



**Regional activity (webinars) on
Educating for Sustainable Development (ESD) with focus on
Waste Water Treatment (WWT) for reuse and Non-
Conventional Water Resources (NCWRs)**

Activity No: HE-3-REG

Concept note



1 INTRODUCTION: THE WES PROJECT

The "Water and Environment Support (WES) in the ENI Neighborhood South Region" project is a regional technical support project funded by the European Neighbourhood Instrument (ENI South). WES aims to protect the natural resources in the Mediterranean context and to improve the management of scarce water resources in the region. WES mainly aims to solve the problems linked to pollution prevention and the rational use of water.

WES builds on previous similar regional projects funded by the European Union (Horizon 2020 CB/MEP, SWIM I and II, SWIM-Horizon 2020 SM) strives to create a supportive environment and increase the capacity of all stakeholders in the partner countries (PCs).

The WES Partner Countries are Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Libya, Palestine, Syria and Tunisia. However, in order to ensure the coherence and effectiveness of EU funding or to promote regional cooperation, the eligibility of specific actions can be extended to neighboring countries in the Southern Neighborhood region.

2 BACKGROUND

The global depletion of natural resources (including water), pollution threats, biodiversity loss, and climate pressures are strongly linked to the fact that we are demanding more from nature than it can supply. In order to shape a more sustainable world, attitudes and behaviours must change at many levels: individual, community, national, regional and global, and this is the entry point for education of all types (formal, non-formal and informal) and awareness.

The Mediterranean is among the most arid regions in the world. While the region holds only 3% of global water resources it hosts over 50% of the world's water poor populations, around 180 million people, according to FAO. Human-made pressures, such as population growth, urbanization, water intensive agriculture, tourism and other industries, together with misuse, keep increasing water demand. Unprecedented droughts and storms, caused by climate change, coupled with erosion, desertification and groundwater overexploitation increase vulnerability and make urgent the need for better water management at all levels (at local, national and transboundary levels).

Non-conventional water resources (NCWRs), mainly rainwater harvesting and greywater reuse, improved by innovative techniques, are for the water-scarce Mediterranean, a cost-effective method for enhancing water availability and addressing current and future water scarcity challenges as well as adapting to climate change. Examples range from irrigation and aquifer recharge with properly treated wastewater, to rainwater collection in buildings, stadiums, airports, or greywater reuse in toilets, etc. However, technical solutions alone are not enough. They need to take into consideration, among others, social and economic aspects. What is needed is a "new water culture" of sensitized citizens who comprehend the challenges of water scarcity and competing uses in the region and respond by saving water, keeping it clean, and adopting practical, 'green' and cost-effective solutions.

How can the WES Partner Countries and their peoples be sensitized to NCWRs so that the region approaches the much needed “new water culture”?

Education and in particular **Education for Sustainable Development (ESD)** has been recognised among the most powerful tools in achieving the SDGs and accelerating transformation towards more sustainable and resource efficient societies (see EU’s upcoming Council Recommendation on education for environmental sustainability; UNESCO’s #ESDfor2030; Union for the Mediterranean’s 2030GreenerMedAgenda and Water Agenda; UN’s Economic Commission for Europe (UNECE) Strategic Planning for 2030, UN Environment Programme (UNEP), UNEP/Mediterranean Action Plan (MAP), Mediterranean Commission for Sustainable Development (MCSD), etc.

In the Mediterranean region this recognition is exemplified, by the intensified efforts of countries in recent years to implement the Mediterranean Strategy on Education for Sustainable Development (MSESD) (elaborated under the EU-funded regional project Horizon 2020 CB/MEP, adopted by the 1st UfM Ministerial Meeting on Environment and Climate Change (2014)), as well as its Action Plan, adopted by Ministers of Education in 2016. Both are integral parts of the Mediterranean Strategy for Sustainable Development (MSSD) of the Barcelona Convention and a flagship initiative of the UfM and of UNESCO (Global Action Programme on ESD). It is noteworthy that the League of Arab States (LAS) and UNECE have also endorsed the Action Plan of the MSESD.

One of the priority themes identified by the MSESD’s Action Plan are Non-Conventional Water Resources (NCWRs) within the Whole Institution Approach (WIA) and in line with the principles of Integrated Water Resources Management (IWRM). Indeed, water related ESD, once applied within the Whole Institute Approach (i.e. combining water efficient infrastructures, learning content, pedagogies, school governance and openness to society) can transform educational institutions into learning and sustainability labs that apply in practice the “new water culture” and inspire for a broader transformation towards the SDGs.

Within this backdrop and frameworks, this WES regional activity comes to assist the WES Partner Countries to be better capacitated to raise awareness on how treated wastewater and non-conventional water resources can contribute to addressing the region’s serious water challenges, through Education for Sustainable Development.

2.1 TARGET GROUP

This regional on-line training addresses Ministries of Education and of Water/Environment/ Climate, etc.; relevant associations and organisations (educators, women, youth clubs, etc.) including CSOs/NGOs working on ESD, and researchers. Through this training activity, eventually a large number of educators of primary and secondary schools in the Partner Countries will be directly and indirectly reached.

