



Shared Prosperity Dignified Life



Report of the regional workshop

Enhancing transboundary water cooperation in the MENA region - progress, challenges and opportunities

3-4 March 2020, Beirut

INTRODUCTION

How can transboundary water cooperation in the Middle East and North Africa (MENA) be strengthened and consequently support the achievement of the Sustainable Development Goals (SDG) and in particular Goal 6?

This was the focus of the two-day regional workshop *Enhancing transboundary water cooperation in the MENA region: progress, challenges and opportunities* that took place at the UN House in Beirut, Lebanon, on 3-4 March 2020, which brought together 35 targeted participants from 10 MENA countries, representing Ministries of Water, Ministries of Foreign Affairs and Parliaments together with international development partners, regional organisations and civil society.

Building on previous work in the region, and through an interplay of presentations, panel exchanges, plenary debates and interactive group work, the workshop offered the opportunity to discuss the current status of water cooperation in the MENA region, review the progress made, identify the persisting challenges and explore ways to overcome them.

More specifically, and during dedicated sessions, the workshop:

- provided an updated snapshot of the status of transboundary water cooperation in the MENA region and of implementation of SDG 6 on water, specifically its target 6.5 on implementing IWRM at all levels;
- showcased good practices and lessons learnt from successful cooperation over the management of transboundary water resources in the MENA region and beyond, highlighting the benefits of cooperation;
- contributed to the development of strategically good approaches to the exchange of data and information as well as to monitoring in transboundary basins, on the basis of the water management issues at stake;
- assisted with better understanding on how international water law, and the Water Convention in particular, can contribute towards strengthening transboundary water cooperation in the MENA region, and reviewed the interest and progress of countries in the region until now in acceding to it;

With the support of:



- shared experiences on how to improve water management in order to increase resilience to climate change impacts and coping with water scarcity, in particular through cooperation;
- discussed different tools and approaches to improve cooperation for the better management of transboundary water resources, including through effectively engaging with economic sectors using water and impacting water resources by applying an intersectoral “Nexus” approach and by developing sustainable and equitable transboundary arrangements on water allocation.

The regional workshop was a joint endeavour of the United Nations Economic Commission for Europe (UNECE), the Global Water Partnership-Mediterranean (GWP-Med) and the United Nations Economic and Social Commission for Western Asia (ESCWA). It was organised in the framework of the project “Making water cooperation happen in the Mediterranean” with financial support from the Swedish International Development Cooperation Agency (Sida), and in the framework of the European Union-funded project to promote and support accession to the Water Convention at global level.

All related documents, as well as presentations and photos from the meeting are available at:

- <https://www.gwp.org/en/GWP-Mediterranean/WE-ACT/News-List-Page/transboundary-water-cooperation-deliberated-during-mena-regional-workshop-in-beirut-3-4-march-2020/>
- <https://www.unece.org/index.php?id=53364>
- <https://www.unescwa.org/events/workshop-enhancing-transboundary-water-cooperation-mena-region>

A brief account of the presentations and discussions during the five sessions of the regional workshop is presented below.

MAIN TOPICS OF DISCUSSION

Session 1. Transboundary water cooperation in the MENA region: progress and challenges

The session provided a **snapshot of the status of transboundary water cooperation in the MENA region and of implementation of SDG 6 on water**, specifically its target 6.5 on implementing Integrated Water Resources Management (IWRM) at all levels. *ESCWA* recalled the water-scarcity proneness of the Arab region, which depends mostly on shared water resources, with 27 shared surface water basins, the major ones being the Jordan, Orontes, Euphrates-Tigris-Shatt Al Arab, El Kabir and Qweik River Basins. Shared groundwater basins cover 58 % of the surface area of the Arab region but are facing challenges such as recharge and non-renewability. Only few river basins are covered by basin wide agreements, while cooperation modalities for transboundary groundwater resources count several examples, including the North Western Sahara Aquifer System (NWSAS) Consultation Mechanism, the Joint authority for the study of the Nubian Sandstone Aquifer and the agreement for the Saq/Disi Aquifer.

