



Working with Stakeholders Linking Environmental Flows to Transboundary Governance in the Pungwe, Buzi & Save River basins

By

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Mozambique-Zimbabwe Objectives

Compliance with SADC Regional Protocol, Bilateral Agreements, and National Water Laws.
Transparent and sustainable transboundary water resources management
Enhancing peaceful bilateral cooperation

Constraints

Low levels of awareness of ecosystems services from river flows.
Inadequate capacity for e-flow assessment and management.

Demand for stakeholder driven and participatory capacity building on e-flow assessment and management.

Outputs

Transparent stakeholder owned transboundary implementation of e-flow recommendations.
Sustainable water allocations and provision of river related ecosystem services.
Upscaling of bi-nationally driven e-flow assessments from pilot sub-basins to all 3 shared basins.

Process

Transboundary and bi-nationally driven e-flow assessments and formulation of commensurate river basin management measures.

IUCN & Waternet Capacity Building Intervention

Awareness development.
Demonstration in pilot Revue River Basin.
Learning by doing e-flow assessment.

Outcomes

Compliance with regional and bilateral agreements, and national legislation.
Increased and sustainable provision of river flow-related ecosystem services.
Improved human-wellbeing and peaceful harmonious bilateral management of water resources and natural resources in general.



Legal Framework

- **SADC Protocol on Shared Watercourse Systems:** Article 4 (2) (a), Protection and Preservation of Ecosystem
- **Mozambique Water Law:** *“Private use of water which is prejudicial to the quantities of water necessary for environmental protection, shall not be authorised.”*
- **Zimbabwe Water Act:** *“ensure the availability of water to all citizens for primary purposes and to meet the needs of aquatic and associated ecosystems particularly when there are competing demands for water;”,*





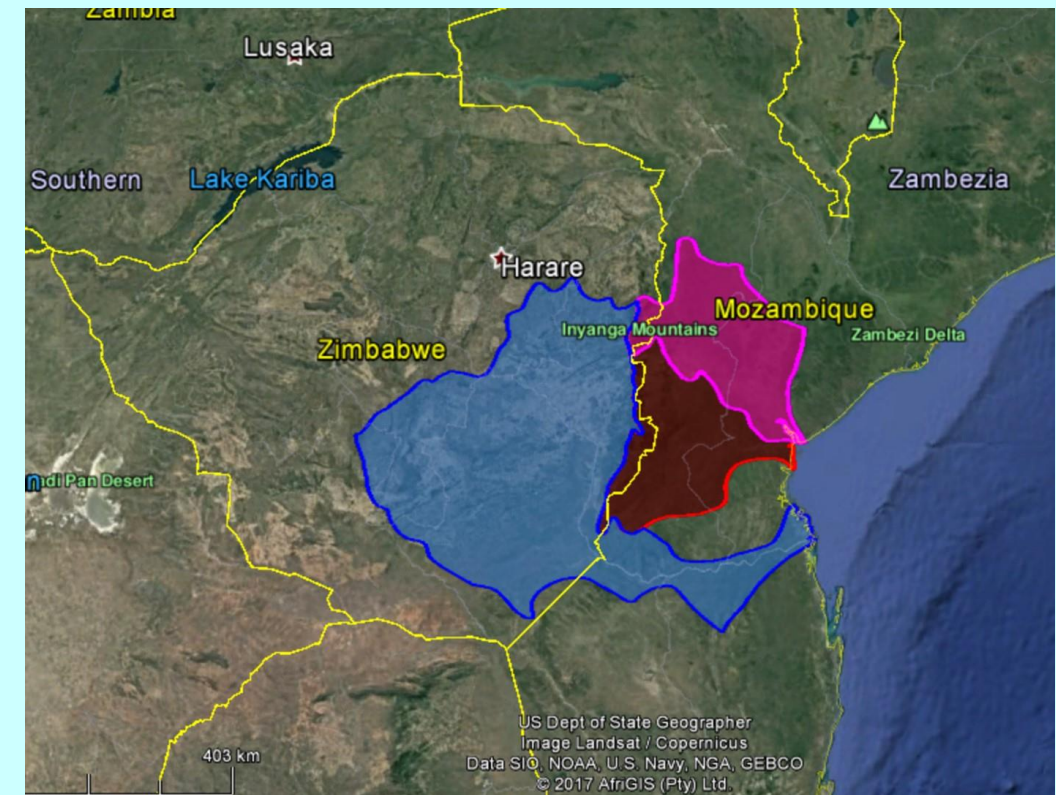
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Pungwe, Buzi & Save Bilateral Agreements

