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IWRM in Uganda – Progress after Decades of Implementation

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ABSTRACT: Uganda lies almost wholly within the Nile Basin and is a country characterised as well-endowed with water resources. Receiving considerable inflows of aid since the early 1990s, some of this aid emerging after the 1992 Earth Summit in Rio de Janeiro enabled the country to begin a process of Integrated Water Resources Management (IWRM), taking the lead from Chapter 18 of Agenda 21. With a focus on more comprehensively managing the country's critical water endowment amidst growing pressure on the resource, bilateral technical assistance and financial support played a large part in backstopping these national efforts. Nevertheless, in spite of this support and government backing, some two decades later implementation on the ground remains thin and the exercise of IWRM in practice is limited. This paper examines the Ugandan IWRM experience and identifies complex political-economy issues lying at the heart of current challenges. It argues that rarely is there likely to be an easy fix to sustainable financing and suggests the need for stronger citizen engagement and buy-in to the wider logic of IWRM to support longer-term effectiveness and sustainability.

KEYWORDS: Water Policy, IWRM, governance, decentralisation, political economy, development, Nile, Uganda

INTRODUCTION

Uganda has reached far into implementation of the IWRM Framework. An IWRM process was started in Uganda in 1993, at a time when civil strife had caused the breakdown of all water monitoring and information systems, when institutional capacity was at a record low and when water policy and legislation was rudimentary. Ten years later, the IWRM framework has been built up to a degree where Uganda has asserted its role in the Nile Basin, where a consistent policy and legislation provides the guidance and rules for priorities of water use, allocation and wastewater discharge and where stakeholder participation and decentralisation provides local involvement. The identified programme activities in the Water Action Plan 1994 has [sic] provided the road map for this development which has resulted, among others, [sic] in empowerment both at local, regional and international level (Jønch-Clausen, 2004).

This early and optimistic portrayal of IWRM progress in Uganda ten years after its introduction came from a well-known global leader of the concept and approach, closely involved in the Global Water Partnership. More widely, this was a period of optimism, coming shortly after Rio +10 Earth Summit and its expectation that all countries would have produced IWRM plans by 2005.

The UN Conference on Environment and Development held in Rio de Janeiro in 1992 had been a defining moment in global water policy, with a shift towards 'Integrated Water Resources Management'

(IWRM). This resulted from a pre-Summit meeting involving international water institutions which sought to shape the water policy narratives arising out of Rio. The 'Dublin Meeting'¹ succeeded in this task through launching a set of four core principles that would provide a foundation for water policy development at a global level (see Muller, 2011): 1) Freshwater is a finite and vulnerable resource, essential to sustain life, development and the environment; 2) Water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels; 3) Women play a central part in the provision, management and safeguarding of water; and 4) Water has an economic value in all its competing uses and should be recognised as an economic good.

Principles No. 2 and No. 4 in particular became embedded in the formulation of IWRM as a policy approach, with policy actors emphasising the notion of water management at the lowest appropriate level; in effect, meaning the engagement of local water users within catchment-level institutions. Combined together these broad concepts forged a new policy discourse at an international level with a focus on user participation and payment for water usage through the issuing of permits.

Uganda's emergence as an early adopter of IWRM (Jønch-Clausen, 2004) emerged from the new government's strong relationship to the donor community.² The political leadership embarked on policy development that reflected principles of democratic decentralisation, market and trade liberalisation and private-sector engagement in service provision (Crook and Manor, 1998).

The geographic location of Uganda within the Nile Basin further enhanced interest in donor engagement. Since the early 1990s, Nile countries had begun to benefit from the end of Cold War politics. This unlocked development potential, a factor seized upon by donors, including the World Bank (Nicol and Cascão, 2011), and led the World Bank and others to launch the Nile Basin Initiative (NBI) in 1999. Entebbe, Uganda, was chosen as the base for the NBI Secretariat³ reflecting Uganda's strong commitment to new paradigms of water management, including its willingness to support the NBI.⁴

Uganda's readiness to undertake new policy directions was also a response to the challenging legacy of preceding years of conflict. Pressing development issues included the transformation to more productive rural economies, and tackling entrenched poverty, particularly in rural areas. In these areas where over 80% of people still live (PROTOS, 2011) low input-output subsistence production remained the norm. More widely, the Ugandan economy remains dominated by the four million farming households and, until recently, was driven by the production and export of the *robusta* coffee, most of which came from smallholders in specific parts of the country. In recent years, the government has provided few, if any, inputs to improve yields and marketing opportunities (Ahmed, 2012).

The government in tackling these development challenges has achieved some successes. The percentage of people living in absolute poverty, for instance, declined from 56% in 1992/3 to 24.5% in 2009/10 (GoU, 2013). The country also has a dynamic and developing service sector, though largely confined to urban and small town areas. On a wider basket of criteria, in 2014 Uganda was still ranked 163rd out of 188 countries (UNDP, 2015) illustrating the scale of the development challenge facing the country as a whole. It is within this context that the challenge for implementation of IWRM exists, and it is a challenge that is essentially based on the complex development pathways taking place in rural areas

¹ In full, the International Conference on Water and the Environment (ICWE) in Dublin, Ireland, held between 26 and 31 January 1992.

² See, for example, www.theguardian.com/society/katineblog/2009/may/26/uganda-and-poverty.

