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CASE STUDY

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Mara River  
Water users  
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WWF-Kenya / WWF Freshwater Practice

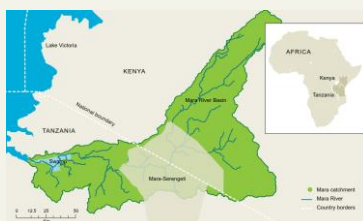
# KENYA'S WATER RESOURCE USERS ASSOCIATIONS

## Devolving responsibility for water management in the Mara river basin

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Map of the Mara river basin

### Introduction

The Mara river basin, at 13,750 sq km, is home to over a million people who largely depend on small-scale agriculture for their livelihoods. Safari tourism (the river passes through the famous Maasai Mara and Serengeti reserves) and tea and wheat production for export are the other main economic activities in the basin. As well as supporting livelihoods, the Mara river basin also hosts some of Africa's biggest wildlife populations.

The Mara river basin faces important challenges. Water quality is affected by wastewater discharges from urban areas and tourism facilities, as well as by non-point pollution and sedimentation from agriculture. In addition, increased abstraction of water is already an issue in the dry season, and a growing challenge. Population and economic growth will place increasing demand on water resources, and increased abstraction is likely to severely degrade the riverine ecosystem.

Reductions in river flow are also likely to affect the migration cycle of wildebeest in the Maasai Mara-Serengeti ecosystem. Disruption of such a significant natural process will change the entire structure of the ecosystem, as well as severely impacting



Wildebeests at Maasai Mara National Reserve, Kenya © Dennis Stogsdill



Large scale farm along the Amala tributary



The Mara wetland, Tanzania

the tourism industry that is so significant to Kenya's and Tanzania's economies.<sup>1</sup>

In response to these emerging water resource issues across Kenya, the Water Law was created and enacted in 2002. The Water Law reflects the Dublin Principles of 1992 - and the ensuing Integrated Water Resources Management (IWRM) paradigm - which call for local level participation in water management to ensure sustainable water use. It stipulated that the responsibility for water resources management in Kenya should be devolved to Water Resource User Associations (WRUAs) – i.e. voluntary organisations run by the water users themselves, working within the boundary of a river basin. In the Mara basin water users include small-scale farmers, pastoralists, schools, commercial farms, tourist lodges and other businesses.

In the first instance these WRUAs typically covered large areas and so a WRUA was set up for the entire Kenyan part of the Mara basin. In 2009 it was decided that the Mara WRUA was too big and it could not represent all parts of the basin effectively, and so it was split into six separate WRUAs. These WRUAs were further split after 2009 when the government issued guidelines for WRUA formation, stipulating that all WRUAs must cover an area of less than 200km<sup>2</sup>. They mapped out 32 WRUAs across the Mara basin, with 23 on the Kenyan side.

The idea was that WRUAs would be spearheaded by, and perform activities on behalf of, the government Water Resources Management Authority (WRMA). WRMA was established through a gazette notice in November 2003 and operationalized in July 2005. It is a national institution with six regional offices that are based on river catchments, assisted by Catchment Level Advisory Committees. WRUAs are meant to provide a platform for stakeholder engagement at the grassroots level.

### What did we do?

The devolution of water resources management in Kenya was welcomed by WWF-Kenya: we believe that water issues are best resolved through multi-stakeholder deliberation, decision-making and action. We also believe that empowering community-level organisations to manage their own water resources helps foster a greater sense of responsibility for their

<sup>1</sup> Assessing Reserve Flows for the Mara River – Kenya and Tanzania, 2010. Lake Victoria Basin Commission of the East African Community and WWF Eastern and Southern Africa Regional Programme Office (WWF-ESARPO)

### Mara basin WRUA characteristics

- They are voluntary organisations: membership is voluntary and members carry out activities on a voluntary basis.
- They are set up for sub-catchments, or parts of sub-catchments, and cover an area of no more than 200km<sup>2</sup>.
- They have to source their own funding, and so many rely on membership contributions or from support from donors or NGOs like WWF.
- There is an “umbrella” WRUA which has representatives from each sub-catchment WRUA and represents water users across the Kenyan part of the Mara basin.

protection, thereby helping to improve river ecosystem health and ensure cleaner and more reliable water supplies.

