

Thursday, October 21st, 2021

INFORMATION KIT

Food losses, food waste reduction
and organic waste management in
the Mediterranean region

The alarming environmental and climate challenges in the Mediterranean region are increasingly putting at risk ecosystems, resources and human health. Urgent mitigation and adaptation actions are needed and will require the full engagement of a wide range of stakeholders, including policy makers, academia, the private sector and civil society.

The Union for the Mediterranean (UfM) is tackling emerging environmental challenges by promoting regional cooperation and initiatives on common priority issues through its post-2020 Environment Agenda: the **2030 Agenda for a GreenerMed**. GreenerMed includes a specific Axis of work on Green, Circular Economy (For more information: <https://ufmsecretariat.org/ufm-environment-agenda/>). With its 42 member countries, the UfM has the potential to reach a wide audience and can initiate pioneering actions in many countries across the region.

The UfM, the Interreg MED Green Growth Community and relevant partner institutions are offering two training workshops which fall within the objectives of the **2030 GreenerMed Agenda** with a particular focus on food systems and the transfer and capitalisation of green circular economy practices.

The present brochure provides you with background information on the first webinar in the series: **Food losses, food waste reduction and organic waste management in the Mediterranean region**.

This document is intended to introduce you to the webinar topic, some key related concepts, the agenda and tools you will need to make the most of the session. To this end, it also includes a list of recommended readings and useful links you are invited to peruse in order to get prepared for the workshop and to further explore certain aspects according to your interests.

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FOOD LOSSES, FOOD WASTE & ORGANIC WASTE MANAGEMENT IN THE MEDITERRANEAN: A CALL TO ACTION

How the webinar can help to answer this call to action?

The COVID-19 pandemic has made the unsustainable foundations of current food systems particularly visible, increasing food loss and waste, affecting incomes in the agri-food sector and jeopardizing food security in some places.

In light of these socio-ecological imbalances, this webinar aspires to provide fertile ground for the convergence of a diversity of sustainable practices that are

currently advancing food waste reduction and organic waste management across the Mediterranean area.

On this occasion, the Union for the Mediterranean brings together regional actors ranging from decision-makers, researchers and agricultural & food operators to enhance food waste reduction and organic waste management and to explore pathways towards desirable food futures.

Let's seize this opportunity to address the imperative set out in the 2030 Agenda of "halving per capita global food waste at the retail and consumer level, and reduce food losses along production and supply chains" (SDG 12.3) and pool the ingredients to create positive food environments.

WEBINAR'S OBJECTIVE AND AGENDA

Objective and Agenda of the Webinar

To share knowledge on the most pressing challenges from the Mediterranean region with regards to the sustainability of food systems.

Keynote speakers will provide inspiration to raise awareness of the importance of these topics. The participants will learn from the experience gained so far from different organisations and through cooperation initiatives, programmes and projects on the ground (i.e. FAO, PRIMA, Interreg MED, ENI CBC MED, WES etc.).

The participants will have the opportunity to transfer and capitalize those practices to other territories within the Mediterranean region.

The participants can also expect to create new long-lasting collaborations to continue to provide innovative solutions in order to ease the transition to a green and circular economy in the Mediterranean region.

Participants will be able to interact with the speakers through Q&A sessions and specifically, they can provide their input, experience and recap the knowledge they have gained through interactive online tools.

Links to the Union for the Mediterranean 2030GreenerMed Agenda Key Actions:

- **KA3** Adopt innovative solutions along the entire value chain (across sectors and industries, urban and rural)
- **KA4** Promote changes in business practices, trade, public policy
- **KA6** Engage all stakeholders (private, public and society/consumer level) and raise awareness

The presentations of the keynote speakers will answer the following questions:

- What is the status and problems with regards to: Food losses, food waste and organic waste management in the Mediterranean region?
- How does this affect the environment, society, and the economy?
- What is the future projection in the Mediterranean region if nothing is done to solve these problems?
- What inspiring stories exist in the Mediterranean of successfully implemented solutions? What lessons learnt exist from non-successful actions?
- How can the webinar participants take follow-up action?

