

IMPLEMENTING UGANDA'S NATIONAL WETLANDS POLICY
A CASE STUDY OF KABALE DISTRICT

Sophie Glass

School for International Training

Project Advisor: Robert Bagyenda

Academic Directors: Charlotte Karungi Mafumbo and

Martha Nalubega Wandera

Program Assistant: Miriam Ouma

Project Location: Kabale and Kampala Districts

Fall 2007

DEDICATION AND ACKNOWLEDGEMENTS

This paper is dedicated to my family in America who launched me into this adventure and to my family in Uganda who safely and lovingly caught me.

I am also grateful to the staff from the School for International Training: Miriam Ouma, Charlotte Karungi Mafumbo, Martha Nalubega Wandera, Jennifer Wateta, Meddie Osundwa, Alice Tebyasa and Muna Siraje. Thank you to Robert Bagyenda for his guidance during my field research. Lastly, thank you to Dez Kamugyeragyere and his family for opening their home by the Kitanga Wetland to me and providing me with an academically and personally enriching experience.

ABSTRACT

Uganda's "National Policy for the Conservation and Management of Wetland Resources" was launched in 1995 to promote the protection of Uganda's wetlands in order to sustain their ecological and socioeconomic functions. Despite the formal policy, wetlands continue to be drained and converted. This report examines factors that account for the divide between the National Wetlands Policy and reality.

Six weeks were spent researching the challenges associated with implementing the National Wetlands Policy. Kabale District was used as a case-study to better understand the issues that institutions and stakeholders face when trying to abide by the precepts of the policy. Rapid Rural Appraisal techniques were used to extrapolate information while in the field, and formal interviews with environmental officers were conducted while based in Kampala.

The research concluded that institutions struggle to implement the National Wetlands Policy due to a shortage of funding, bureaucratic discord, the politicization of wetland issues and a lack of wetland knowledge. Wetland stakeholders have difficulty complying with the policy due to constraining environmental and social factors, unprofitable wise-use activities, unavailable or environmentally destructive alternatives to wetland cultivation, a lack of commitment, decreased dependency on wetland resources and the lingering effects of pre-existing laws and leases. Despite these challenges, the National Wetlands Policy has still positively contributed to environmental management in Uganda and is a notable example of wetlands conservation in the world.

TABLE OF CONTENTS

| | |
|---|-----------|
| List of Acronyms..... | 6 |
| Introduction..... | 7 |
| Background..... | 7 |
| ▪ Uganda’s Wetlands | |
| ▪ Conversion and Drainage of Wetlands | |
| ▪ History of Wetland Management | |
| ▪ The National Wetlands Policy | |
| ▪ Codification into Legislation | |
| ▪ Kabale District Background | |
| ○ Nyamuriro Swamp Background | |
| ○ Rushebeya-Kitanga Wetland Background | |
| Objectives..... | 13 |
| Justification..... | 13 |
| Methodology..... | 13 |
| ▪ Rapid Rural Appraisal | |
| ○ Use of Existing Materials | |
| ○ Direct Observation | |
| ○ Guided Interviews | |
| ○ Group Interviews | |
| ▪ Code of Ethics | |
| ▪ Biases and Errors | |
| Findings and Discussions: Challenges to Policy Implementation..... | 17 |
| ▪ Implementation Institutions | |
| ○ Wetlands Inspection Department | |
| ○ National Environmental Management Authority | |
| ○ Local Government | |
| ○ Foreign Governments | |
| ○ Non-Governmental Organizations | |
| ○ Community Based Organizations | |
| ○ Religious and Educational Establishments | |
| ▪ Institutional Challenges | |
| ○ Shortage of Funding | |
| ○ Bureaucratic Discord | |
| ○ Politicization of Wetland Issues | |
| ○ Lack of Wetland Knowledge | |
| ▪ Wetland Stakeholders | |
| ▪ Stakeholder Challenges | |
| ○ Constraining Environmental and Social Factors | |
| ○ Unprofitable Wise-Use Activities | |
| ○ Unavailable or Environmentally Destructive Alternatives | |
| ○ Lack of Stakeholder Commitment | |
| ○ Effects of Modernization | |
| ○ Pre-Existing Laws and Leases | |
| Conclusion..... | 31 |
| Recommendations for Further Research..... | 32 |
| Bibliography..... | 33 |
| Appendices..... | 35 |

LIST OF ACRONYMS

CBO – Community Based Organization
CBWMP – Community Based Wetland Management Plans
GEF – Global Environmental Facility
GIS – Global Information System
LC – Local Councilor
NEMA – National Environmental Management Authority
NGO – Non-Governmental Organization
NRM – National Resistance Movement
NWIS – National Wetland Information System
PAR – Participatory Action-Research
RRA – Rapid Rural Appraisals
USAID – United States Agency for International Development
UWA – Uganda Wildlife Authority
WID – Wetlands Inspection Department
WWF – World Wildlife Fund for Nature

INTRODUCTION

“Policies are not single-time vaccinations that eradicate plagues. Instead, they are merely statements of intention that need constant support.”¹

Uganda’s “National Policy for the Conservation and Management of Wetland Resources” is an ambitious document that calls for the preservation of Uganda’s wetlands in order to sustain their ecological and socioeconomic functions. However, a policy is only the first step in successful environmental management. In order for a policy to become a reality, it must be implemented.

Research was conducted for six weeks in Kabale and Kampala Districts in Uganda to examine the challenges associated with implementing the National Wetlands Policy. Kabale District was chosen as a case-study because in this area there is a sizable divide between the espoused wetlands policy and actual conditions. To close this divide, recent efforts have been made to enforce the National Wetlands Policy, which has stirred conflict in parts of the district.² In-depth interviews and literature reviews took place in Kampala.

The first part of this study will overview the wetlands in Uganda, the National Wetlands Policy and its associated legislation. The second part will describe the roles of institutions that assist in carrying out the National Wetlands Policy and the responsibilities of wetland stakeholders who most closely manage these resources. Then, by focusing on Kabale District, this report will analyze the challenges institutions face with implementing the National Wetlands Policy and the difficulties wetland users experience while attempting to comply with the policy.