We therefore responded to the Kenyan Government's policies and worked with WRMA to support the establishment and strengthening of 23 WRUAs in the Mara river basin. It became clear that WRMA, despite its legal mandate, had extremely low capacity and scant resources for establishing WRUAs as well as a clear unwillingness to devolve responsibilities. We therefore felt there was a role for us to support WRUA establishment, ensuring they become inclusive, effective and sustainable organisations.

We started out by making the case for WRUAs with communities, explaining their potential benefits. However, we were careful to ensure that new WRUAs responded to a clear need articulated by the communities themselves. The driver for forming each WRUA varied: in the lower basin water scarcity was the biggest concern and people wanted support with illegal abstraction and conflict resolution. Meanwhile, higher up in the basin, people were more concerned with soil loss from farms during heavy rains, affecting farm fertility and water quality. Many could also see the benefit of the WRUA in giving them a voice and helping them to access water and engage in decision-making processes.

Once the need for a WRUA was clearly articulated, we then supported its establishment and strengthened its capacity on a number of fronts, explained further below.

### How did we do it?

Specifically, our support to WRUAs has involved the following:

- **Acting as a catalyst for WRUA creation:** we've usually done this by initiating a meeting with village chiefs and water users. We give them space to raise the issues they've had in relation to water, listen to others and air conflicts. We describe what a WRUA is, how it works, and the benefits of users coming together to manage water.
- **Supporting the establishment of WRUAs:** a constitution is developed which stipulates the objectives and operating principles of the WRUA, as well as details such as geographical area and the roles of the management committee and officer bearers. A constitution is required for registration. Developing and agreeing the constitution usually requires several meetings and much discussion. We have facilitated discussions but not led them, to ensure they own their constitution. We've therefore attended only some

meetings and given space for the WRUA to make decisions for themselves.

- **Supporting the registration of WRUAs:** someone is selected as a point of contact and they then register everyone who wants to be involved. Each sub-catchment is divided into three sections (upper, middle and lower) and representation has to come from each section. We make sure everyone understands what is required of them. The WRUA is formally registered with the Registrar of Societies at the Attorney General's Chambers. The registration provides the WRUA with legal status to operate, open bank accounts, hold assets and enter into legal contracts. A registered WRUA then signs an MoU with WRMA which sets out the roles and responsibilities with respect to water resources management activities, helping to facilitate collaboration between the two parties.
- **Guiding WRUAs through the development of sub-catchment management plans (SCMPs):** A SCMP is an analysis of the water resource problems within the sub-catchment and a set of prioritised activities to address these over a period of three to five years. The SCMPs are guided by the Catchment Management Plan for Lake Victoria South Area and therefore incorporate basin level objectives.<sup>2</sup> The SCMP is used as a guiding document and also as a fundraising tool for the WRUA. Producing a SCMP requires conducting sub-catchment "transect walks" to gather information about land-use; identifying priority actions for the sub-catchment under a set of themes; developing a draft; and holding a validation workshop.
- **Building the capacity of WRUAs for fundraising:** funds need to be secured for the activities identified in the SCMPs, so we have conducted training in proposal development. Funds have been available from various donor projects (e.g. USAID, Dutch Embassy project), the transboundary Lake Victoria Basin Commission, but also from WRMA via the Water Services Trust Fund (established along with WRMA with the Water Act). The Water Services Trust Fund was established to pool donor funding and provide seed funding for WRUA establishment. However, recently funds have been shifted towards water services provision. This remains an area of concern, discussed further below.
- **Working with WRMA to help define and strengthen the role of WRUAs,** and their role in supporting them. This has included encouraging them to hand over

<sup>2</sup> See Government of Kenya 2009, WRMA Strategic Plan

## WAYS WRUAS HAVE IMPROVED

### FARMING AND LAND MANAGEMENT

#### PRACTICES:

- protecting riparian land through demarcation and removing “thirsty” trees, namely eucalyptus
- planting riparian land with native, less “thirsty” vegetation such as bamboo
- protecting springs and creating drinking areas for cattle - thereby guarding against bank erosion and fecal contamination
- creating tree nurseries
- contouring steep slopes and planting strips of napier grass to prevent loss of top soil
- planting drought resistant varieties of crop
- installing fuel efficient stoves to reduce the dependency on eucalyptus timber and charcoal (charcoal making is causing encroachment into forested areas)

responsibility for certain activities to WRUAs - for example, monitoring flow and quality and collecting water user fees.

