



**FOURTH ISLAMIC CONFERENCE OF MINISTERS RESPONSIBLE FOR WATER**

**REPORT OF THE  
SECRETARY GENERAL**

**CAIRO, ARAB REPUBLIC OF EGYPT**

14-16 OCTOBER 2018

## **INTRODUCTION**

1. Recognizing the crucial role of water in overall human and socio-economic development and the fact that the water scarcity is a serious concern in one-third of the OIC Member States, the OIC have accorded high priority to this sector. The Islamic Conference of Ministers Responsible for Water (ICMW) adopted the OIC Water Vision in its 2<sup>nd</sup> session held in Istanbul on 5-6 March 2012. The 3<sup>rd</sup> session of the ICMW held in Istanbul on 17-19 May 2016 approved the Terms of Reference of the OIC Water Council. The objectives of the Water Council were outlined as follows;
  - The purpose of the Water Council is to promote activities recommended by the OIC Water Vision, capacity building and exchange of experience through collaboration among OIC stakeholders, elaborate on a potential financial mechanism and demonstrate success for future consideration of greater cooperation among OIC Member states.
  - The Water Council shall work under the authority of and guided by the Islamic Conference of Ministers responsible for Water to implement the Water Vision for a water-secure future of OIC Member States enshrined also in sustainable development goals;
  - The Water Council shall encourage technical cooperation among the Member States, research and educational institutions, private sector and other possible stakeholders for implementation of the OIC Water Vision. It shall particularly focus on:
    - Connecting institutions within the OIC in water science, technical policy management and technology development to build capacity, and share and enhance knowledge;
    - Supporting OIC Member States to overcome water related challenges through increased dialogue and exchange of experience as well as through promoting concrete actions;
    - Promoting scientific measures to water related challenges in the national and international agendas of OIC leaders.
2. The 3<sup>rd</sup> ICMW also elected Azerbaijan, Tunisia, Bangladesh, Egypt, Iran, Iraq, Nigeria, Guinea, Saudi Arabia, Turkey and Uganda, as members of the OIC Water Council for two terms. The OIC General Secretariat in addition to relevant OIC institutions and international organizations as observers were also part of the OIC Water Council.
3. The present report gives an overview of the activities carried out by the OIC General Secretariat and other relevant OIC Institutions since the 3<sup>rd</sup> session of the Islamic Conference of Ministers Responsible for Water (ICMW) held in Istanbul

## **First Meeting of the OIC Water Council**

4. The first meeting of OIC Water Council held in Istanbul on 15 and 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.
  - Identification of lead water institutes in Member States.
  - Collaborative activities on capacity building, innovative technological ideas and developing training programs among research and training institutes of the Member States.
  - Capacity building activities giving special focus on the needs of Least Developed OIC Countries to address water related challenges.
  - Resource mobilization mechanisms for the implementation of water projects, particularly in Least Developed OIC Countries.
5. The implementation plan assigned specific tasks to the OIC institutions and other stakeholders. OIC General Secretariat and relevant OIC institutions have taken a number of steps to carry out the implementation activities.
6. The OIC General Secretariat is liaising with international organizations including UNESCO for further enhancing international collaborations in the water-related area. Some of the areas of cooperation with UNESCO are as follows;
  - Strengthening cooperation between the water portal of SESRIC and the Water Information Network System (WINS) of UNESCO- International Hydrological programme (IHP) could be a first step. To this end, SESRIC could share its gathered data in the OIC Member States with IHP-WINS with the aim of completing existing maps, and giving access to the OIC Member States. This would allow us to have concise and solid science based information on the region and in the field of water.
  - Conveying comprehensive information and policy briefs on the OIC region and/or specific countries of the OIC to the development of World Water Development Report (WWDR).
  - Providing a platform in the form of an online group on IHP-WINS for the UNESCO Category 2 Centers and Chairs hosted by the OIC's countries. This grouping of water-related centers would have the objective of promoting transfer of knowledge, sharing

of best practices, matching the needs in terms of training, research, exchange of information and data on specific water-related issues within the OIC Member States.