BACKGROUND

Uganda’s Wetlands

Wetlands are defined as: “areas where plants and animals have become adapted to temporary or permanent flooding by saline, brackish or freshwater.”³ While the boundaries of wetlands are difficult to delineate, the Forest Department estimates that wetlands cover

¹ George Honalde 1999, *How Context Matters*, West Hartford USA: Kumarian Press.

² Robert Muherza, “NEMA Cracks Whip on Wetland Encroachers,” *The Monitor*, Aug 31 2007.

³ *From Conversion to Conservation: Fifteen Years of Managing Wetlands for People and The Environment in Uganda*. Kampala, 2005.

13% of Uganda's surface area.⁴ Wetlands are an integral part of Uganda's geography and constitute an important resource for development.

Their ecological functions include the maintenance of the water table, prevention of erosion, flood control, micro-climate regulation, toxin retention, sediment traps and water purification. Wetlands provide habitats for wildlife, notably waterfowl. In addition, wetlands help regulate the micro-climate.

Wetlands also provide socio-economic benefits to the community. Plant products, such as papyrus, are used for handcrafts and roof thatching. Wetlands provide: fish for consumption and sale, clean water and grass for cattle-grazing, areas for beekeeping, sitatunga (waterbuck) for hunting, and opportunities for tourist enterprises. Wetlands contribute to the nation's health by purifying water. In rural areas, the economic valuation of this natural water purification is approximately US\$25 million a year.⁵

Conversion and Drainage of Wetlands

Uganda is mainly an agrarian society with over eighty percent of the country engaging in agricultural activities.⁶ As the population swells, wetlands are the last available land for cultivation. Despite the ecological and socio-economic importance of wetlands, they are often converted into agricultural land. This conversion has deleterious effects on Uganda's environment and population. For example, as wetland soils dehydrate they become too acidic and thin to support bountiful harvests. Without the wetlands' ability to soak up excess water, certain regions, such as the northern Teso region, are much more susceptible to flooding. Without clean water, the population is at greater risk for water-borne illness. If wetlands are converted for monocultures, such as rice in eastern Uganda or potatoes in western Uganda, the crops are at greater risk of annihilation by pests or diseases unless supplanted with herbicides. Economic flexibility is also decreased without traditional wetland enterprises. In rural areas, diversification of income sources is extremely important in order to minimize vulnerability to various environmental or economic shocks. Fishing, craftmaking and beekeeping help provide additional income during crop failures. The loss of wetlands can

⁴ *From Conversion to Conservation.*

⁵ *From Conversion to Conservation.*

⁶ Thomas Ofcansky, 1996, *Uganda: Tarnished Pearl of Africa*, Boulder USA: Westview Press, Inc.

also result in a change in local climate, which in turn, affects the planting and growing seasons.

History of Wetland Management

Wetlands management in Uganda has greatly changed depending on the regime in power. Before national independence, the Gibb Study (1954) advised draining the wetlands for agricultural purposes. This influential study influenced the Obote and Amin administrations to encourage Ugandans to convert wetlands. These administrations issued leases to land tycoons who claimed the land for large-scale cattle grazing and agriculture. These leases disenfranchised the poor peasants who were denied access to the wetlands. When President Museveni came to power in 1986, he placed a ban on large-scale wetland drainage until a wetlands program was developed. The Museveni administration has continued to support wetland management and conservation in Uganda, and has become a signatory to the international RAMSAR wetlands convention.

The National Wetlands Policy

The National Wetlands Programme was launched in 1989 and its first objective was to research Uganda's wetlands to generate scientific information to help form sound policy. The data was compiled into the National Wetlands Information System (NWIS) that mainly consists of Global Information System (GIS) maps, and the National Wetlands Inventory (NWI) that was based on extensive field surveys. After acquiring a baseline of scientific knowledge, multi-stakeholder forums were held with the populace to give them an opportunity to help sculpt the wetlands policy. In 1994, the "National Policy for the Conservation and Management of Wetland Resources" was adopted by Parliament. It was the second wetlands policy in the world, and the first of its kind in Africa.

The goals of the policy are to:

1. To establish wise-use principles by which wetland resources can be optimally used now and in the future;
2. To end practices which reduce wetland productivity;
3. To maintain the biological diversity of natural or semi-natural wetlands;
4. To maintain wetland functions and values;

5. To integrate wetland concerns into the planning and decision making of other sectors.

The policy outlines thirteen specific stipulations:

1. No further drainage of wetlands.
2. Ensure environmentally sound management of wetland resources.
3. Ensure sustainable use of wetlands.
4. Conserve wetlands by fully protecting certain wetlands and partially protecting other wetlands for research purposes.
5. Ensure full protection of wetlands that provide water and treat effluent.
6. Government ownership of wetlands for people of Uganda; no leases to individuals.
7. Recovery of certain previously drained wetlands.
8. Ensure that Environment Impact Assessment precede all developments and monitoring throughout the development process.
9. Develop public awareness.
10. Carry out research and a full inventory of wetlands.
11. Build capacity by training staff and developing a system of EIAs.
12. Promote international actions and agreements.
13. Enact wetlands legislation and create institutional arrangements.

Codification into Legislation

Policies are not laws; they are the goals and intentions of a state.⁷ However, aspects of a policy can be incorporated into laws. The “National Policy for the Conservation and Management of Wetland Resources” has been codified into several pieces of Ugandan legislation.

For example, the Constitution of Uganda specifically mentions communal wetland tenure. It states: “Wetlands are held in trust for the common good of all citizens.”⁸ The National Environmental Statute (1995) asserts that without written approval from the National Environmental Management Authority (NEMA), it is illegal to reclaim or drain any wetland. Moreover, it is an offence to build any structure or engage in any activity that has an

⁷ George Honalde

⁸ The Republic of Uganda, 1995, *The Constitution of Uganda*

adverse effect on the wetland. The Local Government Act (1997) devolved the responsibility of wetland management to district authorities. The Environmental Impact Assessment Regulations (1998) mandates the use of environmental impact assessments (EIAs) prior to any development.

