#### **SWIM and Horizon 2020 Support Mechanism**

Working for a Sustainable Mediterranean, Caring for our Future

### Session I: SWIM-H2020 SM: Where we are and what is still to happen in Palestine Implementing the Palestine work programme

Presented by SWIM-H2020 SM Team members:

Prof. M. SCOULLOS (Team Leader), Mr. D. Zarris (Drought Hazard Expert)

SWIM-H2020 SM National Meeting: Palestine Supporting sustainable water resources and a clean environment in the Mediterranean region Ramallah, 27 November 2018

This Project is funded by the European Union

























### SWIM-H2020 SM in a Snapshot

#### **Profile**

The EU-funded **SWIM-H2020 SM Project (2016-2019)**, is a key regional project aiming to contribute to reduced marine pollution and sustainable use of scarce water resources in the Mediterranean Region with emphasis on the **countries of North Africa and the Middle East.** 

#### **Components of the Project**

The Project is the continuation and merging of two successful previous EU-funded Programmes: <u>Horizon 2020 Capacity Building/Mediterranean Environment Programme (H2020 CB/MEP)</u> (2009-2014) and the <u>Sustainable Water Integrated Management Support Mechanism (SWIM SM)</u> (2010-2015).





#### **SWIM-H2020 SM**

#### The Project is to:

Provide tailored and targeted technical assistance at national level based on partners' requests through an Expert Facility;

Organize regional (or sub-regional) peer-to-peer training seminars and webinars;

Conduct on-site training courses and study tours;

Capitalize on the lessons learnt, good practices and success stories;

Support logistically and technically the Horizon 2020 Initiative's Steering Group & Sub Groups and the Meetings of the Union for the Mediterranean's Water Experts Group.





### **SWIM-H2020 SM Expected Results**

#### In order to Achieve:

Positive changes in the design and implementation of the relevant national institutional, policy and regulatory frameworks;

Enhancement of partner countries' capacity to promote investment and business opportunities for properly managing municipal waste, industrial emissions and waste water;

Facilitation of access to finance for selected sustainable investment projects;

Strengthening of regional coherence and cooperation in approaches to marine pollution prevention and control, and sustainable water management;

Identification, testing and sharing of best practices and success stories;

Use of research results in policy making – enhancement of more sustainable practices.





#### **SWIM-H2020 SM Themes**







### **SWIM-H2020 SM Cooperation**

#### **Framework of Cooperation**

The project is based on synergies, which are further developed and supported through:

- The SWIM-H2020 SM Focal Points (FPs) in the Ministries in charge of Water and Environment of the Partner Countries, which also constitute the SWIM-H2020 SM Steering Committee.
- Regional bodies forming the Institutional Partners of the Project, namely:
  - the **Union for the Mediterranean (UfM)**, assisting on issues linked with the draft Strategy for Water in the Mediterranean, the Water Strategy in the Western Mediterranean (5+5), projects and investments related with Mediterranean pollution Hot Spots.
  - the Mediterranean Action Plan of UN Environment (UN Environment/MAP), supporting activities related to the Land Based Sources (LBS), the Hazardous Wastes and Integrated Coastal Zone Management (ICZM) Protocols of the Barcelona Convention as well as the revised National Action Plans (NAPs).
- Relevant EU Institutions (including DG ENV, NEAR, Research, MARE, etc.) such as the
  European Investment Bank (EIB) which coordinates the Mediterranean Hot Spots Investment
  Programme II (MeHSIP II) and Agencies such as the European Environment Agency (EEA),
  which coordinates the Shared Environmental Information System (SEIS) South.
- Other Regional Initiatives and Projects (SwitchMed, BlueGreen Med CS, CLIMA South, etc.).





#### SWIM-H2020 SM Consortium



LDK Consultants S.A. (Leader) LDK Consultants Europe S.A.