- Developing and strengthening cooperation on water education and capacity-building (including on water diplomacy) within the OIC Member States.
7. In order to assist in establishing a network of Centers of Excellence in the water sector in the OIC countries and to initiate collaborative research, OIC General Secretariat has asked from the Member States details of the water research institutes in their countries. So far, 14 Member States have identified nearly 50 institutes. Member States who have not yet responded to the OIC General Secretariat are encouraged to share the necessary details.
  8. An overview of the activities carried out by the OIC institutions including COMSTECH, SESRIC, IDB and ISESCO in the domain of water is as follows;
  9. **The Islamic Educational, Scientific and Cultural Organization (ISESCO)** arranged the following activities:
    - The Second International Conference on ‘Agriculture, Food Security and Biotechnology, was held in Khartoum, Sudan from 17-18 October, 2016. The conference which was attended by more than 150 scientists, researchers, technologists and faculty members from Iran, Senegal, Egypt, Pakistan, Oman and Sudan discussed recent developments in the field of agriculture , biotechnology and water use adaptation in bioresearch.
    - The Second International Forum on water harvesting social, economic and environmental impacts was held in, Khartoum, Sudan from 26-27 September 2016, by ISESCO in partnership with the Regional Centre for Remote Sensing in North African countries (CRTEAN), the Federation of Arab Scientific Research Councils (FASRC) and Sudan Remote Sensing and Seismology study Authority (RSSA). The forum was attended by experts from Morocco, Algeria, Tunisia, Libya, Egypt, Sudan and the United Kingdom, who exchanged expertise on subjects regarding water harvesting and its applications in agriculture and food security, contribution in conflict reduction and its social dimension as well as integrated water resources management.
    - Expert meeting on addressing land desertification in North Africa and the Mediterranean region organized by ISESCO and the Regional Centre for Remote Sensing in North African countries (CRTEAN) was organized by Jerba, Tunisia from 2-3 August, 2016. The meeting which was attended by 20 experts from

Morocco, Algeria, Tunisia, Libya, Egypt, Mauritania, Sudan and France examined the impact of climate change on water needs, its link to desertification and development of indicators to assess land degradation. The experts also discussed mechanisms of cooperation and financing projects connected to the subject of combating desertification.

- Arab-African regional preparatory meeting to COP22 on Biosphere reserves in the context of Climate Change with water as a central point, was held by ISESCO in cooperation with UNESCO, Mohammed VI Foundation for the Protection of the Environment, and the Moroccan Ministry in charge of water and Forests in Tangier, Kingdom of Morocco from 18-20 October 2016. The agenda contained three panels on Biospheres being an Observatory of climate change and a sustainable development laboratory, Water governance and Articulation of the 2030 Agenda for sustainable development and the Paris agreement.
- On the margins of COP 22, ISESCO in cooperation with UNESCO and The Moroccan Ministry in charge of Water and Forests arranged an observatory for climate change, a laboratory of sustainable development on 9th of November 2016. Representatives of Man and Biospheres (MAB) National committees, managers of the biospheres, and International Hydrologic Program (IHP) focal points discussed the recommendations of the Arab-African meeting held in Tangier, in October 2016, with the aim of building an UNESCO/ISESCO initiative on Biosphere reserves and climate change to bring to COP23.
- A seminar on “what solutions for risk management in Africa?” was held on 9th of November 2016 on the margins of COP 22 by ISESCO, UNESCO and the Association of Mohammedia’s Engineers School. Policy makers, economic managers, civil society representatives and researchers discussed financial engineering and risk management, current situation and prospects of desertification in Africa and Integrated Management of natural resources as a mean to mitigate and adapt to climate change.
- Regional Workshop on "Web-Based Mapping, Space Infrastructure and Sharing Data on Water Resources and Agriculture in Africa" was organized in cooperation with CRAFT-LF and CURAT (University Center for Research and Application in Remote Sensing) on 25- 27 October 2017 in Abidjan- Côte d’Ivoire. 83 Participants from 5 different countries: Benin, Côte d'Ivoire, Gabon, Nigeria, Chad, attended the workshop to promote the applications of web mapping and

collaborative cartography for sustainable development, especially in the field of water and agriculture.

