



United Nations
Educational, Scientific and
Cultural Organization



Regional Centre
on Urban Water Management
(under the auspices of UNESCO)

Governing Board Meeting (GBM-13)

Compendium

23 Feb 2023

Foreword

In my capacity as the chairperson of the Governing Board (GB) of the Regional Centre on Urban Water Management (UNESCO-RCUWM) and the Minister of Energy, I.R. Iran, I have the pleasure to announce that the 13th GB Ministerial Meeting (GBM-13) is planned to be held in Tehran, Iran, 23 February 2023. RCUWM is guided and overseen by its Governing Board (GB) at the highest level and its members are Ministers from Iran (Chair), Afghanistan, Armenia, Azerbaijan, Bangladesh, Egypt, Germany, India, Iraq, Lebanon, Oman, Pakistan, Qatar, Sri Lanka, Syria, Tajikistan, Turkmenistan, Turkey and Uzbekistan as well as UNESCO Director General as for the period of 2019-2024.

As a turning point in the Centre's work plan of activities and achievements several project proposals were defined and developed by RCUWM and its member states and organizations, further elaborated, updated, and approved during GBM-11 (2020) and GBM-12 (2021). Continuous work was carried out with the concerned counterparts to put the proposals into practice. I am pleased to report on the successful completion of some approved proposals and our way forward in running others in the queue.

I would like to state that, in the third period of UNESCO-RCUWM activities (2019-2024), the Center is fulfilling its mandate with its maximum capacity for precisely addressing and solving water management issues in arid and semi-arid regions. I believe that regional water challenges can be addressed through strengthening international cooperation. This outstanding goal is not achievable except through exchanging knowledge, experiences, and lessons learned and taking advantage of the capacity of RCUWM Governing Board (GB) member states and organizations. In conclusion, I declare my full preparedness and support for the Center's activities to solve water-related problems in the region in line with implementing the priority areas of the strategic plan of the ninth phase of UNESCO-IHP (2022-2029) at regional and international levels based on the IHP IX priorities as follows:

- 1- Scientific research and innovation
- 2- Water education in the Fourth Industrial Revolution
- 3- Bridging the data- knowledge gap
- 4- Inclusive water management under conditions of global change
- 5- Water Governance based on science for mitigation, adaptation and resilience

Participation of all active RCUWM GB member states in achieving such a goal as well as assisting the Centre's mandate of activities is highly appreciated.

Last but not least, I would like to sincerely thank all active RCUWM members for expanding their collaboration with the Centre, which I admire.

Aliakbar Mehrabian

RCUWM- GB Chair & Minister of Energy, I. R. Iran

Feb. 2023

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1. RCUWM

1.1. RCUWM in Brief

The Regional Centre on Urban Water Management (RCUWM) has been established under the auspices of UNESCO in Tehran-Iran since February 2002. It is associated with UNESCO through a formal agreement (Annex 3) approved by the UNESCO General Conference and signed and exchanged between the Islamic Republic of Iran and the United Nations Educational, Scientific, and Cultural Organization (UNESCO). Worth noting that, the agreement between I. R. Iran and UNESCO has been renewed for the third six-year period of activities of RCUWM starting since 2019 to be continued to 2024.

The missions of the Centre are capacity building, knowledge sharing, and research in all dimensions of water management.



Figure 1. RCUWM Objectives

The three main pillars of the Centre's activities are as follows:

1. Applied research and technology transfer;
2. Training and capacity development;
3. Partnership and networking at the regional and international levels.



Figure 2. Main Functions

Based on the above-mentioned themes, the achievements of RCUWM-Tehran since its establishment have been:

- Holding around 100 training events for its Governing Board (GB) member states' experts and managers which sum up to around 35000 persons/day being trained;
- Publishing more than 20 books and publications in close cooperation with its GB member states;
- Planning 10 joint research projects with its GB members' researchers;
- Hosting the International Drought Initiative (IDI) since 2010 with the aim of drought management monitoring and required training for drought management and adaptation to water scarcity;
- Holding 12 GB meetings at the ministerial level



Figure 3. Achievements at a Glance

1.2. Staffing Table

Based on Article 9 of the Agreement between UNESCO and the Government of I.R. Iran (Annex 3) which states that the Iranian Government shall “*make available to the Centre the administrative staff necessary for the performance of its functions, which shall comprise: the director, a deputy, experts, program specialists and researchers, a financial officer, an assistant to the financial officers, regular staff and a driver*”, the proposed organizational charts of the Centre and the staffing table are presented at Figure 4 and Table 1, respectively.

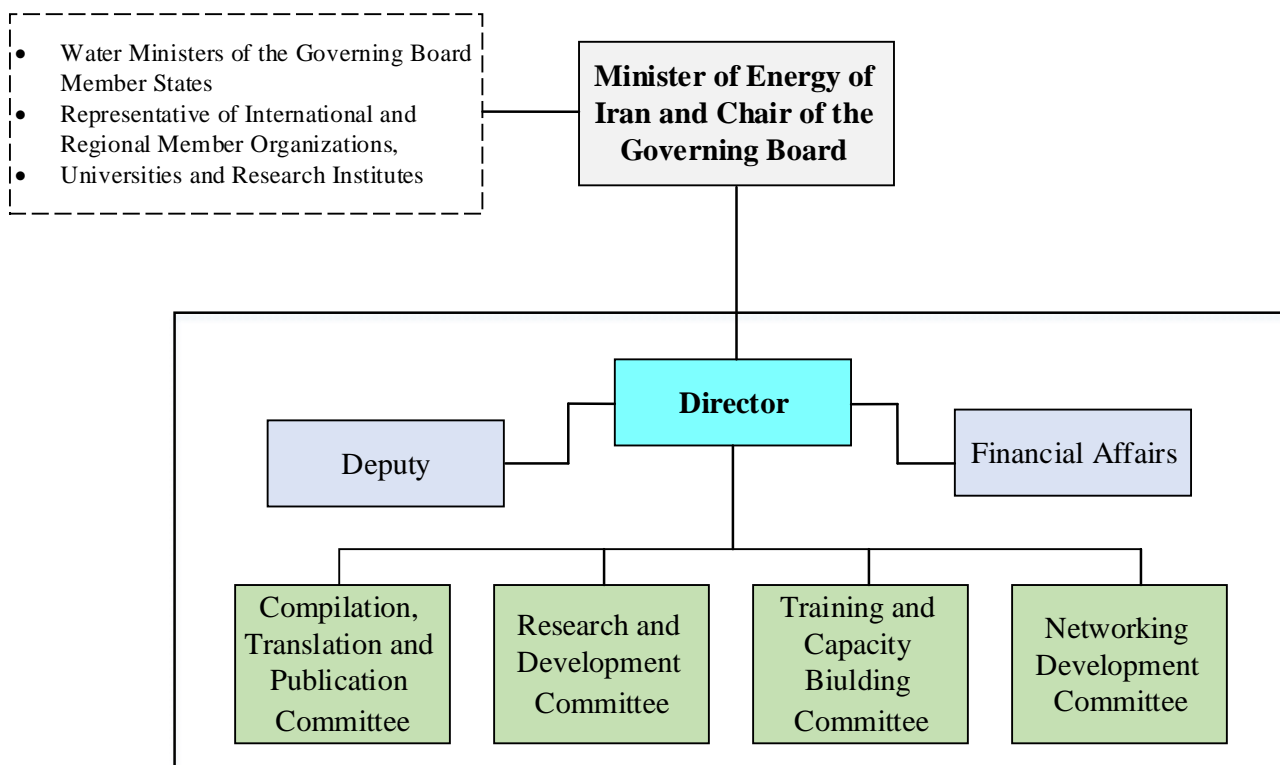


Figure 4. RCUWM Organizational Chart

Table 1. RCUWM Staff

Mr. Aliakbar Mehrabian (Founding Director)	GB Chair and Minister of Energy, I.R. Iran									
Position	Sex		Education				Years of Experience			
	M	F	PhD	MS	BS	N/A	<5	5~10	10~20	>20
Director	1			1						1
Deputy	1			1						1
Senior Advisers (part time)	11	1	9	3						12
Experts	2			2			1	1		
Program Specialists/Researchers	2	2	2	2				3		1
Financial Affairs (part time)		2		1	1				1	1
Supporting Staff	3			1		2			3	
Total	20	5	11	11	1	2	1	4	4	16

1.3. RCUWM Activities (2021-2023)

RCUWM activities from 2021 to 2023 are summarized including capacity building and training courses, publications, research and technical projects, and networking activities.

1.3.1 Completed Activities

A. Online Workshop on "Data and Information for Integrated Urban Water Management"

23 June 2021



This event was co-organized by the International Center for Water Resources and Global Change (ICWRGC) and the Regional Center on Urban Water Management (RCUWM) with the aim of highlighting the importance of quality assured data and products at the basin level as well as water utilities for integrated Urban Water Management. Most of RCUWM's GB Member States including Armenia, Azerbaijan, Bangladesh, Germany, India, Iran, Iraq, Oman, Pakistan, Qatar, Sri Lanka, Syria, Tajikistan and Turkey attended this interactive online workshop.

B. 2nd Online Workshop on "Data and Information for Integrated Urban Water Management"

23-24 November 2021



As a follow up to the first High-Level Panel and kick-off online workshop on “Essential Quality Assured Data and Information for Integrated Urban Water Management”, the 2nd series of events as an online Workshop on “Data and Information for Integrated Urban Water Management” was successfully held on the 23rd and 24th November 2021. This event was co-organized by ICWRGC and RCUWM with the aim of highlighting the importance of quality assured data and products at the basin level as well as water utilities for integrated Urban Water Management. 14 out of 16 RCUWM's GB member states including Armenia, Azerbaijan, Bangladesh, Egypt, India, Iran, Iraq, Oman, Pakistan, Sri Lanka, Syria, Tajikistan, Turkey and Uzbekistan attended this interactive online workshop being well received. This event was held with the support of UNESCO, UNEP, GWP, GFZ-POTSDAM, NASA and WMO.

C. Virtual Field Trips to Support Active Learning in Water Management at the Tertiary Level Across the Region Addressing the Overall Theme of “Urban Water and Sustainability” in Tehran

June to November 2021



This project was carried out by the support of UNESCO Jakarta Office via a contract between UNESCO Tehran Cluster Office (UTCOC) and RCUWM to contribute to a series of innovative virtual field trips to support active learning in water management at the tertiary level across the region and to provide students with opportunities to access and engage in virtual fieldwork, and to acquire skills in field-based observation, monitoring, measurement and analysis. Duration of this project was 5 months, 15 Jun. 2021 to 30 Nov. 2021.

