Moving forward with improved assessment and management of transboundary aquifers

Dr Christina Fraser, World Water Forum 2022
Predicting the future…

What is the future of transboundary aquifer (TBA) assessment and management?
Main TBA challenges

- Data & information **harmonization** across borders
- Lack of **monitoring** data (quantity and especially) quality
- Selecting **priority areas, issues and/or actions** within a TBA
- The establishment of **cooperation** mechanisms and trust building
How to define transboundary impact zones?

One TBA?

An issue of scale…
How to define transboundary management zones?

Regional aquifers (Auob and NOssob) are shown in blue colours, discontinuous Kalahari aquifer in purple.

How to prioritise decision making within TBAs?

- Concept guidelines for prioritization of actions within transboundary aquifers
Purpose of the guidelines

A pragmatic approach to:

(1) Identify key pressures and concerns within TBAs

(2) Assist countries on how to prioritize resources within their TBAs

(3) Recommend priority actions and intervention practices

Developed in consultation with national experts from 8 TBAs across Africa
7 Steps....

Building the knowledge base
Step 1: Identification of key national experts
Step 2 Data collection and review

Directed and Priority-Based Actions within the Transboundary Aquifer
7 Steps....

Building the Knowledge Base

- Step 1: Identification of key national experts
- Step 2: Data collection and review

Zoning/Hotspot Identification

- Step 3: Identification of aquifer pressures
- Step 4: Identification of hotspot zones

Selecting and Prioritizing Actions

- Step 5: Selection of required response and priority actions
- Step 6: Identification of appropriate interventions
- Step 7: Recommendations to decision-makers

Directed and Priority-Based Actions within the Transboundary Aquifer
7 Steps....

Building the knowledge base
Step 1: Identification of key national experts
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Selecting and prioritizing actions
Step 5: Selection of responses and priority actions
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Step 7: Recommendations to decision makers

Directed and priority-based actions within the transboundary aquifer
7 Steps....

Outcome:
Directed and priority based actions within the transboundary aquifer
Thank you for your attention

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