- Mozambique-Zimbabwe Bilateral Agreement for the Pungwe River basin signed in July 2016.
- Draft Agreements for the Buzi and Save Basin are similar to that of the Pungwe Basin
 - Article 9 Protection, Preservation and Conservation of the Environment
 - **Interim environmental flow recommendations** pending detailed studies.



Source: Google Earth

Constraints to implementation of requirements on Environmental Flows of the SADC Protocol, Bilateral Agreements and National Legislation

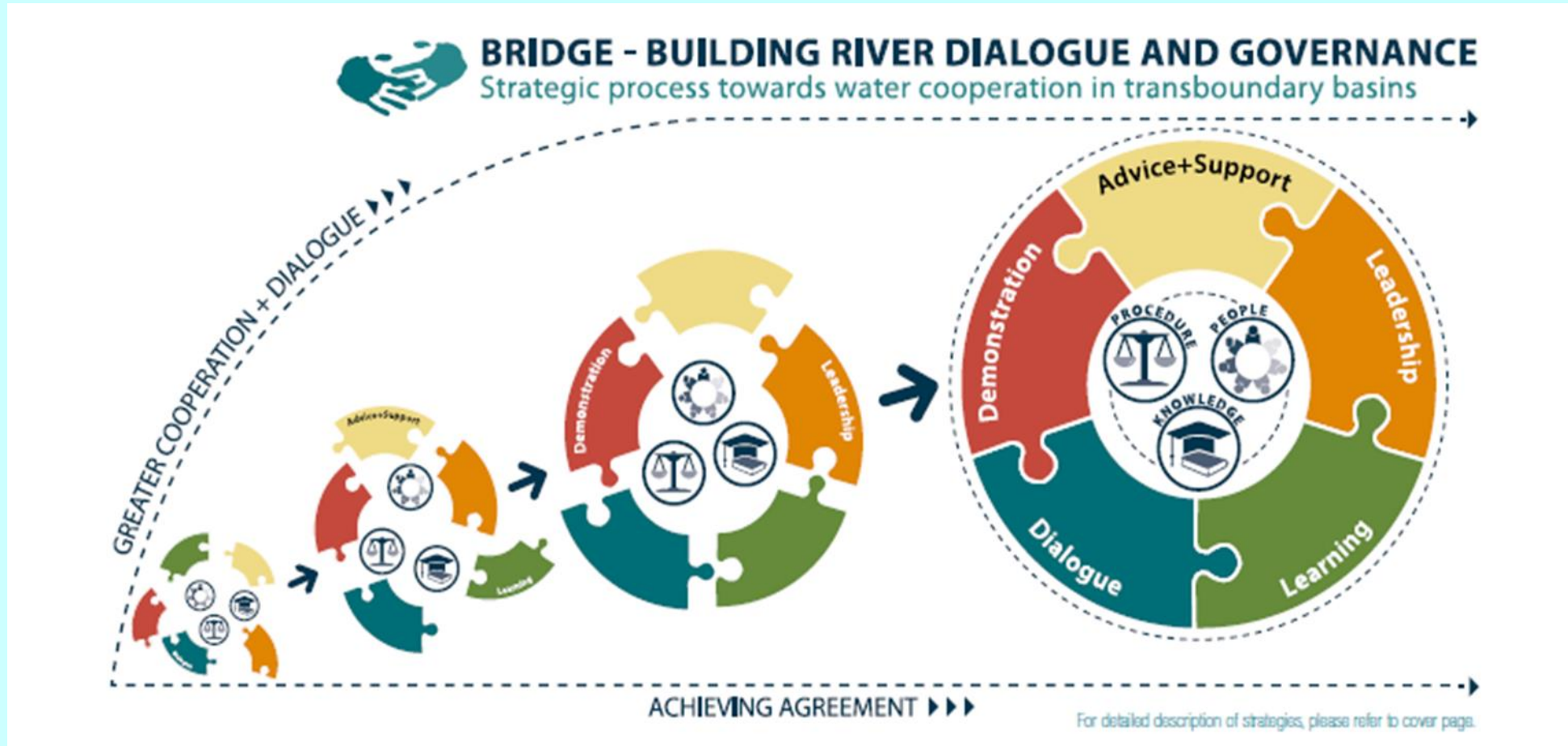
- **Inadequate awareness** of socioeconomic and ecological benefits of providing environmental flows by Policy Makers & Water Resources Managers
- **Skills** for environmental flow assessment at national and transboundary levels have not been previously developed.
- **Inadequate knowledge about mechanisms for effecting environmental flow requirements** at national and transboundary levels.
- **Roles of stakeholders** in the assessment and implementation of environmental flows not well defined and understood



