



BEYOND THE FLOW:
BUILDING STRONG COMMUNITIES
AND RESILIENT BASINS IN AFRICA

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Acknowledgement

Working towards civil society participation in decision making processes for the realisation of more equitable water allocation is not as simple as it sounds. It requires dedication, professionalism and strategic understanding of complex policy processes.

It consumes a huge amount of work, research and commitment. The implementation of a Water Programme and the setup of a network linking civil society practitioners in East and West Africa would not have been possible if we did not have a support of many individuals and organisations. Therefore we would like to extend our sincere gratitude to all of them.

We are thankful to the Netherlands Ministry of Foreign Affairs for their financial and moral support that enabled IUCN NL, Wetlands International and Both ENDS to set up a five year-programme (2011 – 2015) called the Ecosystem Alliance (EA).

Through the EA, the three organisations were able to provide support to many civil society organisations worldwide in their daily struggle for environmental justice and asserting human rights.

For the implementation of the EA's Water Programme in East and West Africa we are also grateful to the Secretariat of AfriWater CoP, their hosting institute JVE International, and of course all the members of the network: ELCI (Kenya) and Nature Kenya (Kenya) – Tana River Basin, NAPE (Uganda) and AFIEGO (Uganda) – the Lake Albert, Development Institute (Ghana) – Dayi River Basin, JVE International (Togo/Benin) – Mono Basin, Nile Basin Discourse (The Nile Basin), Forum Civile (Senegal), Wetlands International Africa (Senegal) - Senegal River Basin, BEES (Benin) – Ouémé river Basin, Millennium Community Development

Initiative (Kenya) – Athi River Basin. We are very proud to showcase some results of their day to day work in this publication.

We would like to express our sincere thanks towards Mr Fredrick Mugira, a multiple award-winning journalist and Communication Specialist, specialised in water communication and advocacy and Coordinator of the Water Journalists Africa (WJA) network, who supported us in collecting the results and describing them.

Danielle Hirsch, Director, Both ENDS
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Made possible by





Ms Kaahwa Tophace Byagira, Hoima District Woman Member of Parliament talking to local communities in Hoima, Uganda. Photo by NAPE

Preface

Africa is a continent of large rivers and lakes, vast wetlands as well as ground water resources. Extensive river basins are home to three quarters of the continent's population. Yet two thirds of Africa is classified as 'arid' or 'semiarid', meaning that water is frequently scarce. Water resources are often overexploited and are being depleted faster than the recharge rate. A range of factors from population growth, pollution, rapid urbanization, water grab and poor planning to desertification and climate variability play a role in undermining the hydrological cycle and ensuring that millions of people suffer from lack of access to clean, affordable supplies of this essential resource.

According to the 2015 UN World Water Development Report, to foster a more equitable allocation of scarce water resources and to facilitate water sharing among competing users innovative tools and approaches should be developed.¹ These should centralise *'the protection of the rights of the most vulnerable people'*² and aim at *'avoiding elite capture of water resources.'*³ Furthermore, the report strongly recommends that *'it should be ensured that poor people should participate meaningfully and hold officials to account, and have equal access to information.'*⁴

The Africa Water Vision 2025 provides a sound policy framework towards integrated water resources

management (IWRM), a process which promotes the coordinated development and management of water, land and related resources in order to maximise economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems.

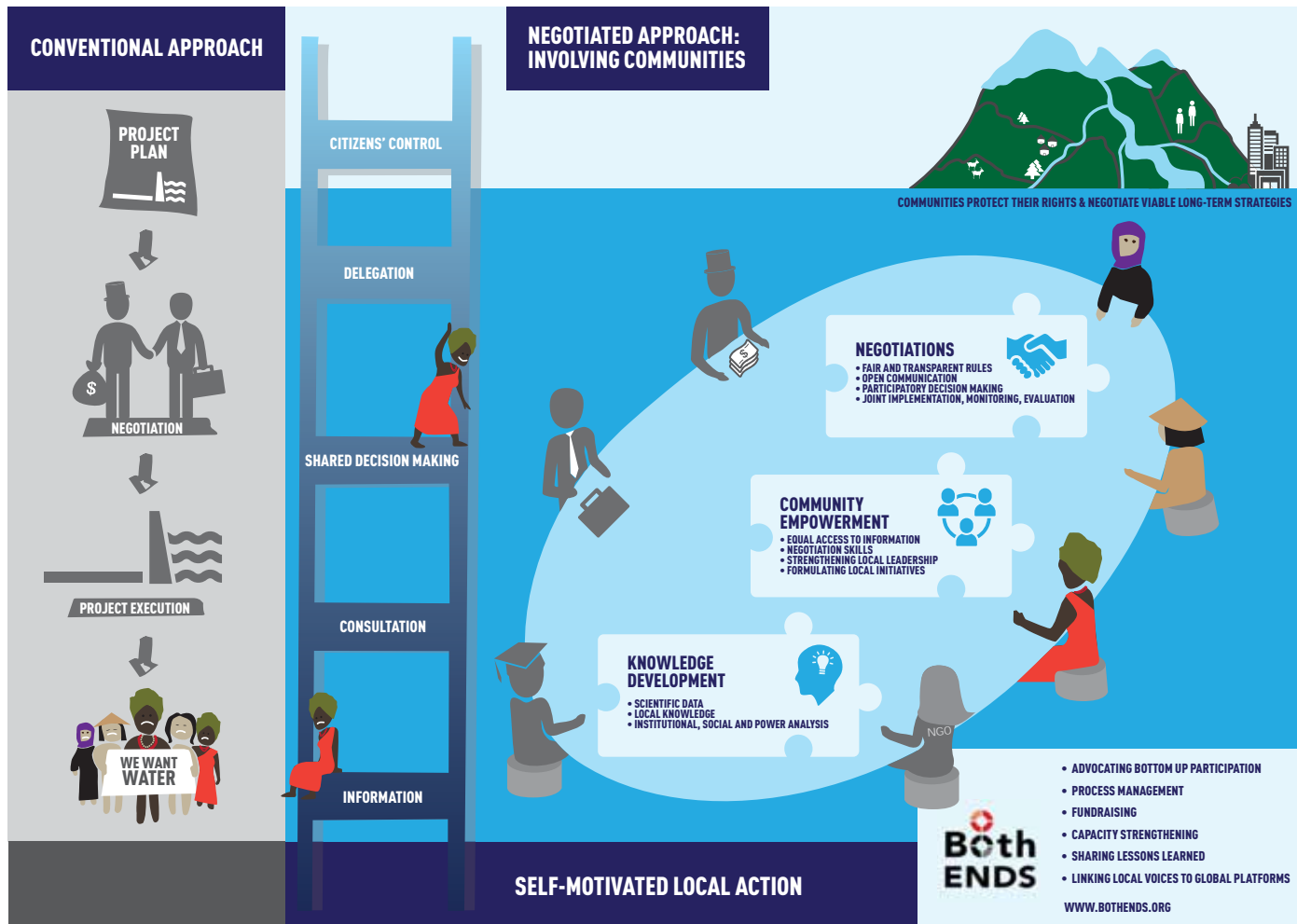
What is lacking, however, is the sound implementation of this vision. In general, the African water sector is faced with institutional weaknesses, inadequate funds for operation and development, weak coordination and weak capacity amongst communities.

And where IWRM is implemented, there is evidence that it is being applied within centralized, state-managed frameworks and only rarely are the interests and capacities of those actually living in the river basin taken into account fully, resulting in policies which do not reflect, and often conflict with the rights, needs and realities of local communities.

Since the early '90s, Both ENDS has worked with a wide range of local civil society organizations to break-through this inequity of power. Together with those partners, it has been developing participatory and sustainable land and water management approaches.

Out of these processes, the Negotiated Approach (NA) emerged. The NA improves the sustainability and legitimacy of IWRM planning by altering the top-down process through which IWRM currently takes place. The NA is a tool that allows for joint knowledge development, community empowerment, and for the creation of an enabling policy environment for the inclusion of local actors in the development and implementation of resource management plans.

1. UN Water, 2015, Water Development Report, p.20
2. ibid
3. ibid
4. Ibid



In the first week of February 2014, this “Community of Practice” met again in Amsterdam to take stock of the current position, share relevant tools, and have strategic discussions on how to strengthen and upscale the initial steps taken through advocacy, fundraising and implementation on the ground. Decision was to make the network more formal.

The AfriWater Community of Practice was formally launched on the 28th August 2014 after a strategic meeting held in Lomé, Togo with the core group members of the CoP. This was not only a major step towards formalizing the activities of AfriWater CoP but also to solidly build the cooperation between these organizations.

This publication showcases some of the successes both the Secretariat and the Members of the network achieved during the pilot phase 2011 – 2015. With this, we hope to inspire other practitioners and policy makers in making water management in East and West Africa more participatory.

In November 2011, the Negotiated Approach was introduced by the Both ENDS to partner organisations in Africa based in Uganda, Kenya, Ghana, Togo, Benin and the Nile Basin. At that time all of

the organisations present felt the NA could be an added value to their on-going work on sustainable water resources or river basin management, and expressed interest to take up the approach.

Thirza Bronner, LL.M. Senior Policy Advisor, Both ENDS
Annelieke Douma, M.Sc. Senior Programmes Manager, Both ENDS



Aluora Annette Luttah, AfriWater Cop coordinator

AfriWater Community of Practice

AfriWater Community of Practice (AfriWater CoP) is a platform linking civil society organisations in various East and West African countries that work in their respective basins on participatory IWRM and the protection of ecosystem.

Whereas the members of AfriWater CoP run ecosystem restoration programs and engage in policy dialogue with their local and or national policy makers, AfriWater CoP draws lessons from the various basins and advocates at a regional level for the right policies, plans and investments that support the sustainable, integrated, participatory management of water resources with regional policy makers.

Both ENDS takes the lessons shared by AfriWater CoP to international donors and policy makers, inviting them to invest in more holistic, participatory and sustainable water management. Based on the information collected on ground, Both ENDS also challenges and questions those investors how their large-scale infrastructure such as dams, river

diversions and port developments can indeed meet the standards for poverty alleviation and ecosystem conservation.

The members of AfriWater CoP strive for water security in Africa by:

- Enhancing involvement of communities through the Negotiated Approach; and
- Promoting an ecosystem approach towards water management.

Negotiated Approach: The members of AfriWater CoP believe that when communities are meaningfully involved in the planning and decision making, they sit at the negotiation table and have a say in the allocation process, policies which reflect the rights, needs and realities of local communities, that are able to decide over their own resources become a driver towards more sustainable, technologically appropriate and broadly accepted developments.

Ecosystem Approach: The members of AfriWater CoP take an ecosystem approach as a start-

ing point. Water is centralized and integrated in the management of land, water and living resources in a way that achieves mutually compatible conservation and sustainable use, and delivers equitable benefits for people and nature.

Members

AfriWater CoP now brings together 12 organisations working in six basins across Africa. They are: ELCI (Kenya) and Nature Kenya (Kenya) – Tana River Basin, NAPE (Uganda) and AFIEGO (Uganda) – the Lake Albert, Development Institute (Ghana) – Dayi River Basin, JVE International (Togo/Benin) – Mono Basin, Nile Basin Discourse – The Nile Basin, Forum Civile (Senegal), Wetlands International Africa (Senegal) – Senegal River Basin and BEES (Benin) – Oueme river Basin and Millennium Community Development Initiative (Kenya) – Athi River Basin.

