

**Analysis of GEF MENARID project learning needs and
first MENARID learning workshop on traditional knowledge
(Feb. 2012, Yazd, Iran)**



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1. Role and tasks of UNESCO-IHP in the framework of GEF IW LEARN

In the framework of the GEF IW LEARN Project 3 “Strengthening IW Portfolio Delivery and Impact”, the UNESCO International Hydrological Programme (IHP) is executing the sub-component 1a: *Support to MENARID Integrated Land / Water Management* under the component 1 *MENARID Programme – Support via Land/Ground Water Integrated Management and Regional Portfolio Learning and Dialogue* aiming at “Improving effectiveness in combating Land Degradation in MENARID through and enhanced role of groundwater and improved subsurface space management”. The third phase of the IW LEARN project has a specific focus on groundwater and supporting the Middle East and North Africa Development (MENARID) process, and in the replication and sharing of good practices between transboundary surface and groundwater management. UNESCO-IHP lies at the forefront of transboundary aquifer management and it is the only intergovernmental scientific programme of the United Nations (UN) system devoted to hydrology, water resources management, and water education. Since its inception, IHP has paid due attention to studies on groundwater resources and aquifer characteristics, enhancing the role that aquifers play in supporting human activities and ecosystems.

UNESCO-IHP is building on its projects and networks of specialists (UNESCO water-related centres around the world, Chairs and partners) to provide assistance and expertise to the GEF MENARID multi-focal area projects in creating dialogue on the role of groundwater in land management and agricultural production. This includes the sharing of knowledge and best practices on groundwater management techniques in arid and semi-arid zones, such as aquifer recharge management, water harvesting, and the enhancement of traditional knowledge, in MENA countries in order to promote integrated land and groundwater management practices and solutions aimed at increasing the effectiveness of soil conservation efforts and more generally of land degradation mitigation initiatives.



1.2 Sub-component 1a (comprised of three activities executed by UNESCO-IHP):

1. Integration of groundwater into MENARID land and water projects at the MENA regional level through a Knowledge Management Platform;
2. Technologies for land management with enhanced recharge to aquifers;
3. Targeted learning workshops.

Activity 3 foresees the organization of a series of structured learning workshops related to groundwater management involving all MENARID projects across GEF focal areas (Land Degradation, Biodiversity, International Waters, and Climate Change).

An initial list of subjects for these trainings has been outlined at the beginning of the project; however it has been further elaborated and expanded, taking into account the project learning needs as singled out by MENARID project managers.

2. First learning workshop for GEF MENARID Project Mangers: “World History of Water Management - Applying Traditional Knowledge in present-day Water Resources Management”, February 2012, Yazd, Iran

Based on the discussions and feedback from MENARID project managers during the inception workshop of the ICARDA-led project “Cross-cutting M&E Functions and Knowledge Management for INRM within the MENARID Programme Framework” in February 2011 in Aleppo, one of the learning workshops for MENARID Project Mangers was suggested to focus on sustainable water utilization and harvesting practices in dry lands,



with focus on traditional knowledge, including rainwater harvesting practices and groundwater catchment systems, such as qanats. The first learning workshop on the abovementioned subject was organized by UNESCO-IHP in February 2012 in Yazd, Iran, seizing the opportunity of scheduling it back-to-back with the International Conference on Traditional Knowledge for Water Resources Management (TKWRM) organized by the UNESCO Category II International Centre on Qanats and Historic Hydraulic Structures (ICQHS), from 21 to 23 February 2012.

The organization of the workshop and the preparation of its programme were carried



out in cooperation with ICQHS and the UNESCO-IHE Institute for Water Education to include a broader overview on archeological and historical developments in water management. The workshop resulted in a comprehensive programme over four days

including half-day field trip. (Refer to Annex I – Workshop Programme)

2.1 TKWRM Conference highlights

The Conference took place from 21 to 23 February 2012 in Yazd, Iran. Organized by the UNESCO Category II Centre ICQHS, it featured the participation of more than 450 people coming from all regions of the world; a rich scientific programme that included high number of technical and plenary sessions, and the contribution of more than 250 papers on the subject matter. (Refer to Annex II – Background Information on TKWRM)



During the TKWRM Conference ICQHS and UNESCO-IHP launched the “International Qanats Club”: a web-based virtual forum that brings together scientists/researchers in the field of Qanats knowledge to share their findings and to also examine new approaches (laboratory of ideas). Additionally, this forum provides a data bank of worldwide experts working in the field of Qanats as well as records of on-going initiatives/projects in the subject field. The secretariat of the Club is hosted at the International Centre on Qanats and Historic Hydraulic Structures in Yazd, Iran.