- ISESCO signed the UNESCO/ISESCO Arab-African initiative on Biospheres Reserves as Observatory of Climate Change with water as central point, in Rabat on 25 May 2017. This document was presented in October 2017 in the International Conference on the promotion of strong networks in the area of climate change and its impact on the management of natural resources” in Agadir-Morocco in partnership with ALECSO, Mohamed6 Foundation for Environment and the Moroccan Ministries of Water and Forests.
- International “Conference on the promotion of strong networks in the area of climate change and its impact on the management of natural resources” including international Hydrologic program IHP and MAB focal points, was organized on 17-19 October 2017 in Agadir-Morocco in partnership with UNESCO, ALECSO, Mohamedmedia Foundation for Environment and the Moroccan Ministry of Water and Forests. 60 participants from nearly 20 Arab and African countries attended the conference where the UNESCO/ISESCO Arab-African initiative on Biospheres Reserves as Observatory of Climate Change (AABRI), jointly signed by the two organizations was presented.
- The UNESCO/ISESCO initiative on Arab African Biospheres Reserves AABRI was launched on the margins of COP 23 in November 2017 in Bonn-Germany, with ISESCO’s partners.
- Training workshop on Environmental Impact Assessment (EIA) with emphasis on water treatment plants and the impacts of sewage on the marine environment, was organized in partnership with the Regional Authority for the Protection of Environment in the Red Sea and Gulf of Aden, (PERSGA), in Jeddah on 2-4 April 2018. The training workshop was attended by 20 experts from Egypt, Somalia, Djibouti, Sudan, Jordan and KSA who shared their countries’ experiences. International keynote speakers also imparted necessary training modules
- Regional conference on “Financing water-related adaptation projects for implementation of NDCs and SDGs: Challenges, Opportunities”- was organized in collaboration with UNESCO, UNICEF and GWP-MED, in the Islamic Republic of Mauritania, Nouakchott, on 24 - 25 April 2018. The overall objective of the conference is to support the acceleration of the implementation of water-related adaptation actions to ensure water security and achieve sustainable development goals in the countries of the region. Representatives of the 9 countries of UMA and G5S, made from Experts and country representatives in the field of water took part in this activity: Mali, Niger, Chad, Morocco, Algeria, Burkina Faso, Mauritania,

Libya, Tunisia and regional organizations (CILSS, Agryhmet, etc.). The African Development Bank also attended this important activity.

- First meeting of the Steering Committee of the AABRI (UNESCO/ISESCO Arab-African initiative on Biospheres Reserves as Observatory of Climate Change with water as central point), was held in Dakar, Senegal, on 26-27 June 2018 in partnership with the ministries of water and forests of Morocco and Senegal. The meeting was attended among others by the focal points of International Hydrologic Program in Africa and Arab region.
10. **SESRIC and the ISESCO** with the collaboration of the University of Jordan organized a Regional Seminar on “Innovative Technologies in Water Sector for the achievement of the SDG 6” on 26-28 June 2018 in Amman, Jordan. 31 Researchers and experts from 15 OIC Member States; namely: Turkey, Iran, Egypt, Pakistan, Indonesia, Kazakhstan, Lebanon, Malaysia, Tunisia, Sudan, Palestine, Uzbekistan, Morocco, Iraq and Oman participated in the Seminar. The main objectives of the Seminar were to promote modern water technologies and research in line with the implementation of SDG No 6; Share information and foster exchanges and networking between researchers and specialists of the OIC countries and provide an opportunity to introduce and exhibit their innovations and research.
11. **Statistical, Economic and Social Research and Training Center for Islamic Countries (SESRIC)** carried out the following activities and capacity building workshops;
- A technical visit of Experts from Ministries of Water and Sanitation from Mauritania, Senegal, and Uganda from 08-19 August 2016 was arranged in collaboration with the DSI (Turkey’s State Water Works) and Islamic Development Bank (IDB). The experts visited the Turkish cities of Istanbul, Akcakoca, Kastomonu, Samsun, Rize, Artvin, Bayburt, Amasya and Bolu to learn from their experiences on “Water Resources Management”.

