

# UN-Water Proposal for Task Force

## Submitted by (name and organization)

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It is a:  **New proposal**

## Proposed scope of work

Given 2016-2030 as the SDGs implementation timeframe and water scarcity challenges for two-thirds of the global population by 2025, there is a need for a new paradigm in water resources management while considering unconventional water resources (UWR) as an integral part of national water resources planning and water budgets and supporting innovations to promote their use while addressing water demand-supply gap.

UWR may refer to *used water* (agricultural drainage water, wastewater and greywater) and *new water* (desalinated water, water confined in deep geological formations, harvested atmospheric moisture, and iceberg towing to water scarce areas, etc.).

Scattered, but there are growing examples of using UWR or developing new technologies to boost water supplies to address water scarcity across the world. Yet, there is no coordinated initiative to date to trigger international and regional cooperation across UN Member States to build and share a global vision to harness the potential of UWR and technologies. This proposal intends to fill this gap.

*By involving water institutions, policy makers, and experts, the proposed Task Force on 'Unconventional Water Resources' is expected to build and share a global vision on UWR to trigger international and regional cooperation among UN Member States to harness the potential of such water resources to address global, regional, and local water scarcity challenges.*

## Name of Task Force

Unconventional Water Resources

## Background and Rationale<sup>1</sup>

### The Context:

Given current demographic trends and future growth projections, two-thirds of the global population will be living in water-stressed areas by 2025. The commonly used conventional water resources, such as rainwater or river runoff, may not be sufficient to meet the growing demand for water in water scarce areas. This necessitates considering UWR as part of the water management and water planning for the future.

UWR may either be generated as a product of specialized processes such as desalination, or need suitable pre-use treatment, and/or pertinent on-farm management when used for irrigation, or need a special technology to collect/access water. Examples of such water resources/sources include, but not limited to:

<sup>1</sup> Rational should include: (1) Why is the proposed subject area relevant to address from a substantive point of view, and (2) why is it relevant from a UN-Water perspective (considering UN-Water's mandate and ToR).

- Desalination of seawater and highly brackish groundwater;
- Groundwater confined in deep geological formations, or in off-shore aquifers;
- Physical transportation of water through tankers and icebergs;
- Micro-scale capture of rainwater where otherwise it evaporates;
- Atmospheric moisture harvesting such as cloud seeding, fog water collection;
- Collection and treatment of wastewater, greywater, and stormwater; and
- Collection and use of agricultural drainage water

The above first five types of UWR can be referred to as '*new water*' while the last two as '*used water*'.

### **The Challenge:**

Despite growing importance of UWR, their potential has not been fully explored due to several constraints, such as the lack of national water policies and action plans, which should consider UWR as part of national water budgets and support their use while addressing water scarcity. Where available, most national water policies and institutions and action plans do not even mention some UWR such as atmospheric moisture harvesting on the public policy agenda.

There are trade-offs of producing UWR. The production and/or use of some UWR such as desalinated water, wastewater, and saline drainage water may result in environmental impacts and/or associated health risks, which need careful assessments and pertinent mitigation options. Also, catching water from certain sources may deprive water to other environments/ecosystems and people. Some UWR offer resilience to climate change through renewable energy generation and green biomass production. There is lack of sound assessments of the trade-offs of managing UWR in different settings.

While the planning, financing, implementing, and regulating the production and use of UWR need sound professional support, there is lack of skilled human resources to address the complexities in undertaking feasibility studies on UWR. The emerging technologies in desalination and atmospheric moisture harvesting need technical and financial assessment in selecting the most appropriate technologies in terms of adaptation to local conditions, sustainability and affordability.

### **The Need for the Initiative:**

The SDG 6, particularly SDG targets 6.3 and 6.a together necessitate harnessing the potential of UWR. SDG target 6.3 emphasizes improvement in water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater, and at least doubling recycling and safe reuse globally. SDG target 6.a highlights international cooperation and capacity-building support to developing countries in water and sanitation related activities and programs, including water harvesting, desalination, water efficiency, wastewater treatment, and recycling and reuse technologies.

### **The Role for UN-Water:**

The call for implementing SDG 6 and achieving its targets, particularly in water scarce UN Member States, can be addressed effectively if the international community joins hands in harnessing the potential of UWR for water augmentation to narrow the water demand-supply gap. This cannot be achieved without supporting international and regional cooperation around UWR and establishing collaboration mechanisms across relevant institutions and stakeholders to address constraints to managing UWR at different scales. UN-Water Members can play an effective role in this regard through establishing a UN-Water Task Force on UWR.