Agenda

Green and circular economy
practices workshops



Webinar

Food losses, food waste reduction and organic waste management in the Mediterranean region

21st of October 2021 | 9:30h -12:00 (CET)

Agenda

	Time Total 2,5 hours	Who	Objective
Welcoming and Icebreaker session	9:30 – 9:40 10 min	<ul style="list-style-type: none"> • UfM, <i>CoPresidency/Secretariat</i> • Mercé Boy, <i>Interreg MED Green Growth representative</i> • David Smith, <i>WE&B</i> 	Welcoming remarks, setting the scene and objectives of the session and getting participants used to using Sli.do.
Session 1 Keynote speeches	9:40 – 10:20 40 min	<ul style="list-style-type: none"> • Octavi Quintana, <i>PRIMA</i> • Maryam Rezaei, <i>FAO</i> • Sergio Ponsá, <i>CT BETA, UVic-UCC</i> 	Inspirational speeches to give an overview of the challenges and solutions around Mediterranean food systems.
Session 2: Engagement Session	10:20 – 11:00 40 min	Lead Facilitator: <ul style="list-style-type: none"> • David Smith <i>WE&B</i> 	Hands on session where participants will identify potential solutions to existing challenges and think further about their region's challenges and opportunities to collaborate.
10 minutes break			
Session 3: Training session: Tools & methods for capitalization activities (Project Examples)	11:10 – 11:50 40 min	Lead Facilitator: David Smith Projects <ul style="list-style-type: none"> • Joan Colón Jordà, <i>DECOST & MED4WASTE</i> • Iro Alampej, <i>WES</i> • Mohamed Wageih, <i>PRIMA</i> • Alessandro Miraglia, <i>SwitchMed</i> • Elisabetta Salvatori, <i>B-Blue</i> 	We will hear from 5 case study projects in the Mediterranean. The projects will focus on the specific methods, tools and processes they have provided to overcome food system challenges in the Mediterranean. The presentations will be engaging with the use of short videos and many visuals.
Wrap-up and conclusions	11:50 – 12:00 10 min	<ul style="list-style-type: none"> • UfM <i>CoPresidency/Secretariat</i> 	Key discussion point, outcomes of the sessions and conclusions.

Welcoming and ice-breaker session

Objective

Welcoming remarks setting the scene and objectives of the session. To provide an opportunity for everyone to know who is in the “room”. It also allows for late comers not to miss any keynote speeches. Get participants used to using Sli.do.

Tools

Sli.do poles and quick questions.

Outputs

Everyone is clear about the workshop objective and more relaxed and ready for the session.

Session 1: Keynote speeches

Objective

Inspirational speeches to provide vision to the challenges and solutions facing the Mediterranean food systems.

Tools

Zoom Presentations

Outputs

Setting the scene and providing vision and inspiration for the engagement session and for the fields of action in the blue and green Mediterranean food systems.

Session 2: Engagement session

Objective

Through engagement tools, the participants will identify potential solutions; match with existing challenges and to think further on the challenges for their specific regions. Finally, participants will provide areas where they see collaboration and networking opportunities

Tools

Sli.do

Outputs

Participants would have developed a deeper understanding and new ideas for actions in the respective key areas;

Potentially new connections among participants will be forged in this session.

Session 3: Training session: Tools & methods for capitalization activities (Project Examples)

Objective

We will hear from 5 case study projects in the Mediterranean. The projects will focus on the specific methods, tools and processes they have provided to overcome food system challenges in the Mediterranean.

Who

Tools

Zoom Presentations

Outputs

Best practices and recommendations for capitalization activities highlighted. Best case study examples provided.