- A training course on “Flood Risk Management” will be held in Suriname on 17-18 October 2018 in coordination with the Ministry of Forestry and Water Affairs, Turkey.
- A training course on “Watershed and River Systems Management” was held in Gambia from 17-18 July 2018.
- SESRIC has designed and distributed a questionnaire to gather information about the current status of water infrastructure as well as requirements of the member states. SESRIC has collected and analysed the questionnaire. The results are presented to this conference.
- SESRIC is in the process of establishing an online network of centres of excellence in the domain of water in the OIC Member States. The network will facilitate closer cooperation for sharing knowledge and experience, conducting joint research and training and organising joint initiatives, projects and programmes in the field of Water.

## **12. Islamic Development Bank Group (IDBG):**

- The Islamic Development Bank (IsDB) has played a key role in supporting Member States to address the needs of water management and water security. The Bank is poised to channel its investment for sustainable development of water resources to contribute to achieve SDGs, focus Goal #6, and OIC Water Vision addressing water scarcity, enhancing access to safe drinking water, improving water use efficiency and adopting advanced and innovative water techniques in the Member States.
- Since May 2016, the Bank completed more than 10 water related projects, in different countries, such as: Albania, Burkina Faso, Bangladesh, Iran, Mali, Tajikistan, Uzbekistan, etc. IsDB has also approved about USD 1.1 billion in financing, benefiting 10 water related projects, worth a total value of USD 1.7 billion. In addition to the Bank and government financing, IsDB has been able to mobilize additional resources for co-financing from other international financial institutions (i.e. AfDB, BADEA, OFID, IFAD, World Bank).

- This portfolio is made up of large and small-scale interventions in water supply and sanitation, irrigation and drainage, water storage, flood protection and initiatives such as Integrated Water Resources Management (IWRM).

*Table 1. IsDB Approved projects during May 2016 – October 2018*

No.	Country	Project Title	Amount (mln. USD)				Approval Date
			IsDB	Gov	Co-financing	Total	
1	Chad	Rural Water Infrastructures Project in Ennedi East and Wadi Fira Regions	53.19	3.95		57.14	Dec-17
2	Cote d'Ivoire	Abidjan Storm Water Drainage and Sanitation Project	89.40	3.76		93.16	Jul-16
3	Cote d'Ivoire	Cocody Bay Environmental Improvement and Urban Development Project	250.27	123.59	30.16	404.02	Oct-17
4	Guinea	Rural Water Supply and Sanitation Project In N'Zerekore Region	16.06	2.09		18.15	Jul-17
5	Guinea	Conakry Sanitation Project	54.00	5.00		59.00	Jul-18
6	Kyrgyz	Rural Water Supply and Sanitation Improvement Project	20.00	7.50	23.50	51.00	Jul-16
7	Oman	Flood Protection Dams Project	348.72	31.69		380.41	Sep-16
8	Oman	Infrastructure Development Project for the Expansion of Rusayl Industrial Estate	135.14	81.49		216.63	Jul-17
9	Tunisia	Construction of Saida and kalaa Kibira Dams and Water Transfer Infrastructure Project	79.76	17.67	147.97	245.39	May-17

No.	Country	Project Title	Amount (mln. USD)				Approval Date
			IsDB	Gov	Co-financing	Total	
10	UGANDA	Irrigation Schemes Development in Unyama, Namalu and Sipi Regions	90.00	19.73	97.30	207.03	Dec-17
			1,136.53	296.47	298.93	1,731.94	