Results for Regional Policy Dialogue

In 2014, the African Network of Basin Organizations (ANBO), a pillar of the African Union and the African Ministers' Council on Water (AMCOW), invited AfriWater CoP representation to the validation meeting of ANBO's ten year Strategic Plan and five year Action Plan. This was evidence of ANBO's new commitment to include all relevant stakeholders in all stages of planning and implementation.

Together they made a joint commitment towards:

- Developing bottom-up and participatory water re-

source management plans in African basins,

- Conducting analysis of stakeholders and the needs of local water users (including communities, private sector, and ecosystem);

- Strengthening civil society practitioners. A partnership has since been pursued bringing the civil societies very close to the policy and decision making platform.

And as a result, civil society organisations are now more connected: they can learn from the challenges in one basin, to support their own work.

Looking Forward

“ We owe it to future generations to take care of our environment, ”
Aluora Annette Lutah,
AfriWater CoP
coordinator

The main goal of the African community of practice is to promote truly participatory and sustainable water governance as key part of the solution to the looming water crisis in Africa. This cannot be solved by technologies and a systems approach alone. To achieve water security for all, it is essential to manage different interests of different sectors and users that conflict.

The gap between the civil society and the decision makers is attributed to limited knowledge and capacity and sometimes opportunity to enable them share the same platform of dialogue. AfriWater CoP strives to create an enabling environment by strengthening CS knowledge and capacity and also linking these to the policy makers, decision makers and their government processes. Considering the strength in joined forces, AfriWater CoPs focus on support to IWRM implementation makes it unique but also enlarges the scope of work to the other basins in Africa.

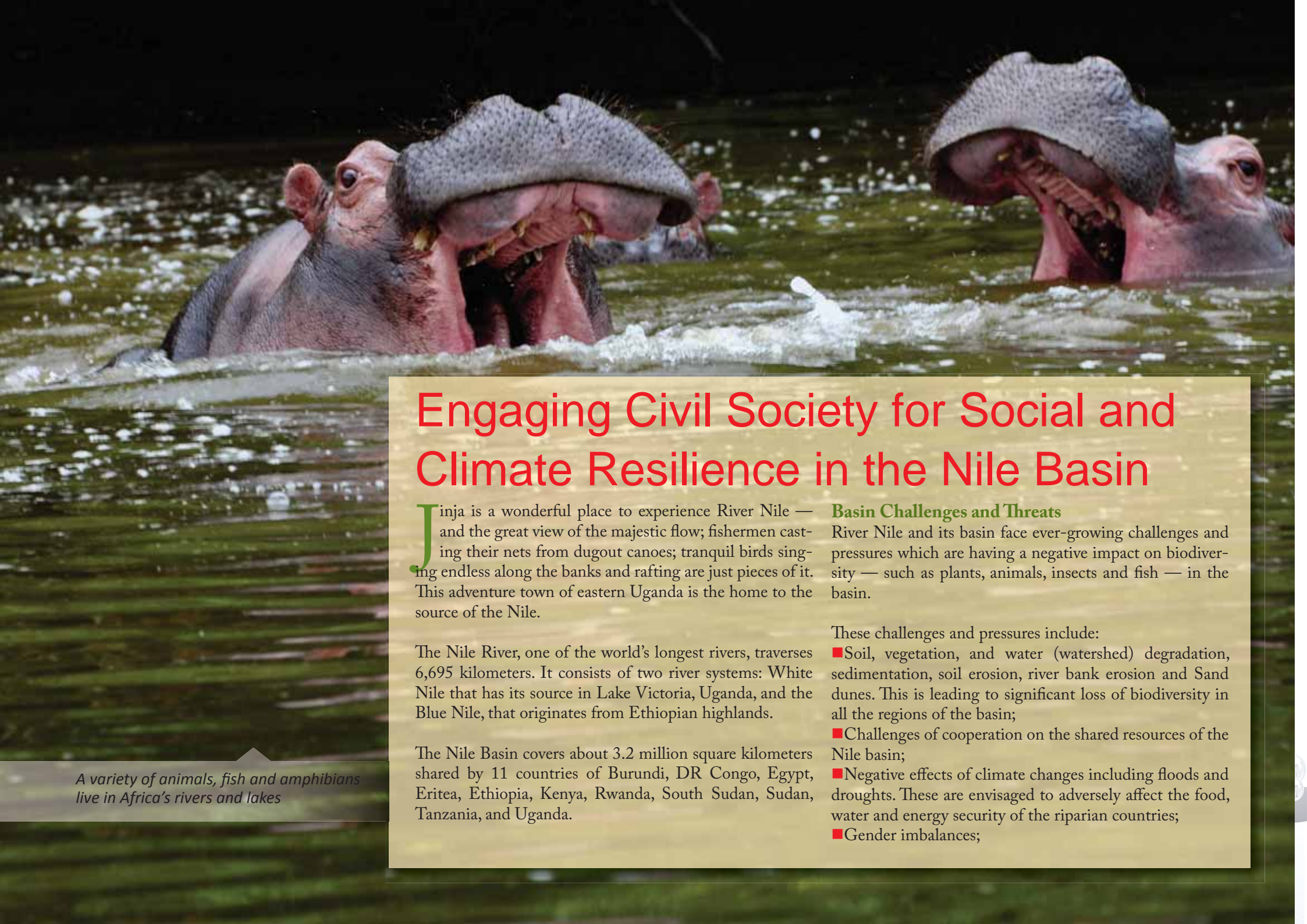


For more information:

<http://www.afriwater-cop.org/>

Or like us on Facebook:

<https://www.facebook.com/AfriWaterCoP>



Engaging Civil Society for Social and Climate Resilience in the Nile Basin

Jinja is a wonderful place to experience River Nile — and the great view of the majestic flow; fishermen casting their nets from dugout canoes; tranquil birds singing endless along the banks and rafting are just pieces of it. This adventure town of eastern Uganda is the home to the source of the Nile.

The Nile River, one of the world's longest rivers, traverses 6,695 kilometers. It consists of two river systems: White Nile that has its source in Lake Victoria, Uganda, and the Blue Nile, that originates from Ethiopian highlands.

The Nile Basin covers about 3.2 million square kilometers shared by 11 countries of Burundi, DR Congo, Egypt, Eritea, Ethiopia, Kenya, Rwanda, South Sudan, Sudan, Tanzania, and Uganda.

Basin Challenges and Threats

River Nile and its basin face ever-growing challenges and pressures which are having a negative impact on biodiversity — such as plants, animals, insects and fish — in the basin.

These challenges and pressures include:

- Soil, vegetation, and water (watershed) degradation, sedimentation, soil erosion, river bank erosion and Sand dunes. This is leading to significant loss of biodiversity in all the regions of the basin;
- Challenges of cooperation on the shared resources of the Nile basin;
- Negative effects of climate changes including floods and droughts. These are envisaged to adversely affect the food, water and energy security of the riparian countries;
- Gender imbalances;

A variety of animals, fish and amphibians live in Africa's rivers and lakes

- Rapid population growth. In seven of the 11 riparian countries, population is expected to double in the coming 20 –25 years;
- Food crises, food poverty and vulnerability;
- Introduction and stocking of exotic species in the lake such as the Nile Perch and Water Hyacinth which have huge social and ecological impact.

Strategic Interventions to Solve the Challenges

Several organisations operate in the Nile Basin aimed at finding an end to problems the basin is facing. Most of these organisations are partners of the Nile Basin Discourse (NBD), a civil society network with over 900 members and partner organizations within the Nile Basin region.

NBD was founded in 2003; primarily to strengthen the voice of civil society in development projects and programmes of the Nile Basin. NBD is registered in Uganda as a multi-national NGO with a Secretariat in Entebbe; with 11 National Discourse Forums (NDFs) operating in the eleven Nile basin riparian states of: Burundi, D.R. Congo, Egypt, Eritrea, Ethiopia, Kenya, Rwanda, South Sudan, Sudan, Tanzania and Uganda.

Applying Negotiated Approach

NBD is active in fostering cooperation in the Nile so as to increase the range and magnitude of direct benefits to Nile Basin citizens, and serve as a catalyst for greater regional integration, both economic and political, with potential benefits far exceeding those derived from the river itself.

NBD and Both ENDS are working together in implementing the Negotiated Approach (NA), including the use of stories (contextual and strategic scenarios) and games. This is to ensure bottom-up stakeholder



Almost a million African buffaloes live in Africa's river basins

engagement in the management of the Nile Basin and to foster Nile cooperation. NBD is a member of the African Negotiated Approach to IWRM group that is led by Both ENDS and actively participates in the NA group meetings and activities.

NBD has been implementing the project dubbed Engaging Civil Society for Social and Climate Resilience in the Nile Basin, a Cooperation on International Waterways in Africa (CIWA) / World Bank Project that is running for the period of February 2013 - October 2016, meant to contribute to the equitable and sustainable development of the basin through increased engagement of civil society in the Nile Basin cooperation programs and processes.

The Project provides support to strengthening the functions of the NBD secretariat; revamping the NBD's web presence in order to better leverage internet and mobile technologies for improved communications across a large, culturally and politically diverse, and geographically dispersed group of stakeholders. It also focuses on capacity



Africa's river basins are biodiversity rich areas

building of NBD's civil society organizations' members on priority issues such as climate change adaptation, gender equity, empowerment of women and young people as resilience champions.

Under this project, NBD applies the three pillars of the Negotiated Approach:

- Evidence-gathering leading to knowledge development (collecting local knowledge, conducting institutional and power analysis, asking questions water



Deforestation and overgrazing are increasing the volume of sediment eroded from hills into River Nile

managers do not normally ask and analyse),

- Capacity building which translates into community empowerment (training, local actions, etc) and
- Collaboratively creating platforms for policy dialogue/negotiations.

Based on this approach, NBD has been able to:

- Support initiatives for sustainable integrated river basin management at all levels for livelihood improvement and development in the Nile Basin.
- Influence policy development for equitable utilization and sustainable management of the Nile basin resources, prioritizing women and youth.
- Improve communication, knowledge and information management among civil society organizations

in the Nile Basin to strengthen civil society perspectives in development processes.

- Include any specific focus on gender inequity or empowerment of women
- Complete stakeholder mapping in 10 Nile Basin Riparian States (NBRs), to know the exact numbers of stakeholders and issues of challenges and benefits
- Undertake capacity building on climate risk management in 10 Nile Basin Riparian States (NBRs), to en-

“ One Nile, one family, NBD stands for benefits to communities with minimal harm ”

Dr. Hellen Natu,
Regional
Manager NBD

hance the understanding of concepts and the role of CSOs in climate change risk management.

On-Ground Outcomes

The Negotiated Approach has enabled NBD to undertake peer-to-peer capacity building of CSOs members, communities and the partners on Climate Risk Management in 10 Nile Basin Riparian States.

NBD has also been able to make considerable gains in communication and knowledge Management; establishing and maintaining an information system that allows all stakeholders to access the information available on Nile Cooperation and give feedback.

As part of its advocacy initiative, NBD has advocated for cooperation and coordinated development and management of Nile Basin resources in order to maximize economic and social welfare of the Nile Basin Citizens without compromising the sustainability of vital environmental systems.