³ 98% of the country lies within the basin and in 1999 Uganda was chosen as host of the new Nile Basin Initiative Secretariat, Nile-SEC, in Entebbe.

⁴ Though beyond the scope of this paper, this translated into eventual disillusionment by upstream countries at the slow pace of change, a new investment environment (new players emerging) and, eventually, a shift to more unilateral project development. Whilst the NBI continues to function, it is substantially affected by tensions, particularly between Egypt and Ethiopia over the construction of the Grand Ethiopia Renaissance Dam and filling of the reservoir.

where nonfarm employment is scarce, agricultural extensification is the norm and balancing catchment development and protection with social change and economic demands presents a complex policy challenge.

One specific challenge in Uganda is the slower decline of poverty in rural areas (Barker, 2009) based, in part, on the lack of income sources that do not rely on exploitation of natural capital – for subsistence farming, to meet energy demands, and to provide for building materials and other artisanal occupations. Up to 90% of the population in rural areas still rely on available biomass for energy sources, particularly for cooking. At around 3.3% per annum, Uganda has one of the highest population growth rates in the world leading to an anticipated doubling to 100 million by 2050.⁵ This level of increase will substantially drive further competition for land and biomass energy sources, increase the exhaustion of soils, affect stream-flow and siltation and exacerbate problems of downstream flooding. Natural disasters in some parts of the country are a regular occurrence.⁶ Further encroachment is likely to take place in more marginal areas including vulnerable watersheds and on heavily-forested slopes. In and around Lake Victoria, one of the key catchment zones, large population concentrations are already employed in fisheries, drawn to the lake littoral for alternative livelihoods. This contributes to rapid urbanisation around the lake which is now seriously affecting water quality and, ultimately, damaging highly-productive fish stocks and the livelihoods of many communities (Barghouti, 2006). The need to manage shared catchments in the context of such rapidly-changing pressures is growing. Reforms that Uganda has been undertaking for over two decades now need to lead to achievements on the ground so that the ideas of IWRM can be translated into practices that achieve positive development outcomes. Uganda is not alone in facing this challenge, of course, as many chapters in this volume make clear. However, given the long gestation period of policy on IWRM in the country, there is a high level of expectation that it can and must deliver at ground level.

This article examines the experience of IWRM in Uganda from initial development of the concept in the early 1990s to current implementation across the country. It describes the progress of IWRM and assesses challenges related to translation of IWRM ideas into practice, including the complexities associated with transposition of catchment-based systems onto existing political-economic contexts. The first part of the article looks at the IWRM policy context to uptake and adoption in Uganda, including the country's pioneering experience after the Earth Summit. The second part then assesses the context for decentralisation in the country and the relationship to political economic change. The third section examines recent steps taken to implement IWRM, followed by an analysis of experience in the Albert Water Management Zone (AWMZ). Conclusions then focus on why the journey from ideas to implementation has taken so long, and argues that future success will lie in more strongly embedding the development logic of IWRM in local institutions and communities. The approach taken focused on a literature review combined with in-depth examination of experience in one catchment through field visits and key-informant interviews. These interviews were conducted during August and September 2014 in Kampala and in the AWMZ. Experts on water and natural resources management were carefully selected based on experience of the IWRM process. NGO workers and IWRM leaders or implementers at the local level were selected with the help of the Albert Water Management Zone technical office of the Directorate of Water Development.

⁵ Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2012 Revision, <http://esa.un.org/unpd/wpp/index.htm>

⁶ www.monitor.co.ug/News/National/Landslides-bury-five-villages-in-Bududa/-/688334/1944328/-/ji1lwz/-/index.html

IWRM IN POLICY DEVELOPMENT

Emerging from the Earth Summit in 1992, the key output was Agenda 21 (for water, Chapter 18) which made explicit the need to implement IWRM (see details in box below). According to Jønch-Clausen, Uganda became the first country to follow these new, internationally-agreed, principles (Jønch-Clausen, 2004), in part because of its existing engagement in the Nordic Fresh Water Initiatives, led by Danida, that had emerged out of an earlier Copenhagen Conference.⁷

With technical and financial support from Danida, Uganda embarked upon the first National Water Resources 'Water Action Plan' (WAP) from 1993 to 1994 before IWRM had been fully refined as a policy prescription. The now widely-accepted IWRM troika of 'enabling environment', 'institutional framework' and 'management instruments' was developed under the Ugandan WAP, and later adopted by GWP in its articulation of IWRM during the mid-1990s. Uganda's early experiment, in other words, became an important part of an internationally-emerging experience of IWRM development.

The Post-Rio Agenda: Agenda 21 – the major product of Rio – included a key chapter on water, Chapter 18. The major thinking processes behind IWRM are included in the following section:

18.8. Integrated water resources management is based on the perception of water as an integral part of the ecosystem, a natural resource and a social and economic good, whose quantity and quality determine the nature of its utilisation. To this end, water resources have to be protected, taking into account the functioning of aquatic ecosystems and the perennality of the resource, in order to satisfy and reconcile needs for water in human activities. In developing and using water resources, priority has to be given to the satisfaction of basic needs and the safeguarding of ecosystems. Beyond these requirements, however, water users should be charged appropriately.