**Haskoning DHV Nederland B.V.** 



Arab Countries Water Utilities Association (ACWUA)



**Mediterranean Information Office for Environment, Culture and Sustainable Development (MIO - ECSDE)** 



Arab Network for Environment and Development "RAED"



Milieu Ltd



**Association of Cities & Regions for Recycling and Sustainable Resource** Management (ACR+)



**National and Kapodistrian University of** Athens (UoA)



**Catalan Waste Agency (hosting institution** of Regional Activity Centre for Sustainable Umweltbundesamt GmbH Consumption and Production (SCP/RAC))





**EEIG UT – SEMIDE** 



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### SWIM-H2020 SM in Numbers

#### **The Project in Numbers**

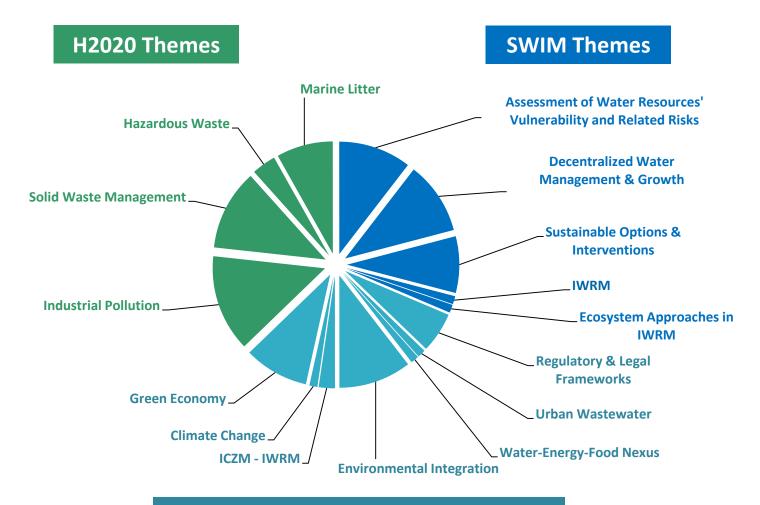
1	Support Mechanism
2	Components (SWIM and Horizon 2020)
8	Partner (Beneficiaries) Countries (active)
19	Major Synergies
14	Consortium Partners
39	Months (2016-2019)
6.705.250	Euros Budget
21	Themes
Over 100	Activities out of which <b>50</b> are National and <b>35</b> (sub) Regional and other meetings with participation from Western Balkans and Turkey
24	Annual Meetings
11	Categories of Stakeholders involved
2	Websites (Project & H2020)
2	Social Media Pages (LinkedIn, Facebook)