Opportunities for transboundary cooperation in implementing environmental flows by Mozambique & Zimbabwe

- Long history of **excellent bilateral collaboration** in all the sectors.
- Commitment to improve bilateral cooperation through implementation of **transboundary water sharing agreements**.
- Commitment to determine and **implement environmental flow provisions of the bilateral agreements**.
- **Demand for developing capacity** for planning and managing environmental flows.
- Commitment to **stakeholder participation** in integrated water resources management.

IUCN Capacity Development for the basins shared by Mozambique & Zimbabwe



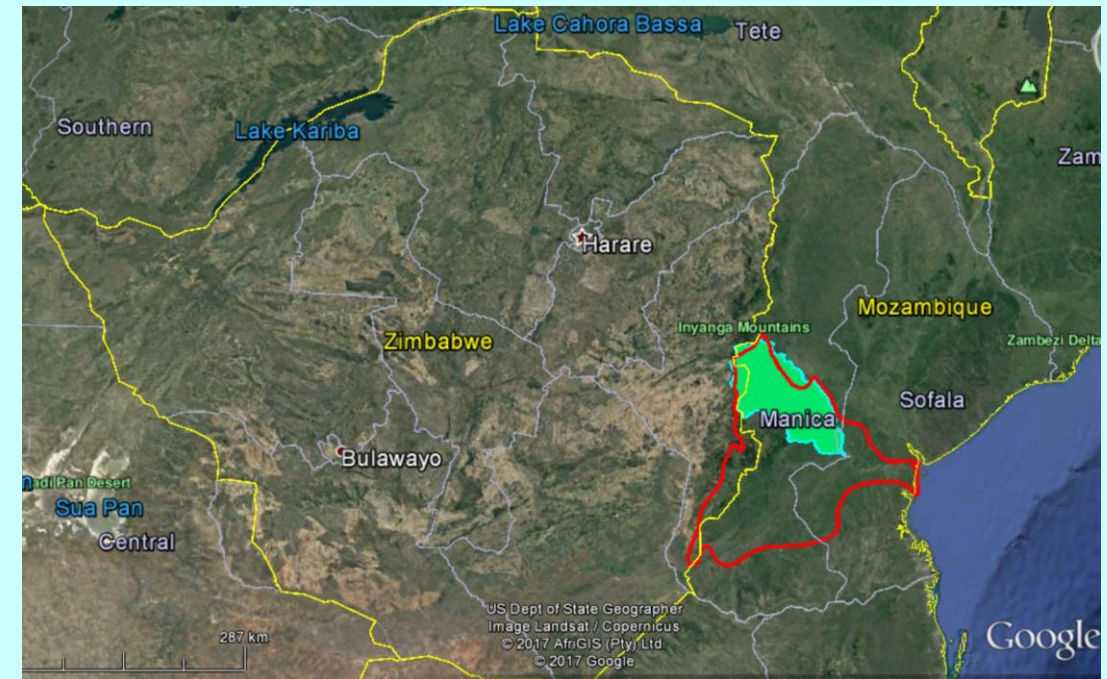


IUCN & Waternet Capacity Development Three Phase Approach

- **Developing the awareness of policy makers and water resources managers** about socioeconomic and ecological benefits from, and principles of integrating environmental flows in transboundary water resources management *(Nov/Dec 2015)*
- **Demonstrating** procedures for environmental flow assessment in a selected pilot river basin *(July 2016).*
- **Learning by doing** – facilitating and guiding stakeholders and multidisciplinary Country Teams to jointly develop recommendations on environmental flows *(Aug 2017 – Apr 2018)*

