THE FRUITS AND VEGETABLES INDUSTRY SERIES

Session 5

Innovations and technologies to reduce food waste and losses

11 October 2023

COLEAD

OECD

FRUIT AND VEGETABLES SCHEME

Intoduction to EU policy intiatives to reduce food losses and waste - new trends

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ERA-NET COFUND ICT-AGRI FOOD

Challenges

We share your analysis and problem describtion. Food Losses and waste (FLW) has severe negative social, economic and environmental consequenses

Fruit and vegetables have a very high rate of loss and waste

Problems are identified in the whole value chain (*at production level, in handling and storage, in processing and packaging, in distribution and market, in consumption*)

Policy frameworks supporting the reduction of FLW

- Global attention to FLW (UN SDG´s, FAO…)
- EU attention reflected in a serie of policy initiatives (**Green Deal** *a package of policy initiatives, which aims to set the EU on the path to a green transition, with the ultimate goal of reaching climate neutrality by 2050, incl. circular Economy Package)*
- ESA and the use of Earth Observation Data (*Copernicus)*
- National *(public and private)* intiatives in the EU member states

EU Food Law

Focus on consumer protection, safety and human health

High degree on regulation in the EU

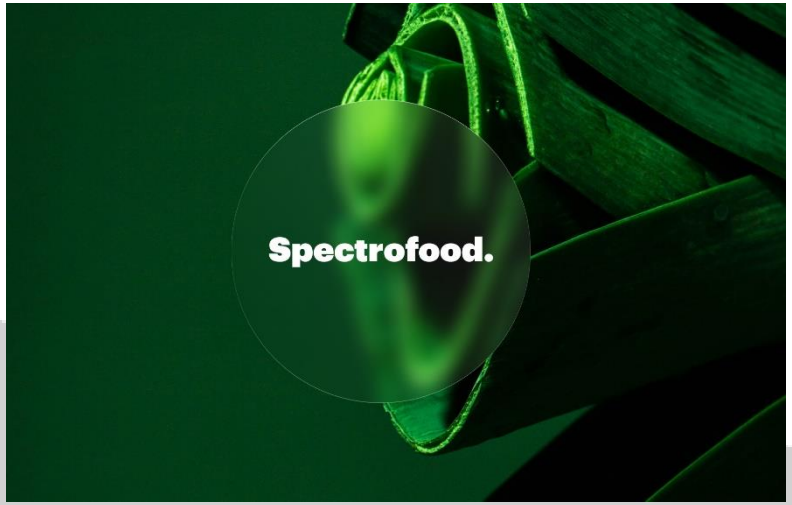
There is often an conflict between consumer protection an initiatives to minimise FLW

Research and Innovation initiatives in EU with a potential to reduce FLW

- FP 7 and SUSFOOD ERA-Net, ICT-AGRI ERA-NET
- Horizon 2020 and SUSFOOD 2, ICT-AGRI-FOOD (*Focus on sustainabilty*)
- Horizon Europe 2021-2027 (*Food Systems Partnership, Agroecology partnership, Agriculture of Data Partnership, Water Partnership, Biodiversity Partnership*)

Project examples from ICT-AGRI-FOOD

Spectrofood: *Artificial Intelligence techniques, analytic tools, and data platform – related solutions in order to reduce food waste while optimizing the use of production inputs*
https://ictagrifood.eu/node/44658



ADCATER : *advanced ICT technologies for Smart Food Catering*
https://ictagrifood.eu/node/44630

ADCATER

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Digital Europe Programme

Agri-Food Testing and Experimental Facilities (*contribute to developing codes of conduct, standards..)*

European Digital Innovation Hubs: (*EDIHs advice on how to digitally transform the business. Focus on AI)*

Trends, policies and innovations on food losses and waste in the F&V sector

- General awareness raising concerning FLW (*policy makers, consumers, NGO´s, producers, retailers,….)*
- Digital technology solutions are moving fast. Especially Artificial Intelligence techniques, analytic tools, and data platform related solutions are shoving interesting results
- Controls and inspections must adopt to the digital technologies
- The Agri-food industry urges for non-destructive, rapid, and accurate technology-enabled quality inspection methods
- There is a need for better data and to combine data from EO

The Data (*many types)*

Data types:

Farm data (*incl. private and public data*)

Geospatial data (*environmental data and earth observation*)

Data are:

- often difficult to find (locked in machines and devises)
- not freely accessible
- poorly described and not stored in standardised or open formats

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A European Strategy for Data (2020)

Until recently: EU GDPR for personal data was the main data regulation; no regulation for non-personal industrial or commercial data = bulk of agricultural data.

EU Data Act (2023?)

Conclusion

- Digital tools and high quality FAIR data has the potential to provide solutions
- However we still face enormous diversty in agriculutural data in terms of format and content (*lack of standardised practise for data*)
- Many promissing project results, however there is a need to valorise R&I results
- Fruit and Vegetables play and important role in a healthy diet, therfore working together to reduce Food Losses and Waste is crucial

More information from our website:

ict-agri.eu

Thank you for your attention

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Thank you

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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.