



“Water and Environment Support (WES)” Project

**Explore the potential of Natural Water Retention Measures (NWRM)
at the catchment scale**

Activity: N-W-JO-2

Information Note and Agenda

Concluding Workshop and discussion among stakeholders

Wednesday, 15 May 2024 from 10:00 to 13:45

Kempinski Hotel, Onyx Room, Amman, Jordan

I. CONTEXT

As part of the second component of the project “Water and Environment Support (WES) in the ENI Neighbourhood South Region” funded by the European Neighbourhood Instrument (ENI) South, an activity entitled “Explore the potential of Natural Water Retention Measures (NWRM) at the catchment scale” was launched following the online kick-off meeting held by videoconference on December 15, 2020, involving representatives of the WES project, the Ministry of Water and Irrigation (MWI), Jordan Valley Authority (JVA) and Water Authority of Jordan (WAJ).

The specific objectives of the activity are:

1. Enrich knowledge and know-how of NWRM including storm water management in peri-urban areas as well as in rural/natural areas according to water usage.
2. Review of international best management practices for NWRM taking also into consideration those measures that are applicable in arid or semiarid areas and with restricted area availability.
3. Designing the basic infrastructure of the NWRM in two pilot cases in Jordan at the feasibility level in natural and urban / peri-urban environments.
4. Review of economic incentives and regulation to support and amplify storm water management **benefiting from Nature Based Solutions**.
5. Build on the current flood management projects and success stories.

During the first year of the activity, WES has completed a thorough analysis of different references from around the globe in order to categorize the different aspects of NWRMs according to the source of water and storage media of water gained. Since not all NWRMs are applicable everywhere, a screening procedure was performed in order to further take into consideration those measures that are applicable in arid or semiarid areas and with restricted area availability. The analysis included also water harvesting (including flood flows) and NWRMs in peri-urban areas and natural/rural conditions.

Now, at the final stage of the Activity, the conclusion of the NWRMs design in two pilot areas, a natural area and an urban / peri-urban area, is to be presented followed by a





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discussion of the evaluation of these measures and how these can be implemented in the whole of the country.

II. TARGET ZONES

The activity was implemented at the local level in **selected pilot areas** in both a natural and a peri-urban area, namely the natural area is the **Azraq City area**, and the urban / peri-urban one the **Ajloun Town**. The outcome of the activity is of national scope and the results could be useful for any arid and semi-arid areas of the entire Mediterranean region, including both natural and urban / peri-urban areas.

III. WORKSHOP OBJECTIVES

The workshop aims to

1. Present an overview of the national activity in Jordan.
2. Present the findings of the final screening of the Best Management Practices and NWRMs demonstrating the application of selected best practices in natural and peri-urban environments in arid or semiarid areas with restricted area availability.
3. Present, discuss, obtain feedback and validate the outcomes of the study with respect to:
 - a. The designs of the NWRMs for the two pilot areas (including the criteria considered for selection, the characteristics of the selected areas, etc.):
 - i. the natural area in Azraq City area,
 - ii. the urban / peri-urban area in Ajloun Town,
 - b. The applicability of the selected measures in Jordan including possible restrictions on their applicability in different sites in the country and alternative techniques.
 - c. The cost-benefit analysis of the application of the proposed NWRM in the two pilot areas. Such analysis could illustrate the viability for a more general application of NRWM in the country.
 - d. The proposed economic incentives and regulation framework regarding Natural Water Retention Measures and storm/flood water management in the country.
 - e. The proposed guidelines/criteria for the selection of appropriate sites of retention and detention systems.
4. Agree on a set of actions based on the recommendations of the activity that the country could implement beyond the duration of the WES project. The results could contribute to the evaluation of the impact of this activity.

The expected workshop results are:





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1. The outcomes of the activity presented to the beneficiaries are evaluated and finalised, including the selected priorities of NWRM options.
2. The establishment of a dialogue among the different stakeholders on a set of priority actions which the country could implement, beyond the WES project.

IV. PARTICIPATION

This workshop will involve the officials representing relevant institutions involved in different aspects of Water Harvesting and Natural Water Retention Measures in both urban and peri-urban/natural areas, from Ministries in charge of Water and Irrigation, Agriculture, Environment and Land Management, water utilities and municipalities, experts and end users of reclaimed water.

More specifically, the proposed list of the stakeholders to be invited, includes:

1. Relevant departments from the Ministry of Water and Irrigation, Jordan Valley Authority and Water Authority of Jordan.
2. Municipality Azraq Area.
3. Municipality Ajloun Area.
4. Ministry of Agriculture - Water Harvesting Department.
5. National Agricultural Research Centre.
6. Ministry of Environment.
7. Ministry of local administration - Master planning department.
8. Direct users (farmers and others) in Azraq and beyond.
9. The Parliament "Agriculture, Water and Badia Committee".
10. On-going Water Harvesting (WH) projects funded by other donors.
11. The National Centre for Security and Crisis Management (NCSCM).
12. NGOs and CSOs of relevance including women's associations.
13. Academics and consultants (with emphasis on young hydraulic engineers).
14. The media concerned with water issues.