18.9. *Integrated water resources management*, including the integration of land- and water-related aspects, should be carried out at the level of the catchment basin or sub-basin. Four principal objectives should be pursued, as follows:

(a) To promote a dynamic, interactive, iterative and multi-sectoral approach to water resources management, including the identification and protection of potential sources of freshwater supply, that integrates technological, socioeconomic, environmental and human health considerations;

(b) To plan for the sustainable and rational utilisation, protection, conservation and management of water resources based on community needs and priorities within the framework of national economic development policy;

(c) To design, implement and evaluate projects and programmes that are both economically efficient and socially appropriate within clearly defined strategies, based on an approach of full public participation, including that of women, youth, indigenous people, and local communities, in water management policy-making and decision-making;

(d) To identify and strengthen or develop, as required, in particular in developing countries, the appropriate institutional, legal and financial mechanisms to ensure that water policy and its implementation are a catalyst for sustainable social progress and economic growth.

See: www.earthsummit2002.org/ic/freshwater/reschapt18.html

According to officials involved at the time, Danish experts were keen on policy development and wanted separate laws and policies for water supply and water resources management.⁸ Uganda decided to have one law with two sections covering Water Supply and Water Resources Management,

⁷ Copenhagen informal consultation on integrated water resources development and management, 11-14 November 1991.

⁸ Interview with Patrick Kahangire, former Director, DWD, September 2014.

for reasons of simplicity and institutional alignment. The WAP underpinned the sector reform process and enshrined the concept of water as an economic good with an economic value attached. This was again reflected in the Water Statute completed in 1995 and in the 1999 National Water Policy.

Under the substantial 14-document WAP published in 1995, Uganda established four sub-sectors covering rural water, urban water, water for production and water resources management (DWD/WWAP, 2005). This included preparatory work and action plans (10 out of the 14 documents). It was envisaged that in the first stage of implementation the technical unit would become a permanent WAP Implementation Unit with the following basic tasks to enable full roll out of the reforms:

- Provide general support to implementation of the WAP Action Programme.
- Formulate project proposals and support the Directorate of Water Development and the Ministry of Water and Environment (MoWE) to arrange funding from government and other sources for implementation of activities.
- Liaise with other projects to carry out monitoring functions within the water sector.
- Assist the DWD to develop a permits system for abstractions and wastewater discharge (in the absence of more permanent arrangements).
- Report to the Water Policy Committee (WPC) on progress and constraints, the WPC being the overseer within the sector.

The 12-member multi-sector Water Policy Committee (WPC),⁹ also established under the Water Statute (1995), was regarded as a way of promoting IWRM nationally and would develop and guide the strategic management of water resources within Uganda. Under the plan, Catchment Management Committees would carry forward the roles and responsibilities of the Water Policy Committee at a local level. As an advisory body, the WPC, was also expected to undertake conflict resolution between national authorities where these arose in relation to water management, a challenge anticipated as new legislation was drafted and began to be implemented across a range of sectors and geographic areas.

Further impetus for IWRM came from the wider East Africa Region, particularly with the establishment of regional bodies during the 1990s. Kenya, Tanzania and Uganda individually prepared a National Environmental Action Plan (NEAP) in this period, acknowledging that Lake Victoria and its catchments required urgent action to address resource management degradation through regional cooperation. The NEAPs focused on issues including water pollution, biodiversity loss, land degradation, deforestation, and damage to wetlands. Discussions to broaden regional environmental cooperation covering the Lake Victoria Basin started in late 1992 and by 1994 the three governments had agreed to jointly prepare and implement the Lake Victoria Environmental Management Programme (LVEMP), to be funded by the World Bank and the Global Environment Facility (GEF).

The programme aimed to restore a healthy, varied ecosystem addressing issues such as declining biodiversity, oxygen depletion in the lake and reduced water quality (Barghouti, 2006). In particular, LVEMP reflected the dominant ecosystem discourse coming out of the Earth Summit discourse (LVEMP, 2003). To a significant extent, LVEMP I helped to raise awareness about natural resources issues amongst Ugandans and, according to a key official at the time, "There was need to get a critical mass

⁹ Permanent Secretary in the Ministry responsible for Water Resources; Executive Director, National Environment Management Authority; The director responsible for irrigation; The director responsible for Animal Industry and Fisheries; The commissioner responsible for Industry; The commissioner responsible for hydropower; One District Resistance Council Chairman (appointed by Minister); One Chief Administrative Officer (appointed by Minister); The Managing Director National Water and Sewerage Corporation; Two persons having special qualifications or experience relevant to the functions of the Water Policy Committee (appointed by Minister); The Director of Water Development.

behind this concept [IWRM], and in Uganda and East Africa LVEMP1 had the biggest impact in building capacity and creating awareness".¹⁰ LVMP1 was the biggest force behind IWRM in Uganda, he argues, not least because its focus on Lake Victoria included support for 50 doctorates, 100s of Masters and thousands of other [qualification] levels, many of which built on concepts of IWRM and helped instil wider consciousness of the approach.¹¹

