

Policy Brief

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Community River Management in East Africa

Lessons from R. Mayanja, Uganda and R. Njoro, Kenya

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INTRODUCTION

A river's well-being is largely dependent on human satisfaction and the capacity of the river's resilience. Its management and detection of its degradation can be measured through the physical, chemical, and biological characteristics (Dollar, 2007). Over the years humans have continued to interfere with the river's health in different ways including the construction of dams and bridges to control its flow as well as contamination at different levels. Due to intensification of human activities in a quest for economic development river health has become of primary concern as the ecology and environment are deteriorating by the day, (Sanon et al., 2020). Indicators are therefore crucial in showing the environmental influences of society.

The DPSIR (drivers, pressures, states, impacts, and responses) framework used in the project (Strengthening community-based research for river health and climate change mitigation in Eastern Africa (STREM)) is a causal framework used to describe the interactions between society and the environment. It seeks to analyze and assess environmental problems by bringing together various scientific disciplines, environmental managers, and stakeholders, to solve them by identifying the direct and indirect drivers of change, pressures, states, impacts, and responses.

For our rivers to be protected for future generations there needs to be a balance between socio-economics and environmental conservation. Society needs to be at the forefront of advocacy, management, and rehabilitation of rivers if we are to get clean and healthy water in the future. Sound and proper policies and collaboration among stakeholders are the key to unlocking strategies and balance as highlighted by some key policy messages in this brief.

Policy Recommendations

- Enhancing Collaborative Governance for Sustainable River Management
- Promote community education by raising awareness
- Enabling a smooth transition to adoption of alternative livelihoods
- Holistic Approach to Ecosystem Preservation
- Formulating inclusive and impact-oriented policies

Key Messages

- Collaboration for sustainability
- Adoption of sustainable practices by stakeholders for R. Health management
- Adopting alternative livelihoods
- Rivers are vital for sustaining ecosystems and resources, yet human activity harms them
- Integrating Ecosystem Preservation and Cultural Practices

KEY POLICY MESSAGES

Collaboration for Sustainability

Miscommunication and lack of communication in other cases by the different stakeholders within R. Mayanja and R. Njoro was one key challenge that was glaring. Researchers, communities, educationists, and government entities do things that are relevant to the Rivers in silos which gives little impact and dissatisfaction among some. Engaging communities in policy development, ensuring their ownership. Joint efforts in research, incentive provision, and funding can be directed toward mitigating issues affecting river health. However, for better impact, this needs to be done with clear role delineation and an understanding of how the different groups contribute to the improvement of the Rivers. To emphasize, in environmental management, particularly for river basin management, collaborative governance has become the standard procedure. However, further study is required to determine "if, when, and how collaboration is effective" to achieve desired results. (Bodin 2017, p.1). Some documentation has linked collaborative governance to ecological conditions, in the context of river basin governance, showing a potentially positive but complex relationship (Biddle, 2017), which can be achieved if done right with the right intention.

Adoption of Sustainable Practices by Stakeholders for R. Health Management

Nature-based solutions offer a holistic and sustainable approach to river health management. By restoring and preserving natural ecosystems along rivers, we can improve water quality, mitigate flooding, enhance biodiversity, promote climate resilience, and provide numerous benefits to both ecosystems and human communities. These approaches are essential for creating healthier, more resilient, and more sustainable river systems for generations to come. With the help of different environmental groups that are geared toward sustainable environmental management, this is achievable.

Adopting Alternative Livelihoods

In addition to adopting sustainable practices, it is important to diversify sources of livelihoods as a community. A statement from a NEMA official in Uganda who has been at the forefront in environmental management,

"population will always increase in the African continent but it is time more effort is put on getting alternative sources of livelihoods would reduce the pressure off the rivers"

This can only be achieved through continuous education and awareness creation. This is emphasized in a publication by the Centre for International Forestry Research (CIFOR), 2016 on "Reframing the concept of alternative livelihoods."

Rivers are Vital for Sustaining Ecosystems and Resources, yet Human Activity Harms them

Human activity-related water contamination is becoming a major concern on a global scale. Since the 1990s, the situation has gotten worse in practically all rivers in Latin America, Asia, and Africa (UNEP, 2016). It is important to commit to implementing comprehensive measures to reduce pollution, improve water treatment, and prevent the reclamation and conversion of wetlands. This is necessary to safeguard the quality of our water resources and preserve them for future generations. Taking action to support the restoration, rehabilitation, and management of degraded areas and allowing the natural regeneration of degraded rivers, wherever possible, is crucial for promoting biodiversity and creating a sustainable and healthy ecosystem.

