



# Achieving Food Security and Sustainable Agriculture through Mechanization, Precision Technologies

*The role of OECD Tractor Codes*

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## Key challenges for food security:

- Low agricultural productivity
- Labor shortages
- Aging farming population
- Unpredictable weather
- Market access
- Finance access
- Supply chain disruptions
- Price Volatility



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***Labour and skills shortages are a major concern in the agro-food sector across OECD countries.***





## Labor Shortages

**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.

In overall terms, **employment in agriculture** has **fallen to less than 10%** of the agro-food labour force in OECD countries.

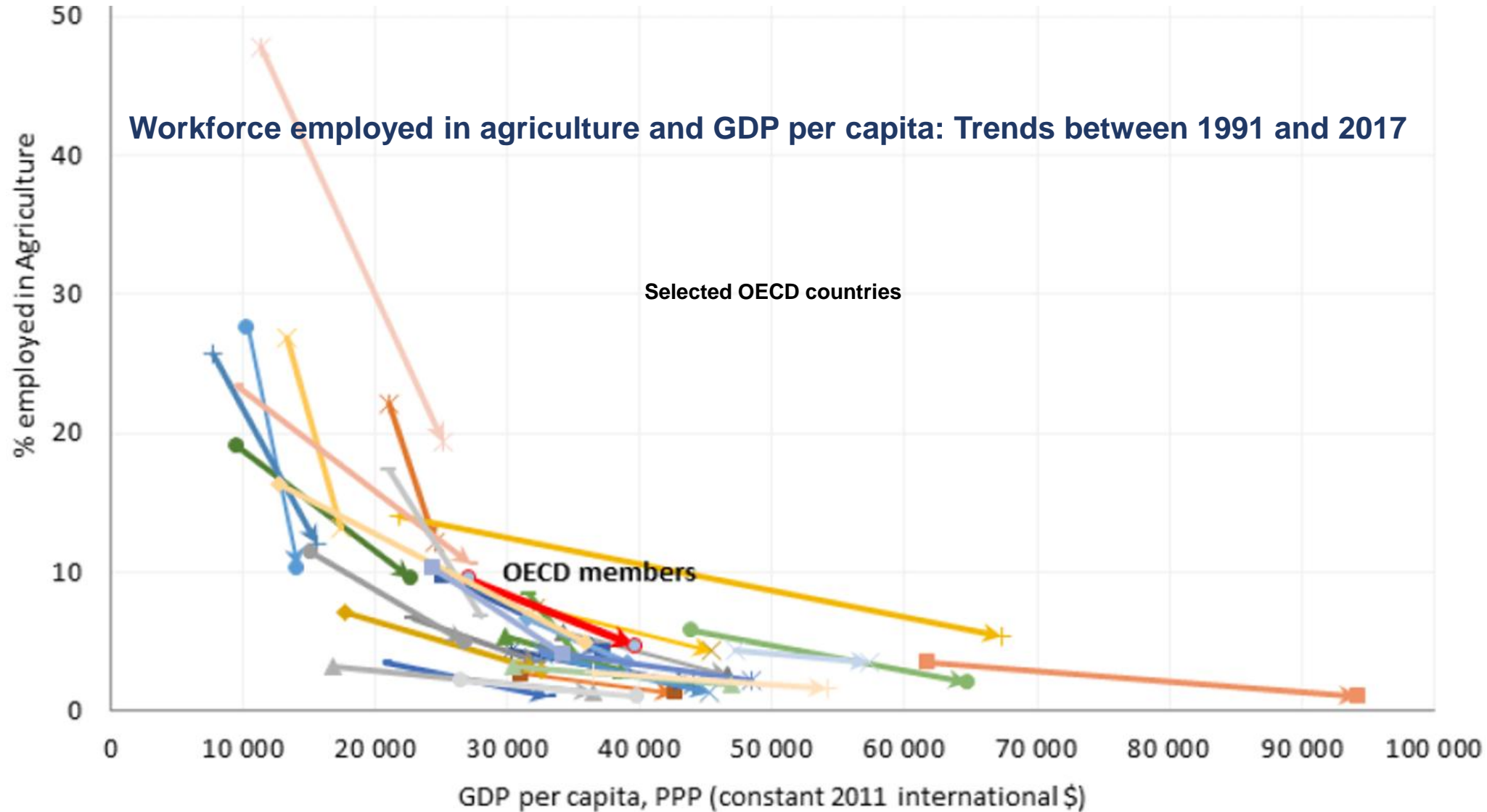


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Note: The beginning of each arrow represents each country's position in 1991; the arrowheads show where they were in 2017. Source: The World Bank (<https://data.worldbank.org>). OECD FOOD, AGRICULTURE AND FISHERIES PAPER January 2023 n°189.



## Solutions

As the shortage of agricultural workers becomes more serious, there is an urgent need to improve productivity through “smart farming”: **Artificial intelligence, information technology and robotics.**



## Challenges

- Lack of clear rules and regulations (National/Global)
- Clear responsibilities (manufacturers, government, users)
- Safety and efficiency



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## How can OECD Tractor Codes help?

