Working Document for the 2nd meeting of OIC water Council

The first meeting of OIC Water Council held in Istanbul on 15- 16 November 2017 approved the Implementation Plan of the OIC Water Vision that aims to help Member States in tackling the water-related issues. The implementation plan comprises the following broad objectives;

- Assessment of the needs and capacities of the Member States.
- Collaborative activities among the member states on capacity building, developing training programs, and innovative research.
- Resource mobilization for the implementation of water Vision.

The implementation plan assigned specific tasks to the OIC institutions and other stakeholders. OIC General Secretariat, relevant OIC institutions and some Member States have taken a number of steps to carry out the implementation activities. A detailed report in this regard was submitted by HE Secretary General to the 4th session of the Islamic Conference of Ministers Responsible for Water (ICMW) held in Cairo in October 2018.

The 4th ICMW adopted a resolution that inter-alia endorsed the implementation plan of OIC Water Vision; encourages the Member States to implement the OIC water Vision and called upon the OIC water Council to suggest practical measures for the recommendations.

Pursuant to the objectives of the OIC Water Council, the 2nd meeting of the Council will discuss the following;

- Progress made so far to promote activities recommended by the OIC Water Vision;
- Sharing published information and best practices. Identify priority areas for capacity building and exchange of experience through collaboration among OIC stakeholders;
- Discuss recommendations for the consideration of the Ministerial meeting and subsequently for the 5th session of ICMW to be held in 2020.

Agenda item 1: Progress made so far to promote activities recommended by the OIC Water Vision:

SESRIC circulated a questionnaire to gather information about the current status of water infrastructure as well as requirements of the Member States. Response

from the Member States was rather lukewarm. This is may be attributed to the type of the data asked by the questionnaire which may not be required for making assessments for capacities of the Member States. In addition, It is likely that some countries are unwilling to send raw data due to the risk of processing such data from other countries that do not have sufficient knowledge of the current situation in the countries or other factors that interfere with these data and affected them.

OIC institutions have carried out a number of capacity building activities since the holding of the First OIC Water Council meeting in 2017. Details of these activities are mentioned in HE Secretary General's Report presented to 4th session of Islamic Conference of Ministers Responsible for Water (ICMW) held in Egypt in October 2018.

During the 4th ICMW, Government of Egypt has also offered to arrange a training course for young water professionals in the field of integrated water resource management. Many countries were admitted to the course through 23 participants. The training is being held in Cairo from 20-24 October 2019.

It may be pointed out that the OIC institutions and OIC General Secretariat have limited resources and it is important to engage the Member States who have the capabilities to come forward and offer training opportunities to the other countries.

Establishment of a dedicated network of centre of excellences in the Islamic world to share knowledge and experiences with other related institutions is a first step towards encouraging collaborative research on water related issues. A Concept note for holding the First meeting including a consolidated list of the institutes, the budget for holding the meeting is prepared. The meeting however, could not take place due to lack of financial resources.

Points for Discussion

- Members are requested to make suggestions for data sharing between countries and OIC institutions
- In order to adopt a more focused approach and to develop synergies between the activities carried out by the OIC institutions, the meeting may identify three/four priority areas for the next year. All stakeholders will be requested to carry out activities relating to those priority areas.
- Engagement of OIC countries to arrange training programs on the identified priority areas.

Agenda item 2: Sharing Published Information and Best Practices

OIC countries are taking many steps in collaboration with regional and international partners to adopt innovative techniques and new mechanisms to address water-related issues. Owing to the geographical diversity of OIC, in many cases reports about their initiatives are not shared or promoted among the Member States.

An effective platform for sharing publications and knowledge is pivotal in disseminating information to all the stakeholders in water sector. SESRIC has established a web portal on water resources to facilitate matching the needs of Member States with offers in terms of training, capacity building, and exchange of experience, expertise and technical assistance. However, the web portal to a large extent remains dormant. There is a need to reactivate the portal and also to apply other tools to reach out to all stakeholders including Member States, and other regional and international organizations.

Points for Discussion;

- Strengthen the external communication and publicizing of activities through newsletters, advocacy, media events and greater visibility.
- Strengthen the internal communication and coordination between OIC Member Countries, lead country coordinators, OIC institutions and other partners.
- Represent, publicize and raise awareness about OIC water Vision in both OIC and international level, and establish close communication channels and networking among the OIC members and the possible partners.
- Promote and disseminate progress of all actors in the implementation of Water Vision.
- Activate OIC Water Portal so that it should carry success stories, case studies and other information about the water-related activities carried out by the Member States

Agenda item 3: Identify priority areas for capacity building and exchange of experience

1. Water Monitoring Network and Early Warning System

Water monitoring networks are very essential for water resources management as adequate assessment, effective preservation and succeeded remediation programs can be achieved. They enable long-term time series and large sets of spatial and temporal information for achieving accurate results and finding. In addition, the continuous emergence of the information and communication technologies (ICTs) facilitate new standards in the collection,

management, and dissemination of water related data. Measurement of these networks should be carried out at the highest precision levels so that research finding and implementation process uptake are maximized.