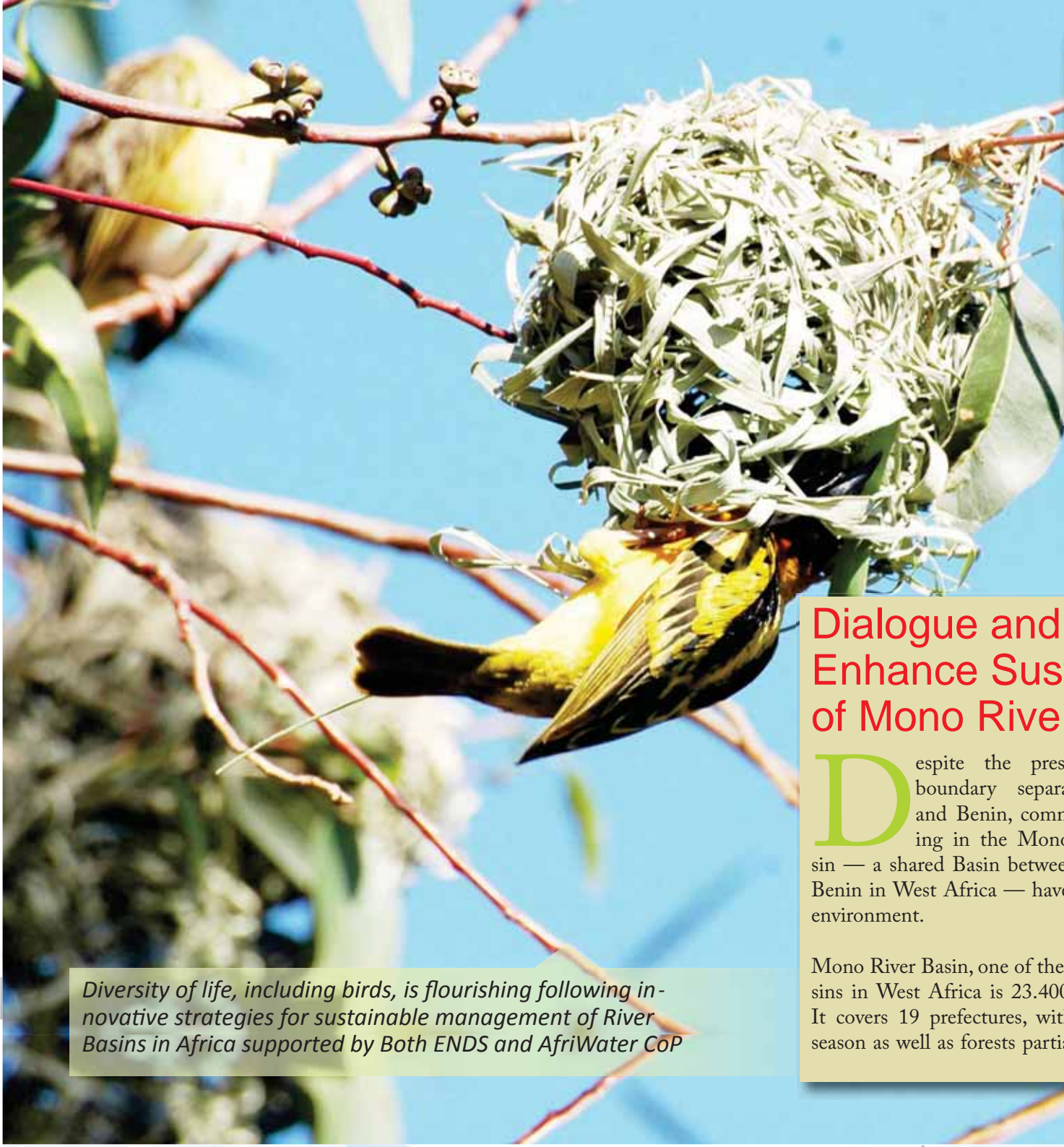
It is providing a platform for facilitating dialogue amongst multiple stakeholders in the Nile Basin Riparian States.

The NBD's innovative strategies have also helped it to build partnerships between the public, private and civil society sectors which enables leaders from different background to find a common ground and common agenda to change balance in power in their region.

The organisation is also providing leadership in Integrated River Water Management (IRWM) approach to Nile Basin development initiatives.

For more information:

www.nilebasindiscourse.org



Dialogue and Citizens' Involvement Enhance Sustainable Management of Mono River Basin

Despite the presence of a boundary separating Togo and Benin, communities living in the Mono River Basin — a shared Basin between Togo and Benin in West Africa — have a common environment.

Mono River Basin, one of the 25 river basins in West Africa is 23.400 km² wide. It covers 19 prefectures, with a tropical season as well as forests partially made of

savannah vegetation. The basin is characterized by prevalence of hydromorphic, ferruginous and ferralitic soils.

Challenges

The Mono River Basin in Togo and Benin is experiencing high population pressure, negative impacts of climate change, and human interventions such as large-scale dam building, mining and agriculture. These have had negative impacts on the livelihoods of the communities.

Diversity of life, including birds, is flourishing following innovative strategies for sustainable management of River Basins in Africa supported by Both ENDS and AfriWater CoP



Most wild animals do not inhabit areas too far from water sources

A hydroelectric dam — Nangbeto dam — constructed in partnership between Benin and Togo in 1987, at 160 km from the mouth of the river, has also brought about controversy in the basin. It is causing floods that leave inhabitants homeless, kill animals, devastate crops and destroy infrastructure along the river during seasons of heavy rains.

Notably, the use of pesticides and chemical fertilizers in farming communities in this basin is also leading to pollution of the waters of the river. Cases of land ownership wrangles and land grabbing continue to flare in the basin too.

Through efforts to bring an end to such problems, a group of students came together about 15 years ago and formed the environmental group JUPE (Jeunes Unies pour l'Environnement) which was later changed to JVE (Jeunes Volontaires pour l'Environnement).

As an intervention, JVE provided a framework and space for the people living in this basin to be involved and to guarantee a solid and legal basis for decision making, engaging all stakeholders in the sustainable management of the Mono basin.

JVE is working hands in hands with all the actors both in Benin and in Togo for the management of the basin resources,
Sena ALOUKA,
Executive Director JVE

JVE's Dialogue and Citizen's involvement Approach

With financial and capacity building support from Both ENDS organisation, JVE — an AfriWaterCoP member — is working hand in hand with all the actors both in Benin and in Togo to manage the basin resources sustainably. The project aimed at creating a space for dialogue and citizens' involvement in the decision-making process on the development of the basin and bringing out people's priorities and initiatives into the negotiations on the sustainable management of the basin, notably in the Mono Basin Authority (MBA).

An autonomous organization — Mono Basin Authority (MBA), was created by Togo and Benin as part of the two countries' bilateral cooperation program to achieve the goal of sustainable management of the basin. From Cotonou to Lomè, a series of meetings between the Ministries of Water of Togo and Benin were held, leading to the validation of legal texts, creating the Mono Basin Authority in early 2014.

In this project, JVE targeted civil society actors (NGOs, associations, trade unions, research centers, universities, networks and platform operating in the basin), users of the basin (Farmers, fishermen), municipalities (town councils and prefects). Others are technical and financial partners, the private sector (companies, micro finance companies), community organizations (VDC groups), administrative and local authorities (Chiefs and decentralized services of the State).

The project activities included awareness raising and out-

reach on the Mono Basin issues and the Mono Basin Authority; the strengthening of the mono Basin Citizen Forum and increased social cohesion and continued policy dialogues.

Under these main activities various tools were put to use to achieve the project's goals including: the development of a practical guide to promote understanding of the Mono basin creation, National caravans for awareness raising, magazines, workshops, dialogues, and media among others.

JVE has successfully engaged communities in making workable decisions on sustainable development of their communities and in all actions that they undertake concerning environment and their well-being.

Outcomes

In summary, since 2007, JVE has been able to:

- Assist the Mono River Basin users to be organized in small groups on the basis of local system known as ACABAB (Association of communities affected by Dams in Togo). In particular, JVE assisted in formation of an association of communities affected by dam construction. This helped to address the communities' challenges and enabled communities that were affected by the construction of Nangbeto dam to receive compensation from Benin Electrical Community (CEB).
- Conduct local consultations and surveys about issues related to integrated water resources management in transboundary Basin of Mono River in 85 villages.
- Hold 12 community debates about the same issues with full participation of the local population and authorities.
- Carry out 11 field studies, hold citizen festivals and establish multi actors' dialogue in the basin.

- Organise about 20 information workshop about the basin management. One of such workshops include the information workshop that was held to inform the local authorities about the implementation of the Mono Basin Authority (MBA).

Sustaining Gains and Addressing Future Challenges

Efforts by JVE to bring together all actors both in Togo and Benin to play leading roles in sustainable management of Mono River Basin are paying off. However, to have these gains sustained and future challenges controlled, there is great need for continued efforts to:

- Sensitize Mono citizens to achieve understanding of the Mono Basin Authority rules and action

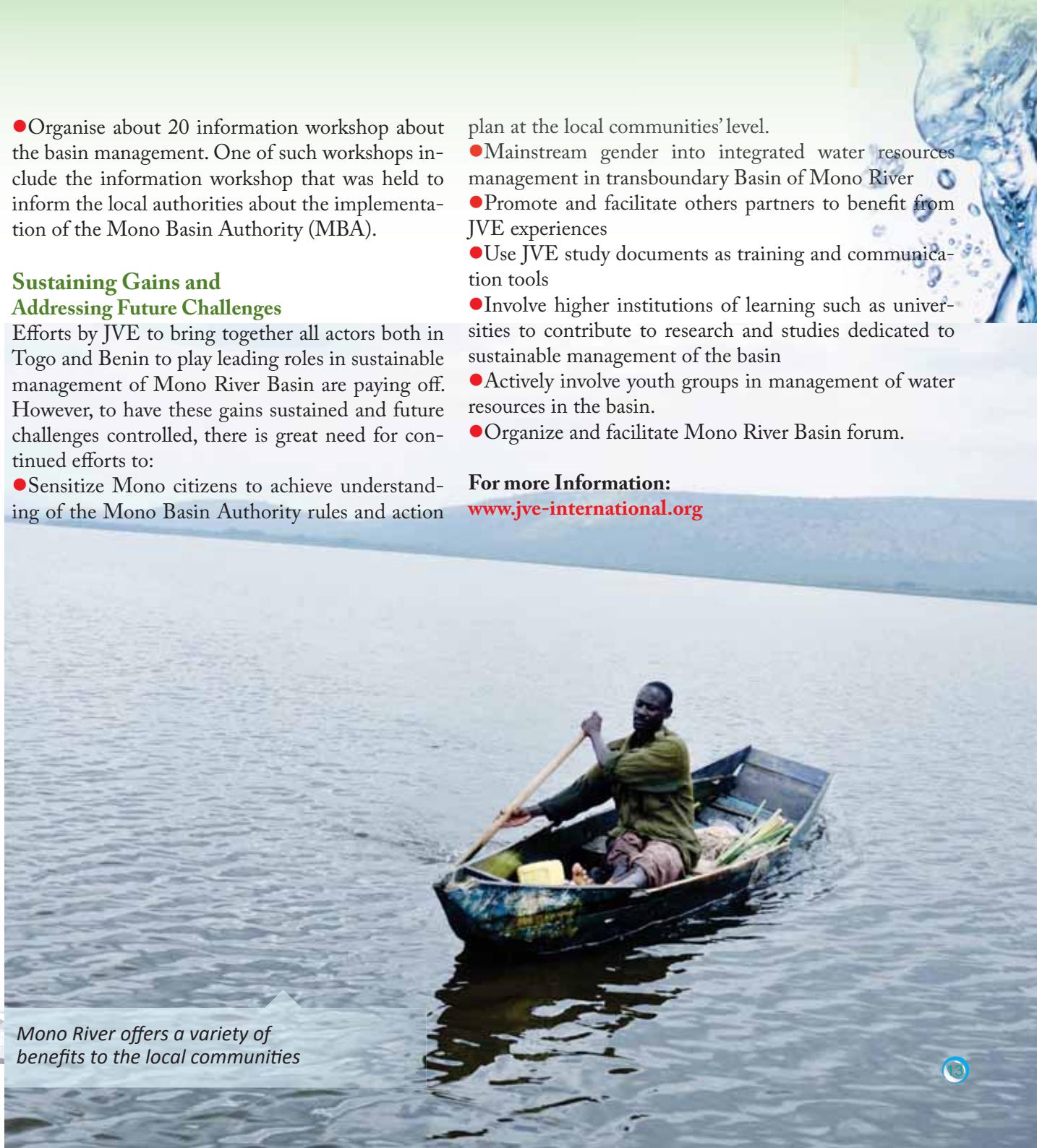
plan at the local communities' level.

