



THE FRUITS AND VEGETABLES INDUSTRY SERIES

10 Avril 2025



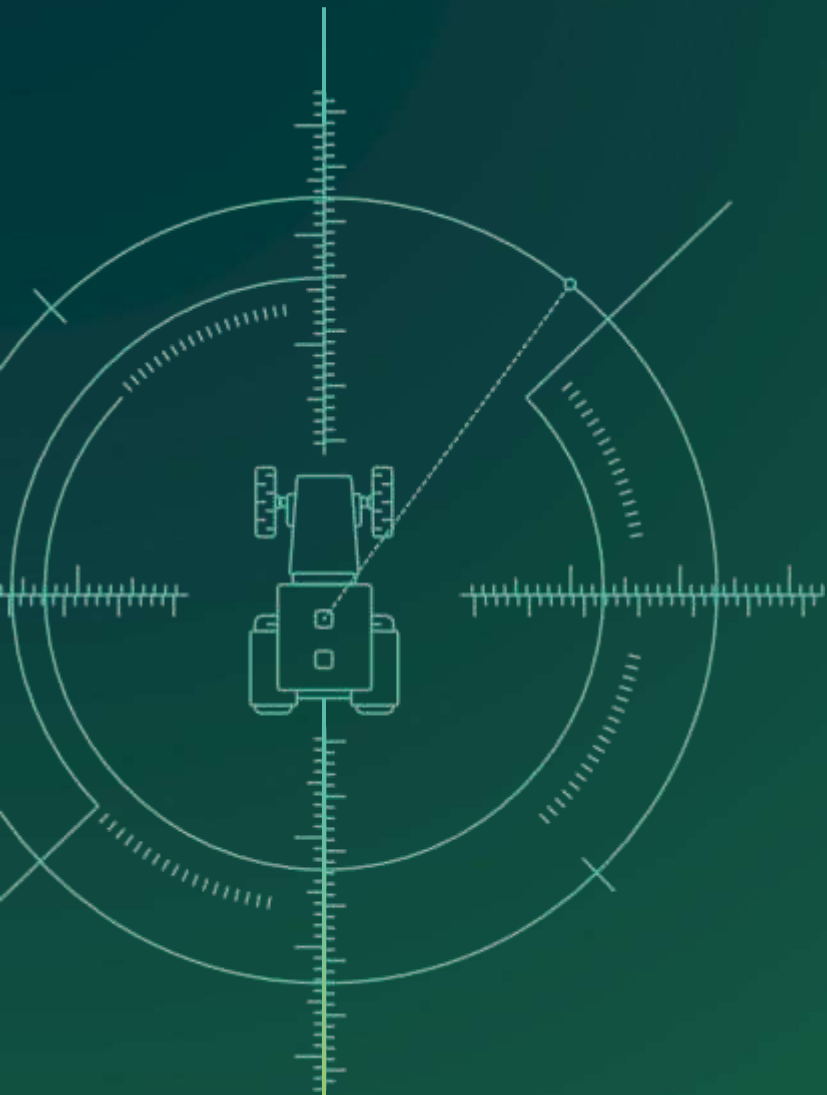
Session n°9

Impact of Labour Shortages in the Fruits and Vegetables Industry (F&V)