#### SWIM and Horizon 2020 Support Mechanism at a glance

#### 85 activities under 15 themes for both Water and Environment







### SWIM and Horizon 2020 Support Mechanism at a glance

#### **Structure**

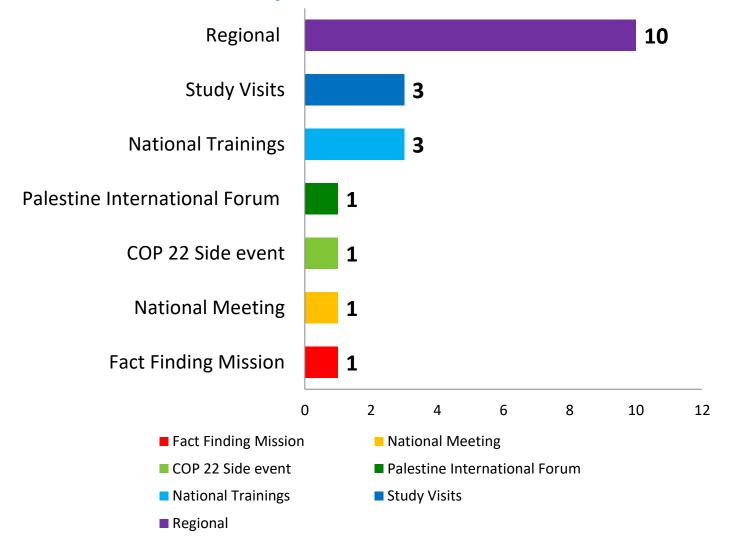




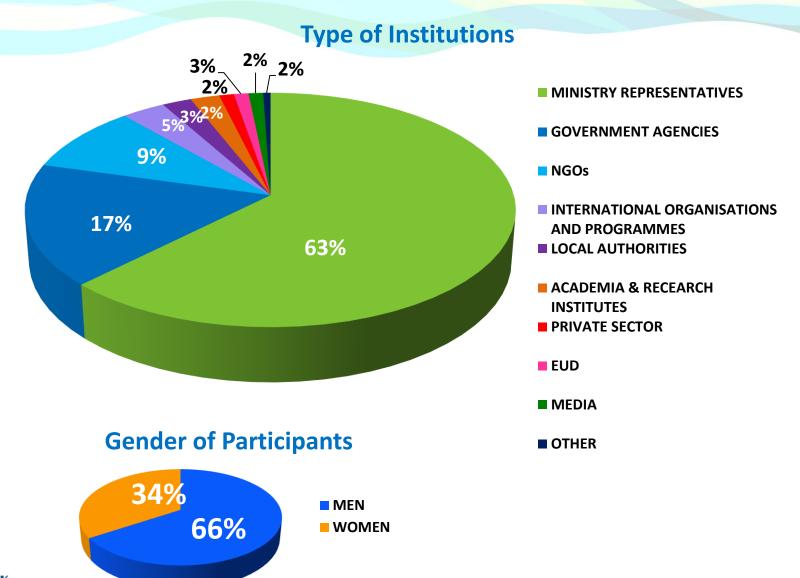


### Stakeholder Engagement

## 204+ Palestinians professionals have participated in the Project's Activities to date



### **Stakeholder Engagement**







### **SWIM-H2020 SM: Assessment process**

## SWIM-H2020 SM methodology for enhancing and assessing its capacity building activities

- -Assessment quizzes/exercises (before/after training/study visit)
- -Evaluation forms at the end of each training/study visit
- -Post training questionnaires
- -Deepening interviews
- -Feedback: emails, reports, etc.
- -Steering Committee Meetings of the project





### EFH-PS-1: Enhancing environmental awareness including of the media and support for implementing Education for Sustainable Development

Description of the activity	Status	%
To raise awareness and build	- Training of Trainers and Inter-institutional	
the capacities of educators and	consultation on ESD organized on 17-18	
other professionals on the	September 2017. (Report uploaded in the	000/
design and application of ESD	website)	80%
programmes, focusing on and		
showcasing projects about	- The Follow up report (task 4) finalized.	
waste management and the use		
of non-conventional water	- The media training to take place in January	
resources. On another level, the	2019 is under preparation.	
activity has introduced the		
Mediterranean Strategy on		
<b>Education for Sustainable</b>		
Development (MSESD).		





## EFH-PS-2: Support in environmental inspection and enforcement of environmental legislation

Description of the activity	Status	%
Rerouted/ Merged with EFH-PS-3 Provide technical assistance for addressing industrial pollution focusing on specific industries (See hereafter).		Rerouted





### EFH-PS-3: Provide technical assistance for addressing industrial pollution as well as inspection and enforcement measures in the tanning and olive oil industries

Description of the activity	Status	%
To strengthen the capacity of the target group to prevent and reduce pollution from the Olive Oil and Tanning sectors in Palestine through the development of guidelines and tools for pollution management and inspection/control in the mentioned industries.	<ul> <li>In April, discussions began with the H2020 FP on merging this activity with EFH-PS-2 (Support in environmental inspection and enforcement of environmental legislation) which had not started yet.</li> <li>On 5 April the H2020 FP confirmed the merging.</li> <li>The ToRs were approved on the 12th of October and the experts immediately began preparations.</li> <li>Inception mission took place on November 26th (back-to-back with the Country Meeting for Palestine).</li> </ul>	20%