Kabale District Background

Kabale District is located in southwestern Uganda. It boasts verdant hills with wetlands filling the valleys. The elevation ranges from 1,219 – 3247 meters above sea-level. Its population growth rate is greater than the already rapid national rate of 3.3% per year. Kabale's 471,783 residents share 1,729.6 sq. km of land, some of which is uninhabitable due to steep mountain slopes. Kabale's main activity is agriculture, both subsistence and commercial. Common crops include: sweet potatoes, Irish potatoes, sorghum, beans, pigeon peas, wheat, bananas, tomatoes and cabbage. The average rainfall is 1,000 millimeters – 1480 millimeters per year, and the mean temperature is 17.5 degrees Celsius.⁹ However, due to micro and macro-level climate changes, the weather has become increasingly warm and the rains more difficult to predict. Several farmers reported that they have difficulty timing the planting of their crops due to the irregular rainfall, and community elders recalled that the weather was much cooler during their youth.¹⁰ Transport is difficult due to the hilly terrain and many of the roads become impassable during the rainy seasons. Two of the major wetlands are the Nyamuriro Swamp and the Rushebeya-Kitanga Wetland.

Nyamuriro Swamp Background

Nyamuriro Swamp straddles Muko and Ikumba sub-counties in Kabale district. It is a high altitude permanent wetland, situated 1,930 meters above sea level. The International Bird Association has designated it an important ornithological site. Approximately 60% of the wetland has been drained for agricultural purposes and the intact portion of the wetland covers 3.5 square kilometers. The wetland lies in a broad valley surrounded by steep cultivated hills that have been cultivated.¹¹

⁹ *Uganda Districts Information Handbook*, 2005, Kampala Uganda: Fountain Publishers.

¹⁰ Dez Kamugyeryere, interview, Kitanga Parish, Nov 20 2007

¹¹ Nyamuriro Management Plan

In 2002, residents of Muko and Ikumba Sub-Counties completed the Nyamuriro Wetland Management Plan. The planning process included stakeholder analyses, “Participatory Wetland Appraisals,” and the formation of local wetland planning groups. The overall objective of the plan is to “contribute to the management of the wetland in a way that sustains the provision of goods and services to the present and future generations.”¹² To achieve this goal, the management plan sets out to:

1. Raise awareness through holding seminars, creating demonstration sites and distributing informational materials
2. Strengthen wetland management institutions through developing local byelaws
3. Delineate wetland zones for various activities
4. Encourage alternative and sustainable use of wetlands
5. Restore and improve hillside lands through zero-grazing practices and tree-planting
6. Promote alternative income generating activities and the formation of micro-enterprises
7. Compile a wetland resource inventory
8. Develop historical profiles on traditional methods of resource methods

Rushebeya-Kitanga Wetland Background

Rushebeya-Kitanga Wetland is located in Rukiga County and covers three sub-counties: Kashambya, Rwamucucu and Bukinda. Its altitude is 1,735 meters above sea level. 5.5 square kilometers of the original wetland remain in-tact. The Rushebeya-Kitanga Wetland is a center of biodiversity and is a habitat for sitatungas, otters, ducks, crested cranes and white egrets.¹³

The Rushebeya-Kitanga Wetland Management Plan was created in conjunction with WID. The planning process lasted several years in order to consult stakeholders, sensitize the community and form resource-use groups. The completed management plan aims to:

1. Strengthen management institutions
2. Build capacity through trainings and workshops
3. Establish management procedures, such as regular meetings

¹² Nyamuriro Management Plan

¹³ Rushebeya-Kitanga Management Plan

4. Finance institutions and administrations
5. Invest in the construction of eco-tourism facilities
6. Create guidelines and boundaries to protect wetland resources
7. Establish community-based programs, such as agro-forestry
8. Control wetland predators, including sitatunga
9. Research the hydrology, ecology and biodiversity of the wetland

OBJECTIVES

The overarching objective of the research was to understand the obstacles to policy implementation. By investigating wetland management in Kabale District, the goal was to better comprehend the challenges various institutions experience while trying to implement the national wetlands policy, and the difficulties wetland stakeholders experience while trying to comply with this policy.

JUSTIFICATION

Wetlands are an integral part of Uganda's geography, society and economy. Wise-use of these resources can contribute to the overall development of Uganda. Therefore, it is important to identify the factors that obstruct policy implementation in order to reform implementation strategies so that wetlands can be managed for Uganda's present and future welfare.

METHODOLOGY

Research was conducted in from October 21, 2007 to December 1, 2007 in Kampala and Kabale Districts in Uganda. Rapid Rural Appraisal (RRA) techniques were used to garner information about wetland policy implementation.

Rapid Rural Appraisal

According to Robert Chambers in Rural Development: Putting the Last First, some RRA techniques include: using existing information, identifying and learning from key informants, direct observation, guided interviews and group interviews. A key component of RRA is

“working with the people themselves as investigators.”¹⁴ The strength of RRAs lies in triangulating research methods to develop a nuanced understanding of research topic.

Use of Existing Materials

A literature review was conducted at the WID and NEMA resource centers in Kampala. Information about Kabale was investigated at Kabale’s District Environmental Resource Center. Books and other published materials on environmental policy and development were examined at the World Learning resource center in Kampala.

Direct Observation

While in Kabale, a week was spent conducting water quality testing in the Nyamuriro swamp with three scientists and one local field guide. Another week was spent living with a family who lived near the Kitanga wetlands. This exposure helped the researcher glean important knowledge on the ecological and socio-economic aspects of wetlands. By directly observing wetland practices, the researcher could critically evaluate assertions in reports and books about the conditions of wetlands and the strengths and weaknesses of implementation strategies.

Guided Interviews

Semi-structured interviews with experts and informal interviews were carried out to acquire the latest information from government officials and wetland stakeholders. In-depth interviews with Paul Mafabi, Julius Mafumbo and Robert Bagyenda from WID offered valuable information on the operations of this Department. An extensive interview with Jackson Katarikaawe, a governing council member of Wildlife Club of Uganda, shed light on the role of NGOs in wetland management. Interviews with Kasangam Bernard and Paul Sabiiti from the Kabale District Government clarified issues pertaining to wetland management in Kabale. Some of the key questions asked during in-depth interviews were:

1. What are the successes and failures of the following implementation strategies?
 - a) Resource Assessment: Surveillance and Monitoring
 - b) Resource Management: “Wise-use” methods:

¹⁴ Robert Chambers, 1983, *Putting the Last First*, Essex England: Pearson Education Limited.