FRUIT AND VEGETABLES SCHEME





EMBRACE SAFETY, BECOME AUTONOMOUS

Autonomous solutions for Fruits and Vegetable

Christophe Aubé
CEO Robagri

27.02.24







01

Labor challenge for Fruit and Vegetable farming

02

Challenge and solution for harvesting and time consuming activities

03

Supporting sustainable food production without increasing labor shortage



LABOR SHORTAGE FOR F & V

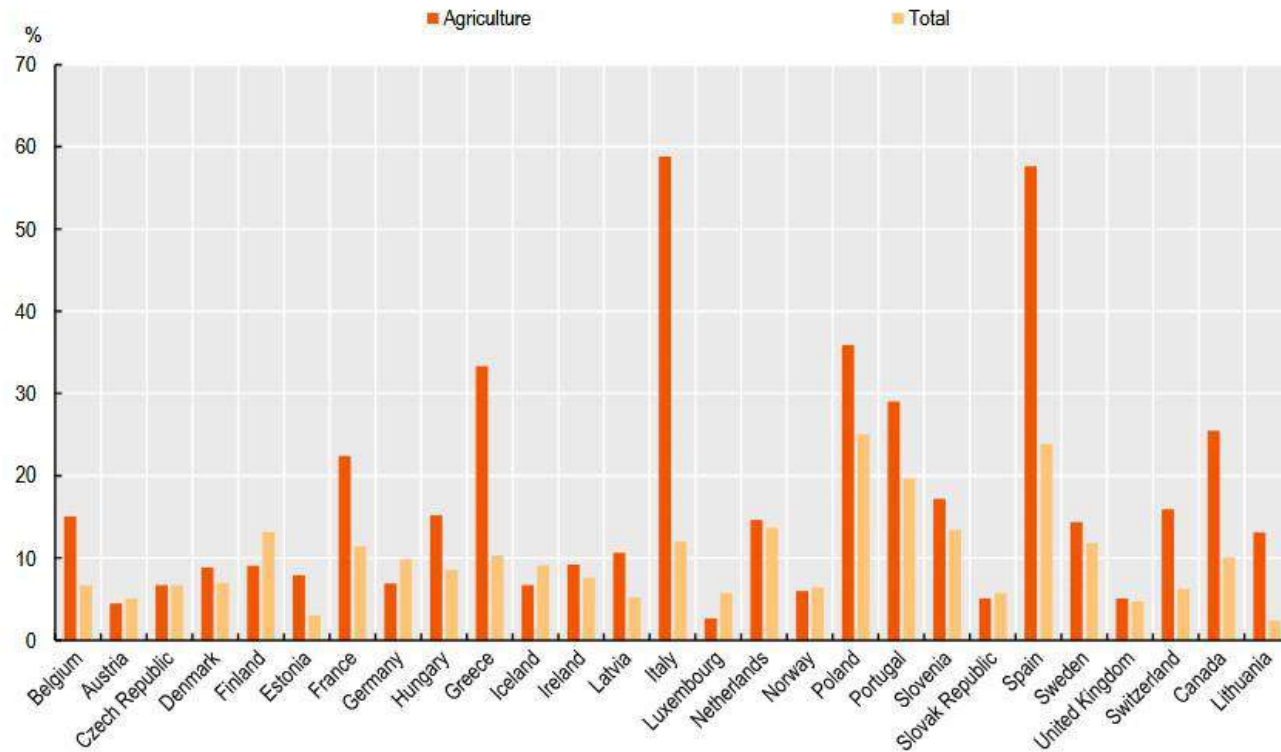


What activities are
facing labor shortage ?