Learning by doing, Aug 2017 – Apr 2018

- Selected **Revue sub-basin** of the Buzi Basin to pilot capacity building
- Formation of **multidisciplinary Country Teams** each in Mozambique and Zimbabwe
- Identification of key **stakeholders** to participate throughout the process
- Country level and transboundary **stakeholder participation in River Basin Situation Analysis** (identification of river-related ecosystems services and potential effects of river flow modifications on these services).



Green = Pilot Revue Sub-basin.

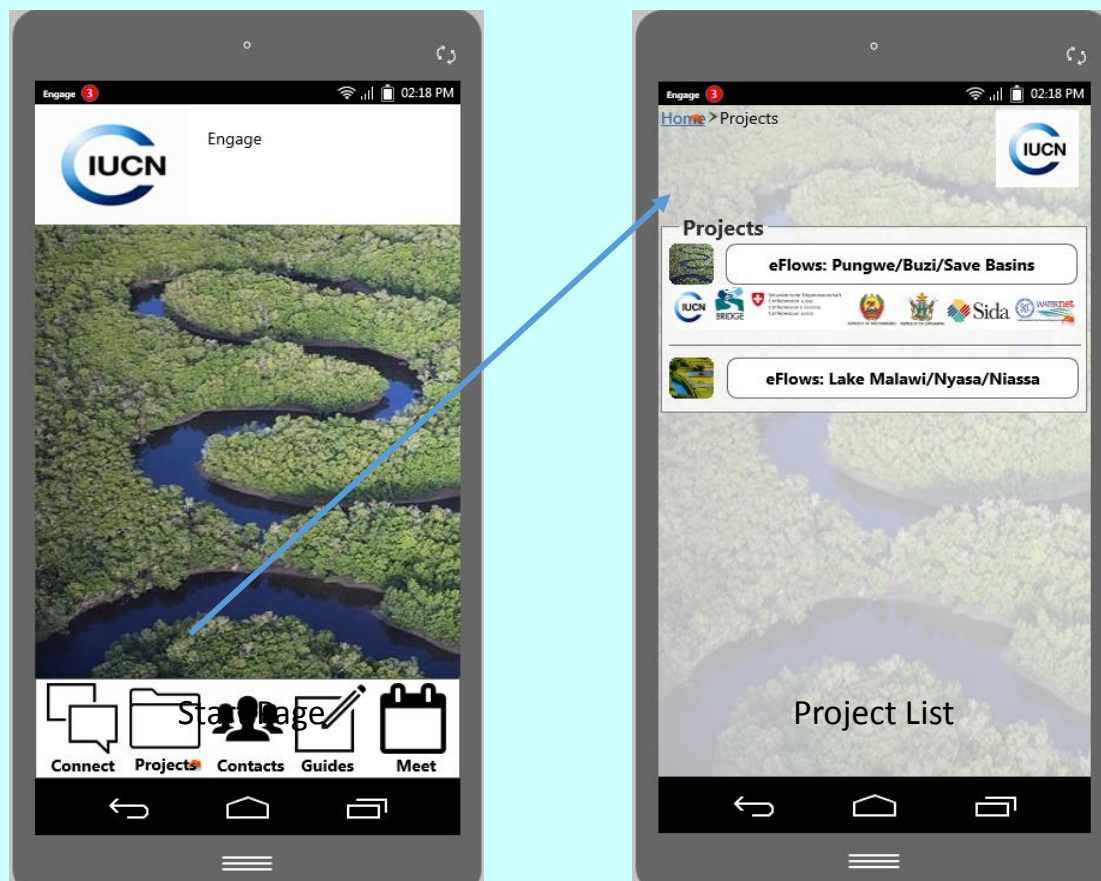
Source: Google Earth

Learning by doing, Aug 2017 – Apr 2018

- Country Teams **jointly select indicators for determining biophysical and socioeconomic responses** to potential river flow modifications.
- Each Country Team **collects data for selected indicators**, and potential flow modifications
- Country Teams **jointly evaluate biophysical and socioeconomic responses** to potential river basin developments
- Country Teams **jointly recommend environmental flows** for achieving agreed desirable levels of the provision of ecosystem services.



