



Governing groundwater for healthy ecosystems

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Groundwater – key resource for healthy ecosystems

- Supports baseflows of streams and rivers
- Major water source for many cities – and a key buffer for natural dry periods
- Crucial water source during droughts
- Groundwater sustains complex food webs of arid landscapes (e.g. Savannahs)
- Provides habitat through underground networks and dependent ecosystems
- Important for many biodiversity
- Provides a buffer to flooding floods in some contexts
- Groundwater needs to be managed together with ecosystems to ensure continued provision of critical ecosystem services



Governing groundwater

- Effective groundwater governance relies on *coherent policies, laws, institutional arrangements and implementation and enforcement mechanisms*
- *Social organisation, stakeholder dialogue and citizen action* are also key for good groundwater governance
- Good groundwater governance also needs to be based on *rigorous scientific information and data*

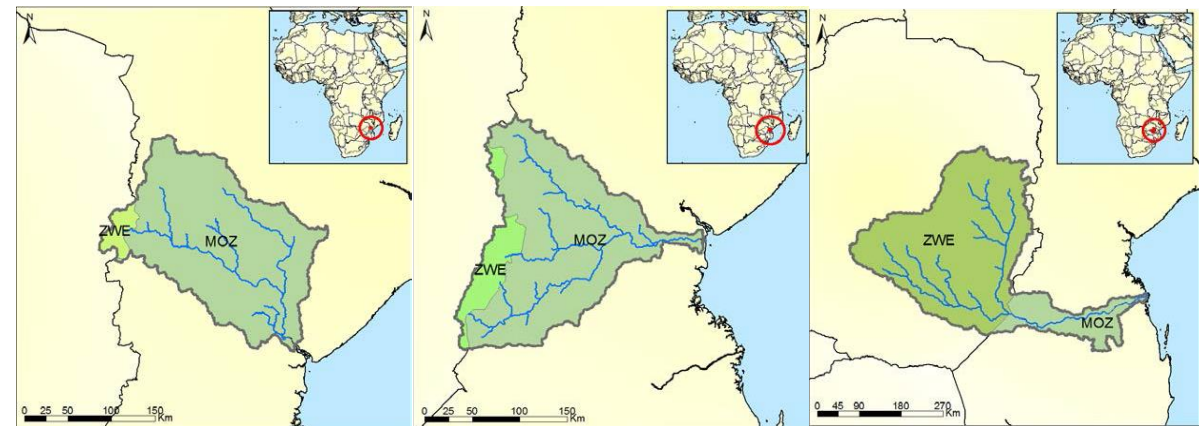


Busi – Pungwe - Save: Groundwater in a transboundary context

- **Recurring droughts** in the region have demonstrated the potential value of groundwater
- Groundwater services are in **high demand**, especially in the rural areas. Communities increasingly depending on groundwater for domestic and productive water uses - increasing droughts
- **Unregulated mining and use of the groundwater** has resulted in overexploitation and chemical pollution; agrochemicals; infiltration of urban and industrial effluents; mining and disposal of untreated waste
- **Declining groundwater levels** define the need for management action
- Precise **data** on the status of groundwater resources are still not available in sufficient detail to make a regional assessment of the ground water potential in the three basins.



Source: BRLi



Busi – Pungwe - Save: Groundwater in a transboundary context

- Ongoing GEF project include groundwater specific activities;
- Identify **hotspots** where groundwater resources can be used to mitigate water supply through sustainable conjunctive management approaches
- ***Understanding the state of shared aquifers***, and their potential to mitigate water supply challenges, will inform a more comprehensive ecosystem evaluation and facilitate enhanced integrated basin planning through the ***incorporation of groundwater in basin agreements***.
- ***Expand the mandate (and capacity)*** of the Joint Water Commission (tri-basin institution) ***to include groundwater management***





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Sources:

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