SWIM and Horizon 2020 Support Mechanism

Working for a Sustainable Mediterranean, Caring for our Future

Drought Risk Management (DRM) approaches and good practices in the partner countries

Open Discussion – Feedback from the Country Questionnaire Q1

SWIM-Horizon 2020 SM Regional Training on "Drought Risk Management Mainstreaming (DRMM)"

14-15 December 2016, Athens, Greece

This Project is funded by the European Union



























Feedback from the Q1 Country Questionnaire (5/8 replies)

SECTION 1: General Facts about Drought & Water scarcity occurrence

How often do you experience drought episodes in your country?

Once in 5 years (EG, IL) - More than once in 5 years (DZ, PS, TN)

What is the relation between **Drought and Water Scarcity** in your country?

WS is a permanent condition, exacerbated during drought (IL, PS)

No WS under normal conditions, but stress during drought (DZ, EG, TN)

Which are the **main drought impacts** in your country?

ECONOMIC IMPACTS		ENVIRONMENTAL IMPACTS		SOCIAL IMPACTS	
Crop production and yield losses	100%	Decrease of available water		Rising conflicts between water	
Cost of drought mitigation measures	100%	resources (minimum vital flow)	80%	users	80%
Reduction of income from agriculture	80%	Degradation of water quality	000/	Water shortage & interruptions	
Disrupted food supply, increase in		, ,	80%	(frequency, duration, e1tent) due	
prices of food	80%	Increased risk of forest and	600/	to deficiency in public water	
Losses in livestock production	60%	range fires	60%	supply	60%
Losses in the production of		Soil erosion and Desertification	40%	Drinking water quality safety	
manufactured goods and related		Loss of wetlands	40%	issues	60%
income	60%	Changes in river morphology	40%	Reduced quality of life, mental	
Impacts on forestry and fishery	60%			and physical stress, discomfort	60%
				Inequities in the distribution of	
Cost of environmental degradation	60%			impacts	60%

SECTION 2: Monitoring and Assessment of Drought &WS

Do you monitor drought in your country? Which parameters/indicators do you monitor?

Streamflow (100%), Precipitation (80%), Groundwater level (80%), Water Level (lakes, reservoirs) (60%), Soil Moisture (20%), Vegetation index (20%)

Do you **monitor and record water use** per sector/ user category?

Some sectors (80%) – domestic, irrigation All sectors (20%)

Is the recorded water use per sector/ user category **complete**? Is water use **estimated or metered**?

Incomplete (60%), Complete (40%) Estimated (60%), Metered (40%)





SECTION 2: Monitoring and Assessment of Drought &WS

Have you performed an **assessment of Drought Risk (Hazard x Vulnerability**) in your country?

Yes (DZ), No (EG), The Hazard only (IL, TN)

Have you performed a **detailed assessment of freshwater resources availability**? Has the actual potential for each of the water sources and the water supply coverage been estimated under extreme drought conditions?

No (EG), For some freshwater resources (DZ), For all freshwater resources (IL) For all freshwater and non-conventional water resources as well (PS, TN)

Can **priority water demands** (e.g. drinking water) be met throughout the available water resources during a severe drought?

No (DZ, EG), Yes (IL, TN), Unknown (PS)





SECTION 3: Managing Drought Risk - the current state

Has the water system experienced significant drought management **problems in the recent** past (within the past 7 years)? How would you characterize the system's level of risk?

Yes – medium level risk (EG, TN), Yes – high level risk (DZ, IL, PS)

How would you summarize the reaction of the affected users?

In general the users complied even not everyone agreed, and looked for alternative sources (DZ, EG, IL)

There are many conflicts, Prices were high, especially for the vulnerable, communities (PS) Awareness by the people, yet in some rural areas manifestations (TN)

How would you characterize **your country's approach** to managing drought?

Rather re-active (crisis management) (80%, DZ, EG, PS*, TN*)

Rather pro-active (risk management) (20%, IL)

* Proactive in certain aspects: mobilisation of WR, inter-regional transfers, water saving programmes

Do you have a **Drought Risk Management Plan** (DRMP) in your country?

Yes (40%, IL, TN), Under Development (20%, PS), Foreseen in the future (40%, DZ, EG)





SECTION 4: Managing Drought Risk – Constraint and Gaps

Which are the **main constraints & gaps** in effectively managing drought risk in your country? (you can select more than one) → see xls

Technical	lack of technical knowledge and in-depth expertise, lack of necessary monitoring infrastructure, inadequate characterization of the hazard, confusion in the purpose and objectives of DRM, lack of in-depth assessments of the cost-effectiveness and suitability of the potential measures, etc.
Legislative & regulatory	lack of relevant policy, regulatory texts, guidance/ implementation documents, etc.
Institutional	lack of competent authorities & responsible actors, lack of a dedicated "drought task force", confusion in roles allocation, poor enforcement and control, etc.
Coordination	responsible actors do not successfully coordinate among them, a proper coordination mechanism among stakeholders at different levels is lacking, lack-of interest, conflicts of interest, etc.
Financial	action plans on managing drought risk do exist but there are no financing mechanisms and/or sources to implement them
Public involvement, equity and acceptability	coherent DRM plans exist but the foreseen measures are not acceptable by the general public, public involvement/participatory decisions had not been pursued, etc.)

On which specific issues would you wish the **regional training and peer-to-peer activities focus** in order to accommodate your priority needs? \rightarrow see xls





The SWIM-H2020 SM Project in a Snapshot

Sustainable Water Integrated Management and Horizon 2020 Support Mechanism SWIM-H2020 SM



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Mediterranean Issues and Challenges

The environmental problems of the Mediterranean are many, complex and interlinked. Uncontrolled coastal development, population growth, increasing tourism, loss of biodiversity and environmental pollution stemming from the above and from poor management of municipal waste, urban wastewater and industrial emissions, including their respective pressures to the quantitative and qualitative characteristics of surface and groundwater resources ending up in the Mediterranean, constitute major pressures on its marine and coastal environment. Their impact is particularly reflected in the land-sea interface, the coastal zone. In addition, economic and social crises, high refugee flows, in combination with climate variability and change have made it more difficult to deal with the accumulated problems. Renewed efforts to address the challenges are made within the SWIM-H2020 SM Project (Sustainable Water Integrated Management and Horizon 2020 Support Mechanism 2016-2019) jointly by the Mediterranean countries and the European Union.

The SWIM-H2020 SM Project

The SWIM-H2020 SM Project, funded by the European Union, aims to contribute to reduced marine pollution and a sustainable use of scarce water resources in the Mediterranean Region with emphasis on the countries of North Africa and the Middle East (Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine, [Syria] and Tunisia). The Project is the continuation and merging of two successful previous EU-funded service contracts, Horizon 2020 Capacity Building/Mediterranean Environment Programme (H2020 CB/MEP) (2009-2014) and the Sustainable Water integrated Management Support Mechanism (SWIM SM) (2010-2015).





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Thank you for your attention.

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