In conjunction with the arrival of IWRM in national policy, Uganda had also begun moving rapidly towards a more decentralised system of governance. In 1995 Uganda adopted a new constitution which charged the government with responsibility to hold the natural resources of Uganda in trust. This was followed in 1997 by the promulgation of the Local Governments Act. In parallel with the 'lowest appropriate level of water management', this Act enshrined governance over development processes at lower levels, with substantial stakeholder involvement. A year later the Water Resources Regulations, Water Supply Regulation, Environmental Impact Assessment Regulations, National Environmental Waste Management Regulations and the National Environment (Wetlands, River Banks and Lake Shores Management) Regulations (1999) were also completed. This draft of new legislation triggered by Rio, described as a "lot of laws in Uganda",¹² underscored the close donor engagement in Uganda's planning and policy-making, but also created considerable complexity. This complexity overlay an already-challenging political-economic environment in which a thrust towards greater decentralisation of government had become a centrepiece of development policy. It also, however, revealed the difficult interrelationship between governance of resources under IWRM and wider institutions of government at a local level. This political-economic challenge subsequently affected IWRM implementation in Uganda. The following section examines these factors in relation to the emergence and development of the country's decentralisation agenda.

LESSONS FROM THE DECENTRALISATION AGENDA

Uganda's government undertook rapid decentralisation¹³ during the 1990s, reflecting prevailing democratic decentralisation discourse of the era. After Idi Amin Dada's government was overthrown in the late 1970s, governance shifted from increasingly autocratic rule by decree to governance through Local Resistance¹⁴ Councils under the Statute of that name promulgated in 1993. This established the LC3 as the basic administrative and political unit of local government, thereafter written into the 1995 Constitution of the Republic of Uganda and enshrined in the Local Governments Act of 1997 (Steiner, 2006). Whilst this decentralised governance ostensibly meant more popular control of local affairs, in many ways it enabled the government to exert greater political control. At the time, it was described as one of the most radical devolution initiatives in an era of decentralisation and was in step with the World Bank and other agencies pursuing an agenda of smaller government, and more democratic decentralisation.

As a political strategy by the ruling party the District Council – LC3 – became the main political organ of local government. Members of the Council would be regularly elected and the executive organs at different local government levels were in charge of collecting and implementing plans from lower levels. In theory at least, these reflected higher levels of policy and planning. This bottom-up process suggested grassroots participation, but in practice proved difficult to sustain. Under this policy, national

¹⁰ Interview with Mr. Tom Okurut, former Director of the LVBC, September 2014.

¹¹ Ibid.

¹² Ibid

¹³ A process of devolving political, fiscal, and administrative powers to subnational units of government (Burki et al., 1999 cited in Cammack et al., 2006).

¹⁴ The term 'resistance' was with reference to their establishment within liberated areas (Cammack et al., 2006).

government was responsible for the provision of public goods (defence, security and foreign relations) and guiding policy-making, whilst local authorities delivered key local public services (Steiner, 2006). The major challenge lay in financing these responsibilities. Local councils needed funds, so some level of fiscal decentralisation was necessary to enable the collecting of local taxes and fees as well as receipt of conditional grants from the central level. In practice, significant challenges rendered the responsibility and (to some extent) capacity, but not the resources necessary to deliver services to local communities. Proceeds from local taxation were generally very low – not least because of the low taxation capacity of rural communities – and in most cases transfers from the centre made up the bulk of income received by local government, reaching as high as 90% in the mid-2000s (ibid). Central government continued to control local financing processes.

Resistance to relinquishing control from the centre came from different directions. Line ministries were concerned at loss of fiduciary influence (and budget), which led them to maintain direct control over decision-making under the key Poverty Eradication Action Plan (PEAP) policy. Up to 80% of funds transferred from the centre were, in fact, earmarked or conditional with ministries concerned about perceived weaknesses in local government financial decision-making and scrutiny. Another additional incentive for re-centralisation in fact came inadvertently from donors themselves. With the emergence of Sector-Wide Approaches as a way of disbursing aid under the Paris Protocols, this served to privilege decision-making and financing processes at the centre, including within the water sector.

Other processes that challenged fiscal decentralisation (and in effect impaired the whole project of decentralised government) included gradual politicisation of taxation as opposition to the government strengthened in advance of the 2005 election. This was caused by a sense of general politicisation of taxes¹⁵ by the government, accompanied by arbitrary, regressive and sometimes forceful collection practices. In addition, there was a lack of awareness about tax collection and service delivery links, causing the collection of low overall tax returns (Steiner, 2006). Local governments were left with insufficient funds to fulfil basic provision of goods and services, a problem compounded by the growth in so-called new districts (Cammack et al., 2007). District subdivision could reward loyalty, through providing new jobs and resource allocations, in spite of the additional administrative complexity generated. It did not however, compensate for capacity needs in the new districts and frequently left new districts bereft of administrative and technical capacity.

This had the net effect of hindering emerging catchment management (Bratton and van de Walle, 1997 cited in Cammack et al., 2006). As one early proponent of IWRM implementation comments:

With decentralisation, now we have districts with no resources. You may also find 39 districts in a (Water Management) Zone. It is a nightmare coordinating them. You also have people with different interests within the catchment. A district environment officer may, for example, feel you are trespassing in his docket when bringing in IWRM.¹⁶

This complexity of the political-economic development environment should not be underestimated in assessing the challenge of IWRM implementation and in the Uganda case, it has continued to hinder the practice of IWRM beyond the development of organisational structures and plans.