D. Promote the activities to mark the 2021 World Water Day, during COVID-19 Pandemic

April to June 2021



This project was carried out by the support of UNESCO Jakarta Office via a contract between UTCOC and RCUWM to Translate the English version of the “Executive Summary” and “Facts and Figures” of the UN World Water Development Report 2021 “Valuing Water” into Persian and organize an online webinar to celebrate World Water Day of 2021. Duration of this project was 3 months from April to June 2021.

1.3.2 Ongoing Activities

A. 3rd Online Workshop on “Data and Information for Integrated Urban Water Management” Focusing on Drought

Preamble

As a follow up to the 2nd online workshop on “Data and Information for Integrated Urban Water Management”, ICWRGC and RCUWM with the aim of highlighting the importance of quality assured data and products at the basin level are planning to hold the 3rd series of workshops by mid-2023 in 2 or 3 consecutive days to be hosted by one of the GB member states.

Similar to the 2 last events, this workshop will be also organized with the support of UNESCO, UNEP, GWP, GFZ-POTSDAM, IWA, NASA, Intergovernmental Group on Earth Observations (GEO) and WMO.

The main goal of these workshop series will be to discuss open questions on requirements and the status of the cooperation modality in details coming up with initial proposals for joint activities on drought.

All RCUWM's GB member states including Afghanistan, Armenia, Azerbaijan, Bangladesh, Egypt, India, Iran, Iraq, Lebanon, Oman, Pakistan, Qatar, Sri Lanka, Syria, Turkmenistan, Tajikistan, Turkey and Uzbekistan will have the chance to attend this interactive event by presenting their needs and priorities coming up to a joint project on urban water management data and information as well as drought management at national level to be carried out with the support of concerned organizers/contributors.

Objective and Motivation

An important motivation is to determine our way forward for selection and implementation of a case study (or case studies) for improving urban water management at basin and sub-basin level in the region.

Another objective is to introduce the project entitled “Development of an Operational, mULTi-sectoral global drought hAZard forecasting SysTEM, OUTLAST”. In this regard, several interested pilot users in the Western and Central Asia region will be specified to co-design and develop some informative drought indicators for the drought hazard forecasting system and their provisioning on the web portal HydroSOS (WMO’s Hydrological Status and Outlook System) that provides access to the data for users all over the world. The results of the OUTLAST and the performance of the global-scale drought forecasts will be evaluated by the involved regional pilot users.

Workshop Description

The organizers will hold the 3rd series of workshops with RCUWM GB member states’ representatives, interested in the OUTLAST project.

The event will be held in 2 or 3 consecutive days providing sufficient time for the participants and the organizers/contributors to define and discuss a joint project on water management data and information which fits their needs as well as how to contribute to the OUTLAST project. All participants are



required to determine their needs and priorities prior to the workshop, coming up with a proposal they are interested to be involved during the event.

Since RCUWM as the secretariat of the International Drought Initiative (IDI), as a UNESCO initiative intends to host the dialog with the pilot users in the Western and Central Asia region and support the co-design process of the OUTLAST drought forecasting system, only the interested pilot users from RCUWM GB member states, involved in the OUTLAST project will attend the event.

Workshop Follow-up and the Future plan

The next follow-up workshop will be preferably organized by the end of 2023 as a plenary workshop to compile the results and discuss recommendations for action of joint projects and the OUTLAST project defined during the 3rd event.

Official Language of the Workshops

English will be the official language of all events, while local languages may also be considered for some particular cases for a better understanding.

Workshop Date and Venue

The workshop will be held in one of the GB member states at regional level. Two options (i.e. 8 - 11 or 15 - 17 May 2023, respectively) have been proposed for organizing the event. Venue and date of the workshop will be finalized during the 13th RCUWM Governing Board Meeting. Domestic costs (accommodation, meals, transportation, etc.) will be covered by the organizers.

Participants

Participation in the workshop serial is on invitation only and will be limited to experts and/or focal points from regional countries and supporting countries, UN organizations and international institutions.

Expected Outcomes

The expected outcome of the 3rd workshop will be joint project proposals and determination of some interested regional pilot users in Western and Central Asia region for the OUTLAST project as well as how to contribute to the aforementioned projects according to the country's needs and priorities.

B. International Workshop on “Water and Media”

Iran is located in an arid and semi-arid area with the average rainfall of one third compared to the world; while the distribution of rainfall is not the same at the country level and some regions of the country are facing with the worsening of water scarce and water stress problems.

On the other hand, because of climate changes, severe and untimely floods and droughts in recent years, the necessity of updating and improving the level of awareness of managers and stakeholders on adaptation and facing these changes, how to evaluate the consequences of a problem and how to propose its solution, is essential and these decisions and management of water resources should be properly transferred to the society who are the main beneficiaries of water.

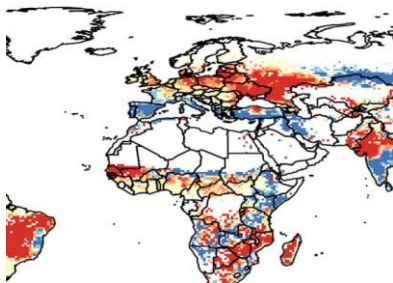
Therefore, careful and principled planning for benefitting from media capacities helps us to prevent social water stress and protect and maintain water resources for the future generation. The issue of water has wide and complex dimensions and informing the media, holding specialized meetings and creating a dialogue between water experts and the media and Journalists as well as inter-sector cooperation can play an important role in water management, especially in the conditions of water crisis.

In this regard, the Ministry of Energy in cooperation with UNESCO-RCUWM is planning to hold an International Workshop on " Water and Media " aiming to improve the knowledge and awareness of journalists regarding key water issues in mid-May 2023 for three days including educational workshops, visits and discussion and exchange of experiences with the presence of national and international professors/lecturers.

The following results are expected at the end of this three-day Workshop:

- Improving the knowledge and awareness of the media in the field of water and the challenges of water management in the country
- Developing the country's media capacities and aligning them with the country's water management requirements such as consumption and demand management
- New methods of consumption management and familiarization with international experiences in the field of water and media

C. Contribution to the OUTLAST Project entitled “Development of an operational, multi-sectoral, global drought hazard forecasting system” in cooperation with ICWRGC



The OUTLAST project aims to develop the first global, multi-sectoral and operational drought forecasting system to quantify drought hazards and implement it as a component of the World Meteorological Organization's (WMO) Global Hydrological Status and Outlook System (HydroSOS). In line with International Drought Initiative (IDI) objectives, RCUWM is going to contribute to the OUTLAST project to evaluate the usefulness of the forecasts for drought management in the region and to co-design together with the regional pilot users a web-portal providing access to the data for users all over the world. Developing an operational, multisectoral, global drought hazard forecasting system for agricultural systems and water supply could be analyzed systematically using IDI platform in different regions, in particular among RCUWM governing board member states in the West and Central Asia to improve the skill of the forecasts for distinct regions, forecasting periods, seasons, and drought indicators.

D. Publishing a book entitled “Integrated Flood Management (IFM)” and an applied research report on the Iran case study at river basin scale



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Edited by
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Mahmoud Eshami



In line with transferring and sharing knowledge in the field of flood management, some global well-known experiences such as associated programme on Flood Management, APFM (under supervision of WMO and GWP) documents were collected, summarized and translated into Farsi. This book will be published in 181 pages by mid-2023 for the first time in Iran. The book consists of 6 chapters and addresses IFM concept and technical, environmental, social, economic and legal aspects of IFM. This book could be published in different languages (e.g. Arabic, Russian and Urdu) to be localized and used by all RCUWM GB member states.

1.4. RCUWM Biannual Proposals for 2023-2024

RCUWM will be presenting the following proposals (Table 2) at the meeting with the aim of investigating the members' contribution towards the projects. Complete description of proposals could be found in Annex 1.

Table 2. Titles of the Proposed Projects

No.	Project Title
1	Improving Integrated Water Resources Management at Regional Level
2	Transferring experiences and technical knowledge about integrated river management based on restoration, rehabilitation and maintenance of river balance
3	Preparation of a report/book on "Water Governance in RCUWM Governing Board (GB) Member States"
4	Development of a Regional Collaborative Platform for Adaptation of Urban Water Systems to Climate Change
5	Development and Implementation of a Regional Drought Monitoring, Prediction and Risk Management System
6	New Technologies in Water and Wastewater Treatment and Recycling
7	Skill Improvement for Urban Water Practitioners and Technicians
8	Improving Water Quality in the Region: from Capacity Building to Capacity Development

Governing Board Meeting

(GBM 2023)

2. Governing Board

2.1. Governing Board Tasks

The Centre is guided and overseen by its Governing Board (GB) as the most important decision-making constituent at the highest level.

The main tasks of the Governing Board are as follows:

- Approve the medium and long-term programmes of the Centre;
- Approve the annual work plan of the Centre, including the staffing table;
Examine the annual reports submitted by the director of the Centre, including a biennial self-assessment of the Centre's contribution to UNESCO's programme objectives;
- Adopt the rules and regulations and determine the financial, administrative and personnel management procedures for the Centre in accordance with the laws of the country;
- Decide on the participation of regional intergovernmental and international organizations in the work of the Centre;
- Examine the periodic independent audit reports of the financial statements of the Centre and monitor the provision of such accounting records necessary for the preparation of financial statements.



Figure 6. 11th Governing Board Meeting (GBM 2020)

2.2. Governing Board Rules of Procedure

2.2.1. Geographical Domain of Activities

Geographical Scopes: Regional priority scope of the Centre's activities is based on

UNESCO regional definition as follows:

- Group I (Western Europe and North America)
- Group IV (Asia and the Pacific)
- Group Vb (Arab States)

Therefore, Group II (Eastern Europe), Group III (Latin America and the Caribbean), and Group Va (Africa) are out of regional priority scope of activities.

2.2.2. Scope of Activities

Water and wastewater management in human settlements hold a high priority. Centre's scope of activities is all aspects of urban water management from technical to social and economic issues. Moreover, it is considering interaction with water use in other sectors such as agricultural and industrial sectors at the basin level in accordance with the Integrated Water Resources Management Concept.