#### **EFH-PS-4: Support for hazardous waste management**

Description of the activity	Status	%
To promote the approval of the National Strategic Plan for Hazardous Waste Management (NHWMP) and to support its implementation and enforcement on the ground, allowing the country to meet the provisions of the Basel Convention.	<ul> <li>- MoM, NHMWP Review (Task 1) and Gap analysis (Task 3) were submitted in November 2017;</li> <li>- The workshop to present the Gap Analysis took place in February 2018;</li> <li>- The Compendium of good practices on HZW management (Task 2) was submitted and approved in June 2018.</li> <li>- The review and development of the national institutional setup for hazardous waste management (Task 4) is underway.</li> <li>- The draft national institutional setup was submitted in the beginning of November 2018.</li> <li>- The consultation meeting (with all stakeholders EQA, MOLG, MOH, MOT, MoNE, PCBS, PEA, PSI) is organized in the afternoon of the 27th of November 2018 (back-to-back with the Palestine Country Meeting).</li> </ul>	95%





Code	Activity	Description
ST-1 & P2P-1	Study Visit on Construction and demolition waste	Study visit on construction and demolition waste organized in September 2017 in Belgium. Introduction of P2P-1 at the end of the study visit.
REG-1	Overview of the developments in Europe and the Mediterranean on Marine Litter monitoring. Correlations with policies dealing with the use of plastics (particularly plastic bags)	Training was organized in Athens on 24 and 25 October combined with another EU funded project, ACT4Litter. Links to national activities in Algeria, Egypt and Morocco are established, as well as with P2P-3 and WEB-2. Links also with other regional projects on marine litter.
ST-2 & P2P-2	Visit to different types of state-of-the-art Sludge Management Systems (focusing on possibilities and conditions for utilization/different applications)	Study visit organized from 25 to 27 June 2018 in Athens, Greece. The report has been finalized. P2P-2 was launched in Athens on 25-27 June 2018 and is underway.  1 Peer from Palestine.





Code	Activity	Description
ST-3	Visit to a site where combined ICZM – IWRM (including groundwater) is applied	Study visit organized in Buna - Bojan, Montenegro, 16-17 July 2018. The report has been finalized.
ST-4	Study Visit on industrial and hazardous wastes (Case of leachate treatment)	Study tour organized in June 2018 in Lebanon with focus on leachate management (ST-4) (in combination with the training EFH-LB-2).
P2P-6	Peer-to-peer on the management of industrial waste to address the acute problem of hazardous substances disposal	Launch of P2P exchange at the end of the study visit with Peers from Jordan and Palestine. (still being defined)





Code	Activity	Description
REG-2	Promoting the role of green banking in supporting investments in the water sector, particularly with the involvement of private banks	<ul> <li>Regional training was integrated into the Conference on "Water Governance in the MENA Region and the Greater Mediterranean Region: Enhancing Integrity and Financing Water Security and Sustainable Development" organized on 12-14 December, 2017 in Barcelona, Spain.</li> <li>All material, presentations, workshop briefing note and agenda were uploaded to the project website.</li> </ul>
REG-3 & P2P-5	In depth examination of the management schemes for wastes from food industry, particularly olive oil mills	<ul> <li>The regional training was organized from 4 to 7 December 2017 in Athens, Greece. The report has been finalized.</li> <li>P2P-5 launched at the end of the REG-3 training and study tour "Sustainable Management of Olive Oil Mills" organised on 4-7 December 2017, in Athens, Greece.</li> </ul>





Code	Activity	Description
REG-10	Regional Training on Education for Sustainable Development (ESD)	Regional training organized on 22-24 November 2017 in Nicosia, Cyprus. A joint meeting of parliamentarians, representatives of ministries and stakeholders (including from Jordan) also took place in the Cypriot Parliament.
		The report is developed and uploaded to the site.
REG-12	Public participation/ Multi stakeholder dialogue involving Parliamentarians, Representatives of Media and CSOs	Regional training entitled "Strengthening Stakeholder Engagement in Mediterranean Environment and Water Programs" held on 20-22 November in Nicosia, Cyprus. The main results were shared with the UfM Secretariat and the Horizon 2020 Steering Group.  The report has been finalized and uploaded to the website.





