includes labour-intensive fruits and nuts, vegetables and melons, and horticultural specialties that range from flowers and plants to mushrooms, often shortened to fruit, vegetable, and horticultural (FVH) commodities.<sup>1</sup>

Factors such as aging agricultural workforces, migration restrictions, demanding working conditions, and competition from other industries have made it difficult to attract and retain workers. While they are somewhat declining from their peak in 2022, there are still widespread shortages throughout the European Union.<sup>2</sup>

Labour and skills shortages are of particular concern in countries that have a relatively large agricultural sector with an ageing farm population, rapid technical change, and ongoing structural adjustment in the sector. For several decades, there have been concerns in many OECD countries over the labour supply and skills needed for the development of a resilient, innovative, and sustainable sector. One of the biggest challenges currently facing the agro-food sector is how to find the right balance of skills, talent, and adequate workers to manage the diverse needs and increasing complexity of the sector. Employment in the agro-food sector continues its long-term downward trend, broadly in line with agriculture's declining share of GDP, in OECD countries. The demand for labour in agriculture is driven by the interaction of several factors: **farm structural adjustment** (increase in average farm size,

<sup>1</sup> [Migrant workers in commercial agriculture](#). Philip L. Martin; International Labour Office, Sectoral Policies Department, Conditions of Work and Equality Department. – Geneva: ILO, 2016.

<sup>2</sup> EURES Report on labour shortages and surpluses 2023. European Labour Authority, 2024. [EURES-Coms toolkir 2021-2024](#)

change in ownership structure, demographics); **technological advances** (increased automation, robotics, drone technologies and digital applications); and the **changing demand of consumers** for attributes such as animal welfare, environmental footprint, and food quality.<sup>3</sup>

In most OECD countries, family members still represent the most common form of labour in agriculture, but the sector is becoming more and more dependent on **migrant workers**, to plant, harvest and pack fruit and vegetables, which has created additional challenges for employers in the sector. Other significant changes are the increased use of casual and contract workforces and the use of labour-saving technology that reduces total labour demand, but requires increased skills.<sup>4</sup> Delays, or lack of workers who plant harvest, pack and deliver fresh fruit and vegetables and implement disease control increases risks and reduces availability and affordability for all consumers.

Labour demand is likely to continue to evolve driven by a combination of factors including the increased use of technologies, the ageing of the farm work force, the increase in the average size of farms, diversification in farm ownership, the increase in non-family agricultural labour, and the consolidation and integration along the food supply chain.

Labour and skills shortages experienced across OECD countries is resulting in increased competition, especially for semi-skilled and skilled labour in the agro-food sector. Entry barriers to the sector are a concern and include high start-up costs, geographical isolation, fragmented rural infrastructure, relatively low remuneration, poor working conditions, and the negative perception of farming as a professional career.

## 2. Causes of labour shortages in the F&V industry

The enormous **structural change** in the agro-food sector<sup>5</sup> over the last 20 years has resulted in major changes in demand and supply of labour and skills to the sector. The economic incentives for workers in agriculture are often significantly less attractive compared to other sectors in the economy due to the perception of the low education attainment and skills required and inflexible working conditions. Moreover, there is growing evidence of a large **mismatch between the needs of the sector and the supply of labour and skills**, including in the face of technological change.<sup>6</sup> The demand for labour is increasingly of a temporary or seasonal nature, with less security for agricultural workers. Emerging **labour-saving technologies** bring new opportunities to the sector to make it more attractive and responsive to new demands, but they raise important questions on the continuous need for upskilling of the labour force.

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<sup>3</sup> OECD. Michael Ryan. [Labour and skills shortages in the agro-food sector](#). Paper n°189. January 2023.

<sup>4</sup> FPJ1202C, Nettle, R (2015), More Than Workforce Shortages: How Farm Human Resources Management Strategies Will Shape Australia's Agricultural Future, in Farm Policy Journal: Vol. 12 No. 2, Winter, pp. 17-27.

<sup>5</sup> There has been a substantial reduction in the number of farms resulting in greater consolidation, and a steady decline in the overall size of the labour force employed in agriculture and the food sector. The migration of rural populations to urban centers in search of better economic opportunities has significantly reduced the labour pool available for agricultural activities.

<sup>6</sup> OECD. Michael Ryan. [Labour and skills shortages in the agro-food sector](#). Paper n°189. January 2023.

Many countries, particularly in developed economies, are experiencing an **aging agricultural workforce**, as young workers are less inclined to engage in physically demanding farm work.

The F&V industry often relies on migrant labour. **Stricter immigration laws and visa restrictions** have limited the influx of seasonal workers, exacerbating labour shortages.

The COVID-19 pandemic led to border closures, travel restrictions, and health concerns that further disrupted labour availability, delaying harvesting operations and reducing efficiency.

Moreover, major changes in agriculture specific policies (i.e. environmental compliance and sustainability in food production) have led to small farms not able to compete.

### 3. Impacts of labour shortages and strategies to retain and attract labour

#### - Impacts of labour shortages

Insufficient labour forces farmers to leave crops unharvested, reducing crop production and leading to financial losses and food waste. To attract workers, farmers may need to offer higher wages and better incentives, increasing overall production costs. This, in turn, affects pricing and profitability.

