



science & innovation  
Department:  
Agriculture, Forestry and Fisheries  
REPUBLIC OF SOUTH AFRICA



WATER  
RESEARCH  
COMMISSION



## **COORDINATION APPROACH FOR PLANNING AND IMPLEMENTATION OF THE WATER AND SANITATION SCIENCE, TECHNOLOGY AND INNOVATION ACTIVITIES (2020-2022)**

### **1. BACKGROUND**

As a member of the South African IORA Academic Group, the Water Research Commission of South Africa received financial support from the IORA Special Fund to organise three workshops of the IORA Academic Group Water Science and Technology Core Working Group (WSTWG) in collaboration with other IORA MS. The inaugural workshop was hosted by South Africa on 5 to 6 February 2015, the second workshop on “Promoting Efficient Water Management through Water Re-use and Alternative Water Supply” hosted by Sri Lanka on 15-16 November 2016 and the final workshop on “Sustainable Development and Management of Water Resources” hosted by India on 5 September 2017. The workshops provided a platform for sharing and to get a better understanding of the water research, development and innovation (RDI) interests, priorities, common challenges of the IORA MS and exchanged ideas of what the responsibilities of the IORA WSTWG should be. The Core Group further identified the following as potential water and sanitation RDI areas of collaboration for the IORA MS:

- Alternative water supply in addressing water scarcity (Recycling and Reuse)
- Urban water management
- Groundwater management (governance, quality, protection and recharge)
- Impact of Climate Change and environment on water supplies
- Sanitation
- Other areas that will be of mutual interest to IORA MS

It was further agreed by the Working Group that water should be made a priority of the IORA Academic Group, develop a portal on the IORA Academic Group website of IORA MS institutions that are active in water and sanitation science, technology and innovation highlighting their priority areas, funding opportunities, RDI flagship programmes and projects and existing technologies and innovations. Noting the interest, common challenges and potential areas of collaboration in water and sanitation RDI amongst the IORA MS, the WRC further signed a Memorandum of Understanding the Indian Ocean Rim Association (IORA) Regional Centre for Science and Technology Transfer (RCSTT) which provided a framework to jointly coordinate Water and Sanitation research, innovation, technology and business

amongst and for the benefit of the IORA Member States. It is envisaged that this partnership will add value to the IORA Academic Group Water Science and Technology Core Working Group and jointly coordinate, plan and implement the water and sanitation activities of the IORA MS and Dialogue Partners (DP). The activities may include:

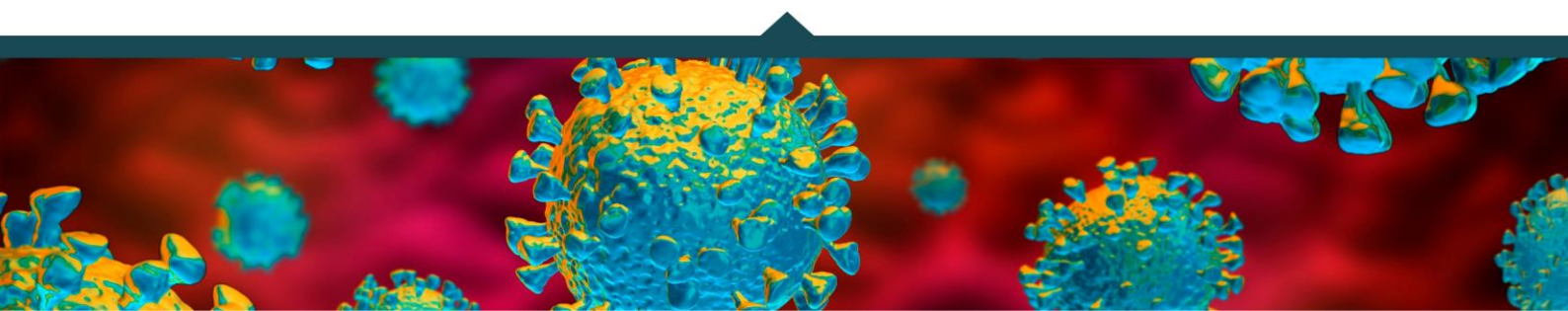
- **Convening an annual strategic planning workshop** with interested IORA MS and DP to develop an action plan for implementation of the water and sanitation RDI activities among the IORA MS and DP.
- **Technical workshops** to facilitate knowledge sharing, dissemination of project results and identify future research and innovation areas of collaboration based on the identified gaps and needs. The workshop outcomes will feed into the strategic planning session.
- **Other events** to promote joint learning, share best practice with the aim of strengthening the IORA MS and DP joint water and sanitation RDI activities.
- **Innovative solutions sharing and technology transfer activities** to promote and disseminate technological and innovative solutions developed by the IORA MS or by MS in partnership with DP. Explore establishment of a “portal” linked to the Academic Group website, events to share or exhibit the innovations and training on how to deploy the technologies.
- **Joint demonstration** of water and sanitation technology and innovative solutions developed by the IORA MS or by MS in partnership with DP excluding desalination technologies since it is covered by the IORA RCSTT Coordination Centre in China.
- **Commission research and desktop studies** as and when necessary to gather the intelligence required to improve planning and implementation of the water and sanitation activities of the IORA MS. information on IORA MS water RDI priority areas, funding instruments, strength, weakness, and opportunities for sharing innovation technologies.