- **Working with the umbrella WRUA** (formally the Mara WRUA), to generate political support for WRUAs with county and national government; and also pushing for specific policies with respect to WRUAs. The county government is particularly important to influence because they have the mandate for land-use planning.
- **Conducting capacity building and extension work to improve agricultural practices** in order to protect land and water sources. This is done in collaboration with the county agriculture officer, and with technical support from the Kenyan Agricultural Research Institute. Details of the activities are given in the box on the left hand side of this page.
- **Supporting WRUAs with other activities** such as abstraction surveys, promoting the concept of catchment conservation, reporting abstractors to WRMA and advising on the issuance of permits.

### What have we achieved?

In total we've helped establish all 23 WRUAs across the Mara, and 21 have been registered. Each WRUA is at a different stage of development. There are five or six that we have worked with really closely and are now relatively strong. One clear indication of their strength is that now we get invited to their AGMs as observers, whereas before they wouldn't have held AGMs without our support. Another indication is that they have been able to secure funding through writing proposals.

As a result of our work, we have seen a major improvement in local awareness about the management of land and water resources. Back in 2009, people didn't know who WRMA were and what their purpose was, and there was little control over water use. Now, through the existence of WRUAs and their regular meetings, many more people understand the rationale for improving land and water management, techniques to do this, and their legal rights and obligations.

The establishment of WRUAs has also provided a new forum to convene water users and other stakeholders to discuss water issues and come up with solutions. In particular, it has improved the communication between government authorities (such as WRMA) and water users, helping the government better understand and respond to the issues, challenges and opportunities facing local communities. This is particularly useful in places like the Mara basin where government



A WRUA member tests the water near Bomet in Narok, Kenya © Kate Holt / WWF-UK



Seedling trees the WRUA plant along the Mara riverbanks © Kate Holt / WWF-UK



Measuring erosion rates on a small farm



Nyangores WRUA office with the WRUA secretary, John Koech

authorities have a limited presence on the ground and suffer from restricted capacity and limited financial resources.

Some WRUAs are also beginning to demonstrate their authority. Water abstractors are being checked and registered, and illegal activities reported. For example, the Talek sub-catchment WRUA took a hotel to court for dumping sewage in the river. Since then, people have become more aware of the existence of WRUAs and the need to be more accountable for their actions, causing a reduction in infractions.

The WRUA also provides the only platform through which to channel funds for safeguarding water resources. As one WRUA secretary said, *“if you got rid of WRUAs all our rivers will dry up because no one will be talking about protecting the river - we need WRUAs”*.

Some of the specific successes we have seen as a result of our work with WRUAs are set out below:

- Protection of riparian land and water sources – for example the 30km-long Chepkositonik tributary has been completely rehabilitated through demarcation of the riparian zone, removal of eucalyptus trees and cultivation of less “thirsty” native species.
- Increased yield and income for farmers through on-farm measures to reduce soil erosion. In particular, buffer strips of napier grass have helped retain soil on steep slopes, but have also provided fodder for dairy cows, increasing milk yields dramatically. Over 500 farms (1028 acres) have been rehabilitated through such techniques.
- Transformation of bare, degraded land through agro-forestry. This has been particularly successful in the Nyangores and Egare Ngito tributaries where over 500 farmers have transformed their land through growing trees such as grafted avocado.
- Reduced illegal disposal of waste in rivers, particularly effluent from hotels and towns on the Talek tributary.
- Reduced conflict over water resources, particularly between the pastoralist communities and the safari hotels and lodges on the Sand River tributary.
- Reduced illegal abstraction – for example, in the Nyangores sub-catchment the WRUA has been able to identify most of the major abstractors and report them to WRMA.
- Reduced sediment load reported by farmers in the small streams draining farmland where soil conservation practices have been adopted.

## Next steps

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**A clear exit strategy.** In a context like the Mara river basin where there is little historical precedent for participatory platforms, consistent external support in the form of resources and guidance has been essential to help them to gain legitimacy, generate incentives for membership and plan for sustainability. Eventually, we want WRUAs to be robust, vibrant community organisations: completely independent and financially sustainable. However, many WRUAs remain dependent on WWF for securing financial and technical support, and for acting as mediators between the water users and government.