Code	Activity	Description
REG-14	on water, waste water and solid waste (focusing on wastewater and solid waste)	The capacity of the technical staff of the water, wastewater and solid waste sectors of Jordan, Lebanon, Palestine and Tunisia has been strengthened in the design of appropriate wastewater and solid waste management projects. Participants' understanding of the needs for wastewater and solid waste management solutions that can be used in temporary settlements / camps and / or long-term or permanent facilities is improved. Training was also
REG-15	Support for the implementation of the PCs' updated UNEP/MAP NAPs	supported/mentored by MEHSIP.  Regional Meeting on NAP Implementation "Lessons Learned and the Way Forward" co-organized by UNEP / MAP and SWIM-H2020 SM, 17-18 October 2016 in Marseille, France.





Code	Activity	Description
REG-9 Planned	Fostering a switch to Green Economy in the Mediterranean: Capacity building for SMEs and Policy makers on eco-design, eco innovation and enabling policies	<ul> <li>This regional workshop is scheduled to take place in Barcelona on December 11-13, 2018.</li> <li>The title is "Fostering the transition to a green economy in the Mediterranean: building the capacity of SMEs and decision makers in ecodesign, environmental innovation and enabling policies.</li> <li>Invitations for candidates were sent in October 2018.</li> </ul>





# **SWIM-H2020 SM Expert Facility:**Water Component - 2 activities in Palestine

### EFS-PS-1: Mainstreaming Drought Risk Management (Application (as pilot studies) to Jenin and Tulkarm Governorates)

Description of the activity	Status	%
<ol> <li>Overall: Contribute to the development of the Drought Risk Management Mainstreaming</li> <li>Assess the drought hazard and the vulnerability to drought and water scarcity through a set of indicators, following a robust methodological framework;</li> <li>Develop Drought Risk Profiles for 2 pilot areas, laying out a clear methodology that can be replicated in other areas;</li> <li>Create a knowledge base of scientific data and information on available surface and groundwater sources and the water use and demand of each sector</li> </ol>	<ol> <li>Rainfall and PET data have been processed for reliability, gap filling, etc. Full monthly rainfall data has been completed for 6 rainfall station covering duration from 1969 to 2017 (48 years).</li> <li>Drought and water scarcity hazard indicators have been principally developed but need adjustment due to recently acquired information regarding irrigation application methods, etc.</li> <li>Drought Vulnerability Indicators have been principally designed but need adjustment due to recently acquired information regarding communities connectivity to potable water networks, etc.</li> <li>Drought Risk Profiles will be shortly completed after settling the above information issues.</li> </ol>	90%





# **SWIM-H2020 SM Expert Facility:**Water Component - 2 activities in Palestine

#### **EFS-PS-1: Mainstreaming Drought Risk Management**

CONSULTANTS

Description of the activity	Status	%
<ol> <li>Overall: Contribute to the development of the Drought Risk Management Mainstreaming</li> <li>Draft a methodology for assessing groundwater vulnerability and defining groundwater protection zones. Implement this methodology in 2 pilot areas;</li> <li>Set-up participatory approaches with the stakeholders towards the establishment of a Aquifer Protection Advisory and Review Committee (APARC) on one hand, and towards the development of a regulatory/legal framework for Drought Risk Management Mainstreaming (DRMM);</li> <li>Train staff on the costs of environmental degradation (assessment methodologies and tools);</li> <li>Build capacity of the PWA staff and other stakeholders on DRMM.</li> </ol>	<ol> <li>The methodology for assessing groundwater vulnerability and defining groundwater protection zones and its implement in 2 pilot areas has been completed.</li> <li>The Aquifer Protection Advisory and Review Committee (APARC) has been set up (during the 1st Meeting of the "Aquifer Protection Advisory and Review Committee (APARC)" (23 May 2018).</li> <li>Training on the costs of environmental degradation (assessment methodologies and tools) has been completed (11-12 July 2018).</li> <li>Training on Building Capacity offered to PWA staff on DRMM has been completed. The PWA has been offered with two free software programs in order to calculate the basic drought hazard indices (SPI, RDI, SDI, Deciles).</li> </ol>	

