



SWAUM



Putting the 'I' into IWRM

Making Catchment Governance Work for All

The Great Ruaha River ... is no longer 'Great'

The Great Ruaha River Catchment (GRR) is critical to the social and economic development of the nearly 2 million people who live and work there. Their wellbeing and that of many people further afield, are dependent upon the GRR's ecosystem services, including for example, provision of crops, water and minerals, regulation of climate, support for nutrient cycles, and recreational benefits. In addition to extensive agricultural (e.g. rice, maize and other vegetables, tea, livestock), timber and fishing enterprises, hydropower from the GRR provides almost half the country's electricity, while the Ruaha National Park and game reserves are important tourist attractions with huge potential for generating significant revenue.



Over-abstraction – rapid, uncontrolled and inefficient expansion of the irrigated sector – following years of migration into the Southern Highlands, has led to the annual drying up of the once perennial GRR. First noted in 1993, and causing former President Kikwete to assert in December 2005 that *'The Great Ruaha River is no longer 'Great''*¹, the river now ceases to flow for up to five months in the dry-season.

A 'Wicked' Problem

Water governance in the GRR is characterised by widespread disagreements and conflict between sectors and stakeholders at all levels, knowledge gaps, climate-wrought and other uncertainties, and prevailing capacity and resource constraints amongst responsible authorities. Such levels of complexity are found to be unresponsive to 'cause and effect' analyses, with the associated conventional management approaches failing to deliver lasting solutions – and hence such circumstances have been called 'wicked' problems.

Specifically, and over many years, the Basin Water Office has been unable to establish or maintain fair and sustainable allocation rates. It has been thwarted in this challenge not only by the absence of reliable data, but also by chronic understaffing² and disbursement constraints³. Staff selected to address hydrological tasks moreover, are not necessarily suited to understanding or delivering on good governance. These practical constraints have been compounded by the widespread support for national water policy and legislation but uncritical oversight of the implementation of Integrated Water Resources Management (IWRM) – the governance mechanism – for the delivery of water security.

With the exception of SWAUM, and despite water security being foundational to the food and energy security nexus – and now sharing joint billing in SDG 6⁴ – there have been no systematic or coherent initiatives to engage stakeholders in mediating effective, fair and sustainable access, use and management of water resources in the GRR.

Stakeholders' Diagnoses

SWAUM's approach to catchment complexity and polycentric governance has been to pilot a multi-stakeholder social – or *catchment* – learning process (2011-16). Diverse catchment stakeholders, formal and informal, already decide or influence issues of access, use and management of water resources, but often unilaterally or without coordination. The premise of the pilot was that spaces – or opportunities – can be created which both bring stakeholders together and enable them to work (i) to address existing conflicts and reduce disagreements (ii) to identify knowledge gaps and prepare for uncertainty, and (iii) to mitigate capacity constraints through more effective and efficient collective working and associated synergies.



¹ President Kikwete address to the National Assembly, 30th December 2005.

² "...the human resource gap is reported as more than double the number of current staff at the Basin, while more staff continue to retire". (DFID, 2016).

³ "During this review period, financial disbursement remains a major obstacle to the full realisation of some of the targets". (DFID, 2016)

⁴ Sustainable Development Goal 6: *Ensure availability and sustainable management of water and sanitation for all.*

This approach is at the heart of the Water Resources Management Act No 11, 2009, whose *principles* advocate 'stakeholder involvement at all levels' and 'public participation in the development of policies, plans and processes'. Engagement with diverse stakeholders in the Ndembera and Mbarali sub-catchments downstream to Mtera has revealed:

- Many formal stakeholders, at local to national levels have overlapping mandates, duplicating roles, & compete for resources;
- Different administrative/political and hydrological boundaries, and upstream-downstream dynamics, undermine decision-making processes and actions;
- Weak coordination and cooperation within & between sectors;
- No systematised meeting or shared strategizing, planning or implementation between RBWO/B and LGAs;
- Constrained relations within the hierarchy of water institutions (i.e. RBWO, catchment & sub-catchment committees, WUAs);
- Claims of political interference from officials & technical staff;
- Discrete but not uncommon allegations of corrupt practices by local people of some politicians and officials;
- Significant gaps in the devolution of national Climate Change Adaptation strategies into district-level planning processes;
- Limited engagement by service providers with local people, including poorer women & other hard to reach groups;
- Conflict between customary norms & practices and private sector practices with official laws & regulations.