**13. The Standing Committee for Scientific and Technological Cooperation (COMSTECH)** has supported the following Research Project;

- *Caractérisation des aquifères souterrains en milieu de socle dans les zones semi-arides en vue de l'amélioration de la productivité des puits et forages lors des campagnes d'hydraulique villageoise (Nord Côte d'Ivoire)* ; The purpose of the study is to improve knowledge of the hydrodynamic operation (recharge and flow) of cracked reservoirs in the middle of the basement and to acquire the elements of knowledge on the modes of transport in these reservoirs (quality and protection) with a view to combat water shortages and improve the water supply of vulnerable populations.
- *Behavioral pattern of groundwater pollution by poultry waste using MODFLOW simulation model*
- *Growth and yield responses of upland rice to treated wastewater (TWW) recycled from a low-cost treatment plant*; The main objective of this study is to develop a low-cost wastewater treatment plant (WTP) for treating wastewater (WW) and to use the treated wastewater (TWW) for producing upland rice in Nigeria. Over 80% of wastewater generated is discharged into the environment untreated, which if half of it is treated and recycled for food production, will reduce food scarcity by at least 25%.

- *An assessment of future extreme events in the Northwestern Upper Indus Basin (NUIB) Pakistan by using Coordinated Regional Downscaling Experiments (CORDEX) dataset under the AR5 Scenarios*
  - *Wastewater treatment using nanocomposites of graphene oxide and reduced graphene oxide*
  - *The Gulf of Gabes hydrodynamics: Physical forcing of the unusual case of a Mediterranean ecosystem under strong tidal influence. GaphyMed; the project consists of Action 1: Assessment (state of zero) of knowledge in the Mediterranean and Action 2: Study of the Gabès-Boughrara complex (in-situ measurements, modeling, and analysis).*
- a. **COMSTECH in coordination with Inter-Islamic S&T Network on Oceanography (INOC)** arranged following Capacity Building training Workshops;
- Training Course on Marine Sonar and Seismic Surveys in the INOC Member States (15-24 March 2018, Izmir, Turkey); The targeted objectives of this course included; 1) Contributing to the development of and reinforcing the capacities of INOC member's institutions about the modern techniques of marine sonar and seismic surveys; 2) Ensuring a better understanding of the edging technological developments with respect to instrumentation among the INOC Member Countries; and 3) brainstorming on the mechanism for monitoring the impact of the activity afterwards.
  - Training Course on Development of Aquaculture Production and Technologies in the INOC Member States (15-20 May 2017, Tunisia); The Training Course on Development of Aquaculture Production and Technologies was held at Monastir-Tunisia from 15 to 20 May, 2017, was organized by INOC with IDB support, and in technical collaboration with the Institute of Marine Sciences and Technology from Turkey, INSTM, the National Institute of Marine Science and Technology from Tunisia, and other institutions. The meeting was attended by participants from Algeria, Egypt, Iran, Iraq, Lebanon, Morocco, Senegal, Saudi Arabia, Tunisia and Turkey.
  - The training course introduced latest technological developments in the marine and continental aquaculture in order to improve ecological conditions, maintain biodiversity aquaculture and ensure a better monitoring of aquaculture industry.
14. **The Inter-Islamic Network on Water Resources Development and Management (INWRDAM)** based in Jordan since 2013 has initiated an applied research and development program line for treatment of sewage and constructed wetland methods. The

scientific and technological results of this research topic during the year up to now are the following:

- The standard text book design equations for estimating hydraulic loading of septic tank sizing were modified and validated by three pilot stage units and resulted in estimating a longer residence times and higher temperature coefficients.
- Hydraulic and biological loading design parameters for horizontal and vertical subsurface flow CW regimes were investigated in four full-scale sewage treatment plants in Jordan.
- Published a number of articles in peer reviewed scientific proceedings of international conference showing accuracy of estimation methods of accumulated sludge in septic tank per capita per user of a and a modified temperature coefficients for biological decay and other CW basin design equation.