OECD Tractor Codes are an integrated system of standardized tractor tests for performance and safety certification, and mutual recognition agreements established in 1959.

OECD Tractor Codes are **voluntary**, tractor **manufacturers can choose** to certify their machines using OECD Tractor Codes approval numbers or use other national or regional systems.

Harmonized technical standards/guidelines that people recognise, have the extra advantage of facilitating the flows of goods through the border, **saving everyone time and money**. This is what common standards/guidelines do: they help build trust and facilitate smoother trade.



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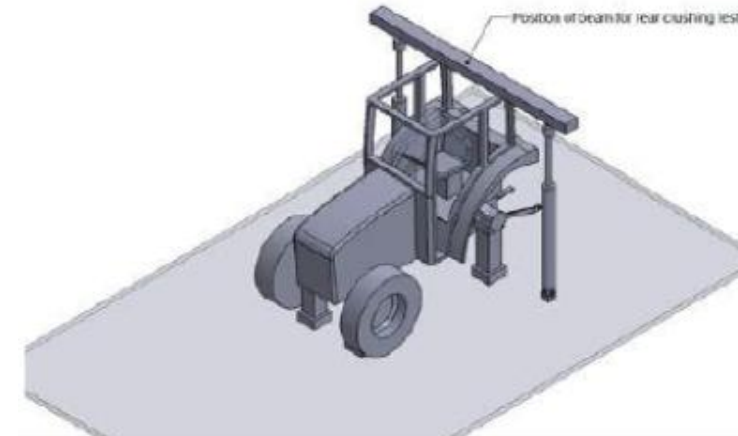
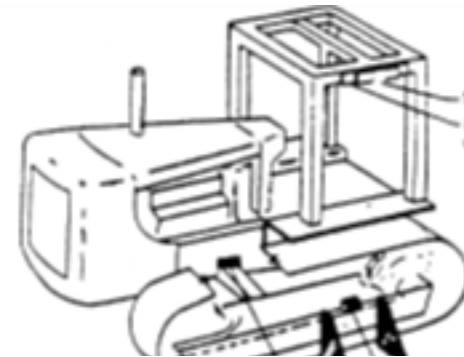
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## Uniqueness of the OECD Tractor Codes System

- Quantifiable tests for reliable comparison between countries
- Global Network of Testing Stations
- Intergovernmental Organisation
- **Third Party Certification**
- Transparency
- **Changes agreed by Consensus**  
*(close collaborations with Industry)*
- **Voluntary**



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<https://www.youtube.com/watch?app=desktop&v=BEy4Bw37YbA>



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**Agrievolution** Members are invited to participate in the work of the OECD Tractor Codes. Interested associations can reach directly the Programme Manager for more information:

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<https://www.oecd.org/en/topics/sub-issues/tractors.html>



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