We are therefore gradually stepping back, focusing on activities that will enable the WRUA to be self-sufficient and achieve social legitimacy without WWF. This involves ensuring clear WRUA objectives and management plans; securing incentives for participation; and establishing a pathway towards sustainable financing. We must also continue to empower WRUAs, reminding them of their powers under the legislation, particularly in terms of being consulted on and approving any new development or water abstraction.

**Lobbying for WRUA powers.** We will continue to lobby for WRMA to recognise WRUAs as their agents and to devolve sufficient responsibility and resources to WRUAs so they can implement this mandate. If the WRUA is allowed to retain a small percentage of water user fees to fund their activities this will be a key step towards achieving self-sufficiency. Indeed, if WRUAs are made responsible for fee collection they are likely to collect more revenue than WRMA due to the greater access they have to users. The Kenyan Forestry Service has adopted this model and has reported improved forest management and increased revenue generation as a result of the partnership. We are therefore planning, with WRMA's blessing, to initiate fee collection by a WRUA in one sub-catchment. This would demonstrate that WRUAs are sufficiently responsible and have sufficient funds to collect fees, *and* generate greater funds for WRMA.

Some progress on this front was made in 2011 when a MoU was signed between WRMA and the umbrella WRUA, stipulating that the WRUA would collect fees from water users and carry out monitoring. This has not yet been put into practice by WRMA - however, they are discussing with Nyangores WRUA how they can assist in collecting water quality data. We hope this will demonstrate the WRUA's capability and convince WRMA to delegate fee collection to them.

### WRUA check list

- A WRUA must respond to a clear need articulated by the community.
- A common understanding is needed with government institutions on what sustainable WRUAs will look like – from the outset.
- A WRUA needs a good governance structure that is well understood by members – so the right rules/values are in place for elections, record keeping and raising funds.
- A WRUA must empower women: men tend to dominate meetings, yet women are involved in farming and water collection.
- The area of WRUA coverage is important: water users need to be able to come together relatively easily; and its size should be adjusted depending on population density.

**Engaging the private sector.** Private sector actors in the Mara include hoteliers, tea factories, and large-scale farms growing wheat, french beans and maize. These represent a large proportion of water users and/or polluters, and could be a source of funds for WRUAs through the payment of water user fees, or through payments for the protection of ecosystem services from which they benefit. Indeed, Nyangores WRUA has had positive discussions with tea factories and a private hospital about them contributing to conservation farming practices upstream to ensure river health. Although these actors have been supportive of the idea, we are yet to secure funds for WRUAs.

We've also worked with a number of hotels in and around to the Maasai Mara ecosystem to develop constructed wetlands for sewage treatment. However, recent declines in tourism and a limited understanding of their impact on the ecosystem means many hotels are reluctant to participate in perceived CSR activities. Going forwards, we need to work harder to better articulate the case for businesses to engage more positively in the protection of water and land resources, using those that have constructed wetland systems as exemplars.

### **Demonstrating improvements in river condition.**

Despite our successes we have yet to see sustained and measurable improvements in the condition of the Mara's tributaries where we are working. This is in part because we are yet to work at scale in any of the tributaries, and systematic data collection by WRUAs has only been happening since 2013 so trends are not yet clear.

Going forwards, we're keen to focus our work on one or two sub-catchments where it's critical to improve river condition. We believe that with continued efforts and monitoring we'll be able to show significant impact in these sub-catchments.

### What helped to ensure our success?

**Working with the government water authority.** The existence of WRUAs is stipulated by government legislation so we have been careful to register and establish WRUAs in partnership with WRMA. This has been important for ensuring their formal recognition and legitimacy with the government, enabling them to secure resources and influence, and guarding against them becoming "talk shops" or WWF-owned institutions. It has also gone some way to helping to reach a shared understanding with WRMA on their roles and responsibilities.

**Getting the balance right** between on-the-ground conservation and influencing institutions and businesses. We



have invested significant resources in community-based interventions with WRUAs in certain sub-catchments. This has earned us, and the WRUAs, greater recognition and trust from communities, helping to build public support for WRUAs. Some may argue that this has distracted us from enacting change at a greater scale. But in fact it has been instrumental in influencing the government about the importance of water resources conservation: it enables us to demonstrate that we understand the issues and point to solutions that are working.

**Allowing the community to own the process.** We have provided guidance and training, but have very much taken a back seat in decision-making. We have allowed WRUAs to establish themselves and develop their own constitution and ways of operating.