- Mainstream gender into integrated water resources management in transboundary Basin of Mono River
- Promote and facilitate others partners to benefit from JVE experiences
- Use JVE study documents as training and communication tools
- Involve higher institutions of learning such as universities to contribute to research and studies dedicated to sustainable management of the basin
- Actively involve youth groups in management of water resources in the basin.
- Organize and facilitate Mono River Basin forum.

For more Information:

www.jve-international.org

Mono River offers a variety of benefits to the local communities





Several households have benefited from the ELCI's Mango project

Enhancing Sustainability of Nature and Livelihoods in Kenya's Tana Delta

Over 96,000 residents of Tana River Delta located in Tana River and Lamu Counties of Kenya have a reason to hope for a brighter future after several years of uncertainty resulting from degraded Biodiversity and Ecosystems in the delta.

The new ray of hope is as a result of the project — Enhancing Community Environmental Stewardship — implemented in the delta by environment Liaison Centre International (ELCI) <http://elci.org> — a global membership organization that brings together

over 800 civil society organization (CSO) members from all the continents of the world.

Key Challenges

The 130,000 hectare delta is home to a variety of resource users particularly farmers, pastoralists, wild harvesters and fishers who have had to withstand a lot of problems over the years. Such problems include unsustainable and dwindling livelihoods emanating from deterioration or depletion of life supporting resources like land, water, fish, forests, and a host of wild products by natural forces including climate change as well as anthropogenic activities such as large scale agricultural schemes.

The Tana River Delta residents have also for long shouldered the burden of weak relations with the market resulting from the inability by most of the local community producers to access medium to high end local and international markets for their products. This problem was partly as a result of low quality production resulting from archaic and inefficient production methods, very little value addition on products as well as lack of certification making it hard to brand them for the quality sensitive markets.

The delta like many other places in Africa has not been spared from the challenge of degradation of ecosystem mainly as a result of anthropogenic activities. Unsustainable means of exploitation such as overgrazing coupled with the new wave of vigorous exploitation of the same resources by large scale commercial entities and an increased population of the delta have led to ecosystem degradation.

To complicate issues more, climate change is also increasing the occurrence of long droughts. This is leading to water scarcity, increasing susceptibility of the delta population to poverty and disease and increasing resource use conflicts.

The unsustainable farming methods have led to soil erosion and siltation of Tana River. Pastoralists in the delta — mainly the Orma and the Wardei — usually clear plants supporting water conservation to pave way for grazing areas and access to water.

Pastoralists also graze in swamps disturbing buffer zones and fish breeding areas. There is massive forest clearance to create room for large scale Agricultural schemes.

All these activities have led to environmental degradation; affected access to clean water, greatly contributed to food insecurity in the area, increased water borne diseases as well as escalating conflicts among resource users.

Strategic Intervention

The worrying trend and state of affairs in the Tana Delta necessitated urgent action. In May 2012 ELCI launched the project — Enhancing Community Environmental Stewardship (ECES) in the Tana Delta found in the Tana River County in Kenya.

With capacity building support from Both ENDS organisation, ELCI — an AfriWaterCoP member — has been implementing a 3-year project under the Ecosystem Alliance of Kenya focussing on empowering local communities to access and control their

“ We have helped to improve lifestyles and natural resources are now better managed and conserved, ”
Halinishi Yusuf, ELCI Project Coordinator

resource through intervening on livelihoods improvement, capacity development and strengthening of community action.

Under this innovative initiative, ELCI established two nature based enterprises, one based on prawns and the other on mango value addition. The enterprise feature standards and protocols with regard to harvesting best management practices of a nature based enterprise, and certification for markets. Remarkably value chain development involves various stakeholders and provides guidelines with regard to farming, storage, processing, packaging and marketing. As a result, this has reduced the communities' susceptibility to weather shocks as they earn and plan to earn more from the products and contribute to environmental restoration.

ELCI has continually built the capacities of the community groups on advocacy and policy influencing, sustainable resource exploitation and value chain development.

It also facilitates the establishment of a civil society network of Tana Delta resource users, including youth groups, women groups, NGOs/CBOs and Cooperatives such that fishers, pastoralists, farmers, wild harvesters and tourism sector interests are represented. At its inception, the project envisaged increasing people's awareness of their rights, building their advocacy capacity and facilitating their active engagement in policy processes.

Noteworthy, ELCI has deliberately included women groups in the project. For example, two resource user groups are made up of women only while the Ozi mango value addition project is 70 percent women.

ELCI's approach to development intervention is anchored on empowering community structures and groups by enhancing their skills to manage their resources as well as engaging with the authorities in co management. The communities are empowered to be at the front line in negotiations as opposed to ELCI taking leadership. This ensures ownership of the process and guarantees sustainability of the interventions.

ELCI is keen on contributing to creating and enabling policy environment that is necessary to sustainable utilization of the Delta resources.

On-Ground Results

ELCI has so far worked with eight community organizations, representing a total of approximately 320 households who depend on the delta resources for their survival. The resource users' skills to sustainably exploit their resources have been richly enhanced through capacity trainings and mentorship. It should be noted that advocacy skills are particularly important in equipping the community to understand their rights and responsibilities as well as the various roles other stakeholders play. This has made negotiating with especially the government easier and more fruitful.

The impact of ELCI's efforts can be seen on the ground and people are finally sensing a brighter sustainable future. Through ELCI's intervention, resource users have improved their resource exploitation thus reaping more benefits. The two enterprises — prawn and mango projects, have been ELCI's flagship projects in supporting the community to better exploit the resources they have at their disposal and concentrating on developing the value chain through value addition, branding and marketing externally.

This has also given the local community greater sense of value of the resources they own and ELCI views this as a requisite factor to the community proactively guarding their land and resources against massive allocations to private developers.

The person who has witnessed ELCI change people's lives is Halinishi Yusuf, the Project Coordinator ELCI.

"Lifestyles have been improved and natural resources

better managed and conserved," Halinishi notes.

Lessons Learned

ELCI's innovative integrated watershed management model has proved that empowering communities to own their resources and lead the negotiations is the most sustainable way of intervening as opposed to development partners negotiating for the communities.

Additionally, the more economic value a community attaches to a resource, the more aggressive they will be in fighting for the same resource.

Perhaps one of the most interesting lessons learned throughout this project is that addressing main ecosystem degradation drivers such as lack of awareness and poverty at the community level is key to achieving sustainable development.

Sustaining the Best Practices

There is need for continuous and focused mentor-

ship of the community in the Tana River Delta to be proactive in managing their resources.

More support is required to ensure the implementation of the legal frameworks developed at the national level such as the Land Use Plan and the county level documents.

Addressing livelihood issues and moving from a welfare and traditional kind of production to more Agri-Business will economically empower the community giving them a better footing to protect their natural resources.

Additionally, more action driven research is required to ensure decisions made are backed by facts.

For more information:

www.elci.org



884 million people in the world lack access to safe water supplies



Agriculture and several other activities are putting pressure on land resources in Senegal River Basin

Engaging Integrated and Multisectoral Approach to Manage Biodiversity and Ecosystems in Senegal River Basin

Snaking through Guinea, Mali, Mauritania and Senegal, before joining the Atlantic Ocean, Senegal River is a beautiful river that brings pride to the people in the four countries.

Senegal River is matchless. It connects everyone. Just from fishmongers to farmers, politicians, and scientists among others in the four West African countries. Located in the water scarce region, the 1790 km long river with a watershed of more than 290,000 km² is a key resource for development in terms of energy, food and water.

Today, the river is in the news not for its great beauty and history but because it is plagued with environmental problems.

As the region develops, the pressure on the use of the rivers' water and encroachment on biodiversity and ecosystems in the basin is increasing. Evidently, pressure to increase allocations and land management for irrigated agriculture for food and biofuels is amassing.

In a country like Senegal, the Diama Barrage constructed in

1986 to improve the opportunities for freshwater agriculture in the Senegal Delta by reducing the saltwater influence due to tidal influence has been partially successful.

The improved situation for freshwater agriculture is also driving increasing investment in the Delta area itself, such as the emergence of biofuel production plantation. The remaining wetland resources are at risk as the role that wetlands are already playing and could play with improved wetland management and restoration are not taken into account.

Without action these resources could continue to be overlooked because the key stakeholders in wetland values — typically rural communities — are not able to engage with the planning and implementation of existing frameworks.

Steps towards Preservation of Biodiversity and Healthy Ecosystems in the Basin

In the face of pending ecological disaster, Wetlands International Africa (WIA) has intervened to enable preservation of biodiversity and healthy ecosystems in the Senegal River basin.

In partnership Both ENDS, the WIA which is a member of AfriWater CoP is implementing MFS II Ecosystem Alliance Program which aims to support the local civil society organizations (CSO) in Senegal River Basin. The program which started in 2011 is slated to end as the 2015 comes to an end.

It is intended to: improve livelihoods of poor and



Wetlands provide food and shelter for a variety of animals, fish, amphibians and insects among others

to create a solidarity economy, by a participatory and responsible management of ecosystems; enable CBO and CSO Capacity Building in term of environmental advocacy / Eco systemic approach and contribute to the restoration of the Ndiaël Special Reserve (RSAN).

Integrated and Multisectoral Approach in Practice

The integrated and multisectoral approach by Wetlands International Africa (WIA) took into account two types of activities: developing synergy with CSO (Civil Forum) and local CBO (AIV), and also developing cooperation with the government; government agencies such

as the wildlife department and the government's regional councils among others.

Through this innovative approach, Wetlands International Africa has been able to enhance the capacity of the CSOs and CBOs in the basin in terms of environmental advocacy through studies, training, demonstration projects, and sensitization.