Qanats are among the oldest known water management and harvesting systems, which are found in a belt consisting of 34 countries that encircles the world from central Asia to Spain in Europe and the Maghreb in North Africa with stretches to as far as Japan, Mexico and Peru. For over 2 millennia, Qanats have turned deserts into blooming orchards and have made it possible for people to settle in some of the world’s most inhospitable environments in a sustainable manner.

Recently, international organizations such as UNU, UNCCD, UNESCO, EC have paid increased attention to rehabilitation and sustainable development of the traditional Qanat systems. Also many individuals/scientists have made enormous contributions to study and further advancement of Qanat systems around the globe.



2.2 Workshop Objectives, Achievements and Evaluation

Objectives:

1. Providing a comprehensive overview of archeological and historical developments in water management including water harvesting, water supply, transportation, delivery, treatment, hydraulic engineering and allocation (with contributions including the physical sciences, technology, ecology, engineering, organization, politics, law and governance) in different parts of the world and various cultural contexts
2. Developing an appreciation of the role of cultural dynamics involved in managing water resources, especially at times of perceived water scarcity
3. Comprehending the historical antecedents of our current paradigm of water management and what can be learned from historical case studies on the basis of the knowledge and experience of several scholars from different countries and from the exchange of experiences to be generated between the participants of the course and the experts
4. Evaluating and discussing the possibilities of applying traditional knowledge and water management techniques within the framework of the portfolio on ongoing GEF MENARID projects.

Insights/Achievements:

The GEF MENARID Project Managers were allocated a special time-slot for their presentations during the training course. The insights on the projects in Iran, Yemen and Tunisia were highly appreciated and further discussed in exchanges with lecturers and other class participants. **(Refer to Annex III – MENARID Presentations)**

1. **“Institutional strengthening and coherence for integrated natural resources management” Project in Iran.** The presentation provided overall information on the project, highlighting threats and root causes of land degradation. The project objective is to promote climate-resilient and gender sensitive integrated



management of renewable natural resources, providing global environment benefits for the four GEF focal areas (LD, CC, IW and BD). The presentation also clearly explained the need for this project and why new strategies and inclusive approaches are necessary to achieve a sustainable and integrated management of renewable natural resources.



2. **“Agro-Biodiversity and Climate Adaptation Project (ACAP)” in Yemen.** The project objectives are: 1) to enhance capacity and awareness at key national agencies and at local levels to respond to climate variability and change; and 2)



to better equip local communities to cope with climate change through conservation and use of agro-biodiversity and traditional knowledge utilization. The presentation identified main challenges related to agriculture and climate change in Yemen, namely (i) water scarcity, due to variable climate and limited annual rainfall; and (ii) over-abstraction and over-use of groundwater being the main source of

water for domestic uses & for the growing irrigated farming which uses more than 81% of the annual abstraction.

3. **“Support to Sustainable Land Management in the Siliana Governorate” in Tunisia.** The presentation gave a broad overview of the groundwater utilization in the Siliana region. Challenges faced in the Siliana region related to water resources (such as damaged urban and hydraulic infrastructures, chronic deficit

in foraging, low profitability of livestock, etc) were highlighted along with a number of possible solutions (protection of agricultural lands against erosion through benches, diversification of crops, build structures of groundwater recharge, etc).