A generally poor taxation environment and dependence on central transfers was combined with low educational levels amongst councillors. Without an effective relationship between the Chief Administrative Officer (executive branch) and the Council Chairperson (elected official), decision-making could become paralysed, as Steiner notes: "Due to the clash between these two functionaries...

¹⁵ For example, the use of the subsequently-abolished graduated personal taxes for campaign purposes in the 2001 Presidential election (when the opposition had called for abolishment in their manifesto), led to widespread reluctance to pay the tax and an overall drop in collections (Steiner, 2006).

¹⁶ Interview with Mr. Patrick Kahangire, former Director, DWD, September 2014.

council meetings were not so much dedicated to development or poverty-related issues but rather to argument about the distribution of power" (Steiner, 2006: 14). These systemic and political-economic factors challenged the achievement of IWRM management at the 'lowest appropriate' level. The assumption inherent is that management at this level is relatively simple. The reality, revealed by experience in Uganda, is rather one of complex environments with demands placed on people and institutions that are difficult to address.

Even key proponents of democratic decentralisation, the World Bank, identified limitations in the process in Uganda. In 2000, an assessment team concluded that the coverage of infrastructure and services at the subnational government level posed a "considerable challenge" with coverage "far behind" the needs of the population (Obowona et al., 2000 cited in Cammack et al., 2007). Other analyses pointed to capture of political (electoral) processes by the local elite in LC1s through the distribution of simple largesse, including basic household products (Francis and James, 2003 cited in Cammack et al., 2007). The conclusion reached was that at a local level decentralisation had helped to create and strengthen an elite which then managed to consume much of the "locally generated revenue as well as the non-conditional grants from central government" (Cammack et al., 2007: 39). These political-economic challenges persist and continue to grate against the capacity to mobilise effectively local populations and institutions in support of IWRM implementation at the catchment level and below.

The political ups and downs of Uganda electoral cycles led to direct politicisation of local government in 2005 when the Constituency Development Fund was introduced and a sum of USD6,000 was given to each MP to "supplement development funding by central and local government" (Cammack et al., 2006; 39). Whilst these MP funds could help support local development activities, in reality they were likely to oil further neo-patrimonial politics. With the relocation of control over finances from the centre at the same time this placed emphasis on local officials 'staying in favour' with the ruling party. This also reduced incentives to prioritise local development interests (Cammack et al., 2006). The challenges of such a situation persisting in relation to IWRM relate to the essential fragmentation that this can pose within catchments, where several districts may share a catchment, with competing political interests in different districts combined with strong neo-patrimonialism driving local-level decision-making.

With the abolition of graduated tax at a local level the link between payment of taxes and delivery of services was effectively broken. This meant that an important accountability mechanism with, and for, the local population ceased to exist, however unpopular the tax. Within this prevailing environment of decentralised administration, but financial recentralisation, it is worth questioning the logic of IWRM at 'the lowest appropriate level' and asking whether local user-driven implementation can actually survive and prosper in an environment such as that of Uganda.

THE FINAL THRUST TO IWRM IN PRACTICE – CURRENT CHALLENGES

In the early 2000s it became clear in Uganda that implementation of IWRM given capacity and other institutional constraints¹⁷ would remain slow unless a stronger institutional framework could be created. A Water Resources Management Reform Study (led by COWI¹⁸) between 2003 and 2005 set in motion a shift from more centralised management to a catchment-based WRM system under which the country was divided into four Water Management Zones (WMZs – see Figure 1 below).

¹⁷ An FAO consultant noted that in the late 1990s, a single person was running the Water Right Administration Unit.

¹⁸ A Danish consulting firm.

Figure 1. Water Management Zones established in Uganda.¹⁹

Source: MoWE, Uganda

This more intensive and focused approach bridged the emerging gap in operational capacity at a local level between articulation of a sectoral policy discourse on IWRM and the hard realities of political-economic governance described above. The Ministry of Water and Environment was reorganised with the establishment of the Directorate of Water Resources Management in 2007 (Barker, 2009), part of which entailed increasing the capacity of water resources management, described by the then Director of Water Development as "institutional strengthening. In terms of skills there was now a team to promote Water Resources Management. The separation was a good ground for establishing IWRM".²⁰

This new institutional environment resulted from another 'global push' to IWRM – this time as a target under the MDGs. Launched at the 'Rio+10' meeting (the World Summit on Sustainable Development held in Johannesburg in 2002) the international community called for the development of "integrated water resource management and water efficiency plans by 2005", with the promise that "support [would be] given to developing countries". This presented a further opportunity for donor engagement in and financing of IWRM as a policy objective, with a renewed emphasis from European

¹⁹ Source: https://cmsdata.iucn.org/downloads/status_of_catchment_based_IWRM_in_Uganda.pdf

²⁰ Interview with Eng. Patrick Kahangire, then Director of Water Resources Development, September 2014.

countries under the European Union Water Initiative, reflecting the successful completion of the European Framework Directive, in which catchment management featured strongly.

By 2005, Uganda had dutifully published its Water Sector Reform Studies, analysing the four main water subsectors leading to a Strategic Investment Plan (SIP) the objective of which was to bring local government at all levels, as well as NGOs and the private sector, into the wider decentralisation context in Uganda (MOWE, 2009). This recognised explicitly that a major barrier to implementation was capacity for local operationalisation and meant moving beyond the water 'silo' whilst recognising that IWRM needed to be more embedded in local institutional environments. This bridging of water and wider governance arrangements set the scene for a complex process of policy implementation.

