



Regional training on the Sustainable Management of Olive Oil Mills' Waste (REG-3)

Mentioned in approved Work Programme as

'In depth examination of the management schemes for waste from food industry, particularly
olive oil mills'

This activity is also linked to P2P-5 and WEB-3

4-7 December 2017

Athens, Greece

1 INTRODUCTION: THE SWIM-H2020 SM

The SWIM and H2020 SM is a Regional Technical Support Program, funded by the European Commission, Directorate General (DG) NEAR (Neighborhood and Enlargement Negotiations), that includes the following Partner Countries (PCs): Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine, [Syria] and Tunisia. However, in order to ensure the coherence and effectiveness of Union financing or to foster regional co-operation, eligibility of specific actions will be extended to the Western Balkan countries (Albania, Bosnia Herzegovina and Montenegro), Turkey and Mauritania. The Program is funded by the European Neighborhood Instrument (ENI) South/Environment. It ensures the continuation of EU's regional support to ENP South countries in the fields of water management, marine pollution prevention and adds value to other important EU-funded regional programs in related fields, in particular the SWITCH-Med program, and the Clima South program, as well as to projects under the EU bilateral programming, where environment and water are identified as priority sectors for the EU co-operation. It complements and provides operational partnerships and links with the projects labelled by the Union for the Mediterranean, project preparation facilities in particular MESHIP phase II and with the next phase of the ENPI-SEIS project on environmental information systems, whereas its work plan will be coherent with, and supportive of, the Barcelona Convention and its Mediterranean Action Plan.

The overall objective of the Program is to contribute to reduced marine pollution and a more sustainable use of scarce water resources. The Technical Assistance services are grouped in 6 work packages: WP1. Expert facility, WP2. Peer-to-peer experience sharing and dialogue, WP3. Training activities, WP4. Communication and visibility, WP5. Capitalizing the lessons learnt, good practices and success stories and WP6. Support activities.



2 BACKGROUND

Olive Oil is undoubtedly the “trademark” product of the Mediterranean region and supports a large number of people working both in agriculture and industry, with direct and indirect links with gastronomy and tourism. Therefore, the economic and social importance of the olive-oil sector is extremely important for the region. Olive mill waste is an old standing environmental problem because it is responsible for acute pollution of a large number and variety of aquatic and terrestrial ecosystems, directly affecting the scarce water resources and soils of the Mediterranean region and the marine environment.

Despite the fact that many efforts have been invested in addressing the problem, the progress made until now is rather modest. This is due to the inherent complexity of the issue which stems from a combination of many factors, including:

- insufficient technological solutions of reasonable cost,
- insufficient legal-institutional frameworks at national level,
- low prices of olive oil in the international market

The latter of the three above factors is the result of the large scale centralized production by some countries (e.g. Spain) versus the considerable, yet fragmented, production of many small family-run artisanal agro-industrial units dispersed in most of the region which lack knowledge and capacities/means on many crucial levels and issues:

- the level of the farmers and primary production modes
- the level of the oil mills and their function
- the packaging and marketing of the products
- the various modes of treatment, valorization and disposal of waste.

The Horizon 2020 Initiative for a Cleaner Mediterranean, in its first phase 2009-2015, recognized the problem and the needs of the PCs and via the CB/MEP project dedicated several national and regional capacity building workshops in examining and sharing good practices on olive mill waste management. Notably, the most important was the Regional Workshop held in Athens, at the UoA, in 2012, reviewing the different waste treatment techniques, alternative options and uses including new valorization opportunities by utilizing the waste as valuable raw material in the food and bio-chemical industry.

The present regional capacity building activity, requested by many countries of the region, intends to go further, inform in depth on successful management schemes, including state-of-the-art technologies of different scales with emphasis on innovative low-cost ones, semi-industrial waste valorization initiatives and sharing of experiences on policy – regulatory frameworks introduced in countries of the region.



The regional training and the Peer-to-Peer exchange that it will launch, will integrate and capitalize also on relevant national activities run under the Expert Facility supported by the SWIM-H2020 SM project.

