

REGIONAL PROCESS SESSION DESCRIPTION FORM 2.

10TH WORLD WATER FORUM

Regional Session Code and Title:

RF7 Harnessing open science tools and innovations for Africa's water security

Regional Session Coordinators (Name, Position, Organization, email, mobile number):

(1) Session Coordinator:

Alexandros Makarigakis, Ph.D

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SUPPORTED BY:

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(2) Co-coordinator: A Member State – (to be proposed by AMCOW)

Regional Session Description including objectives and expected outcomes (500 words maximum):

INTRODUCTION:

Sustainable Integrated Water Resources Management (IWRM) and Disaster Risk Reduction (DRR) are core elements of Water Security, a prerequisite to achieve food security. Information Management Systems and Capacity Development of a critical mass of experts are fundamental in achieving water security.

Access to hydro-climatological data is a crucial issue in Africa. Where data do exist, they are subject to major limitations that undermine their efficient use in the planning and management of water resources, particularly in the current context of stress and vulnerability of these resources. Remote sensing, management information systems, artificial intelligence and Internet of things are some of the tools that can be used to reduce hydrometeorological risks as well as IWRM.



Invisible groundwater resources are an invaluable part of IWRM, whose quantities and quality can benefit from the use of information technology as well as machine learning.

Socially and culturally, water is a central feature of many beliefs, legends and tales, from North to South Africa. Certain traditional societies are repositories of empirical knowledge and visions that deserve to be taken into account for a better understanding of the dynamics of water resources through the ages. The relationship of societies and cultures to water should therefore be revisited, particularly from an historical perspective.

OBJECTIVE:

The session will discuss the following:

- 1. Technological Innovations for Water Security by harnessing Groundwater Mapping and AI in Early Warning Systems.
- 2. Managing Sustainable Water resources by leveraging Earth Observation and Diverse Data Sources
- 3. Data-Driven Water and sanitation Management: From High-Level Engagement to Actionable Insights and
- 4. Knowledge management and the use of indigenous knowledge systems

EXPECTED OUTCOMES:

- Awareness raising of participants for existing initiatives and processes to harnessing Africa's Knowledge and Information for better decision making and impact.
- Networking among participants
- Foster collaboration among governments, scientists/academics, water resources professionals, and policy/decision makers, to explore and identify opportunities for synergies towards overcoming challenges and scaling up solutions.
- Propose clear and compelling messages to influence policy decision-making at various levels

This is a 90 minutes session that shall have a keynote speech, panel discussions followed by an interactive session and tangible proposed messages

FORMAT:

- Keynote: Setting the Scene
- Panel discussion followed by Q&A
- Interactive discussion
- Closing and way forward

Detailed Regional Session Plan:

ESTIMATED TIMING	ITEM DESCRIPTION / ROLE	SPEAKERS	SPEAKERS STATUS (OK OR TBC)
	Session Chair: Africa Member State		ТВС
10 Minutes	Setting the Scene	- Presenter TBC	ТВС



14 Minutes	Panel Member: Using innovative Groundwater Mapping	Mr. James Sauramba jamess@sadc-gmi.org;	ТВС
	and	And	
		Joel Podgorski Joel.Podgorski@eawag.ch	
	AI applications in Groundwater Quality	JUEL.FUUgurski@eawag.cli	ТВС
7 Minutes	Panel member: Managing Sustainable Water	Mr. Guleid Artan	ТВС
	resources by leveraging Earth Observation and Diverse Data Sources	gartan@icpac.net	
14 Minutes	Panel Member: Data-Driven Water and sanitation	Presenters TBC	ТВС
	Management: From High- Level Engagement to Actionable Insights	(one for Water Resources and one for Sanitation)	
7 Minutes	Panel Member: Knowledge management and the use of indigenous knowledge systems	Ms. Hindou Oumarou Ibrahim	Confirmed
28 Minutes	Discussion	All participants	
10 Minutes	Closing and highlighting main outcomes and way forward	Mr Alexandros K. Makarigakis	Confirmed
		a.makarigakis@unesco.org	