Integrating Ecosystem Preservation and Cultural Practices

Cultural services are some of the ecosystem-based services gained by humans. With this in mind, as both R. Mayanja and R. Njoro offer cultural benefits to their people, it is important to take immediate action to support degraded rivers' restoration, rehabilitation, and natural regeneration. This is crucial for maintaining biodiversity and creating a sustainable and healthy ecosystem. To balance tradition and conservation, cultural practices should be respected, recognized, and permitted, with guidelines and regulations at the county and national levels. Maintaining a balance between preserving traditional practices and safeguarding rivers and natural resources for future generations is essential.

POLICY RECOMMENDATIONS

Collaborative Governance for Sustainable River Management

Policies that foster environmental sustainability and safeguard our rivers, centered on collaboration among key stakeholders are key for progression. This includes river management entities, environmental sustainability stakeholders, and local communities, who will be actively engaged in collaborative initiatives. This will empower local communities, encourage collaborative research, allocate resources sustainably, define clear stakeholder roles, enhance stakeholder communication, and improve governance to ensure effective and sustainable river management. By embracing collaboration and harmonization, our rivers are preserved and offer security for a sustainable future for the communities that depend on them.

Promote Community Education by Raising Awareness

To build a resilient ecosystem for future generations, initiating community engagement programs to educate residents on the significance of the River Njoro and R. Mayanja garner their active participation in conservation efforts. Creation of awareness on actively implementing supporting sustainable practices, including reforestation, suitable tree planting, and responsible land use, to ensure the longevity and vitality of the Rivers. This ensures a community-driven approach to river conservation, where informed residents actively contribute to the sustainable development and preservation of the rivers for current and future generations. Launching public awareness campaigns to educate citizens about the importance of rivers, the threats they face, and the individual actions needed to contribute to conservation. Foster a sense of collective responsibility for sustainable river management.

Enabling a Smooth Transition to Adoption of Alternative Livelihoods

Community members should be taught and encouraged to use alternative sources of livelihood, water, and energy to avoid over-exploiting services by the river. Community education centers need to be set up for experiential learning on ways of using other environmental benefits to support livelihoods. People and communities can lessen their reliance on a single source of livelihood such as beekeeping and increase their resilience to economic shocks by diversifying their sources of income.

In addition to reducing poverty, this can encourage inclusive economic growth. As the 24 members of the Kanjikomu Self-Help Group in Kirinyaga County disseminate the sweetness of honey far and wide, beekeeping is proving to be a gold mine. Structures that enable smooth transition should be laid out in policy including licensing and taxation.

Holistic Approach to Ecosystem Preservation

It is essential to focus on protecting rivers as crucial natural resources, as they play a vital role in maintaining a healthy ecosystem. Recognizing each individual's role in ensuring a healthy and thriving ecosystem for future generations is important. This emphasizes personal responsibility in contributing to sustainable practices that preserve our rivers. Acknowledging and permitting cultural and traditional practices in utilizing river resources is important however the integration of these issues is subject to well-developed guidelines, policies, laws, and legislation at local, county, and national levels.

The guidelines should ensure a balanced approach that preserves traditional practices while safeguarding rivers and natural resources. This can be achieved by advocating for developing and enforcing regulations and rules to create a sustainable future is crucial involving forming and enforcing clear guidelines that ensure cultural practices harmonize with conservation efforts. The regulations should promote a balanced and sustainable coexistence.

Formulating Inclusive and Impact - Oriented Policies

From lessons learnt in the STREM project impact - oriented policy can be summarized in one framework with key principles that governments should incorporate into their policy formulation processes. These principles include stakeholder engagement, equity and equality, data-driven decision making, participatory impact assessment, accessibility and inclusivity, capacity building and empowerment, intersectionality, adaptive management, transparency and accountability, and collaboration and partnerships. Together, these principles can help ensure that policies are informed by diverse perspectives, promote fairness and equal opportunities, are based on thorough data analysis, consider the potential impacts on marginalized communities, are accessible to all individuals, empower marginalized groups, recognize intersecting factors of discrimination, remain responsive to changing needs, are transparent and accountable, and leverage resources and partnerships for effective implementation. By following this framework, governments can develop policies that are not only inclusive but also have a meaningful and positive impact on society as a whole.

CONCLUSION

The community can play a key role in managing and preserving ecosystem services relevant to rivers and involving them in certain processes including policy formulation, enforcement of rules and laws, awareness creation, and conservation and restoration initiatives is a step towards improving the quantity and quality of our waters. Though complexities of working with different stakeholders may arise proper understanding that they form an institution of different roles and strengths allows for a lot to be achieved in a short time. It is undeniable that if anything is to be achieved the community has to be involved as they are the main beneficiaries.

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