Wrap Up & Conclusions

Objective

To summarize the key points discussed and to provide a synthesized set of results of the engagement session., highlight conclusions, and farewell.

Tools

Sli.do

Zoom Presentation of results and follow-up

Outputs

Conclusions and outcomes of the training clearly stated. Information to participants of how they can further collaborate.

BRIEF INTRODUCTION TO FOOD LOSSES, FOOD WASTE REDUCTION & ORGANIC WASTE MANAGEMENT PRACTICES

Introduction

How can we accelerate the transition of the Mediterranean area towards more sustainable food systems while incentivizing simultaneous improvements in food security, climate change and socio-economic well-being?

Reducing food losses & waste and enhancing organic waste management are part of the solution.

These two key areas of action fall within the scope of the 2030GreenerMed Agenda which identifies them as potential game-changers for reaching the environmental SDGs in the region.

In this vein, this webinar will provide Mediterranean stakeholders with a decision-support toolkit to advance food waste reduction all along the agri-food chain and energy valorization of organic waste from agriculture and food processing industries.

Theme Focus

Unsustainable consumption and production patterns in the Mediterranean region call for a transition towards circular systemic food systems.

Increasing food demand, resource and food distribution inefficiency and substantial waste of food along the whole food chain are notably leading to increased CO₂ emissions, freshwater scarcity, pollution and land degradation.

Applying the circular economy concept to Mediterranean food systems is a critical step towards ensuring a sustainable future in the region. It would require a multi-dimensional and context-specific approach addressing the interconnections within food systems at each stage of the product flow (from production, processing, packaging, distribution to consumption and waste management).

According to FAO, **one third of the food produced globally is lost or wasted. Each person is said to waste around 170 kg of food every year** in the EU.

In order to cope with significant growth in future food demand, emphasis is often placed on increasing agricultural productivity while it increases environmental footprint, does not necessarily ensure food security and tends to overlook the importance of enhancing the management of losses in current production and supply chains.

Special attention is required for Mediterranean initiatives that address the connection between climate change, food production and organic waste and aim to create a closed-loop system for energy efficiency and organic waste valorization.

They exemplify how bioenergy production from organic waste can be harnessed to build socio-economic resilience, shape a promising future in energy production and waste disposal and support the decarbonization of the Mediterranean economy.

Mediterranean projects are paving the way forward in transforming the interrelated blue and green economy food systems while incorporating the advantages of circular organic waste management.

Within the framework of the “SFS-MED” Independent Food Systems Summit Dialogue (co-organized by FAO, CIHEAM, UfM, OPN-SFSP and PRIMA in April and June 2021) the Scientific Group of the UN Food Systems Summit underscored the urgent need to overcome the tendency to view food systems as mostly terrestrial systems and to jointly consider green and blue circular economy in the transformation of food systems. In the global development agenda, the integration of green and blue circular economies in transforming food systems comes along with the need to adequately manage organic waste, return organic matter to soils and enhance the efficiency of nutrient cycles.

Food and organic waste management has moreover the potential to be used as a lever to strengthen urban-rural linkages.

This is a key aspect of the City Region Food Systems program (FAO/RUAF/Wilfrid Laurier University) which intends to promote energy and fertilizers production from organic and agricultural residues generated in urban and rural areas. The ENI CBC Med CEOMED project similarly contributes to integrated urban-rural development by encouraging the transformation of organic waste collected from local markets into fertilizers used in the farms that supply these places with fresh products.

Cooperation among actors and countries is crucial to achieve a successful transition to a green and circular economy in the Mediterranean region.

Particular emphasis needs to be placed on designing appropriate governance frameworks to efficiently incentivize sustainable management of food systems and waste. Green alliances for participatory decision-making and new settings for multi-stakeholder dialogue are some of the instruments that can help curb power imbalances among food systems actors and overcome segmentation in decision-making contexts. Cooperation frameworks should be able to leverage the growing role of municipal authorities in deploying eco-innovation and supporting circular business models.