It has also been able to make an environmental; social and ethical diagnosis, produce an environmental assessment in order to prepare an environmental and social management plan (PGES) and put in place an insti-



Africa has the highest volume of water stored in wetlands, large lakes, reservoirs, and rivers

tutional framework to ensure the follow-up and assessment of the program.

Under this project, WIA has also been involved in the reforestation activities of mangroves in the basin, rehabilitation of the Yetti-Yone backwater through various activities such as reshaping and ditch cleaning

Additionally, it undertook ecological and ornithological following-up (RSAN); establishment of income generating activities of some communities in the basin to decrease pressure on the ecosystems ; capacity building and exchange visits on national and international level.

The MFS II Ecosystem Alliance Program has also developed the knowledgebase by, among others, undertaking a quick scan study on wetland values and threats. It has also been working to advance civil society engagement within the river basin planning and management frameworks, in close collaboration

with OMVS, through improving the implementation of its framework for civil society engagement and the representation of civil society stakeholders. The final aim is to set up operational civil society engagement platforms in three basin sub-regions, and thus develop a model for civil society engagement for application across the basin accepted by the Organisation pour la Mise en Valeur du Fleuve Senegal (OMVS) — translated as Senegal River Basin Development Authority.

Planned results at basin scale:

- Quick scan of the Economics of Ecosystems and Biodiversity (TEEB) in three pilot regions of the basin, their economic value and their vulnerability to key developments planned and existing.
- Operationalizing civil society engagement platforms in three basin sub-regions.
- Establishing a model for civil society engagement for application across the basin accepted by OMVS.

// As the region develops the pressure on the use of the water is increasing and maintaining the balance between different water users including communities and nature is critical, //

Papa Mawade Wade,
Program Manager
WIA

- Maintenance and restoration of wetlands integrated into the SDAGE implementation.

Planned results at Bassin Ndiael (the Ndiael Reserve) scale in Senegal:

- Rewetting the wetland and restoring its ecological functions.
- Enabling local populations to increase incomes from the wetland, agriculture, pastoralism and other income generating activities.

Main Challenge

The main challenge remains up scaling this platform model at the whole Senegal River basin scale. Much is needed to increase capacities of CSOs in the basin which are still weak and promote a better private sector engagement and a better synergy of the different government bodies.

Further Information:

www.africa.wetlands.org



Rice planting at a paddy in Hewani Village. Communities in Tana Delta collectively earned more than €155,320 from nature based enterprises implemented by Nature Kenya and supported by UKAid and the Ecosystem Alliance. Photo by D. Mumbu

Securing the Future of Ecosystems and Community Livelihoods in Kenya's Tana River Delta

Being a tourist in Kenya isn't always fun. It is sometimes scaring. Some parks are full of scaring wild animals. But many tourists travel to Kenya looking for these frightening animals. It is a likely place for different scary creatures: crocodiles, hippos, and buffalos among others.

Several of these creatures live in Tana River Delta. The Tana River Delta – located in Tana River and Lamu Counties on Kenya's coast about 200 kilometers north of the coastal town of Mombasa – is a vast patchwork of palm savanna, seasonally flooded grassland, forest fragments, acacia woodland, lakes, marine wetlands and the river itself. It supports farmers, livestock herders and fishermen from many communities, and remarkable numbers of wildlife, in particular water birds.

The catchment has an area of 126,000 km² (equivalent to 21.7% of the land area in Kenya) and a population of over 7 million people.

Threats to Tana River Delta

In spite of the several benefits that Tana River Delta brings to the communities around it and Kenya as a nation, the Tana Delta communities face threats: erratic rains and drought, a decline in access to land and water due to large scale developments from which they do not benefit, and a decline in land quality (from deforestation and overgrazing). These have led to a reduction in cattle and crop productivity whilst the population is increasing.

Life for the fisherfolk is also becoming increasingly hard. Around lake Mwa the number of fishermen has risen from 42 (2006) to 130 in 2012. Household size has increased to 6-12 while catch size has reduced from 10-12kgs a day to 0-2kgs/day according to Nature Kenya.

Communities have limited capacity to increase productivity of remaining land and resources. Adoption of technology that could increase productivity (including irrigation and control of soil erosion), market value, or diversification is low, and organisation and collaboration, which could decrease production costs whilst maximizing yields and access to markets, is very limited.

Additionally, over the past decade, conflicts have been increasing in the Tana River Delta as a result of increasing population, competition for land, land-based resources and access to water, and encroachment into fragile ecosystems. These conflicts are compounded by lack of a general framework to guide decision-making on development of the Delta.

Interventions and Impacts

To overcome these threats and prevent several others from cropping up, Nature Kenya has over the years adopted various advocacy strategies to secure the future of ecosystems and community livelihoods in Kenya's Tana River Delta.

Nature Kenya—the East Africa Natural History Society (EANHS)—is Africa's oldest environmental Society. It was established in 1909 to promote the study and conservation of nature in eastern Africa. Nature Kenya implements these aims through the mission “connecting nature and people to take action for biodiversity conservation.

The organisation started working in the Tana Delta in 2007 using a combination of strategies to safeguard ecosystems and enhance community livelihoods. It has since carried out various interventions and achieved the following results:

1 Enhanced Safeguards for Natural Resource Management in Tana Delta including Strategic Envi-



Women in Moa village sort out vegetables harvested from sustainable farming demonstration plots. Photo by G. Odera

Environmental Assessment and Land Use Plan

Nature Kenya initiated and supported the process of developing a Land Use Plan for the Tana River Delta. The planning process was guided by a Strategic Environmental Assessment (SEA). It was the first time such an innovative approach had been followed in Kenya. At the local level the Tana Planning Advisory Committee was formed to represent community interests in the Land Use Plan. Sensitization meetings were held in all the 106 villages in the Delta with 21,000 people involved. At the national level Nature Kenya successfully lobbied the Office of the Prime Minister which catalyzed formation of an Inter-ministerial Technical Committee (IMTC) consisting of 17 ministries and 4 NGOs that provided link with the National government.

2 Enhanced Governance and Social Accountability for Sustainable Living

With time, Nature Kenya, a member of AfriWater CoP, mobilized funding from various donors including the Ecosystem Alliance (IUCN Netherlands, Wetlands In-

ternational and Both Ends), to fund various programmes in the Tana Delta. These include land use planning, enhancing community governance structures, improvement of local livelihoods and awareness, among others.

Nature Kenya facilitated 38 local community based organizations to form one umbrella group named the Tana Delta Conservation Network (TDCN). TDCN is a Site Support Group working with Nature Kenya to ensure sustainability in conservation and utilization of the natural resources within the Delta.

3 Improved Natural Resource Management and Livelihoods with more than 1,000 Households Directly Benefiting and 35,000 ha of Forest Gazetted as Community Conserved Areas

In 2011 Nature Kenya initiated a range of income generating activities that also act as demonstration centres for sustainable production methods, with good results. Through learning by doing approach the project supported farmers, fishermen, pastoralists and beekeepers to increase production through sustainable methods. By ▶

July 2015 direct beneficiaries earned more than Kenya shilling 6,920,119 (\$ 68,460) from the Income Generating activities (IGAs). Percentage increase in household produce and/or income from new IGAs ranges from 25% (honey in Kipao Village) to 86% (rice farming in Hewani Village). Kenya Forest Service (KFS) gazetted 35,000ha of forest in Tana River Delta. KFS then enlisted the assistance of Nature Kenya in establishing community Forest Associations for the sustainable management of the gazetted forests. We initiated a micro-finance scheme managed by Farmers and pastoralists cooperatives, and fishermen's beach management units. The groups are supported by the Tana Delta Conservation Network (TDCN). The procedure is that all monies repaid in microfinance must be banked in the TDCN microfinance account.

4 Successful Partnerships Built

Over the years Nature Kenya has built wide international and local alliances for conservation of the Tana River Delta. This partnership includes local communities and their leaders, government agencies, non-government organizations, donor agencies, researchers and international experts and conservation agencies among others.

5 National Level Coordination for the Conservation of Major Kenya Deltas Catalysed

The process for the preparation of a Land Use Plan for the Tana River Delta stimulated the formation of the Inter-Ministerial Technical Committee (IMTC) for the Sustainable Management of Kenya Deltas. The IMTC will prepare Integrated Multiple Land Use Plans for all major deltas in Kenya, starting with the Tana River Delta.

6 Tana Delta Recognized as a Ramsar Site and included in International Deltas Alliance

When Nature Kenya started working in the Tana Delta

It is envisaged that conservation lessons learned from the Tana Delta will be replicated in other wetlands across the country,

Dr. Paul Matiku,
Executive Director,
Nature Kenya

in 2007 the area had only one designation – as an Important Bird Area. The process of getting Tana Delta listed as a Ramsar site (a wetland of international importance) had stalled in the early '90s. In July 2008 Nature Kenya supported the Kenya Wildlife Service (KWS), the national Ramsar focal point, to hold a stakeholder's meeting to jump start the process to get Ramsar status for the Tana Delta. A small team was nominated to fill the Ramsar information sheet and KWS prioritized Tana Delta among sites lined up for Ramsar listing. Subsequently, other conservation groups continuously provided technical support. In October 2012 Tana River Delta was designated as Kenya's newest Ramsar site.

Lessons Learned

There are various lessons learned from Nature Kenya work in the Tana River Delta (2007-2014). The following are some of them:

A negotiated approach is needed to enhance biodiversity conservation and community livelihoods in difficult circum-

stances. Nature Kenya has demonstrated a consciousness of the socio-economic and political realities of the Tana River Delta in their approach and tailored a well-considered response.

Efficiency through innovative advocacy with government and communities. The complex challenges in the Tana River Delta call for innovation, commitment and patience.

Real empowerment is multi-pronged and built on trust. The cornerstone of the success of the Tana River Delta Land Use Plan is the decision for Nature Kenya to 'lead from behind'. Meaning to influence the process behind the scenes and let the government take the more visible leadership role.

Complex conservation problems cannot be addressed within a 'project mentality'. The Nature Kenya approach demonstrates that adherence to an approach that will yield results is more important than rushing to meet outputs and deliverables within fixed project time-frames.

Beneficiary mentoring, feedback and learning. Nature Kenya is closely involved with the community and accessible to it. In so doing, they have built trust and goodwill and fostered genuine partnership. This is particularly critical for the success of their work in the Tana Delta where the communities also have a complex, conflict-riddled relationship.

Source: This case study is an updated excerpt from the **Tana River Delta Lessons Learned from Nature Kenya Work 2007 -2014 produced by Nature Kenya - the East Africa Natural History Society, 2015**

www.naturekenya.org



Nzinzi- III oil well in Hoima district

Black Gold and Water:

Managing the Social and Environmental Impacts of Mining and Climate Change in Lake Albert Basin

Ten years ago, when oil was discovered in western Uganda after years of exploration, Kaiso Tonya, a remote rural village in Hoima district — the birthplace of immaculate Busingye, a farmer and fishmonger — came under the spotlight.

The discovery of oil in Immaculate's village and several mother villages in Uganda's Albertine Graben unleashed dreams of an economic windfall that would lift her and millions of Ugandans out of poverty.

But now, she is worried. She thinks such dreams might never be realized if nothing is done to control the negative effects of this discovery on the surrounding environment.

"Lake Albert is my livelihood and the rest of the community. We obtain fish and water that we use in our homes. During the

drilling of oil wells in 2009 in our area, we were told that Ngasa11 oil well had been discovered in Lake Albert and just a stone throw from our homesteads.

