Building upon customary practices in implementing IWRM in Africa: Good practice guidelines for water managers

Across most of (southern) Africa, decision-making on day-to-day water development and management issues is in the hands of local communities. Over centuries, local individuals and communities have developed small irrigation systems, springs and wells for domestic water supply, small dams for livestock etc with limited external assistance. These water systems are mainly governed by customary water management arrangements that have also been developed locally. These systems or rules are specific to local environments and have stood the test of time in many places.

Unprecedented investments to develop water resources are now being made by national and international agencies. New institutions are also being established to manage water resources on a catchment basis. Each of these catchment institutions typically covers thousands of square kilometres, tens of thousands of farmers or other small-scale water users, and hundreds of thousands of domestic water consumers. But do these investments and efforts really build upon what already exists? There are opportunities not just to build upon the existing infrastructure, but even more importantly, upon the existing indigenous institutions that already have the experience, knowledge and systems needed to manage water effectively at the local level. Could better use not be made of this mine of resources?

Objective of these guidelines

These guidelines aim to provide ideas, advice and options to help water managers make the best use of customary water management systems, alongside formal management systems, in working towards the objectives of Integrated Water Resources Management (IWRM).

You can use the guidelines if you are trying to find new ways to build effective implementation of IWRM upon locally successful water management practices. They will help you to find a balance between the implementation of centralised systems such as licensing for all water users introduced at a catchment or national level, and local management rules.

Some key terms defined

Customary – something based upon custom (whether new or traditional) that is current and in use but changing.

Customary law – is usually local, unwritten, and considered 'informal'. It may have its origins in social, cultural, ethnic, or religious experience.

Formal and statutory laws – are written down in the statute books of the state and are thus strongly backed up by state power in implementation.

Living customary laws – while customary laws may be codified and 'fixed' (e.g. as during colonial periods to establish a basis for separate rule) they are otherwise constantly evolving.

Customary water management systems/ arrangements – water management systems (a system is not just infrastructure but also the resources, institutions etc) that are based mainly upon customary laws, rules or norms.

Institutions – mechanisms, rules and customs by which people and organisations interact with each other, although often used interpreted in a narrow sense as organisations (e.g. local government).

Integrated Water Resources Management – aims to make the most equitable, efficient, and sustainable use of water through decision-making that considers water users at different scales

Background: what are the problems with current practices

Current water reforms in most southern African countries focus on the use of statutory legal systems to regulate the use of water resources. These countries, however, actually have pluralistic legal systems. Land and water resources are regulated by different pieces of legislation and institutions, including statutory law, customary laws of different ethnic groups, and Islamic law. Especially in poor rural areas, diverse customary laws are often more important than statutory law and are relied upon in developing access to natural resources and resolving management conflicts. Neglect of customary laws may cause implementation of IWRM to fail, or will have negative consequences for individuals and groups who were better served by customary-based systems – especially the poor.

Guidelines: how to make the best use of customary water management arrangements

This section poses questions that you could ask yourself as a water manager, and suggests some possible courses of action to find the answers to the questions. It is intended to inspire water managers to think about customary water management arrangements, to avoid eroding or damaging such practices where they are successful, and where possible, to find ways to build upon them.

KEY ISSUES	ACTIONS YOU COULD TAKE
Existence of customary water management arrangements	
➔ *Customary water management systems are usually localised and based upon unwritten laws. Therefore consider the following (checking first whether these systems have not already been studied by earlier or existing projects, or by interested organisations e.g. research institutes, universities):*	
• Are you aware of the different customary water management systems for development, use and management of water that may exist in the catchment where you work?	➔ Investigate where these systems are found and what types of issue and decision-making are addressed.
• Do you understand the main characteristics of these systems and what makes them more or less successful?	➔ Investigate the rules: who the decision-makers are, who are the beneficiaries, the scale at which they work, their history?
• Are traditional conflict avoidance or resolution management systems in place that may, when needed, address water-related problems?	➔ Consider using these systems, collaborating with traditional leaders to help avoid and resolve water-related conflicts. Use traditional courts and reconciliatory-based systems rather than adversarial courts for enforcement.

Example 1: *Customs guiding the use of water for the Sangu, Tanzania*

In 1964 a small group of villagers in Nyeregete village organised themselves to dig an irrigation canal to offset the erratic and unreliable rains. No doubt the villagers were influenced by indigenous knowledge and customs relating to water use in the area. Under traditional Sangu customs (Sangu being the dominant ethnic group) the construction of irrigation canals and furrows was controlled by the chief. Although a single individual could tap a stream for his purpose without first consulting the chief, the latter could prohibit the construction or use of any such canal or furrow. Once constructed, the canal or furrow was the exclusive property of the people who constructed it until they abandoned it, when it reverts to the chief. Over time, this tribal law has undergone some changes. Nowadays one still needs a right in order to use water for irrigation. For the so-called indigenous/traditional irrigation one obtains the right as defined in customary regulations which are administered in the various levels where customary law operates (local water committees, councils of elders, village authorities, etc.).