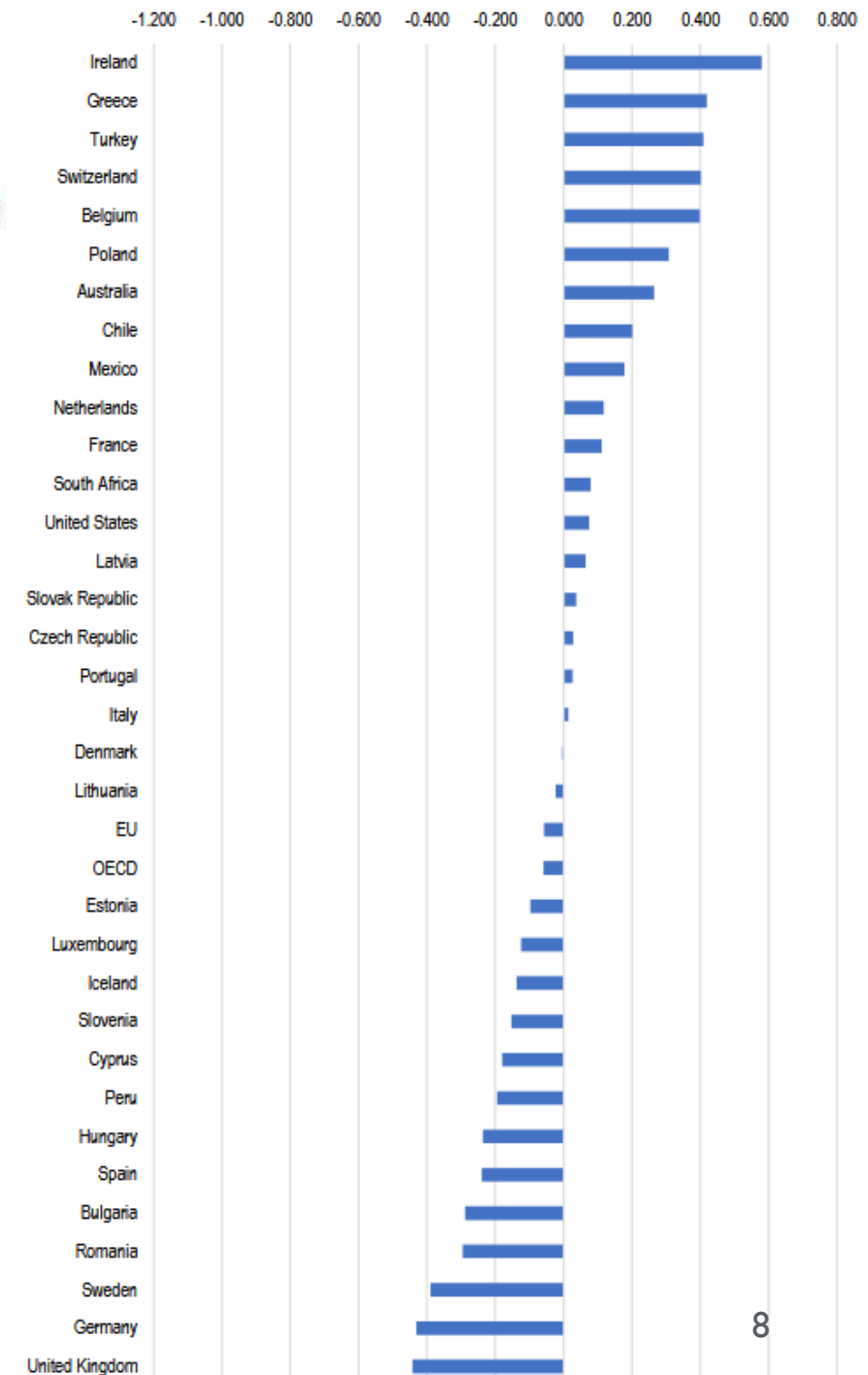
Figure 2.4. Occupational shortage indicator for agriculture, forestry, and fishing

Figure 2.3. Temporary employment in agriculture compared to overall temporary employment, people aged 25-54, 2011-12

Percentage of all employees in each industry



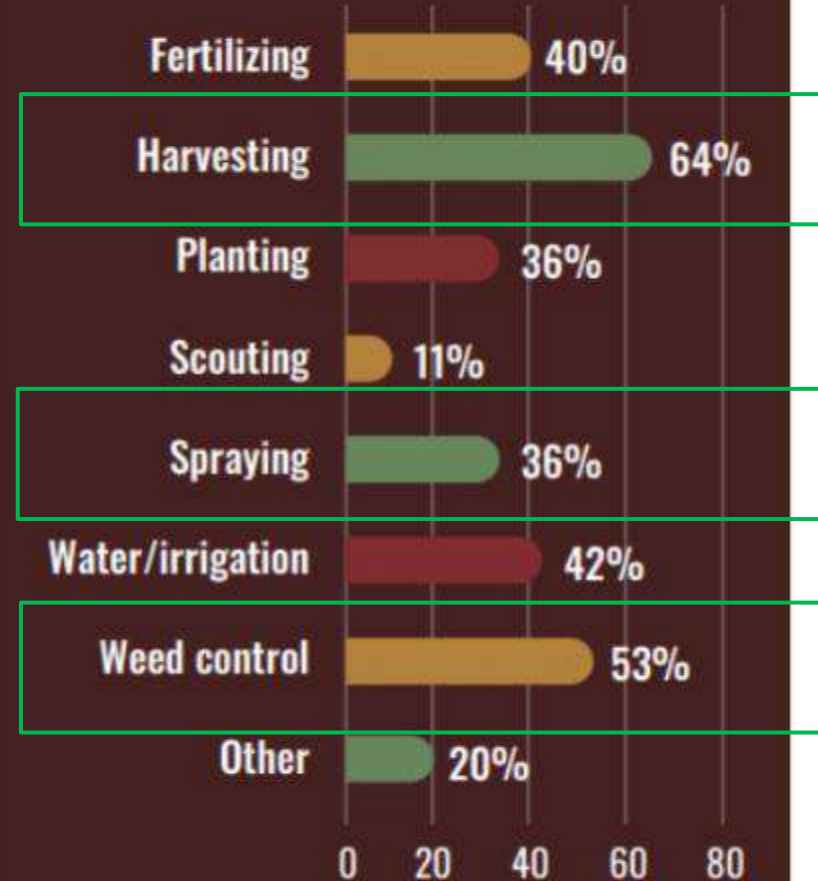
Source: OECD calculations based on European Union Labour Force Survey (EU-LFS) microdata and national labour force surveys from OECD (2014), OECD Employment Outlook 2014, OECD Publishing, Paris, https://doi.org/10.1787/empl_outlook-2014-en.