An introductory presentation on the GEF, the IW LEARN Project and the MENARID program was given at the beginning of the workshop by a UNESCO-IHP representative (Refer to Annexes I - III)



Evaluation:

In order to assess the effectiveness of the workshop and receive feedback from MENARID participants, UNESCO-IHP prepared and circulated an evaluation form with targeted questions aimed at collecting inputs on

- The overall quality and satisfaction with the workshop
- Concrete ideas on project learning needs, use of ICARDA platform, expectations from next learning workshops and role of GEF/UNESCO-IHP in supporting the projects

This evaluation form (Refer to Annex IV – Workshop Evaluation form) has been distributed also within the ICARDA platform to reach out the project managers/representatives that could not attend the workshop; the second part of the questionnaire was aimed at collecting inputs related to project needs, use of platform

and any other suggestion regarding the designing of the next learning workshops - the latter part was directed at all users of the platform.

2.3 Challenges and constraints encountered in the organization of the workshop

In the organization of this first learning workshop IHP has encountered a number of challenges that added unforeseen additional workload and somewhat delayed the process of the MENARID related activities under the responsibility of UNESCO. As these challenges relate to the MENARID portfolio as a whole, not only the UNESCO-led activities, it is important to report them here.

1. Identification of the target group for the activities led by UNESCO-IHP. The organization of the workshop started in late September 2011 with the assumption that the MENARID program had already a structure in place with a small database including clear details of project coordinators, alternates and other parties involved in each of the 11 projects comprised in the program. We instead got confronted with different pieces of information. After some investigations, we were able to identify the status of each project and the person in charge of its execution, be it the national project manager or the institutional representative of the country ([Refer to the Annex V - List of GEF MENARID Projects from GEF website](#)). However, there are still some uncertainties related to this list and its finalization will be of greatest importance for the clear identification of the target for UNESCO-led activities.

3 Project learning needs

As a result of face-to-face meetings, email exchanges and survey results the following needs have been identified by MENARID Project Managers as



main areas that would require further capacity building or training:

- Stakeholder participation: role and how to practically apply a participatory approach for a successful management of MENARID projects
- Communication and knowledge exchange: how to transfer know-how and applied/concrete knowledge
- Applicability: devote more importance to know-how rather than to just theory (as experience is the key to success of each project) in the sustainable fight against desertification, drought, natural resources degradation (consider water, land and vegetation in a context of sustainable and participatory development). Such workshop would be very useful especially in semi-arid areas that are very vulnerable to climate change and anthropogenic effects.
- Planning and management skills: Concept and implementation of development projects and programmes that aim at sustainable management of natural resources and conservation of environment in arid and semi-arid zones
- fight against desertification and poverty
- restructuration of rural world
- gender
- evaluation and follow up (already covered by ICARDA)

Moreover, a number of suggestions and recommendations were made that are directed towards the GEF, its implementing/executing agencies and the international community:

- Facilitate better communication and coordination between the various institutions involved in water resources management at the national level. → importance of integrated planning and creation of sustainable models for interaction among the different authorities in charge of water/natural resources through, e.g., inter-ministerial committees.



- pay due attention to the identification of sustainability indicators, measuring the impacts made by the project
- importance of strengthening early warning systems on drought; identify and share best practices to fight drought (e.g. in Iran plenty of traditional knowledge is available on this subject)
- Raise awareness among policy-makers on the issue of land degradation, applying modern monitoring and visualization tools such as remote sensing
- Legal frameworks: sharing information among MENARID projects official or traditional rules and regulations on water resources

- Importance of face-to-face meetings among MENARID PMs: it enhances chances of smoother and faster cooperation, collaboration and exchange among projects



- In many MENA(RID)

countries, the current socio-political and economic situation is affecting the country stability, creating institutional delegitimization and is putting a high toll on the populations. In such situations, the projects need now more support than ever. Also, it needs to be recognized that delays in releasing the project budgets can cause slow delivery and/or hamper the achievement of project objectives. If alternative fundraising actions are needed to implement project activities, the timely achievement of project objectives will be delayed.

- Usable (ground-)water and development research is needed: from study design to publication and throughout the scientific process scientists must critically evaluate whether their findings are usable by water managers and leading to better decision making.

4 Communication plan (through ICARDA Knowledge Management Platform)

UNESCO-IHP is closely coordinating with ICARDA and IFAD the strengthening of a tight-knit technical working group which includes representatives (i.e. project managers/staff) from all MENARID projects, as well as representatives from both land and water ministries of participating MENARID countries (Algeria, Egypt, Iran, Jordan, Morocco, Tunisia, Yemen), NGO's, International Organizations, national experts and private sector.