We wonder how oil will be extracted without spilling into the lake. And in case of an oil spill, we shall be no more!" the visibly worried Immaculate wonders.

Lake Albert is one of the African great lakes. It is located in the center of the continent — on the border between Uganda and Democratic Republic of Congo. The livelihoods of the local populations around the lake are closely linked to the watershed and dependent ecosystems.

Yet, a significant threat to water in Lake Albert and the Bunyoro region is from Mining extractives and degradation due to climate change which threatens to have various impacts. ►

Threats

Water Pollution: Currently the main challenge affecting the lake and the Albertine rift is the threat of toxification of water by mining activities.

Unpredictability of Water: Mining is likely to involve cutting down of trees, destruction of forests and other flora, which in turn is likely to affect the quality of water due to increasing erosion and siltation of river banks during rainy seasons. Additionally, excessive deforestation would contribute further to climate change in the region.

Response to Risks

The National Association of Professional Environmentalists (NAPE) — an action organization committed to sustainable solutions to Uganda's most challenging environmental and economic growth problems— is working to make sure nothing fails Immaculate's dream.

NAPE monitors government actions, conducts research, provides educational materials, develops science-based strategies, organizes affected communities, makes common cause with other civil society organisations and international organisation, and engages government officials at all levels. It has done so since its founding in 1997.

Four years ago, NAPE, a member of AfriWater CoP which has in the past partnered with Both ENDS to implement various initiatives in Uganda, launched a project titled "Campaigning against Mining impacts

“ If you run short of the basic needs like water, food, then you are poor. If you cannot participate in decision-making regarding the food you are going to eat and the water you are going to drink then you are poor. Somebody else is rich on your behalf. ”

Frank Muramuzi, Executive Director
Of NAPE.



Oil affected women of Sebagoro engage in apiculture activities as an alternative to the dwindling fish in L. Albert

on Lake Albert” focusing on controlling degradation of fresh water ecosystem in the lake basin due to climate change and Oil Mining activities.

Under this ongoing innovative campaign, NAPE has been resource eco-mapping and supporting ecosystems restoration like encouraging plantation of indigenous trees and other economic livelihoods that lessen the stress on the ecosystem. In this regard, NAPE has supported oil affected Women of Kaiso Tonya Oil block to start locally affordable and environmentally friendly food security and income generation initiatives mainly Apiary.

As well, NAPE has been mobilizing communities to participate in the management of integrated water resources management through the sustainability schools that include especially women, youth and fisher communities.

It established a community green radio. The FM radio is now being used by all stakeholders to educate people about integrated water resource management and negative impacts of oil on land, Lake Albert and other natural resources in the region.

Additionally, NAPE is supporting women-led drama groups which it helped to form. These include Sebagoro and Kaiso fishing village women-led drama groups. Through edutainment strategy, these groups show drama performances in terms of plays, poems, songs, tales, etc. that have water conservation messages in them and also expressing their challenges, threats, faced in accessing water.

NAPE has also been facilitating the Sebagoro and Kaiso fishing village women affected by mining (Oil) to play a leading role in de-campaigning oil impacts on their water, livelihoods and demonstrating their



Oil affected women in Sebagoro rehearsing in preparation for performance during women's day celebrations.

issues through advocacy, joint exchanges and artistic impressions such as poems, songs, drama plays, petitions among others. These artistic impressions are formed and disseminated based on local knowledge available in the communities.

The organisation is also supporting the startup of environmental friendly initiative for income generation, food security and climate change mitigation in the basin using local knowledge and skills.

It also continues to engage government's leaders like the District environmental officer on issues of access, quality and affordability of water and threats surrounding the Lake Albert water source.

Other initiatives it is engaged include publication and dissemination of a report on impacts of mining on

food and water and supporting media interactions and held media conferences on mining impacts on community livelihoods, water and the environment.

Impacts and Outcomes

Through this innovative approach and interventions, NAPE has been able to empower country youths to become more organized and vocal on the perpetuated rights abuses in their localities especially in the oil refinery affected areas.

Orders of illegal arrest for both communities and staff of local advocacy groups by government operatives have since seized. However, the order to arrest has since shifted from the Ministry of energy to the minister of internal affairs. NAPE has been engaging this ministry and so far no arrests have been executed.

Communities especially those affected by the Proposed Oil refinery are now very aware, assertive, and actively demanding for their rights. Through the sustainability school village model of capacity building, these communities are now aware that they are being cheated and that their land rights are being violated and have come out strongly to voice out their concerns in the media.

Oil host communities have not been stopped from fishing since July 2013 through out 2014 due to oil operations although their entry into Oil rich parks and reserves is still limited to 2 days a week. However on a positive development, NAPE mobilized communities and facilitated a dialogue with Kabwoya Wild life reserve Authorities. Uganda Wild life Authority (UWA) has since allowed Women of Sebagoro and Kaiso Tonya in 2014 and Sustainability village formed by NAPE to start up an Apiary pilot project in the park.

Government has also continued to show interest in NAPE's advocacy work by acknowledging products of disseminated publications and also inviting NAPE to participate in government programmes like production of Info directories, update meetings, present position papers on policy, environment and community development issues among others.

The radio is helping to mobilize the fishing communities along the shores of Lake Albert educating them alternative environmentally friendly livelihood options diversify such as bee keeping and agro-forestry.

NAPE in February 2014 became the Winner of the 2013 most prestigious Human Rights Award by the Uganda Human Rights Commission (UHRC) in Conjunction with the UN Office of the High Commissioner for Human Rights.

The National Environmental management Authority in February 2014 gave NAPE an EIA certificate that shows that the restoration work by NAPE is rated highly by government.

The Ugandan model of the Sustainability School is being recognized worldwide as an effective tool in mobilizing communities and maintaining their consciousness on Sustainable water and livelihood issues and in their communities and generating their interests to participate in Sustainable development processes beginning from the grassroots.

Under the Sustainability School, communities have become more conscious of the need to participate in the conservation of environment, water resources and mitigating the adverse effects of Climate Change. In many Sustainability villages for example Butimba in Hoima District, communities are setting up nursery beds for indigenous tree species which they distribute among themselves and to other people and institutions. In partnership with Both Ends of Netherlands some selected Communities have been trained on how to practice analog forestry and they are already doing it.

Moving the Agenda Forward

Drawing from a diversity of NAPE's experiences, more efforts are still needed to prevent the negative effects of mining and climate change in Lake Albert basin particularly in these key areas:

- Undertaking an analysis that explores the sustainability of water within the broader environmental management of water resources by assessing the measures by local governments to allocate water for the realization of human rights, protect citizens against pollution, or manage the Lake Albert river basin.

- Empowering oil affected women to be able fight for their space in the growing oil sector and also be able to compel government and other stakeholders to address oil impacts on their water, livelihoods and food sovereignty.
- Continuous preparation of the marginalized communities on alternative survival options such as encouraging the youths (especially girls) among the oil affected communities along Lake Albert to take up technical courses so that they can qualify for jobs in the oil sector.
- Organizing engagement meetings by community groups based in living on shores of Lake Albert with key government officials for example Members of parliament, speaker of parliament on key pertinent oil issues, sourcing for guiding communities during the drafting of petitions and production of advocacy materials.
- Facilitating media interactions with the oil affected communities and talk shows on Community Green Radio to enable community concerns reach the national level and international platforms.

For more information:

www.nape.or.ug



Africa's rivers serve as sources of water for not only people but also birds and livestock among others





MCDI inspires women to participate in conserving forests and in turn they are given incentives. Such incentives include provision of domestic biogas units that reduce the need to collect firewood

Pauline Wangari feeds her biogas digester with dung from her two cows. Photo by MCDI

Changing Lives: Kenya's Millennium Community Development Initiatives Changes Lives in Athi River Basin

After nearly five decades of exposure to indoor air pollution as a result of cooking with biomass fuel on open fires, Pauline Wangari, a widow and resident of Karinde Village now uses biogas — a clean and renewable fuel.

She has had her life changed by Millennium Community Development Initiatives (MCDI) — a local organization in Nairobi Kenya — that was established in 2005 by a group of volunteers who belong to poor rural communities. She now

cooks conveniently with gas after receiving biogas and a solar lighting kit from the organisation.

Changing Lives

Pauline is one of the hundreds of beneficiaries of MCDI which has now become a leading organisation in creating awareness for purposes of promoting environmental conservation and sustainable development.

The kind of sustainable development that Pauline enjoys together with hundreds of other people that use biogas generated by the public ablution block which MCDI constructed at the Dagoretti Market.

The block was built as a measure to reduce pollution of the Kabuthi River — a major tributary of the Nairobi River in Dagoretti, Kenya — from sewage. It now generates biogas from the human waste that is used to cook and heat water.

In addition, MCDI has fundraised for the implementation of two large water schemes; one taps water from the Thogoto Forest in Central, Kenya and the other from a borehole and a spring along the Kabuthi River. This is enhancing the communities' access to safe water for domestic use.

The initiative has also aided the construction of a goat and cattle trough meant to reduce human and livestock traffic into the Thogoto forest; a source of many springs and streams that form the Mbagathi River, one of the main tributaries of the Athi River.

Thus, the project has brought quality water to hundreds of people that used to rely on borehole water that contained high fluoride levels. It has also extended sanitation facilities closer to several people that practiced open defecation in the past.

In particular, the Karinde Water Project is supplying more than 500 households with safe water; the Dagoretti Market Bio Latrine has more than 100 visitors daily who use the facilities.

When completed, the Kabuthi Water Project will supply more than 1,000 households. The organisation has also helped to have more than 100 kilometres of riparian areas rehabilitated and gabions constructed. This has reduced the destruction of storm water from the railway and the Southern By-Pass.

By working with the Water Resource Management



Several bird species live in Athi River basin

Authority (WRMA) and the Kenya Forests Service (KFS), MCDI is stimulating the formation and strengthening of Water Resources Users Associations (WRUAs) and Community Forestry Associations (CFAs). It is in particular focusing on the Athi River watershed as it works with the WRUAs in Kiambu and Kajiado Counties by networking them. It is also assisting these associations to fund raise and implement water management and supply projects.

Since 2005, MCDI has progressed to stimulate the formation of several WRUAs. It has also facilitated the creation of the Athi River Community Network that

is made up of WRUAs, CFAs and Beach Management Units (BMUs) from the source of Athi River in Kiambu and Kajiado Counties to its mouth as it enters the Indian Ocean in Kilifi County.

More specifically, MCDI has enhanced the capacities of more than 20 WRUAs and CFAs through their participation in the Athi River Community Network activities, including exchange visits upstream and downstream.

Currently, the organisation is in the process of incorporating resident associations within the City of

Nairobi.

What is more interesting is that MCDI inspires women and youth to participate in conserving forests and riparian areas and in turn they are given incentives. Such incentives include provision of domestic biogas units that reduce the need to collect firewood and solar lighting kits that lessen the use of kerosene. These are also supplied to young people to sell for profit.

MCDI's Approach for Delivering Successful Outcomes

The success of the initiative is mainly attributed to MCDI's use of a unique approach based on an in-depth understanding of the challenges facing the City of Nairobi and its environs, with regard to water resource management. It also collaborates with a range of stakeholders that bring in diverse skills and knowledge, which in turn enhances their collective understanding of the issues and challenges and also enriches the solutions that are proposed and/or implemented. MCDI has created several platforms to share information and knowledge, including a website that is accessible to communities and features their activities to conserve the environment (www.environett.org).