EXAMPLES OF FOOD WASTE REDUCTION AND ORGANIC WASTE MANAGEMENT PRACTICES

Project examples, policy initiatives and Country Case studies.



B-Blue - Building the Blue Biotechnology Community in the Mediterranean

Funding Organization

Interreg MED Programme ; European Regional Development Fund

Involved Countries

Italy, Slovenia, Croatia, Montenegro, Greece, France, Spain and Portugal.

Themes

B-Blue project aims at gathering the key actors of the Med BB sector and increase their innovation capacity and their coordination in order to unlock the innovation potential in the field through joint transnational initiatives, involving also organizations from the Southern Shore of the Mediterranean.



CLIMA - Cleaning Innovative Mediterranean Action: reducing waste to boost economies

Funding Organization

EU; ENI-CBCMED Programme

Involved Countries

Italy, Tunisia, Lebanon

Themes

Development of policy tools like integrated Municipal Waste Management Plans, innovative technical solutions such as the compost drum and improved pilot compost sites.



DECOST - Decentralized Composting in Small Towns

Funding Organization

EU; ENI-CBCMED Programme

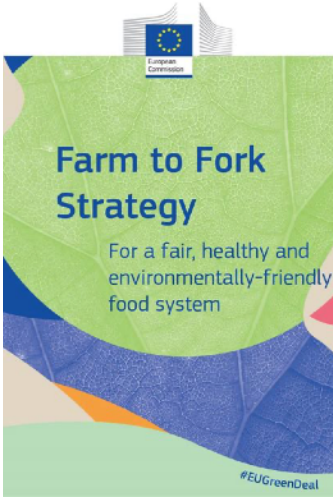
Involved Countries

Spain, Italy, Palestine, Jordan, Israel, Greece

Themes

Urban agriculture initiatives for enhancing food security and accessibility.

Farm-to-Fork Strategy (European Green Deal)



Funding Organization
European Commission

Involved Countries
EU

Themes
Taking action to reduce the use of pesticides in agriculture, decrease nutrient losses and fertilizer use, promote organic farming and the creation of a healthy food environment, fight against food waste, invest in research and innovation related to food, bioeconomy, natural resources, agriculture, fisheries, aquaculture and environment.



LIFE Regenerate - Revitalizing multifunctional Mediterranean agrosilvopastoral systems using dynamic and profitable operational practices

Funding Organization
Co-funded by European Commission

Involved Countries
Spain, Italy, Portugal

Themes
Sustainable and profitable new business model for small and medium-sized farms on oak-based silvopastoral systems. Self-sufficiency, resource efficiency and ecosystem conservation.

MED-InA - A Mediterranean Integrated Alliance on Waste for cities and citizens



Funding Organization
EU; ENI-CBCMED Programme

Involved Countries
France, Jordan, Tunisia, Spain, Lebanon

Themes
A methodology for a “Zero Waste” public policy adapted to Mediterranean cities as an exemplary and participatory approach for waste reduction, reuse and recycling.



ORGANIC ECOSYSTEM - Boosting cross border Organic Ecosystem through enhancing agro-food alliances

Funding Organization

EU; ENI-CBCMED Programme

Involved Countries

Jordan, Lebanon, Italy, Tunisia, Greece, Spain

Themes

Creates an ecosystem of organic producers, manufacturers, sellers, exporters and consumers in which stakeholders are supported by public authorities to boost the organic sector.



PEFMED – Product Environmental Footprint Tool

Funding Organization

European Regional Development Fund ; Interreg MED Programme

Involved Countries

Italy, Spain, France, Portugal, Greece and Slovenia

Themes

Encourages a pool of companies from 9 Mediterranean agrofood regional systems to green their production according to the EU *Product Environmental Footprint* method (PEF) which consists in assessing the environmental performances of a product during its lifecycle.