V. MODERATION & RESOURCE PERSONS

- Dr. Demetris ZARRIS – Hydrologist – Water Resources Engineer (International) and Technical Coordinator of the activity (WES)
- Mr. Stelios VAVOULOGIANNIS – Hydrologist (WES)
- Eng. Farouk TADRUS - Local expert in Landscape Architecture (WES)
- H.E. Eng. Tha'er ALMOMANI – Assistant Secretary General for Technical Affairs (MWI)
- Eng. Ahmad BALI – WES Focal Point (MWI)
- Eng. Suzan TAHA – Water Key Expert (WES)





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- Dr. Emad ADLY – Stakeholders and Engagement Expert (WES) – online

VI. INTEPRETATION

Interpretation EN/AR/AR/EN will be provided.

VII. DATE AND VENUE

The workshop will take place on Wednesday 15 May 2024, Kempinski Hotel, Onyx Room, Amman, Jordan, between 10:00 and 13:45.





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Stakeholders Consultation Workshop

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AGENDA

10:00-10:15	WELCOME & GENERAL INTRODUCTION
	<ul style="list-style-type: none"> - Welcome and Introductory notes <i>Mr Thibaut MOYER, Deputy Head of Cooperation, EU Delegation for Jordan</i> <i>H.E. Dr Mohammad ALDWEIRI, Assistant Secretary General for strategic Planning Affairs, Jordanian Ministry of Water and Irrigation</i> - Structure of the workshop and technical instructions <i>Ms. Suzan TAHA, Key Water Expert, WES (5 min)</i>
10:15-11:50	PRESENTATION OF THE ACTIVITY AND GENERAL DISCUSSION
	<ul style="list-style-type: none"> - Overview of the Water and Environment Support (WES) Project (10 min) <i>Ms. Suzan TAHA, Key Water Expert, WES</i> - Introducing the WES Activity in Jordan and the Terminology - Natural Water Retention Measures (15 min) <i>Dr. Demetris ZARRIS, Non-Key Expert, specialised in Hydrology and Technical Coordinator representative of WES experts' Team</i> - Analysis of Natural Water Retention Measures in Natural Areas – Application in Azraq City Lowland Area (30 min) <i>Dr. Demetris ZARRIS, Non-Key Expert, specialised in Hydrology and Technical Coordinator representative of WES experts' Team</i> <i>Mr. Stelios VAVOULOGIANNIS, Hydrologist, WES</i> <i>Mr. Farouk TADROS, Local expert in Landscape Architecture, WES</i> - Analysis of Natural Water Retention Measures in Urban Areas – Application in Aljoun Town Area (30 min) <i>Dr. Demetris ZARRIS, Non-Key Expert, specialised in Hydrology and Technical Coordinator representative of WES experts' Team</i> <i>Mr. Stelios VAVOULOGIANNIS, Hydrologist, WES</i> <i>Mr. Farouk TADROS, Local expert in Landscape Architecture, WES</i> - Q&A (10 min)
11:50-12:00	COFFEE BREAK
12:00-13:15	<ul style="list-style-type: none"> - Assessment of the adopted NWRMs overall efficiency (technical and economical) (15 min) <i>Dr. Demetris ZARRIS, Non-Key Expert, specialised in Hydrology and Technical Coordinator representative of WES experts' Team</i>





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	<ul style="list-style-type: none">- Proposed economic incentives and regulation framework for NWRM & storm water management in the country (15 min) <i>Dr. Demetris ZARRIS, Non-Key Expert, specialised in Hydrology and Technical Coordinator representative of WES experts' Team</i>- Proposed guidelines / criteria for the selection of appropriate sites of retention and detention systems (15 min) <i>Dr. Demetris ZARRIS, Non-Key Expert, specialised in Hydrology and Technical Coordinator representative of WES experts' Team</i>- Feedback on the applicability of the proposed NWRMs in the country and discussion of the incentives and guidelines (30 min) <i>All participants</i>
13:15-13:45	IMPACT MONITORING & WORKSHOP CLOSURE <ul style="list-style-type: none">- Impact monitoring and stakeholder engagement – Online (5 min) <i>Dr. Emad Adly, WES Stakeholders Engagement and Impact Evaluation Expert</i>- Possible stakeholder actions for greater impact - stakeholders engagement form (10 min) <i>All Participants</i>- Conclusions (5 min) <i>Dr. Demetris ZARRIS, Suzan TAHA and H.E. Dr. Mohammad ALDWEIRI,</i>- Workshop Evaluation (10 min) <i>All Participants</i>
13:45-14:45	LUNCH