The Nyeregete canal was constructed under the customary system of obtaining irrigation water, where people organised themselves informally and construct a canal to divert water from Kiyoga river. Each member of the canal then constructed smaller furrows to tap water from the main canal to their fields. Such canal groups may be initiated by a single individual, and afterwards it may grow into a larger *canal committee*, such as the one in Nyeregete, which has a membership of about 100 farmers and covers a distance of approximately 20 miles. The canal committee and sub-committees (established for each sub-canal) oversee the allocation of water to members, as well as the maintenance of the canal. The Nyeregete canal has to be cleaned every year during the months of August-December, and if a member abstains from the maintenance activities, he or she is liable to a fine.

Irrigation has made it possible for Nyeregete villagers to introduce an important cash crop, rice, a feat they could never have hoped to achieve without the construction of the canal. With the income accruing from irrigated rice some villagers can now buy the maize they need for food instead of trying to raise it themselves (maize does not do very well in Nyeregete).

In addition to the canal committee various customary institutions are used to provide ways to avoid or mitigate conflicts, and

ensure the payment of reparations when conflicts over land and water resources occur. Predominant amongst these are mediation by tribal elders and the application of religious principles in settlements of disputes. Court records reveal that a number of cases have been withdrawn from primary courts in favour of settlement outside of court.

(Source: Maganga, 2002; Maganga, 2003)

Example 2: *A conflict over rural water supply in South Africa is solved by traditional authorities*

In Tshikombani village in Venda, South Africa, villagers developed a self-regulated and self-financed water supply system that was managed by the local traditional leader. Water from a mountain stream was piped to the village for gardens and domestic use. A conflict later arose with the neighbouring village who claimed equal access to the stream and therefore also the water scheme. Traditional authorities in the two villages were unable to resolve the dispute which was referred to the local Magistrate's court. They returned the case for local leaders to resolve and eventually the traditional leaders agreed that the adjacent village could benefit from the scheme providing they contributed equally to the costs of maintenance.

(Source: Malzbender, Goldin, Turton & Earle, 2005)

Effectiveness of customary water management arrangements

Customary water management systems may be highly effective (e.g. compared to formal systems that are perhaps not sufficiently resourced to penetrate to the local level) or failing and struggling to cope with changes. Again check what studies may already have been undertaken:

- Are customary water management systems equitable?

➔ Think about the extent to which customary water management systems discriminate on the basis of gender, ethnicity, age and consider actions that might be taken to address these shortcomings.

Example 3: *Equity issues*

In contrast to the present constitutional imperatives of most governments, customary water management systems and broader tribal authorities or community leadership structures may be hierarchical along gender and age lines, and can enforce ethnic divides.

Women in Sub-Saharan Africa for example, although not completely right-less, are typically recipients of secondary land rights, when land tenure and associated water rights are allocated. Where customary law is found to perpetuate social exclusion in some form, project-driven institution-building based on indigenous norms and values should seek to be transformative in nature. Innovative avenues for women's participation in non-traditional activities offer scope for expanding women's sphere of influence. Effecting more participation of women in user committees and in their leadership, could lead to enhanced *voice* at the village and area level, and may forge space for more formal political participation e.g. by standing for local elections. Joint titles (versus only for female-headed households) are also a more secure route for married women.

Some water projects have curtailed options that women did have under customary arrangements. An example is the vesting of water rights through participation in construction work, which women often have in indigenous customs. Projects may deny such options, assuming that 'construction work is not suitable for women'. Similarly, where interventions define water that was originally used for domestic and productive use, as 'irrigation' water, women (and their families) may be *legally* deprived of on-going access to water.

Building upon indigenous arrangements is pivotal for poverty alleviation and gender-equity. Informal arrangements often represent the only social safety net and insurance for marginalized groupings. Also, communities may have strong norms of sharing of project benefits in general and sharing of water resources in particular, rather than allowing few individuals to appropriate or over-use a scarce community resource. Projects that are not aware of these norms may well introduce measures that favour the male elite more than communities would have allowed had they been directing project design.

Inclusion in formal legal codes poses challenges especially for women and poor users in general as when new water laws require illiterate, remote, and uninformed water users to formally register their water uses for these to be recognized in the new code as state-authorized. Water laws also tend to favour a dichotomy in formal water rights between the larger water users who can register and obtain first-class, often individual, water authorizations such as licenses or permits that are tradable (and for which one is compensated in case of expropriation) while micro-scale water users get collective second-class water rights because, realistically, these are more difficult to administer. These forms of direct and indirect discrimination can be solved by recognizing communities' (or groups of communities') indigenous water rights as lawful.

KEY ISSUES	ACTIONS YOU COULD TAKE
• Are customary water management systems efficient themselves? Do they encourage efficient uses of water and avoid wastage?	➔ Consider whether customary water management systems take water management decisions and actions at a lower cost than is possible through a bureaucracy working at a larger scale.
• Are customary water management systems sustainable?	➔ Have they endured? Are they equipped to cope with change?
• At what scale are customary water management systems most effective?	➔ Assess.
• Do you know how many water users are actively governed by customary water management arrangements compared to formal systems?	➔ Assess.