## 2. PROPOSED ACTIVITIES FOR 2020-21

To minimise further missed opportunities and potential value adding partnerships and collaborations that can be derived from IORA MS and DP water and sanitation stakeholders, the WRC would like the partnership and support of RCSTT and the South African IORA Academic Group in kick-starting some of the IORA water and sanitation RDI activities virtually taking advantage of the global virtual reality imposed by the COVID19 pandemic:

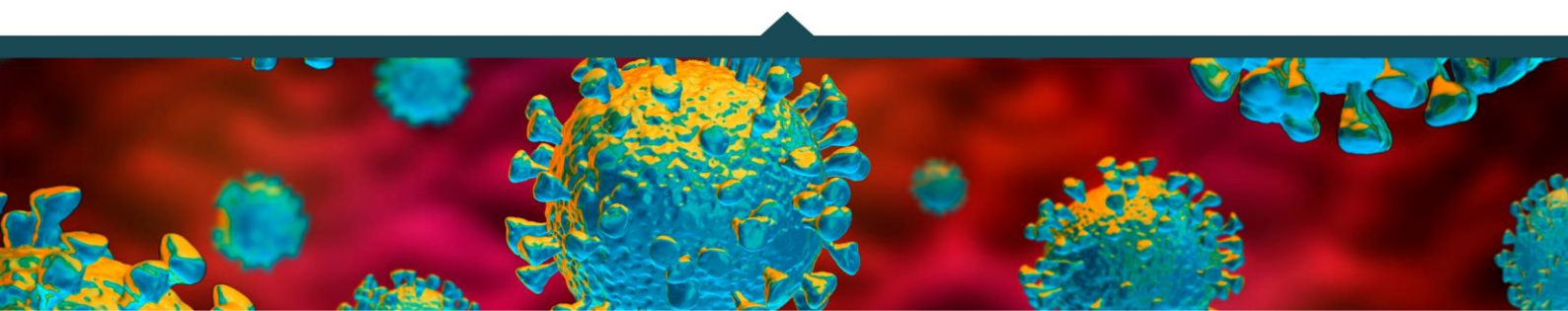
### 2.1 A virtual webinar entitled “Water, Sanitation and Hygiene (WASH) and COVID-19: IORA Member States response to COVID-19 and Beyond”

Evidence indicates that the virus that causes COVID-19 is transmitted mainly through respiratory drops from an infected person or contact with an infected person or surface. However, recent research emanating worldwide has shown the presence of COVID-19 not only in respiratory pathways but could also be found in faeces and urine. Patients with diarrhoea have shown to have higher prevalence of the virus in their stools, the virus has been detected in anal swabs of patients and has been found on bathroom sanitary fixtures of an infected patient. While the faecal-oral disease transmission of COVID-19 has not been established, it does not exclude the possibility that this may not occur and there is always a



possibility that respiratory drops from an infected patient may be transferred on drinking water taps and other sanitary fixtures.

Water, Sanitation and Hygiene (WASH) measures, when combined effectively, have been proven to reduce disease transmission. While initially developed for waterborne diseases, they could be equally effective for preventing the transmission of COVID-19 in public and shared facilities and in homes. The following WASH measures are particularly important: i) the availability of safe drinking for both infected and healthy individuals, for cleaning and disinfection purpose; ii) appropriate hand washing practices; and iii) implementation of appropriate sanitation technologies and associated best practices, including *Operation, Health and Safety* (OHS) of municipal and health-care workers, implementation of appropriate cleaning and disinfection protocols and management systems; and iv) the safe management of human faecal wastes and protective/cleaning/disinfection material and reagents. However, without access to clean drinking water (municipality or household treated) and proper sanitation system, it is impossible to practice good hygiene and curb the virus transmission. The deployment of innovative solutions to speed up the provision of this essential services to the people, promote joint learning and sharing of information and data amongst IORA Member States is thus of crucial importance especially now during the COVID-19 pandemic and for achieving the Sustainable Development Goal 6 (SDG6).





## DRAFT AGENDA

**Zoom webinar: “Water, Sanitation and Hygiene (WASH) and COVID-19: IORA Member States response to COVID-19 and Beyond”**

**Date: 31 August 2020**

**Time: 10:00-12:00 SAST**

**Zoom Webinars link** [https://us02web.zoom.us/webinar/register/WN\\_yLtDHFNIRhC8htEpK48Adg](https://us02web.zoom.us/webinar/register/WN_yLtDHFNIRhC8htEpK48Adg)

**Facilitator:** Dr Mamohloding Tlhagale, Head of International and Stakeholder Engagements, Water Research Commission (WRC), South Africa

Time (TBC)	Agenda Item	Presenter
10:00-10:05	Opening and house rules	Facilitator
10:05-10:15	Welcome and setting the scene	Mr Dhesigen Naidoo, WRC CEO, SA
10:15-10:30	Opening Remarks (5 min each)	Dr Tahereh Miremadi, Director IORA Regional Centre for Science and Technology Transfer (RCSTT), Iran
		Ms Mmampei Chaba, Chief Director Multilateral Cooperation and Africa, Department of Science and Innovation, SA
		Prof Narnia Bohler-Muller, SA IORAG and Human Sciences Research Council, South Africa
		Mr D Malcomson, Chief Director Regional Organisations at DIRCO, Department of International Relations and Cooperation, South Africa
10:30-11:40	Presentation - IORA Member States' and Dialogue Partners' response to COVID-19 (10 minutes per country)	6 IORA MS and DPs
<b>11:40-11:55</b>	Q&A	Participants
11:55-12:00	Closing remarks	Facilitator