# **SWIM-H2020 SM Expert Facility:**Water Component - 2 activities in Palestine

### EFS-PS-2: Provide consultancy services on conceptualization and planning of Palestinian International Water Forum

Description of the activity	Status	%
Assist the PWA in in the conceptualisation, planning and management of the call for proposal:	<ol> <li>Developed a list of proposed themes and topics based on the guidance of PWA and the Water Forum (WF) Advisory Committee.</li> <li>Organised a webinar to discuss the themes and topics with the stakeholders</li> <li>Prepared the Concept Note and the call for papers</li> <li>Announcing the conference</li> <li>Developed &amp; maintained the forum web site.</li> <li>Prepared the event plan and Risk assessment and mitigation Plan</li> <li>Assisted in monitoring implementation progress and managing the call for papers</li> <li>The conference was held between 25 and 28 June</li> </ol>	100%
• LDK	with the participation of 800 stakeholders and delegates in the Official Opening Ceremony of the Event, followed by an Exhibition and the technical sessions in the following two days.	

Code	Activity	Description
REG-4	Regulatory and organizational	The participants were introduced to the concepts and approaches of the Water Framework Directive as an instrument applied in Europe to promote decentralized water management (DcWM). Dialogue and exchanges.
REG-5	issues of decentralized water management, dealing also with drafting and	The participants were introduced to the (a) basic principles of public participation and effective public engagement processes; (b) the data requirements for River Basin Management Plan; and (c) the concept of groundwater bodies as unit for water management and protection at the local level.
ST-5	implementation of management plans at sub-national level and the role/importance of Information Management in Water Resources Planning and Management at the local level	<ul> <li>Through the study tour, the participants were able to:</li> <li>Learn from the experience of the public institutions in Austria, which offer good examples on decentralized water management.</li> <li>Obtain inside view on the work of various water managing institutions related to implementation of surface and groundwater quality protections measures in agricultural areas,</li> <li>see examples of decentralised water supply and wastewater treatment in rural areas of Austria.</li> </ul>
• LDK		***

Code	Activity	Description
REG-6	Different technical and regulatory aspects of Drought Risk Management	The participants were introduced to the concepts of proactive Drought Risk Management (DRM) and DRM mainstreaming and were engaged in the design of further regional activities under the same topic.
REG-7	Regional Training	The participants were introduced to different types of drought indicators, and improved their technical capacity on the development and analysis of indicators (in support of decision-making) and drought risk mapping.
ST-6	on Drought Risk Analysis and Mapping	The participants were introduced to good practices / measures for drought risk management in the Segura River Basin in Spain.
		A Palestinian expert (peer) is participating in technical exchanges focused on the monitoring and mapping of drought risks (another type of training) with three other Tunisian, Jordanian and Egyptian peers and a Greek expert selected by the project. Critical issues and
P2P-9		points common to all counterpart countries have recently been agreed, with emphasis on the institutional aspects of drought monitoring and management, based on the experience of Greece.
WEB-4		Webinar on monitoring and mapping of drought risks involving the peer designated by Palestine.
• LDK		

Code	Activity	Description
P2P-7	Groundwater zone protection and groundwater body delineation	1 (Peer) from Palestine with another peer from Egypt and a specialised expert from Austria, <b>participated</b> in technical exchanges focusing on the principles for groundwater protection against pollution based on existing guidance documents and experiences with the European Water Framework Directive 2000/60/EU (WFD) and the Groundwater Directive 2006/118/EU (GWD)
REG-8	Regional Training on Technical, Regulatory and Cultural aspects of Treated Wastewater Reuse	The capacity of the participants was developed with a view to: - Reinforce their knowledge on the guidelines and standards to be applied to ensure safe reuse in the different types of use - Increase their competence in governance arrangements for the wastewater reuse sub-sector through, e.g. options for covering investment and operating costs, institutional arrangements, public-private partnerships, etc.
REG-11	Reviewing good governance schemes with emphasis on the implementation and enforcement of legislation, needed regulatory reforms and introduction of appropriate incentives	Participants gained a better understanding of the key principles, elements and benefits of good governance, with a focus on the regulatory framework. They have been familiarised with approaches and methods for effective policy design, monitoring and evaluation, including the DPSIR framework (Drivers, Pressure, Status, Impact and Response), Strategic Environmental Assessment (SEA) and environmental audit.