2.2.3. Governing Board Composition

Governing Board consists of three categories as follows:

- 1) Members at State Level: Representatives of Member States, from the Region I, IV, Vb, which will be granted a six-year Governing Board membership period as well as right to vote equivalent to other members.
- 2) Members at International Organization Level: Representatives of UN Agencies and other international and regional organizations, shall be granted a 3-year Governing Board membership period and right to vote equivalent to other members. Membership continuation of this category will be evaluated and decided by the end of the first three years.
- 3) Observers: Representatives of relevant national, regional, and international entities with similar geographical domain and/or scope of activities, which will be invited as an observer without holding right to vote.

2.2.4. Governing Board Decisions

Decisions will be made and approved based on the majority of votes.

2.2.5. Language:

English shall be the official language of the Governing Board Meeting. The Director may consider other UN languages as required.

2.2.6. Date and Place

According to the Agreement, the Governing Board shall meet in ordinary session once per year. The venue of the Governing Board Meeting is primarily in Iran.

2.3. Governing Board Meetings History

The Governing Board shall meet in ordinary session at regular intervals, at least once every calendar year. It shall meet in extraordinary session if convened by its Chairperson, either on his or her initiative or at the request of the director-general of UNESCO or one-third plus one of its members. The Governing Board will follow its own rules of procedure as decided at the first meeting. According to the agreement made between the I.R. Iran and UNESCO, so far 12 GB meetings have been arranged and held with the attendance of its member states and organization representatives. The Centre has held its ordinary GB meetings as presented in Table 3.

Table 3. Governing Board Meetings Information

Year	Venue	Date	Participant Members		
			States	Organizations	Total
2002	Muscat, Oman	18 May 2002	1	1	2
2003	Tehran, Iran	17 Dec 2003	9	4	13
2005	Tehran, Iran	27 Feb 2005	9	5	14
2006	Tehran, Iran	13 May 2006	10	3	13
2007	Tehran, Iran	24 Nov 2007	8	2	10
2008	Muscat, Oman	2 Nov 2008	8	6	14
2010	Tehran, Iran	5 May 2010	11	4	15
2012	Tehran, Iran	4 Sep 2012	11	4	15
2013	Dushanbe, Tajikistan	19 Aug 2013	9	4	13
2014-2017	RCUWM Evaluation Process				
2018	Signing RCUWM Agreement Renewal (Annex 3)				
2019	Tehran, Iran	5 Dec 2019	16	9	25
2020	Video Conference	23 Sep 2020	15	9	24
2021	Video Conference	26 May 2021	18	12	30

2.4. Member States and Organizations

A) Members at State Level: 18 Representatives of Afghanistan, Armenia, Azerbaijan, Bangladesh, Egypt, Germany, India, Iran, Iraq, Lebanon, Oman, Pakistan, Qatar, Sri Lanka, Syria, Tajikistan, Turkey and Uzbekistan.

B) International Organizations: UNESCO, UN Resident Coordinator (As representative of UN offices in Tehran including UNDP, FAO, UN-HABITAT), UNITAR, GWP, WMO, IWA and IsDB

C) Observers: Representatives of Economic Cooperation Organization (ECO), Swiss Agency for Development and Cooperation (SDC), and Oman Water Society (OWS)

2.5. Governing Board Meeting 2023

To follow article No. 7.3 of UNESCO-RCUWM agreement which states that: “The GB shall meet in ordinary session at regular intervals, at least once every calendar year, the GB Meeting-2023 is planned to be organized on Thursday 23 Feb 2023, 09:00 – 12:00, UTC.

2.6. Interventions during the Governing Board Meeting

As for the interventions during the meeting the following time slot is presented.

- Speeches at Ministerial Level: 5 Minutes
- Others: up to 3 Minutes

2.7. Agenda

The provisional agenda would be as stated in Table 4.

Table 4. GB Meeting Agenda, 23 Feb. 2023, 09:00- 12:00, Tehran Time

No.	Time	Items
1	09:00 – 09:10	National Anthem and Reciting the Holy Quran
1	09:10 – 09:20	Opening, Minister of Energy & RCUWM GB Chair
2	09:20 – 09:50	Speeches by GB Members at the ministerial level (5 minutes/member)
3	09:50 – 10:10	Director’s report on the activities between the 12 th and 13 th GBMs and work plan of 2023
4	10:10 – 10:30	Comments and approvals on the director’s report
5	10:30 – 11:00	Speeches by other GB members (3 mins/member)
6	11:00 – 11:50	<ul style="list-style-type: none"> • Presenting New proposals by RCUWM • Interventions & Contributions by GB Members
7	11:50 – 12:00	Determining the venue and tentative date of the 14 th GBM

Annex 1:

Proposals & Projects

Annex 1: Proposals & Projects

A. Completed Proposals

No	Proposal Title	RCUWM Counterpart	Involved RCUWM Members	Project Type
1	1 st Online Workshop on "Data and Information for Integrated Urban Water Management" 23 June 2021	Center for Water Resources and Global Change (ICWRGC)	Armenia, Azerbaijan, Bangladesh, Germany, India, Iran, Iraq, Oman, Pakistan, Qatar, Sri Lanka, Syria, Tajikistan and Turkey	<input type="checkbox"/> Hands-on Workshop <input checked="" type="checkbox"/> Web-based/Online <input type="checkbox"/> Onsite training <input type="checkbox"/> Research
2	2 nd Online Workshop on "Data and Information for Integrated Urban Water Management" 23-24 November 2021	International Center for Water Resources and Global Change (ICWRGC)	Armenia, Azerbaijan, Bangladesh, Egypt, India, Iran, Iraq, Oman, Pakistan, Sri Lanka, Syria, Tajikistan, Turkey and Uzbekistan	<input type="checkbox"/> Hands-on Workshop <input checked="" type="checkbox"/> Web-based/Online <input type="checkbox"/> Onsite training <input type="checkbox"/> Research
3	Promote the activities to mark the 2021 World Water Day, during COVID-19 Pandemic April to June 2021	UNESCO Tehran Cluster Office (UTCO)	National Participants	<input type="checkbox"/> Hands-on Workshop <input checked="" type="checkbox"/> Web-based/Online <input type="checkbox"/> Onsite training <input type="checkbox"/> Research
4	Virtual Field Trips to Support Active Learning in Water Management at the Tertiary Level Across the Region Addressing the Overall Theme of "Urban Water and Sustainability" in Tehran City June to November 2021	UNESCO Tehran Cluster Office (UTCO)		<input type="checkbox"/> Hands-on Workshop <input checked="" type="checkbox"/> Web-based/Online <input type="checkbox"/> Onsite training <input type="checkbox"/> Research

Draft Concept Notes for the approved proposal in the Governing Board Meeting

Nine proposals were initially compiled by RCUWM and its members, later elaborated and approved during GBM 2019, GBM 2020 and GBM 2021. They were uploaded on RCUWM website by officially requesting the members for a further review. Received comments and suggestions were later accommodated. The proposals will be put on the floor for further involvement and contribution during 13th GBM (23 Feb, 2023).

B. Ongoing activities for 2023 and beyond

No	Proposal Title	RCUWM Counterpart	Involved RCUWM Members	Project Type
1	3rd Online Workshop on “Data and Information for Integrated Urban Water Management” Focusing on Drought	ICWRGC	TBD	<input type="checkbox"/> Hands-on Workshop <input type="checkbox"/> Web-based/Online <input checked="" type="checkbox"/> Onsite training <input type="checkbox"/> Research
2	International Workshop on Water and Media		TBD	<input type="checkbox"/> Hands-on Workshop <input type="checkbox"/> Web-based/Online <input checked="" type="checkbox"/> Onsite training <input type="checkbox"/> Research
3	OUTLAST Project in cooperation with ICWRGC entitled “Development of an operational, multisectoral, global drought hazard forecasting system”	ICWRGC and WMO	TBD	<input type="checkbox"/> Hands-on Workshop <input type="checkbox"/> Web-based/Online <input type="checkbox"/> Onsite training <input checked="" type="checkbox"/> Research
4	Project on “Integrated Flood Management (IFM)” and the case studies in the region		TBD	<input type="checkbox"/> Hands-on Workshop <input type="checkbox"/> Web-based/Online <input type="checkbox"/> Onsite training <input checked="" type="checkbox"/> Research
5	IDI Activities	WMO, FAO and G-WADI	All Member States	<input type="checkbox"/> Hands-on Workshop <input type="checkbox"/> Web-based/Online <input type="checkbox"/> Onsite training <input checked="" type="checkbox"/> Research

C. New Proposals

Proposal 1: Improving Integrated Water Resources Management at Regional Level

Introduction:

In order to achieve Target 6.5 of SDG6 entitled “by 2030, implement integrated water resources management at all levels” and appropriate establishment of water governance which insists on policy-making and water resources management as a way to achieve sustainable development, since Integrated Water Resources Management (IWRM) requires technical, economical, institutional, policy, administrative and contribution instruments, it should be implemented in a manner that by using aforementioned instruments basis of appropriate water governance be provided.

On the other hand, according to the motto of world water day in 2022 (Groundwater: Making the invisible visible) and the seventh thematic working groups of UNESCO committees on Intergovernmental Hydrological Programme (IHP) (i.e., groundwater and human settlements), one of the important and effective factors for appropriate water resources management is precise and righteous management of groundwater resources.

Intensified dependency of arid and semi-arid regions on groundwater resources, population growth, and increasing demand for water resources and also occurring drought events and land subsidence in recent years has led to overexploitation of groundwater resources and not taking quantitative and qualitative criteria/privacy of water resources in recent decades has caused irreparable damages to such vital resources, so that most of available and strategic water sources are destroyed or endangered. Moreover, human activities in nature and the implementation of development plans without considering sustainable development principles, the integrity of surface and groundwater resources, and soil and water conservation have caused intensified crises.

One of the main questions about groundwater resources management is which strategy and the most targeted plan are suitable to address groundwater challenges. And what is the best structure to implement plans and achieve goals? What are the targets, strategies, plans, and executive structure of the RCWUM Governing Board (GB) member states? it is recommended that the targets, strategies, plans, and executive structure of these member states are evaluated and discussed.

Another issue is paying attention to the necessity of preparing and formulating criteria and regulations in the water sector that could be as technical policies and institutional instruments to achieve IWRM goals.

Standard is a discipline based on science, technologies and humankind experiences that are utilized as principles, rules and systems to make coordination and unity of procedure, increase mutual understanding, develop industry, save the national economy and

maintain public health and safety.

Standards play a key role in advancement of industry and economy. Standards in water and wastewater industry in different steps of implementing plans including the inception, conceptual design to detailed studies, investment, launching and operation and also management could play an important and effective role. Thus, standards make a solid foundation for improving and developing of industry and economy.