The aim of the training activity is to provide valuable insight into the best available technologies and practices dealing with the management of olive mill waste and the valorisation of olive pomace and other waste, that could reduce acute pollution of waters, benefit thousands of olive oil producers of the Mediterranean region and create new jobs for young people allowing many of them to remain and work near their places of origin. Minimization of water consumption and the minimization/prevention of waste generated is a core principle of the approach.

3 TARGET GROUP

The main target group includes representatives of competent national and perhaps local authorities (Ministries of Environment, Industry, Agriculture, Water) and implementers who are involved in different aspects of olive oil waste including licensing, promotion of new advances and alternative olive waste management in the Partner Countries but also of relevant producers, industry and even academic/research institutions. **Three representatives are targeted to be invited from each Partner Country** as per the following:

- One to two representatives from the National Ministries responsible for the treatment and management of olive oil waste.
- One representative from the agro-industrial sector, ideally the relevant chamber or Association of olive oil producers or equivalent, or one representative from producers/companies/mills involved or academic/research institution.

4 OBJECTIVES AND EXPECTED RESULTS

4.1 OBJECTIVES

The overall aim of the CB activity and the field visit in the framework of the regional activities on Industrial Waste Management is to bring key stakeholders from the participating countries together with selected experts and provide a high-level training, which will include trainings/workshops, exercises and discussions combined with a field visit focusing on management of olive oil mill waste.

The specific objectives of the activity are to:

- Introduce to the participants an integrated approach for sustainable management of olive oil waste at local level based on state-of-the-art technologies and best practices;



- Visit at least one state-of-the-art olive oil waste management facility with particular emphasis to small scale units;
- Provide the participants with a complete/comprehensive introduction of legal/institutional frameworks for management as applied in selected EU and non EU countries of the region;
- Enable, encourage, and facilitate dialogue and exchange of experiences between competent authorities and key stakeholders from the olive oil sector from the partner countries and beyond ;
- Promote sharing of experiences among the partner countries on innovative valorisation of waste management practices; facilitate exchanges with key experts in the field and develop synergies and complementary on this issue within the Mediterranean;
- Capitalise and expand peer-to-peer processes for experience sharing at regional level and knowledge transfer (south-to-south, north-to-south) around waste management.

In order to achieve the above objectives, the SWIM-H2020 SM will use the expertise of the University of Athens (UoA), and the Regional Activity Center of UN Environment/MAP on Sustainable Consumption and Production (SCP/RAC) and invited speakers.

4.2 APPROACH TO MEET OBJECTIVES

In order to achieve the regional training objectives, a highly dynamic, comprehensive, interactive, facilitated and participatory approach will be adopted, in delivering the following:

- Presentation of appropriate legislative and economic instruments employed to encourage the sustainable management of olive oil waste.
- Presentation of recent developments and innovative approaches on olive oil waste management (various case studies including on the minimization of the consumption of water and the generation of waste: 2 phase vs 3 phase extraction; composting of 2-phase waste from olive oil mills: economic viability for small and medium mills, etc.).
- Field visit to state-of-the-art olive mill waste management facilities & presentation of innovative small scale decentralised management options.
- Presentation of selected cases from SWIM-H2020 SM partner countries' in order to stimulate discussions and identify potential synergies
- Interactive workshop session to discuss questions and problems encountered in order to identify common themes; launch and/or enhance peer-to-peer activities.

4.3 EXPECTED OUTCOMES

A. Key stakeholders of the partner countries are introduced to:



- Regulatory frameworks concerning the olive oil industry, olive mills waste prevention, disposal and valorization.
 - Recent developments and innovative approaches on olive mill by-products and waste valorisation and management through presentation of case studies.
- B. A peer-to-peer process for experience sharing at regional level and knowledge transfer (south-to-south, north-to-south) around sustainable olive mill waste management is launched or enhanced.
- C. The informal regional dialogue on olive oil waste management issues that was initiated during the EU-funded CB/MEP project, between decision makers, experts and international technical experts, is continued, enhancing the basis for the development of synergetic activities, regional cooperation, etc.

5 LOGISTICS

5.1 LOCATION

REG-3 is to be held in Athens, Greece. A field/study visit will also take place most likely on the 6th of December to another locality in Greece.