UNEP-DHI and *UNECE*, respectively custodian agency for SDG indicator 6.5.1¹ and co-custodian agency for SDG indicator 6.5.2², together with *ESCWA*, presented the regional baseline for SDG Indicators

¹ <https://www.sdg6monitoring.org/indicator-651/>

² <https://www.sdg6monitoring.org/indicator-652/>

6.5.1³ and 6.5.2⁴, as well as methodologies for reporting on each indicator. In 2017, 19 out of 22 Arab countries reported on SDG indicator 6.5.1, informing about the average medium-low level of IWRM implementation in the region. For SDG indicator 6.5.2, measuring the proportion of transboundary basin area with operational arrangements for water cooperation, only 9 of the 21 Arab States sharing transboundary waters (a low response rate, compared to 70% globally) highlighted challenges, such as the limited data availability in the region. Presenters emphasized that understanding where the region stands offers good opportunity to mobilize financing to achieve SDGs, through improving IWRM and transboundary water cooperation at basin level.

Countries then shared **good practices and lessons learnt from cooperation over the management of transboundary surface and groundwater in the region**, highlighting the different types of benefits of cooperation generated.

The Syrian Arab Republic shared the experience of cooperation in the Orontes River Basin shared with Lebanon, including the 1994 agreement on the distribution of the Orontes River Water, which remains active and effective. Despite the current armed conflict, the committee still meets, facilitating the water planning process. However, instability in the region, water scarcity, difficulty to collect data, environmental degradation and increasing water demand are major challenges for the sustainable management of the river basin.

Egypt referred to various steps of regional technical cooperation in the Nile River Basin including most recent steps. This includes the on-going studies for the establishment of a navigational line between Lake Victoria and the Mediterranean Sea (VICMED), a New Partnership for Africa's Development (NEPAD) initiative aiming to contribute to social-economic integration and cohesion in the Nile basin. Egypt pointed the existence of several technical bilateral cooperation initiatives with riparian countries, which do not always translate into cooperation agreements yet effectively contribute to better transboundary water management.

Jordan presented progress in transboundary cooperation on the Disi/Saq Aquifer shared with Saudi Arabia, with the 2014 agreement aiming to achieve a sustainable management of this non-renewable transboundary groundwater resource, defining management areas, protected and prohibited areas. A joint water committee can be convened depending on needs.

Participants then identified the **persisting and emerging challenges in the region and how they could be overcome**. Some of the main challenge encountered, and possible ways for improvement identified included:

- Limited data and information sharing, due among other to the lack of functioning monitoring networks. The use of remote sensing data and publicly available data, such as those produced under the Regional Initiative for the Assessment of Climate Change Impacts on Water Resources and Socio-Economic Vulnerability in the Arab Region (RICCAR⁵) are available on existing data portal and can be used by countries to support policy and decision making.
- Lack of technical capacities;
- Governance issues and lack of political will for transboundary water cooperation. National water governance needs to be strengthened. At the regional level, on-going discussions on the draft Guidance principles on shared water resources cooperation in the Arab region, under the auspices of the Arab Ministerial Water Council of the League of Arab States, represents an

³ <https://www.unescwa.org/publications/implementation-integrated-water-resources-management-arab-countries>

⁴ <https://www.unescwa.org/publications/progress-shared-water-resources-management-arab-region-regional-baseline-sdg-indicator>

⁵ <https://www.riccar.org/>

opportunity for the region to further develop and strengthen legal agreements and arrangements supporting transboundary water resources management.

- Difficulty to accede donors and partners funding, lack of coordination and unnecessary competition between existing supporting partners. It was clarified that UN Resident coordinators are playing a role in facilitating access to relevant support.
- Need for exchange of experiences. The events organized under the Water Convention's intergovernmental platform are facilitating such exchange globally.
- Lack of awareness of the benefits of transboundary water cooperation. Building on success studies of cooperation from the region and beyond, and involving stakeholders from beyond the water community, could help identify the various benefits and speak a common language.