- c) Resource Management: EIAs
 - d) Resource Management: Community Based Wetland Management Plans
 - e) Awareness: information dissemination (advertisement, pamphlets meetings etc.)
 - f) Capacity building: trainings, workshops etc
2. What other strategies have you used? Would like to see used?
 3. What are other challenges does your institution face with implementing the NWP?

Informal interviews were conducted with residents of Kabale who live near Nyamuriro swamp and the Rushebeya-Kitanga wetland. An interpreter was used to translate from Rukiga (the local language) to English. Discussions with the chairman of the Rushebeya-Kitanga Wetland Association helped expose local management issues. Conversations with local fishermen, beekeepers, craftswomen and farmers helped elucidate the challenges of complying with the wetlands policy. The interview guide used during these informal sessions contained the following questions:

1. What are the challenges associated with complying with the following aspects of the NWP:
 - a) No drainage of wetlands unless more important environmental management requirements supersede.
 - b) “Sustainable use” of wetlands to ensure the benefits of wetlands are maintained for a foreseeable future.
 - c) Equitable distribution of wetland benefits.

Group Interviews

Focus group discussions were held with the Rushebeya-Kitanga Wetland Association, the Nkoni Women’s Craft Group and Kitanga Functional Adult Literacy Group. The groups ranged in size from twelve to twenty-four attendees. The Rushebeya-Kitanga Wetland Association was mixed gender, while the Nkoni Women’s Craft Group and Kitanga Functional Adult Literacy Group were strictly women. Focus group discussions were useful in acquiring vast amounts of knowledge in a time-effective manner.

Code of Ethics

A strict code of ethics was abided by throughout the research process. Core tenets included respecting, protecting and promoting the welfare of all those affected by the work, protecting the dignity and privacy of the informants, giving full credit to all those who have contributed to this research. Most importantly, the interests of the informants took precedence over the research.

Biases and Errors

The limited time-frame of six-weeks rushed certain elements of research and prevented follow-up discussions and repeat interviews for clarification. If there was more time, other RRA techniques, such as ranking exercises, role playing, map sketching and diagrams would have been used. The brief research period prevented accessing the “invisible” members of society,¹⁵ such as the handicap and women who are confined to their homes. Gaining access to their opinions would have produced a more representative report. Additional time with the community in Kabale would have increased the level of rapport which would have facilitated more candid responses.

The information gathered had many inconsistencies. While this may be an accurate representation of the diversity of views within the community, it also might be indicative that informants may have given the answers they thought the interviewer (a twenty-year old Caucasian American female) wanted, as opposed to honest answers.

The use of a translator during stake-holder interviews and focus group discussions may have altered the informants’ responses because the translator was the chairman of the local wetlands association, and the informants may have tailored their answers to be agreeable with him. Another issue with translating from Rukiga to English is that cultural expressions can be lost in translation.

Focus group discussions were disappointing because despite the researcher’s efforts to probe, the participants generally gave one sentence answers. In larger groups there were only a few people who vocalized their opinions, while the remaining participants were silent.

Another research error was that the majority of informants hailed from the Kitanga portion of the wetland which is still in-tact. There is relatively little controversy associated

¹⁵ Tim May, 2001, *Social Research: Issues, Methods and Process*, Philadelphia USA: Open University Press.

with wetland management in this area because the wetland is too waterlogged to cultivate and therefore encroachment is not a problem. However, the parts of the Rushebeya Wetland near Muhanga trading center is easily drained and a tempting site for settlement. NEMA has clashed with Muhanga residents over encroachment and even demolished a house built on the wetlands. Interviews and discussions in Muhanga would have greatly contributed to the research by exemplifying the reluctance to comply with the National Wetlands Policy.

FINDINGS AND DISCUSSION:

CHALLENGES TO WETLAND POLICY IMPLEMENTATION

Policy implementation occurs at the interface of institutions and stakeholders. Both groups are necessary to turn a written policy into daily practice. However, many internal and external factors affect these groups (see Appendix B) and cause obstacles to successful policy implementation.

Implementation Institutions

According to a recent publication by the Wetlands Inspection Department (WID) “A law or policy in itself is not enough but needs resources (people, money, materials) to be implemented...[Institutions must] plan for sufficient monitoring and surveillance, train staff, provide them with transport, set penalties and adhere to them, create awareness, co-opt stakeholders and communicate example cases to a wider audience.”¹⁶ Implementing policy is a complex and arduous process and requires strong, organized and effective institutions. Within Uganda, government bureaus such as WID and NEMA advise and support local governments in the management of wetlands. NGOs and CBOs assist the implementation process by directly engaging wetland stakeholders. Less obvious, but equally important institutions are educational and religious establishments that help sensitize the public on wetland issues. Institutions outside Uganda, such as foreign governments and development agencies help fund wetland management programs and are key partners in the implementation of the National Wetlands Policy.

The Wetlands Inspection Department (WID)

¹⁶ *From Conversion to Conservation*

WID was founded in 1998 and is the lead agency of wetland management in Uganda. Their official mandate is: “To co-ordinate the implementation of the National Wetlands Policy through the collection, analysis, integration and use of biophysical, social and economic information, to development sustainable wetland resource management systems and promote their adoption through awareness, training, inspection and monitoring activities.”¹⁷ In their workshops, they teach wetland users about the wise-use of wetlands, such as “furrow and ridge” cultivation techniques that maintain the hydrological and ecological functions of the wetland while still permitting partial cultivation. Robert Bagyenda, WID’s Western Region Coordinator said, “[WID] builds on what people have been doing for years and has proven to work, instead of relying on new technologies.”

National Environmental Management Authority (NEMA)

NEMA oversees all environmental issues in Uganda. Their mission is to manage natural resources for sustainable development. They enforce the precepts of the National Environmental Statute and without the written approval from NEMA, it is illegal to reclaim or drain any wetland. It is also unlawful to erect structures in wetlands or disturb wetlands by drilling or tunneling. NEMA, with assistance from WID and local governments, identifies important wetlands that are habitats of notable fauna and flora, and compiles these wetlands into a national register. NEMA can declare any wetland to be protected, thereby forbidding or limiting human activities. NEMA is responsible for issuing permits to developers after approval of their EIAs.

Local Government

According to Paul Harrison in The Greening of Africa, “In the African environment, culture and economy can vary from one village to the next more dramatically than in any other continent.”¹⁸ Therefore, the participation of local authorities is necessary for sound environmental management.