PRIMA - Partnership for Research and Innovation in the Mediterranean Area

Funding Organization

From participating countries and the EU through Horizon 2020, its research and innovation program.

Involved Countries

Algeria, Croatia, Cyprus, Egypt, France, Germany, Greece, Israel, Italy, Jordan, Lebanon, Luxembourg, Malta, Morocco, Portugal, Slovenia, Spain, Tunisia and Turkey have formally become PRIMA Participating States

Themes

Develops knowledge and common innovative solutions for agro-food systems, to make them sustainable, and for integrated water provision and management in the Mediterranean area.





RE-LIVE WASTE

Funding Organization

Interreg MED Program ; European Regional Development Fund

Involved Countries

Italy, Spain, Cyprus, Bosnia Herzegovina

Themes

Improves innovation capacities of private and public actors for sustainable and profitable recycling of livestock waste.



REINWASTE

Funding Organization

Interreg MED Program ; European Regional Development Fund

Involved Countries

Italy, Spain, Cyprus, Bosnia Herzegovina

Themes

Aims to rethink the current model used for food production so as to make it more sustainable, thus reducing the inorganic waste generated in three value chains: horticulture, meat and dairy products.



SIRCLES - Supporting Circular Economy Opportunities for Employment and Social Inclusion

Funding Organization

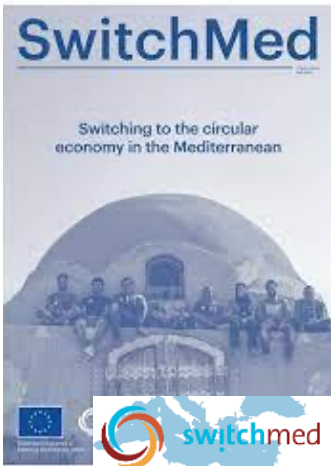
EU; ENI-CBCMED Programme

Involved Countries

Spain, Greece, Palestine, Jordan, Lebanon, Tunisia, Italy

Themes

- Explores new employment opportunities by applying the circular economy model applied to the biowaste sector.
- Develops new capacities oriented to business development and separation, collection, composting and agriculture processes



SwitchMed

Funding Organization

EU

Involved Countries

Countries Hub: Algeria, Egypt, Israel, Jordan Lebanon, Morocco, Palestine, Tunisia

Themes

The program aims at achieving productive, circular and sharing economies in the Mediterranean by changing the way goods and services are consumed and produced so that human development is decoupled from environmental degradation.



SysOrg

Funding Organization

Funded by transnational bodies associated with H2020 ERA-NETs SUSFOOD2 and the CORE Organic Co-Fund

Involved Countries

Denmark, Italy, Germany, Morocco

Themes

Pathways to increase sustainable food production and consumption. Mapping and analysing five case territories (Copenhagen, Cilento, North Hestia, War-saw, Kenitra) in a transdisciplinary way to gain better understanding of food systems.



SELECTION OF NON-EXHAUSTIVE MATERIALS

After going through a large amount of materials, we have selected the following sources that we invite you to review in order to gain more specific knowledge on the topic and get prepared for the webinar.

Title	Source	Description of the document and relevance for the webinar
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Policy Briefs, Concept Notes & Manifestos

<u>The Bioeconomy and Food Systems Transformation</u>	The Scientific Group for the UN Food Systems Summit	Bioeconomy contributions to food systems transformation Section of Interest: The entire document is likely to be of interest to the reader.
<u>Towards 2030: Agenda for a Greener Med</u>	UfM	Placing our topic in its policy context: food waste reduction and organic waste management in the frame of the 2030 agenda. Section of Interest: - GreenerMed Thematic Axis 1 - GreenerMed Thematic Axis 2
<u>Manifesto for proper food waste management in the Mediterranean Basin</u>	SCOW	Manifesto to support the introduction of appropriate drivers for prevention, reuse and separate collection and recycling of bio-waste as part of regional/national strategies for Municipal Solid Waste management. Section of Interest: The entire document is likely to be of interest to the reader.