UNESCO-IHP is using the knowledge management platform set up by ICARDA to disseminate groundwater-related information and events. Making use of its wide network of individual experts, Institutions, water-related Centers and Chairs, UNESCO is ready to provide technical assistance and expertise to answer questions and queries related to groundwater management that arise from participants of the platform.

From several parties, it was voiced the need to establish a sound knowledge sharing system, i.e. a MENARID portal which should be publicly available as a repository of information about each of the different MENARID project. The workspace managed by ICARDA (access restricted) would then be a natural complement of this website.

Multiple benefits have been identified/would derive from with the creation of such tool:

1. Clear information is provided about each project: status, starting/ending date, countries, Institutions and stakeholders involved, success stories, contact details, twinning exercises, best practices, etc.
2. National and local authorities can better grasp the nature and importance of the whole program and ease the relations (not always optimal) with national project representatives
3. Create a common visual identity among MENARID projects (such as an umbrella logo; the project in Iran was using a “MENARID logo”, while it remains unclear whether this logo can be considered official)
4. Stimulate a stronger sense of belonging and sharing among the 11 projects

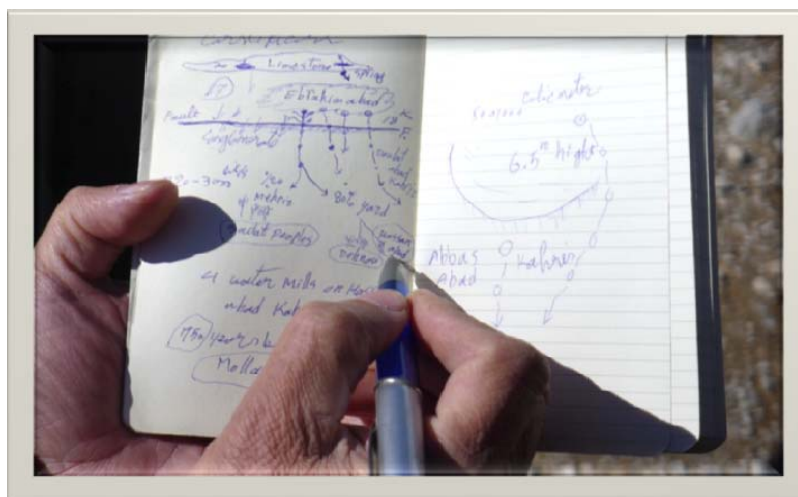


5. A better service is provided (“internally”) to other GEF projects across different focal areas that want to know more about the MENARID program, its objectives and results.

To achieve this, it will be crucial to clearly define the responsibilities between the various agencies involved in MENARID portfolio at a coordinating level, namely IFAD, ICARDA and IW LEARN.

UNESCO-IHP is willing to 1) contribute to the conceptualization of such website and coordinate actions with the other project partners (IFAD and ICARDA), and 2) liaise with MENARID Project Managers to collect their inputs on content & design of this tool.

Additionally, UNESCO-IHP will help producing a series of experience notes to report on the achievements of this project.



Other important aspects to improve internal communication among the established technical group are:

- The consolidation and constant update of a MENARID database in which roles and degrees of involvement of each individual in MENARID projects are clearly specified. The first step would be to ask all the people registered in the ICARDA working space (around 50) to clarify if they are directly involved in one of the 11 projects or in what other capacity they are participating in the discussions.
- Identification of responsible coordinator for the MENARID program at the GEF Secretariat

- Documentation, preparation and dissemination of a document on best practices within the MENARID portfolio
- Sharing Progress Reports of all MENARID projects in the working platform and/or in the future portal

5 List of Annexes:

- **Annex I:** Learning workshop programme
- **Annex II:** Background information on the TKWRM Conference
- **Annex III:** MENARID Presentations (Ms L. Minelli, Mr V. Jafarian, Mr H. Lakhdhar, Mr A. Rubaidi)
- **Annex IV:** Learning workshop evaluation form
- **Annex V:** List of GEF MENARID Projects (from GEF website)