Session 2. Data and information exchange for effective management of transboundary waters

The session discussed **good approaches to the exchange of data and information** on the basis of the water management issues at stake in the region. An expert from *Waterframes* presented general methods for monitoring and assessing transboundary waters, introducing the Driving Forces–Pressures–State–Impact–Responses (DPSIR) framework, as well as the monitoring and assessment cycle, as detailed in the background document⁶ “Outlook for developing monitoring cooperation and exchange of data and information across borders”. He referred to guidelines and tools existing under the Water Convention, and the platform it offers to share good practices with other countries on data and information exchange.

Tunisia presented the status of data and information exchange in the NWSAS, with a common database and common monitoring indicators, supporting the coordinated management of shared water resources between riparian countries (Algeria, Libya and Tunisia). This was achieved despite technical constraints and countries disparities. The necessity to move towards more independence of the institutional framework was highlighted as crucial to be overcome in order to jointly address the overuse and degradation of the aquifer resources.

The *World Bank* presented opportunities offered by disruptive technologies to improve water resources planning and management. Such modern technologies can indeed contribute to improving information and analysis, institutions and policies, as well as investments and operations. A Mashreq water resources portal has been created under the Mashreq Initiative. While using disruptive technologies presents benefits, e.g. in terms of costs and rapidity, there are also risks associated to their use, e.g. social impacts with undermining of jobs. *ESCWA* also referred to the Technology Facilitation Mechanism⁷ as a UN initiative, which can be used by countries to support SDG reporting.

Participants, through group discussions, then reviewed the **current situation and gaps in data and information exchange at the transboundary and regional level**, and jointly identified **opportunities for improvement**.

In the MENA region, data are available mainly at national level and shared only in some basins. Data quality is often not good enough and there are often delays in exchanging it. Even where institutional frameworks for cooperation exist, lack of trust and of political will often limit data exchange. Furthermore, most countries face challenges related to human, technical and financial capacities for data collection and analysis.

⁶ Background document available at: www.unece.org/index.php?id=53364

⁷ <https://sustainabledevelopment.un.org/tfm>

Strengthening institutional mechanisms for cooperation and building on success stories from other basins, could prompt progress towards improving data collection and exchange. River Basins Organizations can play a major role in facilitating data sharing. Countries recognized the need to further rely on scientific tools to establish shared platform for data exchange, at national level first, then at basin level. Needs for support in data collection and exchange can be used as an entry point for countries to approach donors. Finally, data exchange is a commitment according to international water law, such as the United Nations global water conventions, and to regional commitments, such as the Arab Water Security Strategy: on that basis, countries should engage with their neighbouring countries on data exchange.

Session 3. Managing water scarcity – Water and adaptation to climate change

During Session 3, experiences were shared on how to improve water management in order to increase resilience to climate change impacts and to cope with water scarcity, in particular through cooperation.

The session commenced with a keynote presentation on regional projections and the way climate change affects transboundary water resources. ESCWA presented the RICCAR initiative, briefly providing information on its background and partnerships, objective and pillars of work and reminding about the alarming regional projections on how climate change affects transboundary water resources. Being a land-based model that assesses the impact of climate change on freshwater resources in the Arab region, RICCAR's added value lies in its sophistication on scale and on offering a common baseline for countries to dialogue on, set priorities and formulate policies on climate change at regional level. Discussion revolved around clarifications on findings, the issue of data for the model's operation as well as its overall regular updating.

Next in the session was a set of panel interventions focused on good practices and lessons learnt on water and climate change adaptation in transboundary basins. The cases of the Medjerda river basin, shared between Algeria and Tunisia and the North Western Sahara Aquifer System (NWSAS), shared among Algeria, Libya and Tunisia, were highlighted, while also information was shared about literature resources available under the Water Convention and the way climate change adaptation can be used as a catalyst for cooperation at transboundary level.

Key messages from the Medjerda case included the value of vulnerability assessments as key decision-making tool for transboundary basins as well as the need for basin-wide adaptation strategies to prioritise adaptation measures beneficial from the basin perspective. The NWSAS case's novelty and added value is that it brings forth the discussion on groundwater and especially that on fossil water, and also additional considerations like windstorms. Moreover, NWSAS highlights the value of assessments to show proof the impacts of climate change, including the indirect impacts on water and on other sectors and socioeconomic activities, drawing strong linkages with the water-energy-food-ecosystem nexus approach. Importantly, the NWSAS assessment highlighted that climate change aggravates a situation that is already unsustainable and calls for a paradigm shift on how development is planned in this area.