As previously mentioned, The Local Government Act (1997) charged district authorities with the duty of overseeing wetland management. Their duties are to develop and

¹⁷ *From Conversion to Conservation*

¹⁸ Paul Harrison, 1987, *The Greening of Africa*, New York USA: Penguin.

implement bylaws, identify critical wetland areas and take appropriate action to ensure their conservation, mobilize the community and NGOs, create awareness, and monitor wetland management. Paul Mafabi, the Executive Director of WID, mentioned that “it is important for monitoring to take place at the sub-county level because here they are closest to the people. Even district-level monitoring is too far removed.”¹⁹ A recent survey revealed that in total, Uganda’s district governments contribute more funds to wetland management than the national government.²⁰

Foreign Governments

In an increasingly globalized world, support from foreign governments greatly contributes to the implementation of Uganda’s wetland policy. The Royal Netherlands Government and the Government of Belgium have financed the activities of the National Wetlands Programme. The United States Agency for International Development (USAID) and the Norwegian Agency for Development have financed research and wetland programs.

Non-Governmental Organizations (NGOs)

From the national to grassroots levels, civil society plays an important role in wetlands management. NGOs can generate their own funds from national and international donors and thereby can finance environmental institutions. National government bureaus, including WID, receive funding from the Global Environment Facility (GEF), the World Bank and the World Wide Fund for Nature (WWF).

On the local level, countless NGOs conduct community trainings on wise-use of wetlands and provide resources for income generating activities that decrease pressure on the wetlands. For example, World Vision (an American-based NGO) provided cows to the residents of Kabale to establish a small-scale cattle industry. NGOs, such as the World Conservation Society, also finance research on wetlands that can lead to better legislative decisions.

Community Based Organizations (CBOs)

¹⁹ Paul Mafabi, interview, Wetlands Inspection Department, Oct 24 2007.

²⁰ Julius Mafumbo, interview, Wetlands Inspection Department, Oct 26 2007

Ultimately, the future of wetlands is dependent on the behavior of local people. For this reason, CBOs are crucial for ensuring sound wetland management because they are the institutions closest to the people. Communal Wetland Associations have worked with WID to create “Community-Based Wetland Management Plans (CBWMP)” that provide guidelines for utilizing local wetlands. These associations are also useful in settling disputes over wetland uses or tenure. Paul Mafabi said “Wetland Management Plans help to ensure the equitable distribution of wetland resources because stakeholders contribute to the planning process.”²¹ Members of Communal Wetland Associations can monitor wetland activities and community members can report illegal encroachment to these associations. Some CBOs, such as women’s craft groups or fishermen associations provide a grassroots outlet for disseminating the latest resources from national or district authorities.

Religious and Educational Establishments

As Thomas Ofcansky wrote in Uganda: Tarnished Pearl of Africa, “Historically, religion has played a major role in the national life in Uganda.” Approximately sixty-five percent of the population is Christian, fifteen percent is Muslim and the remaining twenty percent of the populace practice traditional religions or are not religious.²² These religious institutions support the National Wetlands Programme by sensitizing their congregations on wetland issues. Wetland projects, such as fishponds, can be organized by religious leaders. The Kitanga Wetlands fish ponds were created in the 1960s by the Kitanga Parish pastor.

Primary and Secondary schools are also important venues for educating the population on wetland issues. WID is currently testing a teacher’s guide in several pilot communities. If this initial trial period is successful, the guide will possibly be incorporated into the national curriculum.

Institutional Challenges

Shortage of Funding

A lack of funding was a ubiquitous concern among Uganda’s environmental institutions. Julius Mafumbo, WID’s Eastern Region Coordinator, complained that funding is

²¹ Paul Mafabi, interview

²² Thomas Ofcansky, *The Pearl of Africa*,

a serious problem and due to a shortage of funds, “WID cannot execute their planned activities.”²³ The lack of funding limits the number of full-time staff the department can support. Paul Mafabi reported that “WID has a low capacity for surveillance and monitoring due to a shortage of staff and funds. At most, we have six employees responsible for this task. There are high costs for transporting them to various sites. Surveillance and monitoring requires money.”²⁴ Wetlands in remote areas are rarely monitored due to the high transport costs and road impassibility during rainy seasons. Without adequate surveillance and monitoring, it is challenging to ensure the wise-use of wetland resources and the protection of certain wetlands that are designated for research or water treatment purposes (as enumerated in the third, fourth and fifth policy stipulations). While the rural areas are seldom monitored, WID’s staff frequently visits the wetlands surrounding Kampala. This core-periphery discrimination causes uneven and fragmented wetland management in Uganda.

Hosting trainings is a costly endeavor and WID’s tight budget restricts the number of trainings they can conduct a year. This limits WID’s ability to build capacity (policy stipulation 11) and generate public awareness (policy stipulation 9).

Mr. Mafumbo revealed that an unfortunate effect of donor dependency is that WID must concede some of its autonomy in order to meet donor conditions. For example, certain donors may only appropriate money for trainings, even if WID’s priorities may be surveillance and monitoring.

District Environmental Offices also struggle to finance their activities. District authorities have difficulty generating local revenue, so they rely on the federal government for funding. However, only a small fraction of the money that enters Kabale’s District Government is allocated for environmental projects because the budget is created by politicians who fear losing constituent support if they advocate for wetland conservation, which is a contentious issue in Kabale. With these limiting factors, most districts receive only \$ 3,000 USD to \$7,000 USD per year for their environmental departments.²⁵ This inhibits the provision of staff salaries and thus active environmental staff. Bernard Kasangam, Kabale’s

²³ Julius Mafumbo, interview

²⁴ Paul Mafabi, interview

²⁵ Kasangam Bernard, interview, Kabale Natural Resources Office, Nov 6 2007.

Natural Resources Officer, cynically remarked, “environmental management in Kabale is a one-man show.”²⁶

NGOs suffer from a scarcity of funds. Jackson Katarikaawe, from the Wildlife Club of Uganda, lamented that “I have the brains and heart but not the money for the activities and projects.”²⁷ Katarikaawe voiced the difficulty that many other NGOs also face when attempting to promote the sound management of wetlands (the second policy stipulation).