Code	Activity	Description
REG- 14	Refugee Emergency: Fast track project design on water, waste water and solid waste (focusing on wastewater and solid waste)	Strengthened the capacity of the technical staff of the water, wastewater and solid waste sectors of Jordan, Lebanon, Palestine and Tunisia in the design of appropriate wastewater and solid waste management projects.  Improved Participants' understanding of the needs for wastewater and solid waste management solutions that can be used in temporary settlements / camps and / or long-term or permanent facilities.  Training was also supported/mentored by MEHSIP





### "External monitoring and ad hoc technical assistance to the SWIM Demonstration projects (Phase II)"

#### **Demo Projects to be monitored**

- Reuse of treated wastewater for agriculture irrigation in southern part of Gaza Strip», Coordinator: OXFAM (Gaza Strip); (Demo 1)
- Promote wastewater treatment and reuse in the water scarce areas of the Middle East & North Africa through development and demonstration of innovative instruments and inclusive management plants», implemented by the Applied Research Institute- Jerusalem (ARIJ) (Jerusalem); (Demo 2)
- «Innovative Demonstrations on Sustainable Integrated Management of Wastewater and Reclaimed Water Use in North West Bank» – Palestine, Coordinator: Agricultural Development Association (Ramallah). (Demo 3)





### "External monitoring and ad hoc technical assistance to the SWIM Demonstration projects (Phase II)"

Task	Description	Demo 1	Demo 2	Demo 3
1	Familiarization with the Demo projects	<b>V</b>	<b>✓</b>	✓
2	Collection, review & analysis of Demo projects' documentation	<b>~</b>	<b>~</b>	<b>✓</b>
3a	Distribution of Prepared questionnaire, and Skype interview to discuss the filled questionnaires	24/10/2018	5/11/2018	29/10/2018
3b	Use DAC criteria to evaluate Demos	On-going	On-going	On-going
4	Meetings and discussions with project manager, stakeholders and beneficiaries	Skype interview with Project manager (Waseem Mushtaha) Interviews with stakeholders to be scheduled	Skype interview with Project manager, Meeting with project manager, 5/11/2018 (Jane Hilal and Ilyas AboMohor), 3 Stakeholders, 2 farmers, representative of beneficiary farmers .	Skype interview with Project manager (Salam Rihan), Meeting with project manager (10/11/2018), 3 Stakeholders, 3 farmers, representative of beneficiary farmers.  Site visit
5	Preliminary findings report on activities progress	On-going	On-going	On-going





### "External monitoring and ad hoc technical assistance to the SWIM Demonstration projects (Phase II)"

#### **Preliminary Findings**

- 1- All DEMOs are anticipated to have a positive impact to the local communities after their full implementation and enhance the effectiveness of local water resources governance.
- 2- All projects still meet the initially identified needs of the target areas and are in line with the objectives of the PWA.
- 3- Some delays in accomplishing activities are foreseen which may put the projects under risk of being accomplished on time; this could have been managed if a thorough risk assessment was carried out beforehand. DEMO project 2 and DEMO project 3 are expected to ask for time extension to accomplish the project.
- 4- Within the course of implementation for all three DEMO projects there was a necessity to differentiate activities, either in terms of budget, scope or even both, without however altering the final output.
- 5- The three DEMO projects faced or are still facing challenges of different types: financing, acceptability from the local communities, internal procedures.
- 6- All three DEMO projects managed to convince their beneficiaries of the benefits of reusing treated wastewater in irrigation.
- 7- The sustainability of the three DEMO projects depends of whether funds will be available to (1) cover wastewater treatment operational costs; (2) the availability of qualified human resources to run the wastewater treatment plants.





#### SWIM-H2020 SM

#### For further information

Website

www.swim-h2020.eu

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**LinkedIn Page** 

**Facebook Page** 





### **SWIM and Horizon 2020 Support Mechanism**

Working for a Sustainable Mediterranean, Caring for our Future

#### Thank you for your attention.

This Project is funded by the European Union



