During the discussion, countries shared individual experiences and stressed the value of assessing the climate change impacts under diverse dimensions, considering that often enough the importance lies in the details and in the issues addressed indirectly. Discussing climate financing opportunities, the UfM briefly presented the context of the regional initiative it launched in June 2019 together with the Global Water Partnership, and which was mandated by its member states for enhancing accessibility to climate finance in the Mediterranean with a prime focus to Global Climate Fund (GCF).

Considering current and projected threats caused by increasing demand and competition for water resources utilisation, as well as growing impacts of climate change on societies and on ecosystems in water basins, the need for transboundary cooperation becomes even more pronounced and integrated water resources management at all levels an imperative to ensure sustainable development.

Session 4. The role of international water law in supporting transboundary water cooperation

This session clarified how **international water law, and the Water Convention in particular, can contribute towards strengthening transboundary water cooperation in the MENA region**. The *Water Convention Secretariat* presented the Convention, its principles, obligations, institutional framework and activities, highlighting opportunities for the MENA region. The *Vice-Chair of the Bureau of the Convention* shared a Party perspective on the benefits of implementing the Convention. Answering questions by participants, they clarified:

- New Parties can implement the Convention's obligations step-by-step. Most Convention's provisions are "due diligence" obligations, not obligations of results. Parties are requested to take "all appropriate measures", proportionate to their economic, financial and other capacity, as well as to the degree of risk of transboundary harm. Parties can receive support by the Implementation Committee, to which they can submit request for advice. The reporting obligation under the Convention, introduced in 2015, monitors real progress in implementation of the Convention by Parties.

- The Water Convention doesn't replace bilateral or basin agreements but complements them. The Convention offers a framework and tools to support continuous progress in cooperation. The Convention doesn't require Parties to revise existing agreements to reflect all Convention's provisions but to adapt them, where necessary, to eliminate the contradictions with the basic principles of the Convention.

- The Water Convention and the Convention on the Law of the Non-Navigational Uses of International Watercourses (Watercourses Convention) are compatible and complementary. From a Party perspective, the Water Convention is a more practical tool, being a more "technical" convention useful for practitioners.

- The benefits for a country of acceding to the Water Convention include: joining a community of Parties to address common challenges; acceding to the Water Convention trust-fund and activities; support to cooperation process. Accession to the Convention is indeed a commitment to comply with international water law, which is a positive signal for neighbours, the international community and donors.

- Challenges faced in implementing the Convention include:

- (i) The financing of the work of the Convention, as there is no system of mandatory financial contribution for Parties;
- (ii) The real enforcement of the Convention, as no sanction is applied in case of not fully fulfilling the Convention's obligations.

Countries were informed about the Guide to implementing the Water Convention⁸, which provides explanations of the legal, procedural, administrative, technical and practical aspects of the

⁸ Available at: www.unece.org/index.php?id=33657

Convention's requirements for appropriate implementation, as well as answers about frequently asked questions about the Convention⁹. Participants requested support from the Secretariat to catalyse national discussion about accession, including through organizing national workshops to raise awareness in the region about the Water Convention.

Iraq, Jordan and Tunisia then shared **updates on progress in accession processes to the Water Convention**. *Jordan* highlighted that the Water Convention could support the strengthening of national water governance and improve cooperation with neighbouring countries, therefore contributing to more sustainable water management. However, its implementation depends on the capacity of the country. *Tunisia* and *Iraq*, initiated accession processes in 2012 and faced various challenges. Both countries studied and discussed the Convention through inter-ministerial processes, and received support by the Secretariat, including for the organization of national workshops. Both countries highlighted that the Convention offers opportunities to their countries (a reference legal framework, support to capacity strengthening, access to financial support). As a Party, they could also contribute with their knowledge to the community of Parties, e.g. on drought management.