Exploring Developing an Interactive Mobile Phone/Web based Application for Participatory Environmental Flow assessment. Uploading data and Information sharing by Country Teams in Mozambique & Zimbabwe



Engage Platform

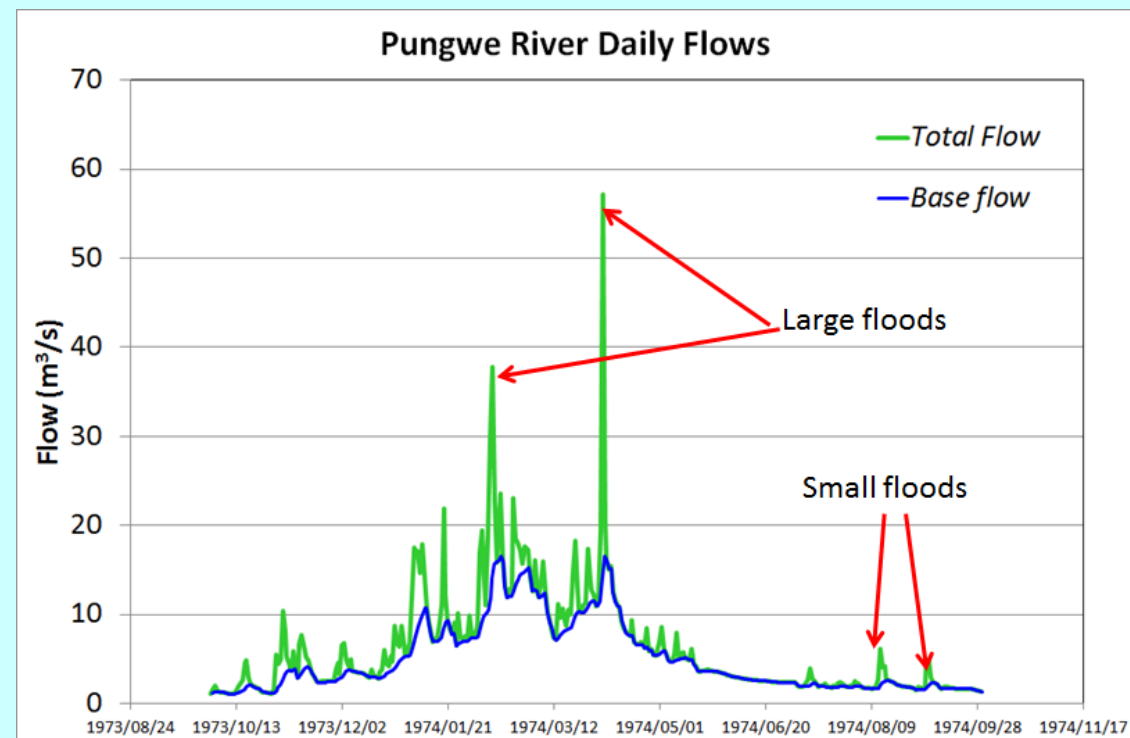
- Mobile tool for improving team collaboration.
- Geared to put relevant data in one convenience – your hands.

Key messages

- App alerts using PUSH notifications
- Information at your fingertips - available online and offline
- Collaborate effectively in a more engaged manner
- Actively engage with remote Subject Matter experts; Virtual teams
- Use key native tools: Camera, GPS, Audio
- Electronic data capture and sharing
- Faster access for analysis or review

Learning by doing, Aug 2017 – Apr 2018

- Country Team jointly submit **environmental flow recommendations to policy makers** responsible for transboundary management of the sub-basin of the Buzi River basin.
- Country Team jointly present **policy recommendations for implementation of environmental flows**





Mozambique and Zimbabwe multidisciplinary Teams learn by doing various aspects of ecological assessments of rivers, July 2016



Mozambique and Zimbabwe Teams learn by doing socioeconomic assessment, July 2016



Thank you for your attention

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