Standard makes scientific and technical foundation for policy making in water, sanitation, safety and environment sectors. On the other hand, increasing the qualitative and quantitative levels of standards and technical criteria and enhancing the level of using them between stakeholders requires focusing on all steps in the standardization process. In addition to needs assessment, preparing, designing and reviewing standards and technical criteria, dissemination of culture and education of standards, evaluating the results of utilizing them and monitoring and supervision of standardization process is critical.

In order to achieve some IWRM goals, two sub-projects are proposed as follows:

Sub-project 1: Evaluation of targets, strategies, plans and executive structures of RCUWM governing board member states in the field of groundwater resources management

Objectives:

- Stabilization of annual drop in groundwater level and recovery/recharge major part of the deficit of groundwater reservoirs
- Controlling land subsidence caused by overexploitation of groundwater resources
- Optimization of groundwater level network monitoring and online evaluation of groundwater level in different plains and evaluation of groundwater level fluctuations
- Increasing reliability of water supply for different uses
- Enhancing quality of groundwater resources and preventing pollutants
- Controlling withdrawals from groundwater resources with advanced new instruments

Scope and Target Group:

RCUWM governing board member states, particularly countries with arid and semi-arid dominant climate (countries with high water stress are in priority)

Outline of activities:

- Getting familiar with the experiences of RCUWM governing board member states about targets, strategies and plans of groundwater resources management
- Getting familiar with the experiences of RCUWM governing board member states about the appropriate executive structure for groundwater resources management

Expected Outcomes:

- Analyzing/ Evaluating the plans and actions implemented in RCUWM governing board member states for groundwater resources management
- Achieving the best strategy and designing the most basic action plan for groundwater resources management
- Procurement of an appropriate executive structure for groundwater resources management

Sub-project 2: How to prepare and develop criteria and standards in water sector (Let's write the standard standard)

Objectives:

- Transferring knowledge and experiences about the procedure of needs assessment, development, and evaluation of standards and technical criteria in the water sector
- Promoting the quantitative and qualitative levels of standards and technical criteria in the water sector
- Modifying policies and educational plans and promoting how to utilize approved and published criteria and standards

Scope and Target Group:

RCUWM GB member states, particularly those countries with more experience in developing standards and technical criteria

Outline of activities:

Organizing a joint workshop entitled “how to formulate a standard to develop standards and criteria in the water sector?”. This workshop should answer some questions as stated below:

- Achieving the best procedure of needs assessment, d develop and evaluation of standards and technical criteria in water and wastewater sectors
- How to monitor and evaluate developed criteria and promote utilizing them
- How stakeholders contribute to the needs assessment procedure, developing and monitoring of standards and technical criteria
- Diversity, scope, and classification of standards and technical criteria in water and wastewater sectors
- How to develop and monitor standards and criteria which have inter and/or multi-sectoral applications
- How to finance the develop, monitor, and educate the standards and possibility of income generation from developed criteria

Expected Outcomes:

- Transferring knowledge and experiences in the field of developing standards and criteria in the water and wastewater sector

- Developing international collaborations in the field of needs assessment, developing and evaluating standards and technical criteria in the water sector

Proposal 2: Transferring experiences and technical knowledge about integrated river management based on restoration, rehabilitation and maintenance of river balance

Introduction:

According to extent of rivers in RCUWM Governing Board (GB) member states and relationship between rivers with other natural phenomena and human societies, effective management of rivers not only can control the risk imposed by floods and inhibition of natural reactions to the inappropriate human activities but also can make possible effective operation for everyone.

Therefore, countries in order to maintain and correctly operation of rivers, try to formulate their long-term plans based on an integrated management perspective and river restoration and maintenance of river balance situation in a sustainable development framework. Some of the plans that can make this perspective possible are systematic floodplain management, improving the river restoration and rehabilitation approach, maintenance of the river house, and development and use of spatial databases. As a result, sharing experiences of RCUWM GB member countries could make it possible to achieve the final goal which is integrated and sustainable river management based on restoration, rehabilitation, and maintenance of river balance situation in sustainable development.

Objectives:

- Maintaining rivers based on restoration and sustainable development
- Appealing public contributions to the conservation and operation of rivers
- Decreasing risks and damages due to floods including flood risk mapping in technical and legal aspects
- Strengthening and improving public and specialized knowledge in the field of sustainable river management focusing on urban rivers in arid and semi-arid regions
- Knowledge sharing on the case studies and successfully implemented plans in the region

Scope and Target Group:

- RCUWM GB member states focusing on experiences of countries which have high potential of flooding

Outline of Activities:

Organizing a joint workshop consisting of several thematic and technical sessions on the following topics:

- Getting familiar with advanced new methods for the study and implementation of river restoration and improvement plans and also removal of waterway bottlenecks by utilizing the restoration and rehabilitation approach
- Getting familiar with new policies and advanced methods of land use management in floodplains
- Getting familiar with decision support systems including spatial databases specifically designed and developed for river management

Expected Outcomes:

- Achieving the best pattern for floodplain management
- Past experiences of RCUWM GB member states in the implementation of river restoration, rehabilitation and improvement plans
- Completion and development of spatial databases for river management

Proposal 3: Preparation of a report/book on “Water Governance in the RCUWM Governing Board (GB) Member States”

Introduction:

Competition to access water resources is increasing as a result of population and economic growth and climate change in RCUWM GB member states. Most of these states are located in arid and semi-arid areas facing severe challenges in meeting future water requirements. Most of these challenges could be addressed through effective water governance. There are ongoing efforts in most RCUWM GB member states to further improve how water is governed. In this process, sharing experiences and lessons learnt in water governance reforms can be useful in guiding ongoing efforts.

Objective/ Motivation:

The objective of this project is to develop a report or book explaining current water governance settings in the RCUWM GB member states including general or to some agreed upon extent of detailed description of organizational/managerial, financial, legal and institutional, and social capacities. It can also include lessons learnt from ongoing or recent efforts dedicated to water governance reforms.

Scope and Target Groups:

Major target groups for this project are water sector government officials, legal system and public sector stakeholders in RCUWM GB member states. Research institutes active in the field of water governance and management in the member states can also participate in this project.

Outline of Activities:

1. Establishment of a workgroup from representatives of RCUWM GB member states.
2. Developing questionnaires for gathering information about water governance status in the member states
3. Processing gathered information
4. Developing the report/book
5. Organizing workshops for the RCUWM GB member states to share the main outcomes of the study.

Expected Outcomes:

1. A comprehensive document explaining water governance capacities and reforms in the RCUWM GB member states
2. Networking between RCUWM GB member states for sharing success and failure stories in water management and governance
3. Educational workshops

Proposal 4: Development of a Regional Collaborative Platform for Adaptation of Urban Water Systems to Climate Change

Introduction:

Climate change is negatively affecting the entire globe. However, cities as the main population settlements and locations for huge economic activities are highly vulnerable locations in this phenomenon. Such a vulnerability can be attributed to the climate change impacts on the water cycle, more frequent and severe extreme weather events and more uncertainties in forecasting systems. These issues are creating serious threats for water supply, wastewater and stormwater systems as well as cities management planning and development.

The RCUWM Governing Board (GB) member states are also facing the aforementioned challenges that require urgent and wisely adaptation policies. Definitely, it can be enhanced and strengthened by knowledge sharing, collective actions and regional collaborations. For this aim, development of a collaborative platform is an effective initiation.

Objectives:

The most important objectives of this proposal are as follows:

- Sharing and introducing the adopted policies, implemented measures and developed tools by the member countries;

- Foster an online professional community of practice around climate change adaptation and supporting research and development;
- Recording the crises that initiated from climate variability in the region of the RCUWM GB member states;
- Developing standards in which the risk of climate-based events can be indicated for cities through a relevant labeling system.

Target Groups:

Major target groups for this project are policymakers, managers, water authorities, municipalities, universities and private sector as well as civilians as the main elements.

Outline of Activities:

- Development of the required web-based infrastructure to support the platform;
- Introducing successful measures of the GB member states through suitable media using the facilities of platform;
- Introducing the challenges and engaging the research centers to address them;
- Role of media in the climate change adaptation of cities
- Planning for a number of workshops between member states and relevant international agencies to address the objectives of this proposal such as:
 - How the climate change/climate variability are affecting the cities of member states?
 - What have been the applied measures to manage the climate-based events and how the effectiveness of measures are evaluated?
 - How can civilians be involved in the adaptation measures?
 - How can private sector be prompted to invest in the adaptation measures?
 - What should be the role of insurance companies to increase resiliency of cities?
 - How the global climate databases can be applied for the forecasting and warning systems?

Expected Outcomes:

- Improving knowledge exchange among GB member states to adapt urban water systems to climate change
- Providing a number of resilience management guidelines/publications regarding adaptation of cities to climate change;
- Developing a network of universities, research centers and experts from GB member states for joint studies on the objectives of this proposal

Proposal 5: Development and Implementation a Regional Drought Monitoring, Prediction and Risk Management System

Introduction:

The Middle East and Central Asia are highly vulnerable to drought and water scarcity due to significant climatic variability, limited system resilience, and the lack of integrated mitigation, risk management, and planning strategy. In the past decades, severe droughts have caused much damage to the economy, society, and environment of these regions and it is expected to increase due to climate change. Hence, it is vital to develop a Regional Drought Management System (RDMS) to reduce social vulnerability and enhance local resilience to drought impacts.

The project will be implemented in two phases. In the first one, a web-based system for regional drought monitoring and prediction will be developed using available data in global databases (such as NCEP/NCAR¹, CRU², ECMWF³ and so on). The system accuracy is gradually improved using local observational data and information collected from the volunteer countries.

In the second phase, the required policies and programs for mitigating the impacts of drought in the RCUWM Governing Board (GB) member states will be determined using their experiences in the field of drought management and the collaboration of their academic and research capacities. Moreover, all the achieved results for both phases will be presented in the form of educational programs (such as workshops, courses, technical sessions, and so on) to the countries' representative.

Objective/ Motivation:

The goals of this project are to create tools, determine policies, and provide training in order to enable the RCUWM GB member states for managing ongoing and future droughts, properly. These goals will be pursued through the following activities:

1. Production of an online and user-friendly system for drought monitoring and prediction,
2. Preparation of the required policies and actions for droughts mitigation in the Middle East and Central Asia,
3. Improvement research and knowledge about drought management and promotion of advanced technologies for water scarcity adaptation in the RCUWM GB member states.

