

3rd MEDITERRANEAN FORUM

FOR PHD STUDENTS AND YOUNG RESEARCHERS

Understanding Mediterranean Agriculture Food Systems and their Supply Chain Actors Under Local, Regional and Global Uncertainty



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FACTORS INFLUENCING INNOVATIVE CIRCULAR BUSINESS MODELS IN THE MEDITERRANEAN OLIVE OIL VALUE CHAIN

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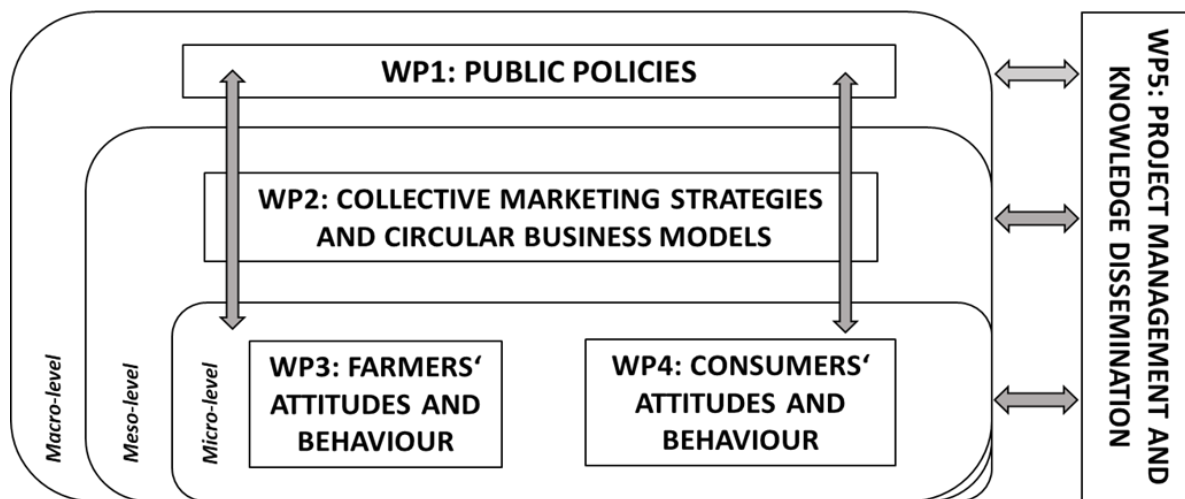
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COLIVE PROJECT

The overall objective of the COLIVE project is to understand the socio-economic conditions and processes of the valorization of olive oil, waste and olive by-products.

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CIRCULAR ECONOMY & CIRCULAR BUSINESS MODELS

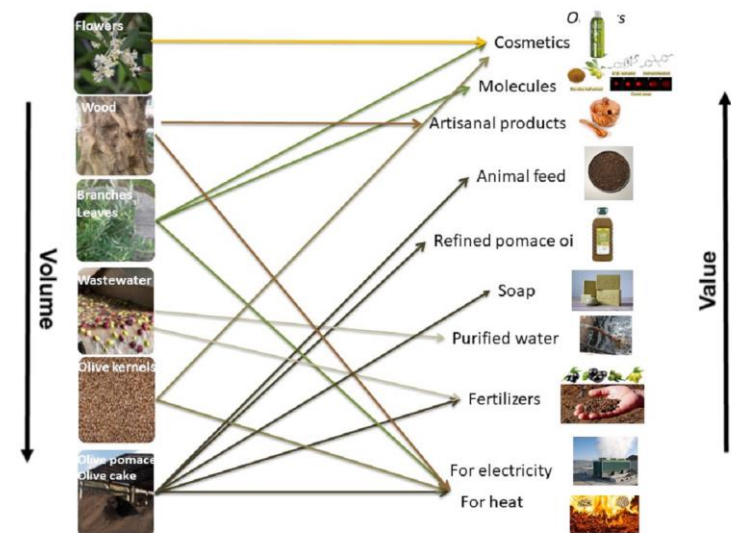
- Circular economy is "a systemic approach to economic development designed to benefit businesses, society, and the environment. In contrast to the 'take-make-waste' linear model, a circular economy is regenerative by design and aims to gradually decouple growth from the consumption of finite resources" (The Ellen McArthur foundation)
- Circular business models are a subcategory of business models, which incorporate circular economy principles as guidelines, aiming to fully close product or material loops proposing the creation of value from waste or providing functionality instead of products (Bocken et al., 2019, 2014; Donner, Gohier and de Vries, 2020)

DRIVERS AND BARRIERS FOR CIRCULAR BUSINESS MODELS

- Drivers for successfully implementing circular business models (Tura et al, 2019)
 - Resource scarcity and opportunity for waste reduction and decreasing costs
 - Environmental regulations
 - Social drivers
 - Institutional factors
 - Technological development
 - Supply-chain related drivers
- Barriers for implementing circular business models (Guldmann and Huulgaard (2019) :
 - barriers at the market and institutional level
 - barriers at the value chain level
 - barriers at the organizational
 - barriers at the employee level
- Barriers and success factors specific for agriculture context (Donner et al, 2021):
 - technical and logistic
 - economic-financial and marketing
 - organizational and special
 - institutional and legal
 - environmental factors
 - social and cultural factors

OLIVE SECTOR IN THE MEDITERRANEAN

- Nearly 10 million hectares of plantation and more than 2,5 million tons of olive oil per year in Europe and Africa (Vilar & Pereira, 2018)
- The production of olive oil generates different wastes (wood, branches, leaves) and by-products (olive pomace, olive mill wastewater, olive stones) in huge quantities (Roselló-Soto et al., 2015)



Source: Donner & Radic (2021)



OBJECTIVE & METHODOLOGY

- The objective of this work was to understand the drivers and barriers influencing the transition towards circular business models valorising olive waste and by-products (for food and non-food applications) in the Mediterranean area.
- Ten case studies of entrepreneurial initiatives from the following Mediterranean countries: Tunisia (2), Morocco (1), France (1), Spain (1), Italy (2), Greece (3)
 - Semi-structured interviews with the responsible persons from the enterprises conducted
 - Field investigation in Tunisia
 - Qualitative content analysis



SUCCESS AND HINDERING FACTORS FOR IMPLEMENTATION OF CIRCULAR BUSINESS MODELS

- Internal success factors
 - Environmental concern
 - Knowledge about waste valorising technologies and markets
 - Long-term presence in the sector
- External success factors
 - Availability of resources, legislation and subsidies
 - The role of consumers
 - Circular economy embeddedness in the territorial agenda
- Internal hindering factors
 - Strong managerial implication
- External hindering factors
 - Support from experts, policy and decision-makers (including financial support (external factor))
 - Waste management activities is recognized but not supported in practice
 - Collaboration between enterprises and research centres or universities is rather complicated



CONCLUDING REMARKS AND RECOMMENDATIONS

- A common feature observed among all the cases is the importance of **territorial embeddedness**, and care for the environment, both as a motivation and success factor
- The enterprises are driven by a commitment to the environment, especially because of the unused high amounts and partly environmentally harmful residues
- The most important barriers for businesses are external support and sustainable partnerships
- More **public-private partnerships** or **multi-stakeholder collaborations** e.g. via joint projects are needed for further developing circular business models