Shortly afterwards the Directorate of Water Resources Management (DWRM) was established with responsibility for developing and maintaining national water laws, policies and regulations, and managing, monitoring and regulating water resources through the issue of permits. It was also tasked with coordinating Uganda's engagement in Transboundary Water Resources Management (TBWRM), particularly given the opportunities for investment that had begun to arise under the NBI. Most importantly for IWRM, the DWRM became responsible for the national pilot sub-catchment projects that were planned across the country by 2015.

This new structure was to enable "holistic planning and equitable allocation of the available water resources (in any given sub-basin/catchment) to the various demands/users to avoid conflicts and to ensure long-term sustainability" (MoWR, 2013). The four WMZs were initially Albert, Kyogo, Victoria and Upper Nile. Each WMZ comprised different catchments (some transboundary in nature²¹) spread over varying numbers of districts. Each catchment was expected to establish a Catchment Management Organisation (CMO), supported by the WMZ team.

By 2015, four CMOs had been set up in the Rwizi, Albert, Mpanga and Semliki basins.²² Each CMO has a mechanism for stakeholder coordination including the Stakeholder Forum, Catchment Management Committee, Technical Committee and Secretariat (see Figure 2 below). Districts located within catchments are where activities are "to be implemented" (PROTOS, 2011), which suggests an assumption about the strength of linkages between the CMOs and district-level planning and development processes. Under this new process a number of non-governmental organisations have played a key role, particularly in the establishment of pilot projects.²³ In addition, an IWRM Working Group was established in 2013 under the Uganda Water and Sanitation Network, the official NGO water network in Uganda. The detailed structure of CMO development is captured in the Operationalisation of Catchment-based Water Resource Management (2010).

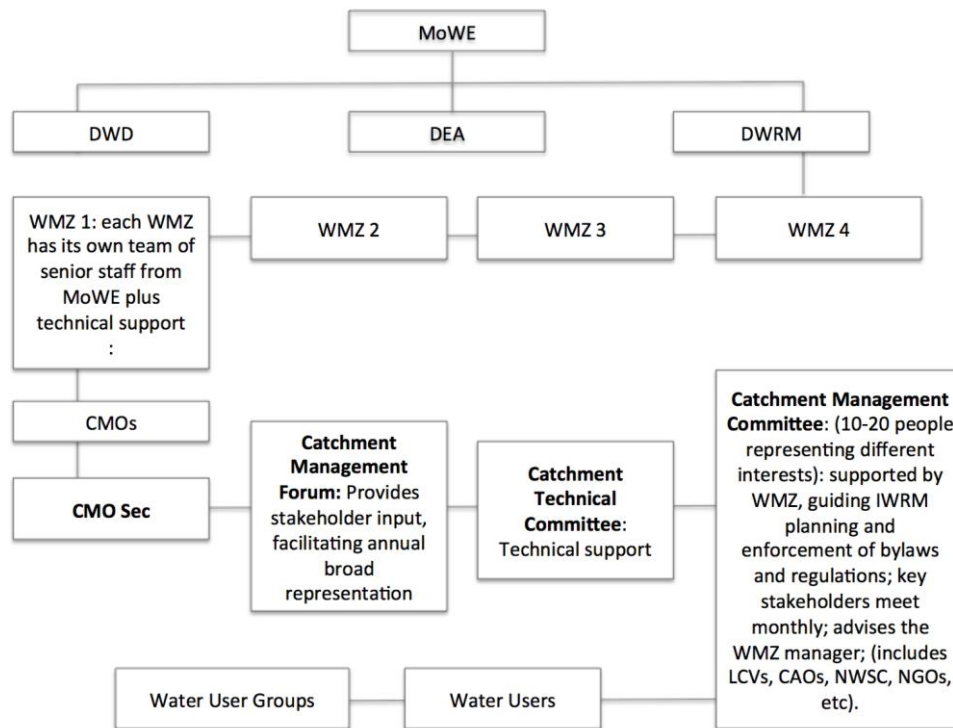
Given the growing linkage between IWRM implementation and structures of local government, the following section examines in more detail the experience of decentralisation and IWRM in one catchment and asks whether challenges encountered here have been partially responsible for the slow implementation of IWRM more widely in Uganda.

²¹ In one case, this added a particular complexity in shared catchments with Democratic Republic of Congo: "We have a challenge to work with the DRC on IWRM. The problem with Congo is the administration. You have chiefs and warlords there. It is quite complicated" (Herbert Kamuhanda, Personal communication)

²² An additional, but smaller pilot, was established under the International Union for the Conservation of Nature (IUCN) in Otuke District on the Awaz Sub-basin.

²³ Possibly linked to the growing NGO funding available for 'climate adaptation' projects.

Figure 2. The structure of water resources governance in Uganda (as at 2015).



Ministry of Water and Environment (MoWE); Chief Administrative Officer (CAO); Catchment Management Organization (CMO); Directorate of Environmental Affairs (DEA); Directorate of Water Development (DWD); Directorate of Water Resource Management (DWRM); Local Council Five (LCV); Water Management Zone (WMZ); National Water and Sewerage Corporation (NWSC).