Scope and Target Groups:

The target groups for this project are water sector managers, policy-makers and

¹ National Centres for Environmental Prediction/National Centre for Atmospheric Research

² Climatic Research Unit

³ European Centre for Medium-Range Weather Forecasts

organizations in charge of water resources management in the RCWUM GB member states. The geographic domain of the RDMS could be Afghanistan, Armenia, Azerbaijan, Bahrain, Iran, Iraq, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Lebanon, Oman, Pakistan, Palestine, Qatar, Saudi Arabia, Syria, Tajikistan, Turkey, Turkmenistan, United Arab Emirates, Uzbekistan, and Yemen.

Outline of Activities:

The project is planned in two phases as stated below:

First phase:

1. Development of suitable indicators for single and integrated monitoring of meteorological, hydrological and agricultural droughts,
2. Evaluation, monitoring and prediction of drought in the current situation and by considering climate change effects based on achieved data from global databases,
3. Development of an online and user-friendly drought monitoring and forecasting system
4. Training and human capacity building for using the drought monitoring and forecasting system,
5. Creating the database of local weather data of the RCWUM GB member states in order to use it for continuously improving the accuracy of achieved results of the system.

Second phase:

1. Reviewing the RCWUM GB member states experiences in the field of proper drought management,
2. Deriving operational measures for proper drought management using the good experiences of the RCWUM GB member states and conducting additional research,
3. Determining the thresholds for starting drought management measures, defining level-based measures, and training the responsible bodies and organizations to implement management measures,
4. Proposing effective policies for proper drought management,
5. Education and capacity building to improve public awareness about drought management.

Expected Outcomes:

1. Creation of a drought monitoring information database, including satellite data, local ground-based information, and so on,

2. Development a user-friendly system for drought monitoring and prediction,
3. Preparation of a plan for confronting drought, including indicators, drivers, management measures at the regional level,
4. Preparation of effective drought management policies at the regional level,
5. Enhancement of the public and specialized awareness in the field of drought management in the region.

Proposal 6: New Technologies in Water and Wastewater Treatment and Recycling

This proposal has two sub-projects and a proposed establishment as follow.

6.1. New Technologies in Water Treatment Plants

Introduction:

The concern over increasing needs for drinking water and awareness for development of systems to improve water quality both for drinking purposes and for effluents from wastewater treatment and industrial facilities have provided incentives to develop new technologies and improve performance of existing technologies.

Improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials as one of the sub goals of SDG 6 indicates the need for improvement in recycling, on the other hand, the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally is an upcoming challenge faced more and more every day. Hence, there is an urgent need to strengthen scientific knowledge and adopt cost-effective new technologies in water and wastewater treatment and recycling. This project responds to these needs by introducing the latest green technologies such as detoxification and wastewater recycling by solar-catalytic treatment, advanced oxidation process (AOP), adsorption, etc. As another important issue, reduction of sludge either by using sludge as a resource or sludge reduction in handling units through cell lysis and cryptic growth, Uncoupled metabolism, endogenous metabolism and microbial predation is yet to be considered in many countries, requiring additional effort in this project.

Objectives/ Motivation:

What motivates the implementation of this project is to introduce the latest cost-effective technologies in treatment and recycling of water and wastewater, further enhance the scientific network of experts and key partners in order to develop future collaboration opportunities and improve water and wastewater treatment and recycle systems among the RCUWM Governing Board (GB) member states.

The ultimate objective of this project is supporting RCUWM GB member states to

strengthen their scientific, technical and policy capacities to promote new technologies in water and wastewater treatment, recycling and manage human health and environmental risks caused by emerging pollutants in water and wastewater by compiling strategies for energy consumption -specially using solar panels- and carbon foot print minimization in wastewater treatment, presenting nature-based solutions for resilient and smart wastewater treatment as well as sludge management, improving water quality and promoting safe reuse of wastewater. This would lead to green, decentralized and Improved systems, for the aforementioned countries by forming a scientific network.

Scope and Target Groups:

Major target groups for this project are water and wastewater industry researchers, practitioners and policy-makers both within and outside the water sector, and other stakeholders from all GB member states.

Outline of Activities:

- A. Promoting scientific research and strengthen the knowledge based on the latest technologies in water and wastewater treatment and recycling
- B. Supporting scientific exchange and collaboration in aforementioned areas
- C. Fostering capacity building and awareness raising on new strategies for energy consumption and carbon foot print minimization, sludge management and cost-effective treatment and recycling methods by membrane, etc. in wastewater treatment as well as nature-based solutions for resilient and smart wastewater treatment
- D. Holding a concluding international conference to present results of the project activities, including case-study reports, technical and policy guidelines, experts' meetings reports, designated platforms and awareness raising materials.

Expected Outcomes:

- 1. A series of technical and policy case-studies on water and wastewater technologies in different GB countries
- 2. Technical and policy guidelines, complemented by findings of case-studies, to assist science-based policy-making on addressing emerging pollutants and safe wastewater reuse
- 3. Multi-stakeholder events like experts' meetings, workshops and international conferences for scientific exchange and expert collaboration to provide a platform for further scientific discussion on related issues.
- 4. Establishment of an international and comprehensive network of experts and institutions to facilitate scientific exchange and collaboration between developed and developing countries amongst RCUWM GB member states.

6.2. Improving the methods of using wastewater collection and treatment systems by creating and developing capacities and holding training courses

Introduction:

Today, in most countries of the world, wastewater treatment is considered as one of the

important methods of environmental protection and public health promotion. The development of infrastructure for the collection and treatment of wastewater and the optimal maintenance and operation of it is one of the important concerns of countries. Therefore, the existence of efficient, trained and experienced personnel to maintain and operate these systems is one of the essential needs. Aquifer, industrial, aquaculture, etc. are used. As a result, maintaining the quality of the effluent and complying with national standards depends on the optimal design, implementation and operation of these systems.

By creating a suitable educational platform and communication channels between experts in order to exchange information and transfer experiences between countries in the region, it is possible to improve the quality of wastewater treatment plants and their use in various applications.

Objectives/ Motivation:

- Holding training courses with the aim of improving the level of knowledge and transferring experiences.
- Visiting important wastewater treatment plants in Iran and other countries in the region and planning to communicate between experts and users of wastewater systems.
- Carrying out research projects in order to optimize and improve wastewater treatment and sludge management processes.
- Collection and classification of wastewater treatment methods that are energy efficient and have less carbon footprint.

Scope:

Training and capacity building of experts and operators of sewage system systems

Outline of Activities:

1. Preparing a report on wastewater treatment plants and their operating status in the countries of the region (number, type of process, population covered, wastewater quality, and sludge management)
2. Studying and analyzing reports
3. Planning for theoretical and practical training of experts and operators of wastewater treatment plants.
4. Planning to create communication networks between wastewater users through regional visits and communication site.
5. Planning for research and development activities in the field of improving and upgrading wastewater treatment processes.
6. Improving and improving the processes of wastewater collection and treatment

Expected Outcomes:

1. Qualitative improvement of effluent from wastewater treatment plants
2. Process optimization, reducing energy consumption and capacity building.
3. Training of manpower in the countries of the region.

❖ *Proposed Establishment: Regional Cooperation on Non-Conventional Water Resources*

Introduction

Water and wastewater services are categorized as ‘essential services’, and therefore continuity of these services notwithstanding external disruptions is critical. Around 60% of the global population lives in areas of water stress where available supplies cannot sustainably meet demand for at least part of the year. Urbanization and economic growth in many countries, including the State of Qatar and I.R. Iran are two major factors contributing to an increase in urban water demand. Conventional water provisioning approaches that rely on precipitation, river runoff and easily accessible groundwater are overexploited and insufficient to meet growing freshwater demand.

These have highlighted the critical importance of non-conventional water resources to overcome water-related sustainable development challenges in arid regions. Utilizing non-conventional water resources is an emerging opportunity to narrow the water demand-supply gap.

Water utilities across the globe have reported following motivations to invest and develop non-conventional water resources:

- Limiting the impacts of increasing water demand on the level of water and wastewater services delivered and ensuring business continuity.
- Managing water scarcity and extreme hydrological events (e.g. drought) by steady supply of non-conventional water to urban water utilities
- Non-conventional water resources provide opportunity for implementing the necessary climate change adaptation strategies and planning.
- High potential of investment by private sectors and developing business with third parties (e.g. industry and municipalities), to become meaningful actors in the management process of non-conventional water development plan.
- Non-conventional water is the only available water resources in some arid areas or areas difficult to access.

The *Global Facility for Non-Conventional Water (GFNC)* will be launched and hosted by the Regional Centre on Urban Water Management (RCUWM) to bring together relevant governmental officials, decision makers, researchers and experts, utility managers, technology and industry sectors as well as users to share their strategies, perspectives, experiences, innovations, best practices and lessons learned in non-conventional water resources development and operation.

Non-Conventional Water Resources

According to the latest report of UN Water on “Analytical Brief: Unconventional Water Resources” published in June 2020, there is a multitude of non-conventional water

resources that can be tapped. Non-conventional water resources range from Earth's seabed to its upper atmosphere and capturing them needs a diverse range of technological interventions and innovations.

Harvesting water from the air consists of rain enhancement through cloud seeding and collection of water from fog, while capturing water on the ground addresses micro-scale capture of rainwater where it would otherwise evaporate; all these techniques address local water shortages. On the groundwater front, tapping offshore and onshore deep groundwater and extending sustainable extraction of undeveloped groundwater are important options in areas where there is potential for more groundwater resources. Reusing water is the key to water conservation and enhancement opportunities which lead to fit-for-purpose use of treated municipal wastewater and agricultural drainage water. Additional opportunities to develop water resources exist in the form of desalinated potable water.

Regional Cooperation on GFNC Pioneered by the State of Qatar and I.R. Iran

Vast areas of the countries located in the West and Central Asia are situated in the subtropical high-pressure belt region of the northern hemisphere, mostly covered by deserts, where the precipitation is low, and its distribution is highly variable. The area is water-stressed (inherently and due to higher water demand in growing economy and urban areas), societally vulnerable, and prone to severe water scarcity. Additionally, global warming will increase the risk of climate change and more prolonged droughts. Even in regions that may not experience a significant decline trend in rainfall, a higher temperature can increase water loss due to evaporation and scale up water consumption, putting greater stress on water supplies. In addition to the above-mentioned constraints, there is also an increasing trend of emerging pollutions and overwhelming health threats such as COVID-19.

In this regard, regional cooperation toward launching and supporting spread activities of Global Facility for Non-Conventional Water (GFNC) among RCUWM Governing Members is crucial to support technical and non-technical aspects of non-conventional water resources.