Representatives from the Circle of Mediterranean Parliamentarians for Sustainable Development (*COMPSUD*), *Iraq* and *State of Palestine* highlighted **opportunities for strengthening transboundary water cooperation in the region, reflecting on the role of international water law**. Implementing international water law principles can contribute to achieving peace and stability in transboundary basins of the region. While they recognized the 1997 UN Watercourses Convention and the 1992 Water Convention being key instruments to improve cooperation at basin level, they also recalled that non-Parties are not exempted from complying with international customary law principles. *State of Palestine* highlighted that, on the basis of international water law, they claimed for all riparians to be involved in initial negotiations about the Dead-Red project. While recognizing that international agreements don't always solve problems, *Iraq* insisted that the Water Convention represents one additional tool (in addition to commitments under the Ramsar Convention, the United Nations Convention to Combat Desertification, the Convention on Biological Diversity, etc.) for the country to support further negotiations. Negotiations take time but it is important for countries to provide a space for discussion with their neighbours and identify a common language, with the Convention can support.

Session 5: Tools and approaches for improving transboundary water cooperation in the MENA region

Part 1: Good practices for water allocation in transboundary basins

This session identified **existing approaches and methodologies for water allocation in the MENA region, looking at lessons learned on sustainable and equitable transboundary arrangements** on water allocation. The *Water Convention secretariat* presented the on-going global process of development of a handbook on water allocation in a transboundary context, currently being developed under the Water Convention. It aims to be a practical guide for government officials, basin authorities and water sector practitioners, providing an overview of key elements, frameworks and modalities to consider in the application of water allocation in transboundary basins. Countries were

⁹ Available at : www.unece.org/fileadmin/DAM/env/documents/2020/WATER/03Mar_3-4_Regional_WS_Enhancing_TWC-MENA_region/4.3_FAQs_in_the_Water_Convention.pdf

informed about the opportunity to submit case studies from their shared basins. The example of NWSAS was proposed as a good practice of water allocation to be considered in the handbook.

Some countries then **shared experiences on water allocation, focusing on groundwater management; limiting withdrawals, and; institutional framework**. Participants highlighted that free energy and cheap renewable energy for water withdrawals for agriculture endangers groundwater resources, with the associated risk of over-abstraction, and therefore should be available only for drinking-water pumping. The necessity for a better monitoring and control of groundwater abstraction was also underlined. Treated wastewater can be an alternative source of water. Tariff systems can also play a role in water consumption limitation. With regards to the role of institutional frameworks in water allocation, participants recognized the need to build capacity of national institutions managing water allocation planning and to make sure agreements with water allocation components consider water flow evolution in basins, when possible.

ESCWA recalled that the theme of the 2022 World Water Day will be groundwaters. The Arab region should be in the focus of the up-coming World Water Development Report on to be developed on this topic.

Part 2: The Water-Food- Energy-Ecosystem Nexus approach

The second part of Session 5 continued the discussion on tools and approaches for improving transboundary water cooperation in the MENA region and focused on the Water-Energy-Food-Ecosystem Nexus framework.

In the keynote presentation, *GWP-Med* briefly elaborated on the nexus framework, as a platform connecting various disciplines, and shared an alternative visualisation of the concept as a tetrahedron, which attributes equal weight to the four elements (water, energy, food, ecosystems) and also allows paying attention to the element with priority at any given moment. This understanding of the nexus is also a means to move from a system of tension towards a system of convergence. This is particularly important in the transboundary context, where benefits to various sectors can be ensured in the whole river basin and synergies be possible at both inter-and cross-sectoral country levels, while also offering a promising instrument for promoting social cross-cutting issues.

In the panel interventions that followed, experiences were shared on the application of the nexus in transboundary basins from the region and beyond. The key elements of the Nexus Dialogue Programme were presented by *GIZ-MENA*, with focus on the Niger Basin and the mainstreaming of the nexus approach in the development of the shared vision of the Niger Basin Authority. More specifically, the nexus angle was used in the selection of activities for the Authority's Operational Plan and investment portfolio, leading to a behavioural change and contributing to the promotion of cross-border cooperation.

