Virtual roundtable with the SADC Groundwater Management Institute

Groundwater data sharing in SADC since 2010

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International Groundwater Resources Assessment Centre (IGRAC)
2010: SADC Hydrogeological Mapping Project (SADC et.al.)

Status: January 2012
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Screenshot of original SADC-HGM web application (source: SADC et.al., 2010)
2014: The system went down.
2017: Resuscitating the SADC Hydrogeological Map
A viewer was created within the Global Groundwater Information System (GGIS)
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ANYONE with internet access:
• Public viewer

REGISTERED & AUTHORISED users:
• Password-protected workspace

Password-protected workspace
2019-2020: Expanding the SADC-GIP

The SADC Groundwater Information Portal (SADC-GIP) is a platform for sharing groundwater-related data and information in the SADC region. It includes the maps from the 2010 SADC Hydrogeological Mapping project (SADC-HGM), among others. Organisations and individuals are invited to register and share relevant groundwater data and information in the SADC-GIP. Providing easy access to groundwater data and information is key to allow all stakeholders to actively participate in the sustainable management of groundwater resources in the SADC region. The SADC-GIP is managed by the SADC Groundwater Management Institute.
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www.sadc-gip.org
• The new SADC-GIP operates as a Spatial Data Infrastructure, where many users can register for uploading/accessing data.

• It supports international standards for spatial data exchange.
• It is based on a free and open-source software (GeoNode).
• It was set up and is maintained by a company based in South Africa.
Training material was produced, and workshops were held to reach out and engage national water departments in SADC.

https://www.youtube.com/watch?v=1_loHepw9g&feature=youtu.be
2021: Launch of new GGIS
Development of a database for well and monitoring data that can be coupled with SDI.
Already deployed for the Senegalo-Mauritanian Aquifer Basin (SMAB)
2013-2015: GGRETA project – phase I, Stampriet Transboundary Aquifer System (Botswana, Namibia, South Africa)

3 pilot studies to advance “Governance of Groundwater Resources in Transboundary Aquifers”
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2018: The Multi-Country Cooperation Mechanism (MCCM) of the STAS was integrated to the Ground Water Hydrology Committee (GWHC) of ORASECOM.

Location of the Stamperl Transboundary Aquifer System (in orange) and the Orange-Senqu River Basin (in green) (UNESCO-IHP & ORASECOM, 2018)

Launch of a new information management system at ORASECOM gis.orasecom.org
2015-2017: Ramotswa project – phase I (Botswana, South Africa)

The Ramotswa aquifer is a small transboundary aquifer close to Gaborone.
2019: LIMCOM launched its first Groundwater Committee to address conjunctive management of surface water and groundwater resources, with a focus on the 3 TBAs identified to date in the basin, among which the Ramotswa aquifer.

Support of LIMCOM by SADC-GMI settled in a MOU.
Lessons learnt:

• RBOs are increasingly integrating (transboundary) groundwater assessment and management
• Data sharing is challenging and a never-ending effort
• A regional institution promoting data sharing is instrumental and cost-efficient
• Data sharing involves different organizations, at different levels (country level, regional/continental level, RBO level)
• Spatial Data Infrastructure allow data providers to remain in control of their data
• International data sharing standards allow data to flow seamlessly through different platforms
• Free and open-source software programs are available
Thank you for your attention

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