Handbooks

<u>Reducing Food Loss and Waste. Setting a Global Action Agenda</u>	World Resources Institute	Toolkit for reducing food loss and waste: A Target-Measure-Act approach, an actor-specific “to-do” list, and 10 “scaling interventions” Section of Interest: The entire document is likely to be of interest to the reader.
<u>A Guide on Developing a Zero Waste Strategy for Local Municipalities in the Mediterranean Region</u>	UfM	Published within the framework of the MED-InA (A Mediterranean Integrated Alliance on Waste for cities and citizens) project. Section of Interest: Comprehensive bibliography on zero waste circular economy : case studies and best practice examples of food waste reduction and organic waste management

Scientific articles

<p><u>Environmental Impact Assessment of Food Waste Management Using Two Composting Techniques</u></p>	<p><u>Aisha Al-Rumaihi</u> <u>Gordon McKay</u> <u>Hamish R.Mackey</u> <u>Tareq Al-Ansari</u></p>	<p>Food waste characterization and suggestion of a set of waste management alternatives to minimize environmental impacts and maximize social and economic benefits.</p> <p>Section of Interest: The entire document is likely to be of interest to the reader.</p>
<p><u>Waste management in the olive oil industry in the Mediterranean region by composting</u></p>	<p><u>Manjari Chandra</u> <u>Shalini Sathiavelu</u></p>	<p>This paper investigates management of wastes generated during processing of olive oil, focusing on olive husks and their disposal. The most effective method of disposal of olive husk waste is composting.</p> <p>Section of Interest: The entire document is likely to be of interest to the reader.</p>
<p><u>Mediterra 2016 . Zero Waste in the Mediterranean. Natural Resources, Food and Knowledge</u></p>	<p>CIHEAM and FAO</p>	<p>An overview of the FLW issue and its implications for sustainability and food security, analysing drivers and causes of FLW along the entire food chain and highlighting different strategies and policies for its reduction and/or prevention.</p> <p>Section of Interest: Chapter 9: “Food losses and waste: global overview from a Mediterranean Perspective”, p. 193.</p>

Key Platform for Food Waste Reduction

<p><u>EU Platform on Food Losses and Food Waste</u></p>	<p>European Commission</p>	<p>The EU Platform on Food Losses and Food Waste brings together EU institutions, experts from the EU countries and relevant stakeholders. The Platform aims to support all actors in: defining measures needed to prevent food waste; sharing best practice; and evaluating progress made over time.</p> <p>Section of Interest: The entire web page is likely to be of interest to the reader.</p>
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Recordings of Webinars, Conferences and Workshops

<p><u>UN Food Systems Summit Pre-Summit official Ceremony and Global Town Hall: Rising Up to the Future</u></p>	<p>UN Food Systems Summit Youtube Channel</p>	<p>This session with the UN Secretary-General and Heads of State and Government lays out how transforming food systems around the world can help deliver on all shared goals for people, planet, and prosperity.</p> <p>Section of Interest: The entire conference is likely to be of interest to the reader.</p>
<p><u>Food Loss and Waste Reduction during Processing</u></p>	<p>FAO</p>	<p>This webinar addresses the main areas of opportunity to prevent and reduce food waste at this stage are improving processing practices, finding innovative packaging solutions, and promoting circularity by using by-products and left-over product material for human food.</p> <p>Section of Interest: The entire webinar is likely to be of interest to the reader.</p>
<p><u>Webinar: Waste Technology Deep Dives - Treatment of Organic Waste - Anaerobic Digestion</u></p>	<p>Wuppertal Institute for Climate, Environment and Energy</p>	<p>Fundamentals of Anaerobic Digestion from experts' and practitioners' perspectives.</p> <p>Section of Interest: The entire webinar is likely to be of interest to the reader.</p>