5.2 IMPLEMENTATION DATES

REG-3 will be organised over three and a half consecutive days, with travels on the days before (or the morning of the 1st day) and after (5 days in total) and is **to take place from 4-7 December 2017**. Olive Oil Mills are still functioning during this period in Greece and the trainees will witness operational mills during the field/study visit.

5.3 LOGISTICS

SWIM-H2020 SM will arrange all logistics for the training including travel, local transportation, accommodation and catering. Interpretation of English/French will be available (partially whisper translation during the field visit).



PROVISIONAL AGENDA OF THE REGIONAL TRAINING

Sustainable Management of Olive Oil Mills' Waste

DAY 1:			
Monday 4 Dec		Venue: Acropolis Palace Hotel, 19-25 Parthenonos, 11742, Athens	
Time	Session	Work programme	
13.00-14.30	Lunch		
14.30-15.30	Welcome	<ul style="list-style-type: none"> • Welcoming remarks • Brief overview of the SWIM-H2020 SM • Agenda overview • Tour de Table 	Prof. Michael Scoullas, Team Leader, SWIM-H2020 SM
15.30-16.30	OMW in the Mediterranean	How Med countries are dealing with olive oil production and pollution prevention and treatment: a general overview of currently applied policies and methods (centralized and decentralized approaches) Q&As	-Dr. Kostas Chartzoulakis, SWIM-H2020 SM Expert -Ing. Angelos Mochloulis, Peralisi
16.30-17.00	Coffee break		
17.00-18.30	OMW in the Mediterranean	The regional context: the legal and institutional frameworks across the Med – challenges and latest trends Q&As	-Mr. Giorgos Kontaxakis, SWIM-H2020 SM Expert -Ms. Olympia Antoniou, Environmental Permitting Dpt., Ministry of Environment of Greece,

DAY 2:			
Tuesday 5 Dec		Venue: Acropolis Palace Hotel	
Time	Session	Work programme	
09.30-11.15	Pollution Prevention and resource efficiency	<ul style="list-style-type: none"> - The use of olive by-products for energy production: the case of Cyprus - The international olive oil sector and its environmental impact: An overview, with cases from various countries 	-Dr.-Ing. Paris Fokaidas, Frederik University -Prof. Dr. Juan Vilar Strategic Consultant, SWIM-H2020 SM Expert
11.15-11.45	Coffee break		
11.45-13.00	BATs/best practices	Centralised schemes: - The Spanish case, with emphasis on water savings - other Countries	-Prof. Dr. Juan Vilar Strategic Consultant, SWIM-H2020 SM Expert -Countries' presentations
13.00-14.00	Lunch break		
14.00-15.30	BATs/best practices	Decentralised schemes: - Case studies and methodologies from companies and various countries	-Mr. Konstantinos Axaridis, Alfalaval -Countries' presentations



15.30-16.00	Coffee break
16.00-17.30	Exercise Group work

DAY 3:		
Wednesday	Field visit to olive oil mills	
6 Dec		
Time	Session	Work programme
9.00	Departure from the hotel by bus	
10.30-12.00	Visit to a functioning olive oil mill in the area of Agioi Theodoroi (close to Corinth)	
12.30-13.30	Visit to a functioning olive oil mill in the Peloponnese (near the village of Klenia)	
14.00-15.30	Lunch	
15.30-17.00	Presentations/discussion	
17.00-18.30	Return to the hotel	

DAY 4:		
Thursday	Venue: the University of Athens	
7 Dec		
Time	Session	Work programme
9.00	Departure from the hotel to the UoA (Panepistimioupolis)	
09.30-10.15	Valorisation of olive oil mill waste Overview	Venue: Aristotelis Amphitheater
10.15-11.00	Coffee break and walk to the Laboratory	
11.00-12.00	Valorisation of olive oil mill waste Visit to the Laboratory	Venue: Laboratory of the Department of Pharmacology
12.15-13.15	Closing training of Closing reflections Evaluation and certificates award	Venue: amphitheater
13.15-14.30	Lunch break	
14.30-16.00	P2P session Peer-to-Peer exchange launch session	Venue: Aristotelis Amphitheater

**The civil society component of SWIM-H2020 SM is facilitated by
the UfM labelled BlueGreen project and mechanism**