The focus of the proposed UN-Water Task Force on UWR is closely related to the Results Area 1 (Informing policy processes and addressing emerging issues) and Results Area 3 (Building knowledge and inspiring people to take action).

## Proposed Terms of Reference

The roles and responsibilities of the Task Force will include but not be limited to:

- Work with UN-Water Members and Partners and other institutions interested in UWR to highlight the importance of UWR in SDG era.
- Develop a global community of practice on UWR to build and share a global vision on UWR to harness the potential of such water resources at different levels.
- Arrange an expert consultation meeting to discuss the challenges in harnessing the potential of UWR and propose strategies in addressing such challenges.
- Raise awareness of the UN Member States to collect and share data related to UWR through AQUASTAT.
- Utilize existing literature and work with relevant organizations and professionals to produce an info-graph and an analytical brief on UWR.
- Present the work of the Task Force at key water related international events, where possible, through individual presentations, side events, and special sessions.
- Provide inputs to the World Water Development Reports (WWDR) 2019 and 2020 in case the WWDR themes address topics with relevance to UWR.

The term of the Task Force will be two years (1 January 2018 to 31 December 2019).

## Describe the expected activities of the Task Force

Activities	Timeline
1. UN-Water members and partners on board	Jan-Feb 2018
2. Develop global community of practice on UWR	Jan-Jun 2018
3. Arrange expert consultation meeting on UWR	Aug 2018
4. Produce an info-graph on UWR	Oct 2018
5. Organize side events or sessions at international events	2018-2019
6. Produce analytical brief on UWR	Aug 2019
7. Inputs to 2019 and 2020 WWDR in case of related topics	2018-2019

Please describe the main outputs and related indicators etc. as per the [UN-Water Results Matrix](#):

Outputs	Indicators, baseline, target	Means of Verification	Assumptions
UN-Water Info-graph on UWR	<p><b>Indicator 1:</b> Info-graph on UWR published  <b>Baseline:</b> 0  <b>Target:</b> 1</p> <p><b>Indicator 2:</b> Number of downloads of info-graph  <b>Baseline:</b> -  <b>Target:</b> -</p> <p><b>Indicator 3:</b> Number of UN-Water Members and Partners contributing to info-graph  <b>Baseline:</b> -  <b>Target:</b> 8</p>	<p>Website records</p> <p>Progress report from the Task Force</p>	UN-Water Members and Partners participate actively in the work

UN-Water Analytical Brief on UWR	<b>Indicator 1:</b> Analytical Brief on UWR published <b>Baseline:</b> 0 <b>Target:</b> 1  <b>Indicator 2:</b> Number of downloads of the Analytical Brief <b>Baseline:</b> - <b>Target:</b> -  <b>Indicator 3:</b> Number of UN-Water Members and Partners contributing to the Analytical Brief <b>Baseline:</b> - <b>Target:</b> 8	Website records  Progress report from the Task Force	UN-Water Members and Partners participate actively in the work
Global community of practice on UWR	<b>Indicator 1:</b> Global community of practice on UWR established <b>Baseline:</b> 0 <b>Target:</b> 1  <b>Indicator 2:</b> Number of institutions joining the global community of practice on UWR <b>Baseline:</b> - <b>Target:</b> 12	Website records  List of institutions and professionals as part of global community of practice on UWR	UN-Water Members and Partners participate actively in joining the global community of practice on UWR
Side events or sessions at international events	<b>Indicator 1:</b> Side events or sessions at international events <b>Baseline:</b> 0 <b>Target:</b> 2	Web records of the international events	UN-Water Members and Partners participate actively in side events/sessions

**Would this activity need financial support from the UN-Water Inter-Agency Trust Fund?  Yes**

**If yes, please provide an indicative budget (for each anticipated activity and a total budget, USD):**

Activities (please add timeline)	UNU-INWEH	UN-Water
UN-Water members and partners on board (Jan-Feb 2018)	0	0
Develop global community of practice on UWR (Jan-Jun 2018)	0	0
Arrange expert consultation meeting on UWR (Aug 2018)	15,000	7,000
Produce an info-graph on UWR (Oct 2018)	2,000	1,000
Organize side events/sessions at international events (2018-2019)	3,000	2,000
Produce analytical brief on UWR (Aug 2019)	12,000	10,000
Inputs to 2019 and 2020 WWDR for related topics (2018-2019)	8,000	0
Total	40,000	20,000

**As per the UN-Water Operational Guidelines, “a minimum of four UN-Water entities is required in order to create a Task Force”. Which UN-Water Members/Partners are already committed?**

**UN-Water Members:**

- UNCCD
- UNDP
- UNESCO
- FAO
- UNEP

**UN-Water Partners:**

IWMI