Through, AfriWaterCoP, MCDI is collaborating with Both ENDS to source for funding opportunities.

Lessons Learned and Future Plans

There are several lessons that MCDI has learn as it implements this project but, Violet Matiru, the Programme Coordinator at the Millennium Community

Development Initiatives (MCDI) believes the key lesson they have learnt is that empowering communities to take charge of the management of their natural resources is a slow process but its rewards are great.

“We finally have a solution for a community that has suffered from drinking unsafe water for many years. We are proud of restoring dignity to the communities by providing them with safe water and sanitation facilities,” she notes.

Looking forward, MCDI calls for better scientific and socio-economic understanding of the Athi River basin,

in terms of its hydrology, status of forests and riparian areas and the communities, their use of the forest, knowledge of the forest and capacity needs to manage the natural resources.

It also urges more support to projects that can address direct livelihood needs in the water and sanitation areas and the conservation of the natural resources for the benefit of everybody.

For more information:

<http://www.mcdikenya.org/>

“ We now have a solution for a community that has suffered from drinking unsafe water for many years. We are proud of restoring dignity to the communities by providing them with safe water and sanitation facilities, ”

Violet Matiru, the
Programme Coordinator
MCDI



Wetlands are consider to be synonymous with wetland hydrophytes



The Red-bellied guenon monkeys are natives of Benin and Nigeria. These beautiful little monkeys became officially endangered in 2000, mainly due to destruction of their habitat by humans.



The black heron (Egretta ardesiaca) also known as the black egret, one bird species found in Benin, uses its wings like an umbrella, and takes advantage of the shade it creates to attract fish.

Education and Sustainability:

Empowering Communities to Manage their Environment in Ouémé River Basin

If a particular ecosystem was a human body, wetlands would be the kidneys of such a body. Apart from acting as a water purification system - purifying and filtering harmful waste from water- wetlands such as marshes, swamps, peat bogs, river deltas, tundra, mangroves, river flood plains, and lagoons are a reservoir of biodiversity and help to control floods among several others roles.

But what is worrying is that up to 64% of wetlands worldwide have been lost since 1900 according to the Living Planet Report by the World Wide Fund for Nature (WWF).

In Africa, despite their precious value, development and high population pressure continue to pose major threats to wetlands that cover more than 131 million hectares.

Wetland Destruction in Benin

Some of the countries that have experienced increased destruction of wetlands in the recent past include Benin. This has had a far reaching effect on a number of sectors especially the fisheries division which plays an important role in protein intake and food security, income generation and employment.

The coastal zone is the provider of key agricultural products including crops such as pineapples, palm oil,

and banana. A large number of local foodstuffs and non-food products that are collected from wetlands and other permanent and seasonal water bodies play important roles in home consumption and income generation for rural households, especially, the poor.

Unfortunately, these economically and ecologically valuable natural resources of the coastal zone are being degraded at an accelerated and alarming rate. This degradation results mainly from poor environmental and natural resource planning, and high population pressure.

Wetland loss in Benin is worsened by the disparity between those who make decisions about the allocation of

a wetland's land and water on one hand, and those that depend on the wetland's goods and services for their livelihoods on the other. This is mainly due to a lack of population involvement in the identification, formulation and execution of development tasks, particularly concerning environmental management.

The impact of this pressure is noticeable on the coastal wetlands, their ecosystems and on the biological resources of the whole coastal zone. For example, the population of several animal species, such as Aardvark, Red-bellied Guenon, Manatee, Hippopotamus, Bush pig, Sitatunga antelope, sea turtles and others has declined through hunting and loss of habitat. At least one species, the chimpanzee, has become extinct in the coastal region.

Such problems are coupled with flooding and pollution around Ouémé River. Ouémé River starts in the Atacora massif in north-western Benin. It is approximately 310 miles (500 km) in length and flows southward.

The increasing of sea level and the modification of water regimes due to climate change coupled with unsustainable management of the water complex resources have resulted in increasing flooding and coastal erosion.

All these concerns call for action to reverse the trend and the Benin Environment Education Society (BEES) – an NGO created in 2005 to implement community programs for sustainable development and management of biodiversity in Benin – started the drive to save the environment in Ouémé River Basin and its ecosystem mostly the wetlands under the project it termed as Valuing Ecosystem Services in Benin Ramsar site 1018.

Working For People and Environment in Ouémé River Basin

BEES consists of natural resource management specialists and scientists of the largest universities in the country. The founding members of the organization often act as a volunteer resource people volunteer, with experience in the field of natural resource management, biodiversity, eco-health and education.

The organization also develops the experience in advocacy, local planning and project management.

With financial and capacity building support from Both ENDS organisation, BEES, an AfriWater member, has been involved in various initiatives as part of its innovative project focusing mostly on sustainable wetland management through ecotourism in Ouémé River Basin. These include:

- Abetting sustainable livelihoods for local communities;
- Working with communities to get involved more directly in environmental protection;
- Creating more goodwill towards environmental protection measures, such as protected areas, and draw more benefits locally;
- Promoting heritage and build local capacity;
- Promote education and information through public awareness activities in schools and in local populations on wetlands and green areas of protection for the sustainable use of natural resources

// Building the capacity for local communities and empowering them in promoting their natural and cultural heritage is the way to go, //
Maximin Djondo,
Director BEES

Impacts and Outcomes

Since 2005 BEES has been able to:

- Undertake capacity development for 12 municipalities meant to enable leaders of these municipalities to integrate sustainable wetland management in their participatory municipality's development plan.

- Hold seven workshops with the central government and local partners for the promotion of good practices from existing community-based management program to the context of Nokoué Lake.
- Organize communication activities to raise awareness on wetland values and functions.
- Organize two multi-stakeholder workshops for the Ouémé River basin Management Council creation.
- Provide seedlings and other planting materials for the restoration of 2,500 hectares of degraded mangroves in the basin.
- Set up of 12 environmental clubs in six districts.
- Undertake capacity development for smallholder farmers in the implementation of agro- forestry aimed at reducing the environmental footprint.
- Establish three community natural reserves which are now managed by community members with high local involvement.
- Promote ecotourism in the basin.

Looking Forward

Despite all the achievements, to have a better impact on communities, BEES staff still need a series of capacity strengthening program especially on advocacy, wetlands management and research (assessment of carbon stock).

For more information:

<http://www.bees-ong.org>



Several species of trees are found in Ouémé River Basin

Empowering Communities to Influence Decision Making

It is not very difficult to locate John Matsiko's village of Buseruka along the banks of River Wambabya in Hoima district of Uganda. The road leading to Buseruka meanders through a national park but reaches this formerly little known village.

The main reason why this road leads to Buseruka — and why Buseruka is in the news — is the plan by Ugandan government to establish an oil refinery in this area and eviction of the occupants of this area — including John of course.

John is one of the over 170,000 people that have been living in the villages along the banks of River Wambabya and Lake Albert shores. The communities survive on cattle Keeping and cultivation. For centuries, they have done their activities conscious of their surroundings.

However, since the commencement of exploration and discovery of commercial oil reserves about a decade ago, the life in the area has fundamentally changed.

Oil activities have caused displacement of people from their native areas. And people from other areas are coming to the oil region in such of jobs and markets. This

has led to sudden increase in population, forcing the natives to change their practices, customs and beliefs with negative consequences.

Deliberate Intervention

Since 2011, Africa Institute for Energy Governance (AFIEGO) has been helping affected oil communities in the areas of River Wambabya and Lake Albert sensitizing them about relevant laws including those on the rights to a clean environment, land, water, property, compensation and others.

AFIEGO is a public policy research and advocacy NGO dedicated to influencing energy policies to benefit the poor and vulnerable. Based in Kampala- Uganda, the organization was borne out of the need to contribute to efforts to turn Africa's energy potential into reality; and to ensure that the common man and woman benefit from this energy boom.

Through lobbying, research and community education, AFIEGO works with communities and leaders to ensure that energy resources are utilized in a way that promotes equitable development, environmental conservation and respect for human rights.



Oil activities in Hoima have caused displacement of people from their native areas. The Most affected are women and children



Since the commencement of exploration and discovery of commercial oil reserves in Uganda's Albertine Graben region about a decade ago, life in the area has fundamentally changed.

Empowering local communities and working with them to influence policy to work for the citizens has remained AFIEGO's major secret as an organization.

AFIEGO's new approach based on empowering local communities and facilitating them through modelling examples and AFIEGO's presence to engage parliament, ministers, and government agencies such as those dealing with environment, wildlife, human rights and

others have yielded a lot. It has helped local communities from deep in the rural areas to compile and present policy petitions and comments to parliament, the President, ministers, districts and others.

As a result of AFIEGO's influence, today, many NGOs in Uganda have started doing the same. Perhaps, the effectiveness of AFIEGO's approach is the reason why the authorities have been harsh on this organisation and coming up with laws that stop NGOs from organizing local communities for development and demanding for accountability.

AFIEGO's partnership with Both ENDS has enabled it to access relevant information and developed interest on water management and community rights. AFIEGO is now working with Both ENDS to look for financial resources to implement individual and joint projects.

Indicators of Progress and Achievements Since 2011, AFIEGO has:

- Helped 93 families in Buseruka from being evicted before they are paid their compensation.
- Held negotiations that resulted into government buying land to resettle the refinery affected people.
- Supported communities in Kidoma parish around River Wambabya to restore degraded areas by planting fruit trees along the River banks. The trees serve many purposes including providing food as fruits, restoring the area, environmental conservation, increas-

// It is my duty to contribute in making my country a better place for all the citizens especially the downtrodden to live in, //
Dickens Kamugisha, CEO AFIEGO

ing household incomes through sale of trees and others.

- Caused the Auditor General of government to audit the electricity projects that were displacing local communities.
- Distributed copies of River Banks and Lake Shores Regulations to all the local authorities and got commitment from the district environmental officers to enforce the laws.

Looking Forward

Uganda's oil sector is entering into production through a refinery and pipelines.

The production processes will require huge amounts of water for the refinery, large chunks of land where pipelines will be passing from the various oil wells to the refinery, land for the pipeline to export crude oil through Kenya-covering a distance of over 500 kms. The infrastructure development will result into many challenges including displacing communities from their land, going through wildlife areas, lakes, rivers, wetlands and others. There will also be other risks such as water pollution, air pollution, soil pollution and others resulting from poor treatment of wastes and oil spills.

The best way to manage these challenges and risks will be to empower the communities to engage with the government and companies to ensure that laws are effectively enforced. If laws are enforced, the result will be respect to human rights including the right to water, environment, land and others.

For more information:
<http://www.afiego.org/>



In many developing countries, millions of Children and women spend several hours a day collecting water from distant, often polluted sources

Enhancing Integrated Water Resources Management in Dayi River Basin

The Dayi River in the Volta region of Ghana is once again drawing attention to itself, this time for persistent siltation and pollution.

The two hitches are a consequence of soil erosion as a result of deforestation from agriculture and logging by commercial wood companies, chemical pollution due to poor waste disposal and indiscriminate use of agrochemical due to farming close to the banks of the river. This is exacerbated by climate change extremes of flooding, drought and variability. This situation has implication for food production in the Dayi river basin affecting the livelihood of farmers who cannot extricate themselves out of poverty.