Tunisia then shared the way a Nexus Assessment has been implemented in the case of the transboundary North Western Sahara Aquifer System basin (NWSAS), shared among Algeria, Libya and Tunisia. After highlighting the alarming situation in the basin due to overpumping and overexploitation, and explaining the rationale for the selection of the NWSAS for the Nexus Assessment as part of the Sida-funded Water Matchmaker project, Tunisia delved into the expected results of the Assessment that include a better understanding of the interaction across sectors, a set of technical and governance recommendations, an analysis of suitable solutions for the development of cross-border cooperation and a study of legal and institutional options for the management of the system. Importantly, the Nexus Assessment is part of a process, including the strengthening of the institutional

and legal transboundary cooperation and also the development of a common vision for the NWSAS management.

The panel interventions concluded with the *Water Convention Secretariat* sharing their nexus work, involving both capacity building and peer-to-peer learning and the development and application of the transboundary basin nexus assessment methodology. The latter, that is applicable to river basins and aquifers, has been applied in six basins until now, with NWSAS being one of them. Strengthening transboundary cooperation, facilitating inter-sectoral dialogue, securing policy insights for the optimisation of resources and infrastructure, and jointly identifying solutions and discussing investments, are among the practical impacts of the nexus assessments, with examples shared also from the Western Balkans. Embracing a nexus thinking has multiple benefits for cooperation as well as in policy and project development, including increasing their financeability.

The discussion involved clarifications on the implementation of the nexus approach in the different cases, including the way nexus solutions address vulnerable groups and ecosystems. Identifying a way to measure the level of success or failure was raised by several participants as important for assisting with the implementation of the nexus approach in other parts of the world. Participants stressed the cross-linkages when planning nexus interventions, for example in the use of renewable energy for water abstraction from wells, so that it doesn't turn counter-productive in terms of water use, or through employment opportunities for local populations through the preservation of water resources and land so that migration can be discouraged. Overall, participants acknowledged that the Nexus framework offers multiple benefits through the inter-sectoral approach it adopts but needs stronger supporting evidence through case studies.

Conclusions and next steps

The Workshop concluded with a tour du table collecting participants' reflections. There was agreement that the water crisis is increasing tensions in the MENA region, complexities persist and transboundary issues – though critical for most countries – remain unresolved. The availability of initiatives at different levels was well acknowledged; however, the need for a mapping exercise for them, along with more dialogue processes and capacity building efforts were also accentuated. In particular, the participants noted that the focus on international water conventions, bilateral and basin agreements and other related legal aspects was of high added value in a view of better and sustainably managing transboundary water resources.

The participants called for additional capacity building activities, under the auspices of the co-organisers, to: (1) share additional success stories of transboundary water cooperation processes from the region and beyond, but also analysis of failures including the nexus application in transboundary regions; (2) focus on transboundary groundwater resources management, and; (3) combine political and technical discussions related to transboundary water resources management.

Overall, the participants considered the Workshop a success, having provided a comprehensive overview of transboundary water cooperation in the MENA region and showcasing the benefits, including attracting opportunities for funding. The diverse audience composed of water practitioners, representatives from ministries of foreign affairs, representative of IGOs, Parliamentarians and NGOs, and other supporting partners was particularly appraised and the importance of discussing and hearing from one another in order to understand national interests was well stressed. Finally, the participants acknowledged behavioural change and a paradigm shift -though time-demanding and strenuous- as fundamental for progressing with cooperation over transboundary water resources.

Co-organizing partners confirmed their availability to further support transboundary water cooperation in the region, in particular through the work of (1) *ESCWA* in response to its regional mandate and Member State requests supporting the implementation of the Arab Water Strategy and exploring avenues for regional guidelines in transboundary water cooperation; (2) the *Water Convention Secretariat*, with the Convention offering a global legal and institutional framework and platform for voicing needs, sharing experiences and strengthening cooperation; and (3) *GWP-Med*, supporting transboundary water cooperation through multi-stakeholder platforms and enhancing transboundary cooperation with measurable results being one of the three strategic priorities of the GWP 2020-2025 strategy.