GFNC Objectives

- Exchanging technical and non-technical experiences and information
- Promoting research and innovation
- Conducting training courses and capacity building activities
- Improve non-conventional water management and governance
- Contribution to UNESCO-IHP and other relevant international/regional organizations

Venue and Host

GFNC Secretariat will be established in the premises of the Regional Centre on Urban

Water Management (RCUWM) based in Tehran with the capacity to develop satellite GFNC offices in member countries.

Thematic Areas of the Global Facility for Non-Conventional Water (GFNC)

1. Governance, laws and policies, institutional arrangements
2. Technology, innovation, and engineering
3. Social and environmental considerations
4. Operation and maintenance
5. Economic, financial issues and trend analysis
6. Training courses and capacity building
7. Promotion of public awareness

Priority Areas: Desalinated Water and Water Reuse

Desalinated water is on a path to where it is likely to be the most acceptable alternative water supply source in the majority of arid and semi-arid regions in the world. The advancements in the reverse osmosis desalination technology are very dynamic. New but more efficient seawater desalination membranes and membrane technologies, and equipment improvements are released every few years. The reverse osmosis membranes of today are many times smaller, more productive, and cheaper than the first working prototypes. The steady reduction of desalinated water production costs is expected to accelerate the reliance on the desalinated water as attractive and competitive non-conventional water resources by 2030. The rate of adoption to desalination water will depend on the magnitude of water stress and availability and cost of the conventional water resources.

Municipal wastewater and agricultural drainage water are two main sources for water reuse and a non-conventional water resource. Private as well as public water companies need to explore opportunities to valorize the reuse of water and hence expand their variety of uses. This shift needs to be accompanied by analyzing demand and market opportunities as well as identifying feasible business models. Against this background, a challenge to be addressed is to explore financial and economic instruments to promote water reuse and make this an attractive option on water markets and beyond. In doing so, information on current costs of water reuse projects, tariffs and subsidy arrangements as well as the overall acceptance and issues of awareness rising should be further investigated.

Proposal 7: Skill Improvement for Urban Water Practitioners and Technicians

Introduction:

The use of technologies for water supply and treatment as well as the qualification of specialized personnel in this sector are subject to a variant of standards worldwide, as are education and training in these areas. In many countries, a large proportion of non-industrial sewage flows untreated into rivers, lakes and seas. In regions with inadequate technical education in the water supply and treatment sector, even simple water supply and treatment utilities cannot be properly planned. Therefore maintenance of existing plants and equipment couldn't be ensured and their performance may not be precisely optimized. High water losses during transportation as well as deficiencies in treatment cannot be rectified and may affect the economy and the health of the local societies. In view of these challenges, access to technical education in the water and wastewater sector provides important leverage for improving and securing the quality of water supply and wastewater disposal in a sustainable manner. Hence, technicians must be equipped with basic skills, technical knowledge and local expertise.

Objective/ Motivation:

This project focuses on future-oriented water technology, considering local needs and capabilities. Vocational Training (VT) is a critical success factor for a future-oriented development of sustainable water management. RCUWM in close cooperation with universities and international experts from interested Governing Board (GB) member states intends to develop VT courses that promote practical, activity-oriented learning on water supply and wastewater treatment processes.

Scope and Target Groups:

Major target groups for this project are technicians involved in construction, operation and maintenance sectors from GB member states including hydraulic technicians, wastewater treatment technicians, specialists for pipe, sewer and industrial services. An estimated 60 partially sponsored participants will be invited to VT courses on the following fields: Leakage detection and repair methods, Pipeline repairing processes, installing water splits, Water quality sampling, Installing wastewater splits.

Outline of Activities:

In order to improve technicians' knowledge, this project has two main elements:

- A. Conducting VT training courses and capacity buildings
- B. Organizing an international professional competition for specialists in water and wastewater engineering.

Expected Outcomes:

- 1- Improved knowledge of technicians via organizing VT courses
- 2- Filled technical gaps among practitioners and technicians

❖ *Proposed Event 1: Improving the Reliability of Water Transfer Lines and Supply Network (depending on easing restriction for international travel)*

Introduction

The reliability of a Water Distribution System (WDS) including water transfer lines and urban supply networks is an indicator of sustainable urban water management. It plays an important role in the design, operation, and proper maintenance planning. The reliability of water transfer lines and supply networks is classified as mechanical and hydraulic components. While mechanical reliability represents the capability of WDS providing continuous and long-term operation with minimal repair, modification, and replacement of parts, hydraulic reliability is the ability to deliver water to individual consumers in the required quantity and under a satisfactory pressure. The role of pipelines in the supply network is an important issue for a comprehensive urban water supply management. More than 60 percent of the cost of an urban water supply system belongs to the pipeline networks. Therefore, reliability analysis of water transfer lines and distribution networks is an important issue.

Ration and Motivation

Providing sufficient water of appropriate quality and quantity is the most important issue for urban water managers. The water distribution system plays a vital role in preserving and providing a desirable life quality to the public, of which the reliability of supply is a major component.

In this ration, UNESCO Regional Centre on Urban Water Management (RCUWM) intends to organize the Training Workshop on “Improving the Reliability of Water Transfer Lines and Supply Network” as approved during 10th RCUWM Governing Board Meeting (GBM) on 5 December 2019 as part of the project proposal No. 7 on Skill Improvement for Urban Water Practitioners and Technicians. Understanding theoretical and practical backgrounds, sharing best practices, and know-how for increasing lifetime of WDS with minimum operation and maintenance costs are the main objectives of this training workshop.

Date and Venue

The workshop will be held either in Tehran or Kashan (a historical city in the Isfahan Province and about 250 km south of Tehran) of Iran. The workshop is planned to be organized in 2023.

Tentative Agenda

It would be a three-day training workshop consisting of a one-day discussion based on the hydraulic and mechanical components of reliability of water transfer lines and supply network followed by a two-day technical tour to manufacturing and supplying pipes site for a better understating of the pipe production process as well as material characteristics.

Participating Countries:

The main audiences will be decision-makers and practitioners in public and private sectors dealing with water supply plans and projects. The number of participants is expected to be around 25 participants from the RCUWM governing board member states and organizations in Afghanistan, Armenia, Azerbaijan, Bangladesh, Egypt, India, Iran, Iraq, Lebanon, Qatar, Syria, Oman, Pakistan, Turkey and Uzbekistan. Participation from other countries is also welcome upon receiving their interest.

Logistics Arrangements and Registration

All domestic costs in Iran including accommodation, local transportation to the venue and visiting sites, meals, technical and sightseeing tour/s will be covered by RCUWM and other supporting organizations during the period of the event while the participants are required to cover their international airfares as well as their visas to travel to Iran. RCUWM will facilitate the visa issuing process by providing invitation letters. UNESCO as well as interested sponsors may provide financial support to a few participants to cover their international flight tickets.

Proposed Event 2: New technologies in Leak Detection and Non-Revenue Water and Regional Training Workshop (depending on easing restriction for international travel)

Introduction:

In scarce countries such as Iran, maintaining valuable water resources is one of the most important measures in the field of water resources management. In this regard, an important and effective activity in water management networks and reducing water revenues without income is significant financial benefits and Blue has water for suppliers. In order to take measures related to the reduction of non-revenue water in Iran, it is necessary to have new knowledge and technologies in the field of related activities such as leak detection and leakage in transmission lines of distribution networks and water branches. Design and implement separate measurement areas or *independent measurement areas* (DMA) - subscriber meter management and data transmission systems - Network hydraulic modeling and intelligent management of distribution networks and new performance-based contracting (PBC)-based performance investment models.

Objectives/ Motivation:

- Reduce water loss
- Reduce permissible expenses without income
- Improving the level of knowledge of experts
- Familiarity with new and modern technologies in the world
- Transfer of manufacturing technologies into the country
- Transferring experiences gained in Iran to other countries in the region

Scope:

- Applied Research
- Training and capacity building
- Developing and strengthening regional and international cooperation

Outline of Activities:

- Holding a training course
- Visiting new technologies in developed countries
- Determining the relevant indices
- Improvement of manufacturing technologies
- Investigating the areas of bilateral cooperation with leading countries
- Providing an investment platform Iran

Expected Outcomes:

- Familiarizing with new and up-to-date technologies in the world
- Transferring manufacturing technologies into the country
- Transferring experiences gained in Iran to other countries in the region

Proposal 8: Improving Water Quality in the Region: from Capacity Building to Capacity Development

Introduction:

The pressures of population and economic growth and climate change are expected to further exacerbate water stress in Member States of RCUWM. Water quality is an important aspect of water management that needs further efforts on the national as well as regional levels. There is a need to improve national policies and regional cooperation with the ultimate aim to improve water quality with particular attention to urban water quality. Water quality labs and data that they are produced are very important in this regard as well as the capacity of experts and officials in the field of water quality.

Objective/ Motivation

An important motivation of the project is the creation of a working group on water quality with the participation of representatives from interested RCUWM Member States. The

objective of the project is to contribute to the development of efficient and coordinated national/regional policies with regard to water-quality aspects and improved coordination of joint assessment, monitoring and exchange of information on water quality.

Scope and Target Groups:

Major target groups for this project are water quality managers, policy makers and practitioners in water quality laboratories. An estimated 15 partially sponsored participants will be invited to hands-on training courses on water quality from sampling to lab-based tests in the first phase.

Outline of Activities:

A step-by-step plan is proposed to develop an effective and coordinated national/regional water quality working group. The project has three main elements:

- A. Conducting hands-on and lab-based training courses and capacity buildings
- B. Networking experts and developing database
- C. Improving (e.g. renovation, modernization, certification) facilities and laboratories

Expected Outcomes:

1. Organizing hands-on training courses (sampling, standard tests, emerging pollutions, etc.)
2. Renovating/establishing water quality labs in member countries
3. Networking of water quality labs in the region and certifications
4. Establishment of a regional reference lab in an interested member country, which will act as a reference body for water quality in the region, and will monitor the implementation of WHO programs in the area, including the quality aspects the Water Safety Plan. It will also act as a reference for the disputes on the quality of common water bodies.

Timeline:

A hands-on and lab-based training course for about 15 managers and experts from countries in the region is proposed to be conducted in the second half of 2023. The project will be continued with other phases until December 2024 after discussion at RCUWM Governing Board meetings.

Venue/Host:

The host organization for the first phase of training course would be National Water and Wastewater Engineering Company (NWWEC) of Iran in close cooperation with a Reference Water Quality Lab located in Tehran Water and Wastewater Engineering Company. The lab has more than 50 years' experience and has been internationally certified for several water quality tests.