CBOs, such as wetland management associations receive in-kind donations, such as tools, seeds and livestock, from NEMA, WID and USAID. But these wetland associations do not have their own funds to finance other aspects of their management plans. For example, no progress has been made on the tourism facilities proposed in the Rushebeya-Kitanga Wetland Management Plan. Members of the Rushebeya-Kitanga Communal Wetland Association laughed when asked about the development of sitatunga viewing platforms, tourist center, canoeing sites, and craft market and jeered, “We don’t have money for those things.”²⁸ They have also failed to implement predator control structures to guard against sitatunga. Due to a lack of funds, CBOs cannot afford to print informational brochures and pamphlets to distribute to the community. This limits their ability to implement the ninth policy stipulation regarding developing public awareness.

Unless there are funds to bolster the “National Policy for the Conservation and Management of Wetland Resources,” this documents is reduced to mere words. The severe lack of funding inhibits the implementation of nearly all thirteen policy stipulations.

Bureaucratic Discord

Officially, only WID, NEMA and local governments are entrusted to safeguard wetlands. However, other government bureaus can become involved with governing wetlands. When so many players are involved, bureaucratic competition and disharmony of policies can result. For instance, NEMA recently threatened to force encroachers off the wetland near Muhanga trading center in Kabale district. Residents of Muhanga protested this decree and to appease them the Vice-President of Uganda, Professor Gilbert Bukenya

²⁶ Kasangam Bernard, interview

²⁷ Jackson Katarikaawe, interview, Wetlands Inspection Department, Nov 24 2007.

²⁸ Rushebeya-Kitanga Wetland Association, focus group discussion, Nov 20 2007.

Balibaseka, visited Muhanga and told the protestors that they will not be evicted off their land. His announcement directly contradicted NEMA's prior statement.

Mr. Mafumbo from WID commented that the Department of Agriculture's policies conflict with the wetlands program, and urban planning organizations initiate programs that violate wetland policies.²⁹ Furthermore, wetlands that are located in National Parks are under the jurisdiction of the Uganda Wildlife Authority (UWA). This can be problematic because UWA can have its own agenda that conflicts with the objectives of the National Wetlands Policy.

Monitoring agencies and enforcement agencies can also clash. Paul Sabiiti, the District Environmental Coordinator from Kabale, said that he cannot rely on local law enforcement agencies to persecute wetland encroachers. He confessed that he has to report violations to national authorities if he wants Kabale's police to take action because they will not listen to him. Sabiiti complained that the police have a negative attitude towards him and the wetland policy at large.³⁰ Without the support of the police and the ability to punish wetland encroachers, it is nearly impossible to implement the first policy stipulation that bans wetland drainage. Mr. Sabiiti remonstrated that as the District Environmental Officer, he disagrees with local politicians who "misinterpret the environmental agenda."³¹ Without the help of local government or the justice system, it is nearly impossible to enforce the byelaws grafted from the National Wetlands Policy.

Even NEMA and WID can come into conflict. They have overlapping jurisdiction which yields confusion and incongruity. For example, sometimes NEMA issues a permit to a developer while WID denies the permit (or visa versa) if they suspect harm to the environment.

Politicization of Wetland Issues

Politicians can become the stumbling block to successful policy implementation when they turn a blind-eye to violations or promote certain damaging activities out of self-interest.³² Interviews and focus group discussions revealed that local councilors (LCs) fear

²⁹ Julius Mafumbo, interview

³⁰ Paul Sabiiti, interview, Kabale Natural Resources Office, Nov 7 2007.

³¹ Paul Sabiiti, interview

³² Jackson Katarikaawe, interview

that by taking a rigid stance on wetland conservation, they will lose support of the farmers who encroach on the wetlands. For this reason, LCs commonly dismiss wetland violations and they rarely persecute offenders. Without stringent enforcement, it is difficult to recover certain converted wetlands, as stated in the seventh policy stipulation.

The use of EIAs has also become politicized and has jeopardized the eighth policy stipulation mandating the use of EIAs before any development. According to Robert Bagyenda, “if a politician has an interest in a certain development, he or she will push the EIA through”³³ even if it is inaccurate or misleading. This corruption prevents EIAs from protecting natural resources, as they were intended to.

. George Honalde in How Context Matters warned, “The espoused policy may result from pressure exerted by international donors or conservation organizations and it may not reflect the true intentions of a national leadership.”³⁴ The National Resistance Movement (NRM) has also been known to vacillate on wetland issues in order to gain political favor. For example, during the RAMSAR Wetland Convention politicians from the NRM espoused great support for wetland management. However, as the Muhanga incident illustrated, they can change their stance to assuage voters.

Lack of Wetland Knowledge

Up-to-date and accurate scientific information is crucial to learning how to soundly manage wetland resources. However, wetland science is a relatively new field of study in Uganda and there is a scarcity of specialists. Makerere University in Kampala has started offering wetland courses, yet students who are interested in higher level wetland research have difficulty accessing academic advisors. Aventino Kasagaki, a researcher affiliated with the Institute of Tropical Forest Conservation remarked that “wetland policy recommendations are based on speculation because there is little knowledge on Uganda’s wetlands.”³⁵ Limited scientific research hinders the attainment of a “full inventory of wetlands,” prescribed in the tenth policy stipulation. This inventory could better equip Uganda’s institutions with monitoring wetlands.

³³ Robert Bagyenda, interview, Kabale, Nov 3 2007.

³⁴ George Honalde

³⁵ Aventino Kasangam, interview, Kabale, Nov 4 2007.

Wetland Stakeholders

It is important to identify the key stakeholders in wetland management because the attitudes and decisions of these people are the key determinants to successful wetland policy implementation. As George Honadle said, “Since policies are intended to guide human behavior they must be firmly grounded in the world experienced by the actors whose behavior is the object of the policy. If they are not well-grounded, the chances for success plummet.”³⁶ The community stakeholders are responsible for managing wetland resources in accordance with the law, acting as vigilantes to protect wetland resources from abuse, helping to formulate byelaws through the local council system, and contributing to the national and global conservation agenda through local action. Wetland stakeholders include: farmers, crafters, beekeepers, cattle ranchers, tourists, hunters and developers.

