

# Regional Workshop on Climate Change (Impacts and Adaptation) 18-19 October 2023, Tehran, Iran

#### Introduction

Climate change is one of the most important phenomena that has changed in the climate of the earth's hydro-climate during the last few decades. According to the definition, climate change is a process that occurs in long term due to changes in greenhouse gases concentration and significantly affects the earth's weather processes. Research has shown that climate change has caused a significant change in the earth's meteorological variables, particularly temperature and rainfall. Also, climate change has changed other processes that are related to human life (environmental impacts) for which changes in extreme events (such as floods, droughts, and heat waves), storms, crop water requirement, etc. are among the most important.

One of the most vulnerable natural systems to climate change can be called water resource systems. Climate change has many impacts on hydrological cycles and water resources and can be introduced as an important threat in the field of water resources management. The severity of this threat is different in various parts of the world. The prediction of the continuation of climate change in the coming decades also indicates that water resource systems will continue to be significantly affected by this event in future, and the impacts of this issue cannot be ignored. The severity of the impacts of climate change is so wide that it will impact the economy and people's livelihood. The most important reason for this issue is the reduction of available water resources due to climate change. Also, the change in human life patterns (which is caused by the increase in the level of public health and welfare resulting from urbanization), has increased the water demand, and for this reason, in many regions of the world water has become a limiting factor for development. Therefore, the challenge of water management under climate change conditions is one of the most important current and future issues in different societies.

The areas located in the middle latitudes of the world (including the Middle East, North Africa and Central Asia) are among the areas that have a lot of climate diversity due to their geographical location. Due to the occurrence of several droughts in some countries located in these areas, water resources of the countries have faced serious challenges and any impacts of climate change on future temperature and precipitation of these countries can worsen this situation.

In this regard, the Regional Centre on Urban Water Management (RCUWM; under the auspices of UNESCO), in partnership with Iran Water Research Institute (WRI) and Iran Meteorological Organization (IRIMO), is planning to hold the *"Regional Workshop on Climate Change (Impacts and Adaptation)"*, in Tehran, Iran, 18-19 October 2023. This event will lay a platform for interaction between experts in the region and aims to accelerate future research and major milestones in the discipline of climate change. More details about this event include the following:

#### **Conference Theme**

- Climate change and its impact on climate patterns
- Impacts of climate change on water resources
- Policymaking for adaptation to climate change

#### **Participants**

- Managers and experts from RCUWM Governing Board Member States (including 18 countries)
- Government sector managers and experts in the field of climate change management in Iran (including the Ministry of Energy, the Ministry of Agriculture Jihad, Iran Meteorological Organization, Department of Environment, Ministry of Industry, Mining and Trade)
- Academic community and researchers in the field of climate change
- Consulting engineers related to water and environment

#### **Official language**

The official language of the workshop will be English with simultaneous Persian interpretation.

| Title   | Speakers  | Time        |
|---|---|-------------|
| Opening Ceremony  | <ul> <li>Ministry of Energy or Deputy Minister of<br/>Energy for Water Affairs</li> <li>Head of Iran's Meteorological Organization</li> <li>Head of Regional Centre on Urban Water<br/>Management (RCUWM)</li> <li>Head of Iran's Water Research Institute (WRI)</li> </ul> | 9:00-10:30  |
| Break Time  | -   | 10:30-11:00 |
| <i>Workshop 1:</i> Impacts of climate change on water resources according to the sixth assessment report of IPCC          | <ul> <li>Dr. Yashar Falamarzi, Climatological Research<br/>Institute, Iran</li> <li>Dr. Fatah Masthawee, Senior Meteorologist,<br/>Hydrometeorological Sub-division, Thai</li> </ul>  | 11:00-12:30 |
| Break Time  | -   | 12:30-13:00 |
| <i>Workshop 2:</i> Climate change and its impacts on weather patterns   | <ul> <li>Dr. Ahad Vazifeh, National Center for Drought<br/>Monitoring and Crisis Management, Iran</li> <li>Dr. Hamid Bastani, Project Officer, Energy<br/>Sector, World Meteorological Organization</li> </ul>  | 13:30-15:00 |
| Break Time  | -   | 15:00-15:30 |
| <i>Workshop 3:</i> Comparative analysis of multi-year forecast and multi-decade forecast of precipitation and temperature | <ul> <li>Dr. Ebrahim Fattahi, Atmospheric Science and<br/>Meteorological Research Center, Iran</li> <li>Dr. Iman Babaeian, Climate Research Institute,<br/>Iran</li> </ul>  | 15:30-17:00 |

## First day (18 October 2023)

## Second day (19 October 2023)

| Title  | Speakers  | Time        |
|--|---|-------------|
| <i>Workshop 3:</i> Impacts of climate change on access to water resources and it's consumptions        | <ul> <li>Dr. Majid Delavar, Tarbiat Modares University,<br/>Iran</li> <li>Dr. Wassim Daher, Chairman and Director<br/>General @ Establishment of Water of Southern<br/>Lebanon</li> </ul>   | 08:30-10:00 |
| Break Time   | -   | 10:00-10:30 |
| <i>Workshop 4:</i> Successful experience for climate change policy-making                              | <ul> <li>Dr. Saeid Morid, Tarbiat Modares University,<br/>Iran</li> <li>Prof. Mohammed Matouq, Professor of<br/>Environmental and Chemical Engineering, Al-<br/>Balqa Applied University, Jordan</li> </ul>   | 10:30-12:00 |
| Break Time   | -   | 12:00-13:00 |
| <i>Workshop 5:</i> Introducing collaborative capacities for adaptation to climate change in the region | <ul> <li>Dr. Dariush Golalizadeh, Head of the National<br/>Center for Air and Climate Change of the<br/>Department of Environmental, Iran</li> <li>Dr. Mohamamd Reza Farzaneh, Research<br/>Center for Environment and Sustainable<br/>Development, Iran</li> </ul> | 13:30-14:30 |
| Break Time   | -   | 14:30-15:00 |
| Closing Ceremony   | <ul> <li>Head of Regional Centre on Urban Water<br/>Management (RCUWM)</li> <li>Coordinator of Workshop Scientific Committee</li> </ul>   | 15:00-16:00 |

### Address:

2<sup>nd</sup> Floor, No. 34, Janbazan Blvd, South Sheikh Bahaei St. (Azadegan St.), Tehran, 1439955667, Iran Tel: +98 (21) 8822 9156 – 9404 Fax: +98 (21)8822 9156 Email: info@rcuwm.ir Website: www.rcuwm.ir