Annex 2:

12th GBM

Executive Summary

Annex 2: 12th GBM Executive Summary

Introduction

The Governing Board is the most important decision-making constituent of the Regional Centre on Urban Water Management (RCUWM) at the highest level, which takes part in ordinary sessions once a year.

Ways and means of promoting and expanding mutual and multi-lateral cooperation among RCUWM member states and organizations was thoroughly discussed in the 12th Governing Board Meeting (GBM 2021). Moreover, the progress of implementing proposals approved during the GBM 2020 was discussed.

Participants and Membership Notifications

A) Members at State Level: 18 Representatives of Afghanistan, Armenia, Azerbaijan, Bangladesh, Egypt, Germany, India, Iran, Iraq, Lebanon, Oman, Pakistan, Qatar, Sri Lanka, Syria, Tajikistan, Turkey and Uzbekistan.

B) International Organizations: UNESCO, UN Resident Coordinator (As representative of UN offices in Tehran including UNDP, FAO, UN-HABITAT, WHO), GWP, WMO, IWA and IsDB.

C) Observers: Representatives of Economic Cooperation Organization (ECO), Swiss Agency for Development and Cooperation (SDC), and Oman Water Society (OWS)

The list of participants is presented in **Section 1**. Representative of India & Lebanon, was not present during the GBM 2021.

Opening Remarks

H.E. Mr. Reza Ardakanian, Minister of Energy, Islamic Republic of Iran and Chairperson of Governing Board welcomed the participants to the 12th board meeting (GBM 2021) of RCUWM. The Chair mentioned that today, RCUWM is at the third period of its activities (2019-2024) with representatives of 18 member states and several international/regional organizations. The Centre's activities are based on three main pillars of Training and Capacity Building, Joint Research and Technology Transfer, and Networking and Information Sharing. The Chair invited member states and organizations to cooperate in and contribute to the Centre's activities. At the end of his speech, he explained about two important achievements of Ministry of Energy during the period of his activity related to urban water management as follows:

1) Improving Access to Safe Water and Wastewater Collection by launching the A. B. Campaign

2) Integration of Urban and Rural Water and Wastewater Utilities (Improving Urban Water Governance)

Adopted Agenda

The tentative agenda was put to the floor and was unanimously adopted. The final agenda is presented in **Section 2**.

Rules of Procedure

The rules of procedure of the Governing Board Meeting was proposed by the GB Chair. All items of the proposed rules of procedure as in **Section 3** were unanimously adopted.

RCUWM Director's Work Plan and Statements

The Director's work plan and statements were presented according to article 7.2 of the Agreement as in **Section 4** and approved anonymously by the GB Members.

Concluding Remarks

H.E. Mr. Reza Ardakanian, the Minister of Energy and RCUWM GB Chair, deeply thanked the honorable participants for attending this important Board Meeting. As mentioned by H.E. the Centre will proceed wrapping up all descriptions related to the approved proposals and will approach the concerned parties through virtual meetings to follow up with the aim of meeting the deadlines defined and agreed upon during the board meeting.

Section 1: List of GBM 2021 Head of the Delegations

State	Affiliation	Head of the Delegation
Afghanistan	Director of National Water Affairs Regulation Authority	H.E. Mr. Khan Mohammad Takal
Armenia	Minister of Territorial Administration and Infrastructure	H.E. Mr. Suren Papikyan
Azerbaijan	Deputy, Azersu (OJSC)	Mr. Farda Iamanov
Bangladesh	Minister of Local Government, Rural Development and Co-operative	H.E. Mr. Tazul Islam
Germany	Director of the International Centre for Water Resources and Global Change	Mr. Harald Koethe
Egypt	Head of Regional Training Sector for Water Resources & Irrigation	Mr. Tarek Elsayed
Iran	Minister of Energy (Chair)	H.E. Mr. Reza Ardakanian
Iraq	Councilor Committee Member, Ministry of Water Resources	Mr. Aun Dhyaib Abdullah
Oman	Undersecretary of the Ministry of Agriculture, Fisheries and Water Resources	H.E. Mr. Ali Muhammad Al Abri
Pakistan	Federal Secretary Ministry of Water Resources	H.E. Mr. Munir Azam
Qatar	President of Qatar General Electricity and Water Corporation	Mr. Essa bin Hilal AL-Kuwari
Sri-Lanka	Minister of Water supply	H.E. Mr. Vasudeva Nnayakkara
Switzerland	SDC Special Envoy for Water to Central Asia	Mr. Guy Bonvin
Syria	Minister of Water Resources	HE. Mr. Tammam Raad
Tajikistan	Minister of Energy and Water Resources	H.E. Mr. Daler Juma
Turkey	Deputy Minister of Agriculture and Forestry	Mr. Akif Ozkaldi
Uzbekistan	Head of the Chief Department	Mr. Azizbek Erkaboev
Organization	Affiliation	Head of the Delegation
ECO	Head of Section for International Relations	Mr. Mohammd Farooq
GWP	Executive Secretary	Mr. Dario Soto-Abril
IsDB	Global Lead Urban Development	Mr. Papa Abdoulaye SY
IWA	Chair of IWA Water Security and Safety Management Specialist Group	Mr. Bruno Nguyen
OWS	Chairman of Oman Water Society	Mr. Ahmad Al Malki
UNESCO	Director of Division of Water Sciences and UNESCO IHP Secretary	Mr. Abou Amani
UN-RC	UN RC Ad Interim	Mr. Alexander Fedulov
WMO	Director of Water, Snow and Ice	Mr. Johannes Cullmann

Section 2: Adopted Agenda

No.	Items	Time
1	Opening by the Minister of Energy, I.R. Iran, Chairman of the Governing Board	15
2	Adoption of Agenda	5
3	UNESCO Representative Speech	5
4	RCUWM Director's Report	15
5	GB Members' Interventions	70
6	Concluding Remarks	10

Section 3: Approved Rules of Procedure

1. GEOGRAPHICAL DOMAIN OF ACTIVITIES

Geographical Scopes: Regional priority scope of the Centre's activities is based on UNESCO regional definition as follows:

- Group I (Western Europe and North America)
- Group II (Eastern Europe)
- Group IV (Asia and the Pacific)
- Group Vb (Arab States)

Therefore, Group III (Latin America and the Caribbean) and Group Va (Africa) are out of regional priority scope of activities.

2. SCOPE OF ACTIVITIES

Water and wastewater management in human settlements have the high priority. Centre's scope of activities is all aspects of urban water management from technical to social and economic issues. Moreover, it is considering interaction with water use in other sectors such as agricultural and industrial sectors at the basin level in accordance with Integrated Water Resources Management concept.

3. GOVERNING BOARD COMPOSITION

Governing Board consists of three categories as follows:

- A) Members at State Level:** Representatives of Member States, from the Regions above which will be granted a six-year Governing Board membership period as well as right to equivalent vote. Member state representatives not attending the board meeting for a 3-year consecutive period will no longer be deemed as a member.
- B) Members at International Organization Level:** Representatives of UN Agencies and other international/ regional organizations, shall be granted a 3-year GB membership period and right to vote equivalent to other members. Membership continuation of them will be evaluated and decided by the end of the first three years.
- C) Observers:** Representatives of relevant national, regional and international entities with

similar geographical domain and/or scope of activities, which will be invited as an observer without holding right to vote.

4. GOVERNING BOARD DECISIONS

Decisions will be made and approved based on the majority of votes.

5. LANGUAGE

English shall be the official language of the Governing Board Meeting. The Director may consider other UN languages as required.

6. DATE AND PLACE

According to the Agreement, the Governing Board shall meet in ordinary session once per year. It shall meet in an extraordinary session if convened by the Chairperson on his/her own initiative or at the request of the Director General of UNESCO or one-third plus one of its members. The venue of the Governing Board Meeting is primarily in Iran.

Section 4: RCUWM Director's Work Plan and Statements

Administrative status:

The Director of the Centre, Mr. Ali Chavoshian started his report by indicating the Governing Board Function according to the RCUWM agreement. He referred to the Compendium which has compiled and distributed amongst participant before the meeting and he mentioned that it's accessible through the RCUWM website.

Furthermore, the staffs working at the RCUWM were reported to be 19, six of whom are female. He mentioned that RCUWM Staff has a good diversity from education to years of experience as well as gender balance.

Annual Work Plan of the Centre

The work plan of Centre was described by Mr. Chavoshian. He also briefed the participants on the following main ongoing activities:

- Online workshop on "Essential Quality Assured Data and Information for Integrated Urban Water Management to be jointly held on 23rd June 2021 by Germany (ICWRGC) and Iran (RCUWM). All GB members were invited to contribute and attend the webinar.
- Global Facility for Non-Conventional Water (GFNC) to be pioneered by the state of Qatar and Iran as a joint proposal. The secretariat would be in the premises of RCUWM in Tehran with the capacity to develop satellite GFNC offices in member countries. Interests have been received from Turkey, Iraq, Oman and a few other member states to join this initiative.
- He also pointed out at WASH initiative which could effectively contribute to health and sanitation in this specific period of Corona virus pandemic.

Annex 3:

Agreement

for the third period of

RCWUM activities

(2019-2024)

**AGREEMENT
BETWEEN**

**THE UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL
ORGANIZATION (UNESCO)**

AND

THE GOVERNMENT OF THE ISLAMIC REPUBLIC OF IRAN

REGARDING

**THE REGIONAL CENTRE ON URBAN WATER MANAGEMENT (RCUWM) UNDER
THE AUSPICES OF UNESCO (CATEGORY 2)**

The United Nations Educational, Scientific and Cultural Organization,
and

The Government of the Islamic Republic of Iran,

Recalling Session 31 C/48 whereby the General Conference of UNESCO approved the establishment of the Regional Centre on Urban Water Management (RCUWM) under the auspices of UNESCO (category 2) and invited the Director-General to sign the corresponding agreement between UNESCO and the Government of the Islamic Republic of Iran,

Having regard to the Agreement signed by the Government of the Islamic Republic of Iran and UNESCO concerning the Establishment and operation of the Regional Centre on Urban Water Management (RCUWM), in Tehran, on 16 February 2002,

Having regard to the Agreement signed by the Government of the Islamic Republic of Iran and UNESCO concerning the continued operation of the Centre in Tehran on 8 January 2010,

Considering 37 C/Resolution 93 by which the General Conference approved a new integrated comprehensive strategy for Category 2 Institutes and centres, and requested the Director-General to apply this strategy to any renewals of existing agreements, and

Considering that the Executive Board at its 202nd session decided to renew RCUWM as a category 2 status under the auspices of UNESCO, and authorized the Director General to sign the corresponding agreement (202/EX/Decision 18.I.A),

Desirous of defining the terms and conditions governing the framework for cooperation with UNESCO that shall be granted to the said Centre in this Agreement,

HAVE AGREED AS FOLLOWS:

Article 1 – Definitions

1. In this Agreement, "UNESCO" refers to the United Nations Educational, Scientific and Cultural Organization.
2. "Government" means the Government of the Islamic Republic of Iran.
3. "Parties" means the Government of the Islamic Republic of Iran and UNESCO.
4. "Centre" means the Regional Centre on Urban Water Management, which was established in Tehran, Iran, in 2002 and has been granted the status of a category 2 centre under the auspices of UNESCO.
5. "UNESCO-IHP" means the International Hydrological Programme of UNESCO.