RECENT EXPERIENCE IN THE SEMLIKI CATCHMENT, ALBERT WATER MANAGEMENT ZONE

The Semliki River flows from Lake Edward and drains in Lake Albert, contributing 63% of the lake’s inflow. The Semliki is augmented by rivers Mubuku and Nyamwamba, which flow from Mt. Rwenzori, before the river embarks on a 140 km journey to Lake Albert. Human demand for water is mainly for agriculture, much of which involves poor land management. Deforestation, fuelled by opening up increasing tracts of land for farming and an ever-growing demand for wood fuel and timber, has increased the risk of flooding and caused greater siltation of Lake Albert, including an ever-expanding delta at the outlet of the Semliki.

In July 2011, an AWMZ team of six arrived in the western Uganda town of Fort Portal from the DWRM. The team was sent to establish an office under which to facilitate implementation of IWRM in the Lake Albert catchment. The same process was ongoing in the other three WMZs in Uganda. This was part of what those involved in establishing the four WMZs called a 'big bang' approach – launching all four simultaneously.²⁴

The team was given one small room at the Technical Support Unit (TSU) 6 to start work. In the Semliki River catchment the NGO WWF had already begun a pilot project on IWRM in Uganda under the Semliki River Catchment and Water Resources Management Project. This was implemented in the

²⁴ Personal communication with Patrick Kahangire, former Director, DWD.

districts of Kasese, Ntoroko and Bundibugyo. Environment officers were the focal persons at the Local Government level. Other key groups included DWRM staff, the Uganda Wildlife Authority (UWA), National Environmental Management Authority (NEMA), National Water and Sewerage Corporation (NWSC) as well as Tronda Power and Kilembe Mines from the private sector. In 2011, they established institutional structures starting with water user committees at village level up to parish, sub-county and district levels. The role of the newly established WMZ officers was to help move pilot activities forward on a surer footing, with the establishment of effective procedures and guidelines.²⁵ As explained by the District Environment Officer:

We tasked members to move around registering every resource user (name, activity, telephone number). They were to elect nine people among themselves to form a committee and of the nine at least three had to be women and at least one woman should hold an executive post. One of the key principles of IWRM is that women play a big role in natural resources so they have to be recognised.²⁶

The purpose of these WUAs (combining farmers, cattle keepers, brick makers, sand miners and all other water users), is to guard against activities that are detrimental to the environment while undertaking restoration practices such as tree planting on river banks. After their formation, the associations were given laws and guidelines and WWF provided funding of between Shs 10 m (USD4,000) and Shs 20 m (USD8,000). However, the end of external funding under WWF ushered in the realities: According to a number of interviewees, following up on activities became difficult even on the part of the NGO because there were no funds. According to one WUA Chairman only recently had the DWRM reached local levels, and articulated the concepts behind IWRM.²⁷

One key institutional shortcoming is the lack of legal entity of WUAs under the Water Act. Hence, even if funds were available they would be unable to access them directly. This is a serious impediment given the essential principle of local action and responsiveness to local water management demands. This is also one of the reasons why the government has pursued an approach based on working with NGOs, given their local engagement and legal status.

According to Albert Orijabo, Principle Water Officer, AWMZ, "the law is being reviewed so that these new groups can be recognised and financed. But we have budget lines that, for example, support tree planting around river banks. We shall continue to work with NGOs to implement management activities". This underscores the virtually negligible budgets for natural resources management and the continued centralisation of water resources management at national level. According to one Community Development Officer, the local government provides a budget of just UGX100,000 (USD40) a year, from a total sub-county tax base of some UGX10 million (about USD4,000),²⁸ according to Hamda-Saadi Kibuuka, Community Development Office (CDO) Karusandara subcounty, Kasese. At the lowest end of the local government (LC1), where mobilisation for natural resources management is very critical, the system is completely broken. There are very sparse human and financial resources and to get any kind of community action going resources need to be provided directly to the 'officials'.²⁹

The challenge of sparsely-resourced institutions of management in acutely poor development environments is becoming a substantial impediment to realising the goal of management at the most appropriate level. Semliki Catchment Management Organisation, headed by the LC5 Chairman of Kabarole District, has had no impact since it was formed in 2012 according to some key informants. Clovis Kalegutsa, Chairman Mubuku-Nyamwamba Water User Association stated:

²⁵ Personal communication with Albert Orijabo, Principle Water Officer, AWMZ.

²⁶ Personal communication with Herbert Kamuhanda, Ntoroko District Environment Officer.

²⁷ Personal communication with Clovis Kalegutsa, Chairman Mubuku-Nyamwamba Water User Association.

²⁸ Personal communications with Hamda-Saadi Kibuuka, CDO, Karusandara sub-county, Kasese.

²⁹ Personal communication with Clovis Kalegutsa, Chairman Mubuku-Nyamwamba Water User Association.