From each of the WES Partner Countries, the Western Balkans and Turkey, the following trainees are targeted:

- 2 policy persons dealing with ESD or SDGs (ideally participating/following the MSESD process) and 2 education practitioners (teachers, trainers, Vocational education and training (VET) professionals, etc.) **appointed by the Ministry of Education.**

- 2 policy persons (ideally, participating/following the MSED process) and 2 practitioners (dealing with awareness raising / education / communication) **appointed by the Ministries of Water and Environment/Climate Change**.
- 2 - 4 non-state actors (environmental NGO, association, women's group, youth group), media professionals and/or academia.

In addition, up to 3 regional NGOs of relevance may also be targeted to participate in the regional training.

The selected trainees are expected to participate in both training modules of the activity (see more below).

3 OBJECTIVES AND EXPECTED RESULTS

3.1 OBJECTIVES

The overall aim of this regional activity is to provide technical assistance and strengthen the capacities of the WES Partner Countries to effectively implement Water related Education for Sustainable Development (ESD) with emphasis on Waste Water Treatment (WWT) for reuse and Non-Conventional Water Resources (NCWRs).

The specific objectives of this activity are to:

- Facilitate the competent authorities of the WES Partner Countries (education and water administrators) in applying the Whole Institute Approach and ESD in the formal and non-formal educational system.
- Demonstrate how WWT and NCWR applications in schools and other institutions, combined with appropriate ESD, can transform the institution into a learning lab for sustainability.
- Enhance the competences of the targeted stakeholders (teachers, trainers, youth leaders) in implementing learner-centered and participatory ESD didactic approaches relating to water in their own educational contexts.

3.2 APPROACH TO MEET THE OBJECTIVES

The regional activity will comprise **two on-line Modules (Webinars)** that are expected to last for approx. 3 hours each.

Key considerations in the design of the modules are the following:

- (i) ESD is an interdisciplinary, holistic, whole system thinking, learner-centered, and transformative form of education, that is acknowledged as essential in reaching all SDGs.
- (ii) Focusing on the provision of water education at all levels and for all, is an essential need and a component for water security and sustainable development.

In this respect, the two modules will promote water knowledge and capacity building in a culture- and gender-sensitive way, adapted to meet local needs, in order to affect the way people think about the

value and use of the water coming from Non-conventional resources (including the reuse of treated wastewater).

The modules will include presentations, case studies and engaging participatory exercises and will offer opportunities for co-creation with the participants. The trainees will be invited in advance of the training to provide their opinion/needs and experiences in water education *via* a related questionnaire as well as in pre- and post- exercises.

The content of the Modules will follow the below lines:

1: “Implementing WWT and NCWRs, in the framework of the Whole Institute Approach and ESD”

The first webinar will provide the theory and practices of the Whole Institution Approach (WIA) and of ESD, as they have developed over the past years. In addition, concrete examples of water education combined with WWT for reuse and NCWR installations in educational institutions and other public buildings (e.g. in Malta, Greece and Cyprus) will be presented and discussed. Moreover, related online teaching and learning resources will be shared with the participants.

2. “ESD Methodologies: Proposed didactic approaches to educate about water and NCWRs”

The second webinar will focus on the design and application of learner-centered and hands-on ESD approaches, using water and, more specifically, NCWRs as a vehicle. For this reason, several didactic approaches will be discussed and eventually tried out by the participants during the webinar and/or as part of the pre- and post- exercises. Such didactic approaches may include: Water audits by learners at school; Interviews of key for the community water people; Competitions (e.g. poster, photography); Role plays and Serious games.

3.3 EXPECTED RESULTS

By participating in the webinars, trainees will:

- Increase their knowledge and competences in designing and implementing Water related Education for Sustainable Development (ESD) with emphasis on Waste Water Treatment (WWT) for reuse and Non-Conventional Water Resources (NCWRs).
- Enhance their capacities to implement learner-centred and participatory ESD didactic approaches relating to water in their own educational contexts.
- Learn about how WWT and NCWRs applications in schools and other institutions, combined with appropriate ESD, can transform the institution into a learning lab for sustainability.

4 LOGISTICS & TIME

The on-line training will consist of **two webinars** spreading over February and March 2022:

Webinar Module 1: **23 February 2022** | “Implementing WWT and NCWRs, in the framework of Whole Institute Approach and ESD”

Webinar Module 2: **9 March 2022** | “ESD Methodologies: Proposed didactic approaches to educate about Water and NCWRs”

The training's working languages will be English and French (simultaneous interpretation).

Further details on the learning platform and link to be used, detailed agenda, support materials, etc. will be sent directly to the selected trainees.

5 ACRONYMS

ESD Education for Sustainable Development

IWRM Integrated Water Resources Management

MSESD Mediterranean Strategy on Education for Sustainable Development

MSSD Mediterranean Strategy for Sustainable Development

NCWRs Non-Conventional Water Resources

PCs Partner Countries

SDGs Sustainable Development Goals

WES Water and Environment Support

WIA Whole Institution Approach

WWT Waste Water Treatment