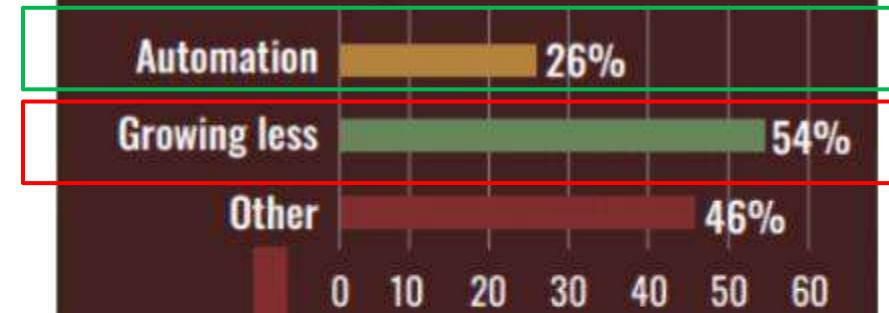
Solutions ?

Types of automation growers are considering to combat labor shortages:



Percentages include responses that selected more than one option, as they were able to select all that applied. Other responses included pruning, grade line automation, processing lines and more.

How growers plan to address labor shortages in 2024:



Other options:

- Exploring alternative labor sources (2.56%)
- Diversifying operations (2.56%)
- Exiting business (7.69%)
- Adjusting marketing strategies (5.13%)
- Uncertain future or closing down (3.85%)
- Extended working hours (3.85%)
- Exploring government programs (8.97%)
- Infrastructure Investment (2.56%)
- Cost considerations for H-2A program (1.28%)
- Adapting harvesting practices (1.28%)
- Labor optimization and efficiency (3.85%)



HARVESTING AND PICKING SOLUTIONS





Other robot for apples picking





Soft fruits harvesting





Robots for harvesting strawberry





Support for harvesting or pruning to decrease the workload





MORE SUSTAINABLE FOOD
PRODUCTION INCREASES
LABOR SHORTAGE



KFAST Kubota :
Autonomous spraying
solution for Apple, Almonds,
Olives, Orange

Up to – **50%** of pesticides

2 times slower than
equivalent tractor with
driver



Carbon robotics



Laser weeding to avoid
using pesticides

0,5 km/h for 4 - 6 m
wide

instead of up to 40m
wide at 12km/h

PELLENC



Rx-20 from Pellenc

Mechanical weeding
for perennial crops

Up to 2 times less
energy per ha for
weeding but 1,5 slower
than a tractor with a
driver



Aisprid : robot to
smoothly remove
unwanted leaves

Reduce the disease
exposure and increase
crop health



THANKS A LOT

Free up time for what really matters



THE FRUITS AND VEGETABLES INDUSTRY SERIES

Thank you



FRUIT AND VEGETABLES SCHEME



The OECD-COLEAD Fruits and Vegetables Industry Series focuses on market access conditions and opportunities for the fruit and vegetable sector, especially for fruit and vegetables producers and exporters from ACP-countries. This activity is supported by the Fit For Market Plus programme, implemented by COLEAD within the Framework of Development Cooperation between the Organisation of African, Caribbean and Pacific States (OACPS) and the European Union.