Labour shortages can delay harvesting and processing, causing disruptions in the supply chain and leading to supply instability in markets. A reduced supply of fruits and vegetables leads to higher retail prices, impacting consumers and potentially reducing demand.

To cope with labour shortages, many producers are investing in automation and mechanization. While this can enhance efficiency, it requires significant capital investment and may not be feasible for small-scale farmers.

#### - Attracting workers in times of shortages

To ensure a stable workforce, companies and agricultural businesses must adopt innovative strategies that enhance the appeal of jobs in the sector. **Working conditions and job quality and security are crucial in addressing labour shortages.**<sup>7</sup> A significant part of the issue lies in attracting workers, who now have greater options and choices. There is also room for attracting workers with specific skills by: providing more training to fill skills gaps as well as supporting improved work conditions through collective bargaining;<sup>8</sup> higher wages and incentives, including bonuses, subsidized transportation or housing; providing **modern equipment** and protective gear to reduce physical strain; ensuring **better sanitation, rest breaks, and proper shelter**; implementing **fair labour contracts** that offer some level of job security beyond seasonal employment and any support on **health insurance or medical support**, especially for migrant workers

Governments can **revise immigration policies** to facilitate the entry of seasonal agricultural workers, ensuring a steady labour supply.

<sup>7</sup> European Trade Union Institute (EUTI). Wouter Zysen's working paper '[Labour shortages, job quality and workers' bargaining power: a European quantitative analysis](#)'.

<sup>8</sup> European Commission. [Commission sets out actions to tackle labour and skills shortages](#).

Investing in **automation and technology**, advances in robotics, precision agriculture, and AI-driven solutions can help reduce dependency on manual labour, improving efficiency and sustainability as well as making agricultural jobs more appealing. Strategies include **automated harvesting machines** to reduce manual labour, **drones for monitoring crops**, reducing the need for fieldwork, **mobile applications** for managing workforce schedules and payrolls. Technology not only improves efficiency but also attracts **tech-savvy younger workers** who may have otherwise overlooked agricultural jobs.

In the medium and long term, digitising food inspection and introducing more technology to inspect fruit and vegetables could significantly reduce the risks associated with food safety.<sup>9</sup>

Providing **education and vocational training programs** for young people can encourage them to pursue careers in agriculture. Moreover, a technological revolution also means that farmers need to continue to develop and update their technical skills, but also their knowledge on financial, marketing, and regulatory aspects, in particular as they relate to environmental compliance.

## 4. Way forward

Labour shortages in the F&V industry present significant challenges to production, supply chains, and market stability. Addressing this issue requires a multi-faceted approach, including policy reforms, improved labour conditions, technological advancements, and workforce training initiatives.

In priority they should aim to improve the image of agriculture as a sector capable of offering career opportunities, as the role of agriculture is evolving with increasing attention to food security, environmental goods, biodiversity, and social aspects. They also need to promote a more diverse agro-food workforce with a wider range of skills and to ensure a better alignment of education and skills to the evolving needs of the agro-food sector, which is critical for the sector to be sustainable and competitive, including entrepreneurial and digital skills.

By implementing these strategies, the industry can enhance resilience, ensuring a stable and sustainable food supply for the future. Where job quality is low, improved wage and non-wage benefits, as well as enhanced working conditions, are important. In the pandemic's aftermath, so is geographical and temporal flexibility, where feasible. Where skill shortages are widespread, active collaboration between employers and education and training providers as well as employment services must be enhanced to match skills supply and demand through initial and ongoing training.<sup>10</sup>

The European labour authority (ELA)<sup>11</sup> is conducting a strategic foresight exercise to explore and construct potential scenarios for the future of labour mobility within the European Union.

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<sup>9</sup> Food Standards Agency UK. [The impact of labour shortages on UK food availability and safety](#). March 2022.

<sup>10</sup> OECD. Michael Ryan. [Labour and skills shortages in the agro-food sector](#). Paper n°189. January 2023.

<sup>11</sup> EURES Report on labour shortages and surpluses 2023. European Labour Authority, 2024. EURES-Coms toolkit 2021-2024.

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#### Agenda

**Moderator:** *José Brambila-Macias, Programme Manager, Trade and Agriculture Directorate, Agricultural Codes and Schemes, OECD*

**9:00-9:10**      **Welcome and introduction:** *Jeremy Knops, DG, COLEAD; José Brambila-Macias, OECD*

**9:10-9:35**      **Addressing labour shortages in the F&V industry: challenges and solutions**

This panel will share information on trends in labour shortages and ways to address it.

- *Roxana Barbulescu, Associate Professor, University of Leeds, United Kingdom*
- *Christophe Aubé, CEO of Agreenculture & Director of Robagri, France*

**9:35-10:00**      **Views from operators**

This panel will feature experiences from operators in addressing labour shortages.

- *Thomas Hildenbrand, Director of the Fruit Department at SIPEF, Belgium*
- *Alice Riouall, CEO, Mango So, Burkina Faso*

**10:00-10:20**      **Q&A session**

**10:20-10:30**      **Conclusion and way forward:** *Isolina Boto, Head of Networks and Alliances, COLEAD*



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