The United Nations Educational, Scientific and Cultural Organization,
and

The Government of the Islamic Republic of Iran,

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4. "Centre" means the Regional Centre on Urban Water Management, which was established in Tehran, Iran, in 2002 and has been granted the status of a category 2 centre under the auspices of UNESCO.
5. "UNESCO-IHP" means the International Hydrological Programme of UNESCO.

Article 2 – Operation of the Centre

The Government agrees to take, in the course of the year 2018, any measures that may be required for the continuation of the Centre in Iran as provided for under the present Agreement.

Article 3 – Purpose of the Agreement

The purpose of this Agreement is to define the terms and conditions governing collaboration between UNESCO and the Government and also the rights and obligations stemming therefrom for the parties.

Article 4 – Legal status

1. The Centre shall be independent of UNESCO.
2. The Government shall ensure that the Centre enjoys within its territory the functional autonomy necessary for the execution of its activities and the legal capacity:
 - to contract;
 - to institute legal proceedings;
 - to acquire and dispose of movable and immovable property.

Article 5 – Constitutive Act

The constitutive act of the Centre must include provisions describing precisely:

- (a) the legal status granted to the Centre, within the national legal system, the legal capacity necessary to exercise its functions and to receive funds, obtain payments for services rendered, and acquire all means necessary for its functioning;
- (b) a governing structure for the Centre allowing UNESCO representation within its Governing Board.

Article 6 – Functions/objectives

The objectives of the Centre shall be:

1. To generate and provide scientific and technical information on urban water management issues in the region that will allow the formulation of sound policies leading to sustainable and integrated urban water management at the local, national and regional level.
2. To promote research on urban water management issues through regional cooperative arrangements using and strengthening local capabilities and involving international institutions and networks, in particular those under the auspices of UNESCO.

3. To undertake within the region effective capacity building activities at institutional and professional levels, and awareness raising activities targeted at various audiences, including the general public.
4. To enhance cooperation with international institutions in order to advance knowledge in the field of urban water management.

The functions of the Centre shall be:

1. To promote scientific research on the issues and problems related to urban water management of the region.
2. To create and reinforce networks for the exchange of scientific, technical and policy information on urban water issues among the institutions and individuals in the region and in other countries.
3. To develop and coordinate cooperative research activities on urban water management issues, taking advantage particularly of the installed scientific and professional capacity of the region and of the relevant UNESCO-IHP networks and non-governmental organizations.
4. To organize knowledge and information transfer activities on the subject, including international training courses, symposia or workshops, and to engage in appropriate awareness raising activities.
5. To develop a strong program of information and communication technology to further the Centre's objectives.
6. To provide technical consulting and advisory services in the region and beyond as required.
7. To produce technical publications and other media items related to the activities of the Centre.

The Centre shall pursue the above objectives and perform the above-mentioned functions in close coordination with UNESCO through UNESCO-IHP.

Article 7 – Governing Board

1. The Centre shall be guided and overseen by a Governing Board renewed every 3 years and include:
 - (a) The Minister of Energy as the representative of the Government or his/her appointed representative;
 - (b) representatives of Member States, which have sent to the Centre notification for membership, in accordance with the stipulations of Article 10, paragraph 2, above and have expressed interest in being represented on the Board;
 - (c) a representative of the Director-General of UNESCO;
 - (d) Representatives from relevant entities including international and regional organizations, public authorities, academia / universities and research institutes which have sent to the Centre notification for membership and have expressed interest in being represented on the Board.

2. The Governing Board shall:

- (a) approve the long-term and medium-term programmes of the Centre;
- (b) approve the annual work plan of the Centre, including the staffing table;
- (c) examine the annual reports submitted by the director of the Centre, including a biennial self-assessment of the Centre's contribution to UNESCO's programme objectives;
- (d) adopt the rules and regulations and determine the financial, administrative and personnel management procedures for the Centre in accordance with the laws of the country;
- (e) decide on the participation of regional intergovernmental organizations and international organizations in the work of the Centre;
- (f) examine the periodic independent audit reports of the financial statements of the Institute/Centre and monitor the provision of such accounting records necessary for the preparation of financial statements.

3. The Governing Board shall meet in ordinary session at regular intervals, at least once every calendar year; it shall meet in extraordinary session if convened by its Chairperson, either on his or her own initiative or at the request of the Director-General of UNESCO or of one-third plus one of its members.

4. The Governing Board will follow its own rules of procedure as decided at its first meeting.

Article 8 – UNESCO's Contribution

1. UNESCO may provide assistance, as needed, in the form of technical assistance for the programme activities of the Centre, in accordance with the strategic goals and objectives of UNESCO by:

- (a) providing the assistance of its experts in the specialized fields of the Centre;
- (b) engaging in temporary staff exchanges when appropriate, whereby the staff concerned will remain on the payroll of the dispatching organizations;
- (c) seconding members of its staff temporarily, as may be decided by the Director-General on an exceptional basis if justified by the implementation of a joint activity/project within a strategic programme priority area.

2. In all the cases listed above, such assistance shall not be undertaken except within the provisions of UNESCO's programme and budget, and UNESCO will provide Member States with accounts relating to the use of its staff and associated costs.

Article 9 – Contribution by the Government

1. The Government shall provide all the resources, financial or in kind, needed for the administration and proper functioning of the Centre.

2. The Government undertakes to:

- (a) make available to the Centre its' premises
- (b) entirely assume the maintenance of the premises and its running costs
- (c) contribute to the Centre the required budget per annum
- (d) make available to the Centre the administrative staff necessary for the performance of its functions, which shall comprise: the director, a deputy, experts, programme specialists and researchers, a financial officer, an assistant to the financial officers, regular staff and a driver.

Article 10 – Participation

1. The Centre shall encourage the participation of Member States and Associate Members of UNESCO which, by their common interest in the objectives of the Centre, desire to cooperate with the Centre.
2. Member States and Associate Members of UNESCO wishing to participate in the Centre's activities, as provided for under this Agreement, shall send to the Centre notification to this effect. The director shall inform the parties to the agreement and other Member States of the receipt of such notifications.

Article 11 – Responsibility

As the Centre is legally separate from UNESCO, the latter shall not be legally responsible for the acts or omissions of the centre, and shall also not be subject to any legal process, and shall bear no liabilities of any kind, be they financial or otherwise, with the exception of the provisions expressly laid down in this Agreement.

Article 12 – Evaluation

1. UNESCO may, at any time, carry out an evaluation of the activities of the Centre in order to ascertain:
 - (a) the Centre makes a significant contribution to UNESCO's strategic programme objectives and expected results aligned with the four-year programmatic period of C/5 document (Programme and Budget), including the two global priorities of UNESCO, and related sectoral or programme priorities and themes;
 - (b) the activities effectively pursued by the Centre are in conformity with those set out in the present Agreement.
2. UNESCO shall, for the purpose of the review of this Agreement, conduct an evaluation of the contribution of the Centre to UNESCO's strategic programme objectives, to be funded by the Government or the Centre.
3. UNESCO undertakes to submit to the Government, at the earliest opportunity, a report on any evaluation conducted.
4. Following the results of an evaluation, each of the contracting parties shall have the option of requesting a revision of its contents or of denouncing the Agreement, as envisaged in Articles 16 and 17.

Article 13 – Use of UNESCO name and logo

1. The Centre may mention its affiliation with UNESCO. It may therefore use after its title the mention "under the auspices of UNESCO".
2. The Centre is authorized to use the UNESCO logo or a version thereof on its letter headed paper and documents including electronic documents and web pages in accordance with the conditions established by the governing bodies of UNESCO.

Article 14 – Entry into force

This Agreement shall enter into force, following its signature by the contracting parties, when they have informed each other in writing that all the formalities required to that effect by the domestic law of the Islamic Republic of Iran and by UNESCO's internal regulations have been completed. The date of receipt of the last notification shall be deemed to be the date of entry into force of the present Agreement.

Article 15 – Duration

This Agreement is concluded for a period of six years as from its entry into force. The Agreement shall be renewed upon common agreement between Parties once the Executive Board made its comments based on the results of the renewal assessment provided by the Director-General.

Article 16 – Denunciation

1. Each of the contracting parties shall be entitled to denounce this Agreement unilaterally.
2. The denunciation shall take effect within 60 days following receipt of the notification sent by one of the contracting parties to the other.

Article 17 – Revision

This Agreement may be revised by written consent between the Government and UNESCO.

Article 18 – Settlement of disputes

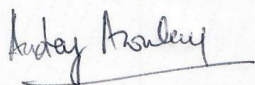
1. Any dispute between UNESCO and the Government concerning the interpretation or application of this Agreement, if not settled by negotiation or any other appropriate method agreed to by the parties, shall be submitted for final decision to an arbitration tribunal composed of 3 members, one of whom shall be appointed by the Ministry of Energy, I.R. Iran, another by the Director-General of UNESCO, and a third, who shall preside over the tribunal, shall be chosen by the first two. If the two arbitrators cannot agree on the choice of a third, the appointment shall be made by the President of the International Court of Justice.
2. The Tribunal's decision shall be final.

IN WITNESS WHEREOF, the undersigned have signed this Agreement,

DONE in 2 copies in English and 2 copies in Farsi, each version being equally authentic.
In case of divergence in interpretation, the English text shall prevail.

On 2018.

**For the United Nations Educational
Scientific and Cultural Organization**



Audrey Azoulay
Director-General

**For the Government of the
Islamic Republic of Iran**



Reza Ardakanian
Minister of Energy, I. R. Iran
and Chair, RCUWM-Tehran