Stakeholder Challenges

Constraining Environmental and Social Factors

Many of the factors preventing stakeholders from complying with the National Wetlands Policy stem from larger environmental and social conditions, such as overpopulation, land-shortages, environmental degradation and endemic poverty.

Kabale District has an even higher fertility rate than the national average of seven children per woman. Many of the families encountered had at least eight children. Large families are so commonplace in Kabale that residents often joke that due to the region’s cold climate, married couples hide in their beds and produce children!

Overpopulation has led to land shortages. Ancestral land is passed down from generation to generation, and as the population of each generation swells, the fraction of land bequeathed to each descendent diminishes. The result is that each child has access to less land than the children of the previous generation. Kabale’s mountainous terrain disallows the steep hilltops from being cultivated. The overuse and mismanagement of cultivatable portions of hills has led to soil erosion and nutrient loss. As a result, Kabale residents search for fertile land in the valleys where wetlands are located. Mr. Mafabi said, “In Kabale, people are squeezed into the wetlands as a matter of survival.”³⁷ When people’s survival depends on

³⁶ George Honalde

³⁷ Paul Mafabi, interview

cultivating the wetland, it becomes almost impossible to fully protect wetlands for research purposes or in the interest of maintaining biodiversity (as outlined in the fourth policy stipulation).

Misdirected priorities, such as excess consumption of alcohol, can drain a family's income and leave them more impoverished. Household surveys in Muko sub-county indicate that men often spend as much as 500,000 Ugandan shillings per year on alcohol.³⁸ Without this money, or the shillings spent on other luxury items like cell phones, families become more impoverished. Their poverty makes them more dependent on subsistence farming, and thus dependent on cultivating "protected" wetlands.

Unprofitable Wise-Use Activities

To protect wetlands government agencies, NGOs and CBOs have promoted the wise-use of wetlands, which is defined as "the sustainable utilization of wetlands for the benefit of mankind in a way compatible with the maintenance of the natural properties of the ecosystem"³⁹ Some common examples of the "wise-use" of wetlands include beekeeping, craft-production and fish-farming.

However, as Ms. Kiruhura said, "Alternative measures of using the wetlands are good, but they cannot meet the daily demands of a local resident."⁴⁰ Residents are economically discouraged from relying on sustainable and wise-use activities which hampers their ability to comply with the third policy stipulation calling for the wise-use of wetlands. Cultivating the wetland is still the most profitable enterprise and it is difficult for wise-use activities to compete.

Handcraft production is an ideal example of how unprofitable wise-use activities currently are. Many women's groups, such as the Nkoni Women's Craft Group, create beautiful mats, baskets, bags out of wetland grasses. But Mr. Mafumbo confessed, "You can't make a living off of handcrafts. A mat that takes three weeks to make can see for only three thousands shillings. People don't think the alternatives are worth it."⁴¹ Conversations with the Nkoni Women's Craft Group revealed that there are no established

³⁸ Robert Bagyenda, interview

³⁹ *From Conversion to Conservation*

⁴⁰ Robert Muherza

⁴¹ Julius Mafumbo, interview

markets to sell their crafts in, and as a result their primary objective is still cultivation. Mable Kiruhura, the LC5 councilor for Kashambya sub-county, described how over 20,000 farmers currently earn a living from cultivating Irish potatoes on the wetland.⁴²

Mr. Bagyenda believes that even if cultivation is the top priority, the small stipend that women earn from craft-production can still help conserve the wetlands. Bagyenda argues that craft production instills an appreciation and dependency on the resources from in-tact wetlands so wetland-users will “think twice before draining.”⁴³

NEMA’s attempts to establish an apiary near the Rushebeya-Kitanga Wetland also illustrates how the wise-use activity of beekeeping can’t compete with cultivation. NEMA provided the residents near the Rushebeya-Kitanga Wetland with Kenyan beehives. Despite good intentions, NEMA neglected to provide the proper honey-harvesting equipment and so the beehives haven’t yielded an ounce of honey. However, Mr. Bagyenda reported that even if they could harvest gallons of honey, it would not be profitable because honey is only used locally to sweeten millet beer, and there isn’t a large demand beyond that use.⁴⁴

Environmental institutions have touted fishponds as an ideal wise-use activity. In some regions, such as in the Kitanga wetlands, the project has been indubitably successful. Due to the support of the local parish, a benefactor from Kampala, and the work of the Kitanga Wetlands Fish Farmer’s Association over seventeen fishponds have been constructed and the most are operative and lucrative.

However, fishponds are not foolproof. For example, the community members responsible for a fishpond in Nyamuriro swamp were overly reliant on the representative from the Department of Fisheries assigned to oversee the project. When this representative was transferred to another location, the fishpond became silted due to neglect and mismanagement. As a result, the sediment has nearly choked out aquatic life and the community has ceased receiving any benefits from this initiative. In addition, some regions such as the Rushebeya portion of the Rushebeya-Kitanga Wetland, are not suitable for fishponds. Thus, fishponds are only a successful wise-use activity if there are suitable natural conditions and proper maintenance.

⁴² Robert Muherza

⁴³ Robert Bagyenda, interview

⁴⁴ Robert Bagyenda, interview

In sum, wise-use activities are theoretically the savior of the wetlands. However, these activities still cannot economically or practically compete with cultivating Irish potatoes or rice.

Unavailable or Environmentally Destructive Alternatives

In addition to promoting wise-use activities, environmental institutions advocate switching to non-wetland related enterprises in order to alleviate the stress on the wetlands. However, investing in animal husbandry or agroforestry requires capital that the poor farmers cannot finance on their own. To address this lack of start-up capital, NEMA has donated fruit trees and animals to groups in Kabale. The groups that were fortunate to receive these resources have benefited from growing avocado trees and rearing pigs and goats. However, many community members complained that they didn't receive resources even though they wanted them. While NEMA's efforts are commendable, their donations did not have a sizable impact on the community and therefore barely decreased the pressure on wetlands. Until wetland-users are self-reliant and can independently invest in alternatives, the impact of these donations is likely to be nil.

Another problem associated with alternative enterprises is that some of them, including growing Eucalyptus trees for timber, producing mud bricks and mineral mining are environmentally harmful. Growing Eucalyptus trees consumes vast amounts of water and depletes underground and surface water supplies. Producing bricks for construction requires digging up large swathes of land to collect mud. This destroys the soil biology and disrupts local eco-systems. Additionally, trees are cut down to supply brick kilns with prodigious amounts of fuel, resulting in deforestation. Finally, mineral mining in the hills surrounding Nyamuriro Swamp has caused rapid sediment run-off that has accumulated in water channels and in the swamp.