Many types of these networks are established according to the situation in each country. Examples are:

Meteorological networks: the collected data include temperature, precipitation, evaporation, relative humidity, solar radiation, wind speed, and wind direction ...etc. These types of information are used for hydrological studies to estimate and predict flash floods and climate change impacts related to different storms and scenarios to take up the necessary measures.

Quality monitoring networks: to reflect the different sources of pollution for surface and Ground water as well, namely agriculture, domestic and industrial wastes. Water quality indicators are good tools for rapid assessment. Among them are Dissolved Oxygen (DO), is the factor that influences all chemical and biological processes within the water bodies. It is used to indicate the pollutant by organic matter and the level of self-purification of surface water. Biological Oxygen Demand (BOD) is an indicator for the amount of oxygen that is needed for the biological degradation of organic materials. Total Dissolved Sediment (TDS) mainly consists of inorganic salts, it determines the suitability of water for agricultural uses.

Telemetry system: to monitor water resources in a real time manner in order to fully control each and every drop of water and optimize its allocation and maximize benefits. The data and information include surface and ground water levels along irrigation and drainage networks, flow calculation, water quality, and meteorological parameters. This is in addition to monitoring the operation of the pump units in pumping stations. Having continuous and accurate data available in real time sense allows officials and water distribution managers taking right decision at the right time and immediately respond to different events and can also forecast for future trends. These real time data also support not only day to day water resources management but also any possible water crisis management. Based on data provided by the telemetry system, the officials' command instructions related to water management and also can follow up execution of these instructions.

2. Water Saving and Management in Agriculture Sector;

By 2050 global water requirements for agriculture will increase by 50 per cent to meet the increased food demands of a growing population. Global freshwater is becoming increasingly scarce, due to improper management, indiscriminate use and a changing climate. Water scarcity and quality problems in many parts of the world are a serious challenge to future food security and environmental sustainability. All these challenges have intensified the search for measures to conserve water in agriculture, as largest water user (more than 70% of fresh

water). To ensure food security and sustainable water management for agriculture, there is an urgent need to produce more crop per drop of water used in the agricultural sector and hence ensure that water use efficiency is increased without negative impacts on downstream water quantity and quality. Different policy measures encourage adoption of water-conserving irrigation technologies, are the basic references to make more water available and increase water use efficiency. One of the most influential techniques that can deliver results is increasing the stakeholder's participation that will increase efficiency, equity, cost recovery and accountability for the water consumed. Greater participation by farmers is one of the main pillars to overcome many of water scarcity problems and produce substantial benefits. Egypt as one of the OIC countries through Ministry of Water Resources and Irrigation (MWRI) launched a farmers' competition to recognize those who applied modern irrigation techniques and inspire others to adopt the same methods instead of flood irrigation techniques. The competition's objective is to protect and conserve water resources. Participants were required to document their practices clarifying how much water was saved, observing the water quality and the corresponding increase in the overall productivity of the cultivated crops. The MWRI organized a number of knowledge sharing and experience exchange field visits, where farmers from different governorates were invited to visit the fields of the winning farmers to learn about their best practices. As the replication of pilot areas and demonstration sites is needed in many regions all over Egypt (different governorates) to demonstrate best practices and to deliver highly reliable and trusted results for the farmers.

Points for Discussion

- Members are required to discuss the different techniques and systems used in water monitoring in their countries.
- Sharing the best practices and experience related to priority areas
- Discuss the main challenges and obstacles facing countries in the represented priority areas
- Recommendations for sharing experiences
- Research requirements and cooperation opportunities

Agenda item 4: Resource Mobilization and International Partnerships:

Many OIC Member States lack necessary expertise and financial support to prepare water management strategies, as well as to conduct and cooperates in innovative research to achieve different mitigation measures. In order to benefit from the international best practices and fund opportunities, it is important to engage with other regional and international stakeholders. A number of institutions and non-OIC countries are already assisting the OIC countries to achieve UN Sustainable Development Goals (SDGs) adopted by United Nations

particularly, particularly Goal 6 on Water and Sanitation and its associated targets.

Points for Discussion

- Optimum utilization of available regional and international funds to enhance research cooperation among OIC countries
- Capacity buildings and training activities
- Innovative research opportunities in priority areas