**Ensuring the purpose of the WRUA is clear.** Although we advocate the benefits of WRUAs, we have always been clear that a successful WRUA must respond to a clear need articulated by the community and that their purpose must be clearly stipulated in the constitution of a new WRUA.

### The hard lesson

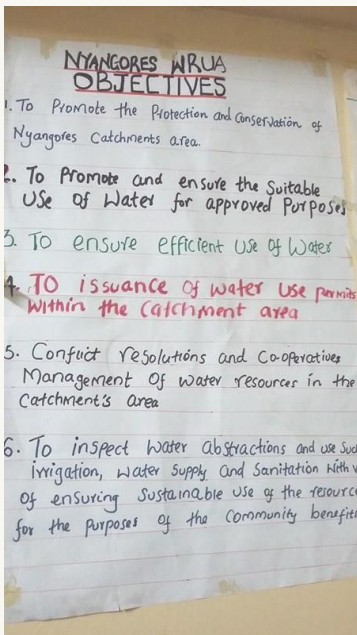
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**Getting sustained buy-in from WRUA members.** Our experience shows that community members are often enthusiastic during the initial stages of WRUA establishment, when there are expectations about resources and funding. However, in a number of WRUAs we have seen support dwindling and it has been difficult for WRUAs to collect membership fees.

Part of the problem is that for many there is no pressing issue while the river is still flowing, particularly when people are focused on the present. In addition, there is an inevitable reduction of interest as members realise they bear some responsibility for tackling the issues, and this can be compounded by a perception that the problem is complex and seemingly intractable.

*“People think the rains come from God and don't look into the future” (Nyangores WRUA secretary).*

In reality WRUAs need to deliver quick, tangible benefits for communities - such as an improvement in household income - in order to retain their engagement. If WRUAs are advocating changes in livelihood practices, such as moving cultivation away from rivers, then it is even more crucial for the WRUA to deliver improvements in income generation. If benefits are actually realised then it's important that these are effectively communicated throughout the community.



Objectives of the Nyangores WRUA



The Nyangores WRUA logo

We have learned that while incentives for WRUA membership might be important initially, they need careful thought to avoid creating unsustainable and unproductive institutions. There is a danger that the existence of WRUAs becomes dependent on the delivery of material benefits; or that a donor-supported “allowance culture” (i.e. the payment of per diems, sitting allowances and travel stipends) prevails for WRUA meetings which results in WRUAs becoming a “talk shops” rather than vehicles for action.

We have been diligent to avoid this, and have tried to ensure that benefits provided to WRUA members are largely in the form of advice, training and seedlings. Such inputs have often resulted in livelihood and economic benefits, and where this has happened WRUAs have become stronger.

Establishing this cycle of success involves time and energy of WRUA members, as well as WWF staff. So, in time we need to move away from a WRUA model where membership is incentivised by material benefits, and towards one where membership is based on the intrinsic community and professional benefits of involvement. Essentially we want WRUAs to provide a strong platform for dialogue and support which encourages its members to realise material benefits through their own efforts.

**Policy change is not the end goal: difficulty in getting WRMA to enact devolution.** Despite the underpinning legislation, and an MoU between WRMA and the umbrella WRUA, it has been challenging to make devolution happen in practice. Our efforts to establish WRUAs have not been matched by the necessary enabling environment to make them thrive. Underlying causes might be:

- a lack of confidence that WRUAs can perform;
- poor capacity and resources within WRMA itself: only a handful of staff are responsible for the entire Mara (and Sondu) catchments;
- high turnover of staff in WRMA: often hampering progress of initiatives, especially where newcomers are not bought into previous decisions;
- inadequate sharing of information between WRUAs and WRMA, particularly about water-user fee collection;
- lack of incentives to empower WRUAs.

In reality it takes time. At the core of devolving power to water users is the need to develop trust, transparency and strong relationships between the government agency and the WRUA, and for both sides to agree to collaborate towards common

goals. Small steps have been made towards this, but the time required, especially with high staff turnover in WRMA, is significant. Going forwards, we will need a twin-track approach of demonstrating the capability and value of WRUAs to WRMA, and continued advocacy to push for high-level commitment and action for devolution from the government.

If we were starting again we would ensure that we had agreement with WRMA on what devolvement of power looks like in practice and the steps required to achieve that.

#### FOR MORE INFORMATION

Contact the WWF-Kenya team



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