Example 4: *Mkoji sub catchment and the Wasafwa, Tanzania*

Sokile et al (2005) provide a good example illustrating the effectiveness of CWMA. They note that although Tanzania abolished chiefdom officially in 1962, in some places traditional and customary leaders have been co-existing with the new formal local governments and are quite influential. In the upper zones of the Mkoji sub catchment, among the local ethnic group of the Wasafwa, there exist an array of traditional leaders called mamwene (Sing. Mwene). Mwene is a chief to this ethnic group. Each mwene commands an area of roughly a new ward. In water and natural resources management the powers of the mamwene include enforcing customs and traditions relating to cutting riparian trees, cultivating near water banks and polluting water bodies.

(Source: Sokile, Mwaluvanda and van Koppen, 2005)

Recognition of customary water management arrangements

Customary water management systems are usually ignored in water policies, laws and guidelines:

• Do existing policies, laws and guidelines facilitate and encourage recognition and/or collaboration with customary water management arrangements?	➔ Consolidate and build on successful initiatives, and promote their success with policy makers and other influential players.

Example 5: *Collaboration between the Rufiji Basin Water Office and informal institutions*

Given its limited capacity in terms of its human and financial resources, the Rufiji Basin Water Office has been forced to depend on the collaboration between a number of existing and new institutions in: the regulation and distribution of river water flows during the dry season; the collection of water user fees; the construction of new infrastructure, and most importantly, the mediation and resolution of water conflicts. To realise potential advantages associated with the *alignment* of formal and informal institutions, grassroots water users have been mobilized to discuss and agree on the amount of water to be allocated to various uses and users, and are authorised to oversee and regulate the allocation. Similarly, village leaders, both formal and informal, have been involved in monitoring water availability and quality through gauge reading and through development and implementation of bylaws for pollution prevention.

(Source: Sokile, Mwaluvanda and van Koppen, 2005)

Example 6: Gadaa systems in Ethiopia

In Oromia, Ethiopia, inter-and intra-ethnic conflicts over the use of natural resources, including water, in the major pastoral areas are settled by local elders following the principles of the *Gadaa* (age-based) system. Elders in their 40s become the key decision makers. These customary institutions have largely been ignored by the government in dealing with conflict resolution between individuals and communities. This has led to a reduction in their efficiency and relevance.

(Source: Edossa, Babel, Gupta & Awulachew, 2005)

• Do the existing policies, laws and guidelines stop you from recognising or collaborating with customary water management arrangements?	➔ Advise policy makers on whether customary water management systems should be given more recognition in policies and laws (see policy brief).

KEY ISSUES	ACTIONS YOU COULD TAKE
Building upon customary water management arrangements	
There are many practical steps you could consider to build upon customary water management arrangements:	
• Are the water charges levied effective in encouraging more efficient use of water? Do they raise enough revenue to cover the costs of collection?	➔ Consider whether charges, if required, could be levied and utilised locally?
• If there are traditional conflict avoidance or management systems in place:	➔ Seek to utilise and build on these systems as appropriate (see examples 1, 2 and 6).
• Are there problems in setting abstraction limits because of large seasonal fluctuations in available water resources?	➔ Consider using volumetric caps to manage wet season abstractions (based upon a formal centrally managed system), and proportional caps to manage dry season abstractions (managed by users based upon flexible customary arrangements) etc
• Are you encouraged to promote 'participation' and 'grassroots involvement' in your activities?	➔ Consider understanding and supporting customary water management arrangements as a concrete way (entry point) to encourage grassroots participation

Example 7: *Practical steps for building upon CWMA from the Rufiji*

In Rufiji, the Rufiji Basin Water Office started by identifying basin-wide priorities and those functions that were best performed by the RBWO. This recognised that many management functions could be successfully undertaken at lower levels:

• Allocation	Local people organised under their irrigation canals and furrows committees or groups can allocate water, while village governments regulate access.
• Access conflicts	Can be mediated by village elders as well as formal law courts.
• Pollution control	Can continue to be the responsibility of regional water engineers, who have the laboratories to execute the function. This function may also be assisted by village bye-laws which restrict cultivation close to streams in order to reduce the risk of pollution.
• Environment protection	This function can be undertaken in cooperation between village governments, ward, division and district councils.

Further materials and information

You can find further information in the following documents:

- *Accommodating customary water management arrangements to consolidate poverty-focused water reform: A policy brief* www.nri.org/waterlaw/reports
- Case studies (33 papers) presented at the *African Water Laws Workshop*, 26-28 January 2005, Johannesburg www.nri.org/waterlaw/workshop
- Plenary statement of the participants at the *African Water Laws Workshop*, 26-28 January 2005, Johannesburg www.nri.org/waterlaw/workshop

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