All of these shortcomings involve significant costs – costs of duplication, of inefficiencies, of impaired effectiveness, of wasted time, of not addressing capacity constraints, of missed opportunities to learn and improve systems. In addition to these costs there are strategic and longer term costs, associated for example with poorer health and disease, reduced production levels, pollution of freshwater ecosystems, missed tourist revenues, lower power generation.

The Integration Challenge

Analysis of the various diagnoses put forward by diverse groups of stakeholders in successive workshops and in collectively undertaken initiatives over 5 years, linked prevailing processes, arrangements and behaviours, with breakdowns and gaps in key aspects of integration widely associated (e.g. in the literature) with good governance. These aspects, which SWAUM refers to as the 'critical dimensions of integration' (CDIs), are both distinct and overlapping or interwoven to varying degrees, and inherently political. Given the continuing deference to IWRM as the governance model in the Rufiji Basin IWRMD Plan, we conclude that unless these are addressed the pattern of governance failure will not be broken, nor associated drying of the GRR reversed. The CDIs include:

- [CDI-1] Working within sectors (e.g. *vertically* and *horizontally* between water institutions, between LGAs etc);
- [CDI-2] Cross-sectoral, or *horizontal*, working (e.g. between: water, agriculture, energy, local government sectors);
- [CDI-3] Integrating Freshwater Ecosystem Conservation & WASH initiatives;
- [CDI-4] Engagement & involvement of poor, disadvantaged, and hard-to-reach groups (e.g. women, girls, marginalised & youth);

- [CDI-5] Engagement & involvement of the private sector;
- [CDI-6] Integrating upstream-downstream working (i.e. decision-making & actions), particularly between sub-catchment and downstream stakeholders;
- [CDI-7] Devolving Climate Change Adaptation (CCA) from and through national to local; and
- [CDI-8] Integrating practice, research and policy-making to improve strategic decision-making.

Some of these constraints are identified in the final Rufiji Basin IWRMD Plan: irrigation-energy-environment conflicts; lack of institutional coordination; ineffective stakeholder participation; insufficient technical capacity for IWRM. It asserts that the 'Rufiji Basin has reached a cross-roads in its development' and argues for a 'paradigm shift in water management', warning that 'sectorally uncoordinated development and management will foreclose the promise Rufiji holds for people and environment'.

Putting the 'I' into IWRM

Despite water security being foundational to the food and energy security nexus, and sharing joint billing in SDG 6, it remains unclear exactly what is meant by 'integration' – the 'I' that turns WRM into IWRM – the main delivery strategy for the IWRMD Plan. From SWAUM's field work in the Ndembera and Mbarali sub-catchments downstream to Mtera and from the experience of key 'thought leaders', we offer the following scenarios for exploring how best to put the 'I' into IWRM:

- [CDI-1] Consider separation of *Urban & Rural Water Supply* from WRM as a 'scenario' for assessing respective costs & benefits and exploring better ways of working in the water sector.
- [CDI-2] Institutionalise joint planning between Basin Water Office (RBWO) & District Councils (e.g. sharing info & resources, prioritising actions; resolving accountability and power issues).
- [CDI-3] Rationalise responsibilities with respect to Water Supply and LGAs – as for CDI-2, respective planning processes need to be integrated between RBWO and District Councils; consider changes to (regulation for) composition of catchment committees; ensure WASH returns 'clean water' to environment.
- [CDI-4] Adopt SWAUM's proven multi-stakeholder (MS) learning approach as mechanism for (sub/) catchment foras, to realise 'principles' enshrined in 2009 WRM Act No 11, and enable disadvantaged and poor people to demand & secure their rights; encourage support from civil society and faith groups.
- [CDI-5] Ensure Private Sector part of MS learning approach; promote Corporate Social Responsibility / Water stewardship, social & environmental certification, transference of skills, PPPs and longer-term investment, linking farmers to markets.
- [CDI-6] Promote *Catchment Water & Climate Change* campaign put forward by Njombe Regional Commissioner, endorsed by WWF, and recently taken up by the 2030 Water Resources Group; build on CDI-2, and strengthen capacity of water institutions and LGAs for dialogue; promote PES where appropriate.
- [CDI-7] Promote CDI-6 Climate Change campaign, use of discretionary grants to District Councils, climate-smart agriculture.
- [CDI-8] Create Centres of Excellence in Ministry to link research, policy & practice stakeholders; ensure platforms for sharing cutting edge physical and social sciences (e.g. JWSR).

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