The political part of local leadership is a problem. They are only interested in votes. From Water User Associations we formed a catchment organisation, which is full of civil servants and politicians. It is probably because of political reasons that the Semliki Catchment Organisation has not taken off. The guidelines were that this organisation would be constituted by top civil servants and politicians. The argument was that they should own the process since they are leaders.³⁰

One of the main challenges for local leaders – political and non-political alike – is that there is acute pressure to be responsive and identify immediate solutions to pressing problems. IWRM is not set up for such responsiveness and is rather longer-term in approach. Among local leaders interviewed there was a mixture of perceptions when it came to IWRM. One key issue was the lack of understanding of the interconnectedness of water management, land restoration and development. "There is a fundamental disconnect between water supply and environmental management. Many people can't link water supply to water management. For example, it is easier for a politician to understand digging a borehole than planting trees", stated one key informant in the WMZ.³¹ This was reinforced by the current Executive Director of NEMA, who stated that:

After the big push of LVEMP1, MoWE remained the key champion of IWRM and that is where problems came in. Right now, catchment zones are bringing other professionals on board but elsewhere people are looking at IWRM as a water affair. There is a silo structure at the top. Land use and soil conservation, for example, are not integrated. We have to ask questions such as: how is the Ministry of Agriculture contributing to IWRM?³²

CONCLUSIONS

*This thing is not yet politically accepted and adequately supported.*³³

The lineage of IWRM policy development in Uganda is long, but the experience of implementation on the ground relatively short. Given the challenge of externally-generated principles and institutional structures superimposed on a complex and dynamic political-economic landscape this is perhaps not surprising. However, there is real need now to bring IWRM into effective local-level management and planning of resource use within catchments as pressures on natural capital – land, water and forest and fishery resources – continue to grow. Without effective management of resources that provide a platform for many people's livelihoods, particularly in rural areas, there will be major challenges for future livelihood security. The balance between IWRM as a resource management tool and a development approach still needs to be effectively struck and articulated locally. As one informant

³⁰ a) Representatives of local authorities, councils and public bodies responsible for matters relating to water resources in the catchment area;

b) Representatives of any agency, department or organisation whose area of jurisdiction or any part of it falls within the catchment area;

c) Representatives of the business community operating within the catchment area concerned;

d) Representatives of nongovernmental organisations engaged in water resources management activities within the catchment area concerned;

e) Any other person who has demonstrated competence in matters relating to management of water resources - The Water (Deconcentration of Water Resources Management) Regulations, 2012.

³¹ Personal communication Albert Orijabo, Principle Water Officer, AWMZ.

³² Personal communication Dr. Tom Okurut, Executive Director, NEMA.

³³ Personal communication Patrick Kahangire, former Director, DWD.

stated: "There is the issue of poverty and livelihood. IWRM principles are looking at conservation. You are telling people 'don't lay bricks here' but they have to pay for their children's school fees".³⁴

In conclusion, the process of developing the policy framework in Uganda has taken time – over two decades. In this period the population of the country has effectively doubled and along with this increase, demand for resource access has grown, posing new institutional and governance challenges. Having been approached as a grand policy design flowing from international meetings via international agencies and government institutions, the concepts of IWRM are now meeting hard realities of local political economy and resource governance in Uganda. Not surprisingly there are challenges. Little prior consideration has been given to the embedding of catchment management institutions in local political and other processes, and this challenge remains to be adequately addressed. Two key ways forward are suggested:

First, local government needs to be brought into catchment management in a more substantial way. This is increasingly the case where local government and catchment management institutions are expected to converge and work together. Aside from (political) elite capture of the management institutions, which remains a challenge, there are wider questions of the financing relationship between local government, as implementers, and catchment organisations as planners. These processes are locally very political; catchment institutions are, to all intents and purposes, another layer of government intervening in the lives of local people and expanding the reach of the state into otherwise locally-governed natural resources spaces.

This leads to the second need, which is around the socialisation of the ideas of IWRM with the broader public so that its development logic is better appreciated by users. It may be that narratives focusing on development rather than resource conservation and management should be used more frequently and widely. As one key informant observed:

Defining the environment without including human beings takes you away from the real issues because the human being is an influencing factor, for example the impact of population growth. We need to define the environment correctly to understand that IWRM brings the human being to the centre.³⁵

People matter not just as participants, but also as users of resources and drivers of livelihoods from different landscapes. Their understanding and knowledge can become keys to the success of IWRM in Uganda, as champions of the approach, and, ultimately, as those to whom the actions of catchment organisations should be accountable.

The experience of Uganda shows that IWRM can be a long process of policy-making and institution-building; but also that its real development potential requires careful navigation of power and political economy realities at local levels. One key step forward entails the embedding of IWRM's core development logic in the local communities and institutions it is supposed to serve. This large, but important, task can help ensure the future uptake and sustainability of IWRM in Uganda.

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³⁴ *ibid.*

³⁵ Personal communication with Dr. Tom Okurut, Director, NEMA.

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APPENDIX: ACRONYMS

AWMZ	Albert Water Management Zone
CDO	Community Development Office
CMO	Catchment Management Organisation
DWD	Department of Water Development
DWRM	Directorate of Water Resource Management
GEF	Global Environment Facility
GoU	Government of Uganda
IWRM	Integrated Water Resources Management
IUCN	International Union for the Conservation of Nature
LVEMP	Lake Victoria Environmental Management Programme
MoWE	Ministry of Water and Environment
NBI	Nile Basin Initiative
NEAP	National Environmental Action Plan
NGO	Non-Government Organisation
PEAP	Poverty Eradication Action Plan
TBWRM	Transboundary Water Resources Management
UNESCO	United Nations Educational, Social and Cultural Organisation
WAP	Water Action Programme
WMZ	Water Management Zone
WPC	Water Policy Committee

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