The Dayi river basin is located in the Volta Region, east of Lake Volta. It is rich in water resources and forms a network of small and large tributaries that drain into the main River Dayi channel. The Dayi River runs along the Ghana-Togo Highlands into Lake Volta.

Strategic Intervention

The disquieting trend and state of affairs in the Dayi river basin necessitated crucial action. This is the reason why the Development Institute, a member of AfriWater CoP, started working in Dayi River Basin (DRB) in 2008.

The Development Institute is a Ghana based non-government, not-for profit development organization that aims at empowerment of civil society organizations to become active and useful partners in the socio-economic transformation in Africa.

DI has worked with the Global Environmental Fund (GEF), a UNDP sponsored project to stop the drying up of streams and tributaries of the Dayi River by improving resource management and introducing new livelihood options. The area had experienced a long period of degradation, causing disappearance of year round springs, bush fires



By 2025, 1.8 billion people will be living in countries or regions with absolute water scarcity.

and disappearance of tree base market economy (cocoa and oil palm). A model was developed to protect vegetation in uphill areas, zero growing on slope and sustainable agriculture practices.

From 2009 to 2012 within ADAPTS Ghana Case project began as an initiative of Institute for Environmental Studies of the Free University of Amsterdam (IVM), Acacia Water and Both ENDS with the Development Institute and Water resources Commission as Ghana partners. ADAPTS enabled a broad approach to the problem, measuring climate change in the basin; water volume in Dayi; re-vegetating by tree planting and by developing especially irrigated agriculture setting up

buffer zones in some parts of the basin and working with six farmer groups.

Since 2009 DI has been collaborating with Both ENDS in enhancing the sustainable management of the Dayi River Basin through continual empowerment of communities in the basin to appreciate consequences of basin degradation, climate change effects and to engage duty-bearers for services needed for water security in the basin. DI and Both ENDS have jointly engaged Ghana Government through Water Resources Commission, governmental agency for water resources management to mainstream climate change into water management in Ghana. DI and Both ENDS are jointly looking for

funding opportunities to implement the IWRM plan for the Dayi Basin, other river basins in Ghana and the Volta River Basin.

DI's Approach for Delivering Sustainable Outcomes

The DI is not only a facilitation agency but also engages in empowering communities to be agents of their own sustainable development through enabling them to appreciate their challenges and the critical roles they need to play. DI also creates learning opportunities for communities through hands-on piloting of desired approaches. As strategic objective, the DI builds strong partnerships with relevant stakeholders; traditional authorities, women groups and youth groups, farmer associations and government agencies and connects communities in the basins to decision makers and engage them constructively. It has created platforms to share information and knowledge, including the Weto Platform and the Volta Green Development Network to advocate for and work towards sustainable management of Weto Mountain Ecosystem which includes the Dayi River basin.

Outcomes and Impact

The riparian communities empowered by DI have become aware of climate change challenges and have adopted short during crops as adaptation to climate change effects of drought. These have also created buffer zones along the Dayi channel. Six communities are involved in this. Over 2000 farmers from over twenty communities have been empowered to adopted cocoa agro-forestry and have established buffer zones along four major rivers and water falls. Dayi River Basin Board which is mandated to ensure sustainable management of Dayi basin is now in place implementing the Dayi River Basin Management Plan. Several networks of Community Based Organizations to support development initiatives in the basin; the

Weto Platform, Weto Community Resource Management Areas Board and the Volta Green Development Network are sustainability pillars all put in place and working.

The activities of DI in the Dayi River Basin and the Weto Mountain Ecosystem has attracted the interest and collaboration of several institutions, which are partnering with DI to strengthen the capacities of the communities and to enhance the sustainability of the initiatives in the Dayi Basin and beyond into Togo. These include: IUCN-Netherlands, Both ENDS and Solidaridad. Some four NGOs from Togo are also partnering with DI on the buffer zone concept and the cocoa agroforestry to be replicated in Togo. The Volta Basin Authority is also partnering DI for the replication of the ADAPTS Approach for the other six basin countries of the Volta Basin and the formation of civil society partnership of the basin. The major impact of the DI interventions however, in the water/forest and climate change interventions is the building of local capacity of excluded groups, women, youth and farmers and also government agencies; this though slow process, is the key to sustainable development.

Future Prospects

A monitoring and evaluation frame to assess the progress of the past interventions and of the socio-economic, hydrology, status of forests and standard of life the riparian communities of Dayi River, their use of the forest, and capacity needs to manage the natural resources. Another very important need of the Dayi Basin and the Weto mountain ecosystem is poor waste economy and improper use of agro-chemicals which have critical effects on water quality and associated resources of the Dayi River. Support to implement the IWRM plan for the Dayi River Basin is urgently needed and to ad-

“ We are co-creators and unless we function as such we continue in the cycle of insanity; the destruction of our only habitat; one earth. Our collective duty is to be creative and to facilitate the process for others, so together we can make earth a home for all not a few, ”

Ken Kinney, the Executive Director of the Development Institute

dress direct livelihood needs of the communities, water and sanitation and the conservation of the basin resources for the benefit of all basin citizens. In the near future the experiences and lessons learnt in the Dayi River basin will need to be applied in other river basins in Ghana where mining activities are a major challenge to water resources security in river basins such as Ankobra, Pra and Tano not forgetting working for the full participation of civil society organizations in the Volta River Basin.

For more information:

www.thedevin.org/



Several women in rural parts of developing countries spend most of their time collecting water from water sources situated far from their places of residence

Basic Descriptions

Athi-Galana-Sabaki River Basin

The Athi-Galana-Sabaki River is the second longest river in Kenya, with a total length of about 400 kilometers. Its catchment of 68,900 km² is found in nine counties, from its source in Kiambu and Kajiado Counties to its mouth in Kilifi County and it passes through the six counties of Nairobi, Machakos, Makueni, Kitui, Taita Taveta and Mombasa. With a population of 16.7 million people, the basin hosts more than 40% of the total population of Kenya.

Dayi Basin in Ghana

Dayi basin is part of the Weto mountain range, separating Ghana from Togo, which used to be a sub-tropical rainforest area. After 1900 the German colonizer introduced rain fed cocoa farming around the capital of Ho which attracted labour migrants from neighbouring areas. However, the slash and burn practices resulted in a steady degradation of the vegetation. Negative effects became visible around 1980 with a crisis in the cocoa economy. Dayi became a stagnating region with increased cultivation of cassava (threatening the tree based economy). Around 60% of the population depend on rain-fed farming for their livelihood. However, average annual rainfall decreased from 1700 mm/year in 1975 to 1400 mm/year at the present.

Lake Albert Catchment, Uganda

The Lake Albert catchment comprises the part of the Great Rift Valley around Lake Albert on the Ugandan side and is dominated by this great lake. Lake Albert is one of the Africa's great lakes. The Lake is located in the center of the continent, on the border between Uganda DR Congo. Several rivers originate from elevated ground above the escarpment and Rwenzori Mountain and flow down into Lake Albert. The main rivers arising from this important watershed area are: Sambiya, Victoria Nile, Hohwa, Wabambya, Waki, Waiga, Wisonso, Waisoke and Muzizi. Subsequently, Lake Albert drains into the Nile. Lake Albert is the largest single water body in the region. The livelihoods of the local populations around Lake Albert are closely linked to the watershed and dependent on the ecosystems.

Mono River Basin – Togo and Benin

The Mono River is the major river of eastern Togo. It is approximately 400 km long, and drains a basin of about 20,000 km². The river forms the international boundary between Togo and Benin. The river drains into the Bight of Benin. Communities live from small scale farming, fisheries, and livestock rearing. The river is dammed 160 km from its mouth by the Nangbeto hydroelectric dam, a partnership between Benin and Togo completed in 1987. Studies have reported economic benefits, but also forced displacement, con-

flicts on compensation, substantial modification in the ecology of the lagoon system at the river's mouth and reduction in water flow. Besides the international agreement between Togo and Benin on electricity, Mono was devoid of a legal and institutional framework for the management of its water resources, up till 2011 when the setup of the Mono Basin Authority of the Mono Basin (MBA) was initiated.

River Tana Delta, Kenya

The Tana is Kenya's largest river and discharges, on average, 4,000 million m³ of freshwater annually. The total catchment measures an area of 126,000 km² (equivalent to 21.7% of the land area in Kenya), while the delta measures an area of 130,000 hectares. It is inhabited by around 100,000 people that live together in 115 villages. The core of the delta covers an area of about 130,000 ha, mainly in Tana River District. The population of the District as at 2010 was 96,000 people. The primary ethnic communities living in the delta are the Pokomo (44%) who are sedentary farmers and the Orma (44%), nomadic pastoralists and the Wardei pastoralists (8%). Other ethnic groups (Luos, Luhyas, Wataa/Sanyes, Malakote and Munyoyaya) account for the remaining 4 percent. The basin is also an important international trekking area for pastoralists. During the dry season it receives several animals from other parts of Kenya and Somalia. The delta is a seasonal wetland as half

of its territory is regularly inundated during the rainy season. Also the seasons vary dramatically from year to year. A series of dry years, with ponds drying up and grasslands eaten bare, may be followed by a year with extensive floods. BirdLife International has designated the delta as an important bird area and the delta has been designated as a Ramsar site in 2012.

Ouémé River Basin

Ouémé River also spelled as Weme rises from the Atacora massif in north-western Benin. It is approximately 310 miles (500 km) in length and flows southward, where it is joined by its main affluent, the Okpara, on the left bank and by the Zou on the right. It then divides into two branches, the western one discharging into Lake Nokoué in the Niger Delta near Cotonou and the eastern into the Porto Novo Lagoon. The Ouémé River is a river in the countries of Benin and Nigeria.

Senegal River Basin

The Senegal River is a West African river of, 1790 km long, taking its source in Guinea at a 750 km altitude and flowing through Mali, Mauritania and Senegal, before joining the Atlantic Ocean in Saint Louis. Located in a water scarce region, the river is key resource for development in terms of energy (hydropower and irrigation for biofuels), food (intensive and subsistence) and water (from industry to community). The basin has a significant wetland resource whose health is to a large extent dictated by the river itself. Floodplain wetlands and the Delta are dependent on the river's regime being maintained within certain boundaries and hold



IUCN, the International Union for Conservation of Nature estimates the number of hippos in Africa to between 125,000 and 150,000

huge value for communities supporting the livelihoods and local economies many thousands of people. The area has a total population of 35 million inhabitants, of whom 12 million live in the river basin, and where malaria control intervention coverage is among the lowest in the world.

The Nile Basin

The Nile is one of the world's great rivers. It traverses 11 countries and nearly 6,700 kilometres. It covers 10% of the African surface area and

contributes 60% of the states' GDP. The Basin has highly diverse and variable climate regimes, languages and cultures. The Human Development Index (HDI) of six of the Nile Basin countries rank among the bottom 25. Many of the critical water towers are degraded and in dire need for rehabilitation. There are 17 Wetlands and Ramsar sites covering 35,596 Km² that need to be preserved and protected. 42% of the basin is arid and hyper arid areas which causes a strain on the water resources.



Nearly 64 per cent of Africa's land surface lies within its 63 transboundary river basins



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