Even though these alternative enterprises are profitable and reduce pressure on wetlands, they negatively impact natural resources and should not be promoted by environmental institutions.

Lack of Stakeholder Commitment

During focus group discussions and interviews, the majority of the informants espoused a positive attitude towards environmental institutions and claimed to support wetland conservation. However, several incidents suggest an undercurrent of resentment towards environmental institutions and a disdain for the wetland policy.

Paul Sabiiti lamented that although community members attend workshops, seminars and planning meetings, “their hearts are not in the program.” He confessed that the attitude of most locals is summed up in a common Rukiga expression: “The white man’s trap will only kill those who don’t collaborate.” Sabiiti explained that most people “collaborate” with WID and other institutions during planning meetings because they fear the repercussions of their absenteeism. As evidence of this tenuous support, Sabiiti described how his office distributed 25,000 tree-seedlings to demarcate the boundary of the Rushebeya-Kitanga Wetland, as outlined in the management plan that the community supposedly helped create. However, most of the seedlings were thrown away or were planted along false boundaries that encroached on the wetland. When asked about the failure of the demarcation project, some community members responded that they didn’t like the idea of boundaries because it limited their freedom to use the land.

Some community members outright resisted efforts to enforce wetland boundaries. In August 2007, NEMA ordered the residents of Muko and Kashambya sub-counties to abide by the local law that requires a buffer-zone around the wetland. This decree was met by a public outcry and 1,157 community members signed a petition resisting the buffer-zone. The petition declared that they are entitled to the land that their ancestors passed down to them and they cultivate wherever they desire. NEMA was scheduled to revisit these sub-counties in October 2007 to enforce the preservation of a buffer-zone, but as of November 2007, they still hadn’t returned.

For some time, policymakers believed that as people become more educated about the values of wetlands, they will work to preserve and conserve the remaining wetlands. However, a recent WID awareness survey concluded that people are indeed sensitized about wetland issues and are knowledgeable about wise-use practices, but none-the-less they continue to encroach and exploit wetland resources. This negligence could arise from the stakeholder’s lack of true commitment to the issue, or from of their perception that draining

and converting the wetland is necessary for their survival, due to the constraining environmental and social factors described earlier.

Developers are also wetland stakeholders and their projects greatly impact Uganda's wetlands. Unfortunately, some developers also exhibit a lack of commitment to the wetland's agenda. For example, developers such as highway contractors are not dedicated to the EIA process. In fact, Mr. Mafabi recounted that developers only make EIAs to please NEMA, but after their submissions, developers do as they wish because they most likely will not be regulated.

This lack of true commitment prevents the local stakeholders from complying with the National Wetlands Policy. Specifically, residents will be unlikely to devote themselves to the arduous process of reclaiming previously drained wetlands, the seventh policy stipulation.

Effects of Modernization

As rural wetland areas modernize and adopt European and North American practices, certain traditional uses of the wetlands are lost. For instance, corrugated iron sheets are quickly replacing thatched roofs constructed out of wetland grasses. People are substituting substitute plastic basins for woven grass baskets. Western fishing apparati are supplanting traditional fishing gear made out of natural materials. Herbal medicine extracted from the wetland is losing ground against imported synthetic drugs. As individuals decrease their dependency on the wetlands to meet their housing, storage, fishing and health needs, the more readily they will convert the wetland into agricultural land. It is difficult to convince wetland-stakeholders of the importance of conserving and preserving wetlands (the fourth policy stipulation) if they do not see the benefits of wetland resources.

Pre-Existing Laws and Leases

During the 1960s and 1970s, the government sold wetland leases to Ugandans to encourage them to cultivate the wetlands to increase land productivity. Many of these leases are still valid with local authorities, despite the Ugandan Constitution declaring that wetlands are held in trust by Government of Uganda for the welfare of the people. Individuals who claim to own wetland property are reluctant to forgo their leases because they claim legal

tenure of their land. Mr. Mafabi voiced that “it’s important to realize that policy does not exist in a vacuum; to implement policy you have to change the legal system.”⁴⁵ Stakeholders who drained the wetland when they purchased land thirty years ago find it difficult to comply with the first policy stipulation that bans the drainage of wetlands.

These withstanding leases are also problematic because it encourages other people to encroach on the wetland as well. Some wetland stakeholders question why they have to abide by the wetlands policy if some of their neighbors “own” and cultivate tracks of wetland (even if their leases are illegitimate in the eyes of the National Government). To illustrate this common phenomenon of jealousy leading to encroachment, an officer from the World Conservation Society told a story how “if one naughty goat steals bread from the table, then the well-behaved goat will soon follow, in order to get his share of the bread.” He said that wetland management in Uganda is the story of “one bad goat becoming two bad goats and so on.”⁴⁶

CONCLUSION

Policy implementation occurs at the interface of institutional arrangements and stakeholder compliance. In order for Uganda to successfully implement its “National Policy for the Conservation and Management of Wetland Resources” institutions such as WID, NEMA, NGOs and CBOs must be strong and organized. Specifically, they must be well-funded. Other institutions, such as the Department of Agriculture and the Ugandan Wildlife Authority, must harmonize their policies with the wetlands policy. Politicians, from top-ranking leaders to LCs, must commit themselves to enforcing the wetlands policy, even if it temporarily makes them unpopular or deprives them of their share of wealth that they would gain from supporting an environmentally damaging development. Educational establishments and environmental organizations must devote more resources to wetlands research to ensure that the prescribed management practices are having the intended results.

Dedicated institutions are not enough; stakeholders must be committed as well. Farmers, ranchers, artisans and developers should cease their short-term thinking and begin acting in ways that protect wetlands for future generations. If stakeholders believe that the

⁴⁵ Paul Mafabi, interview

⁴⁶ Caleb, interview, Kabale, Nov 20 2007.

suggested alternatives to wetland cultivation are inadequate, they must brainstorm with institutions to find more profitable alternatives or develop markets for existing alternative income generating activities.

It is essential that Uganda remain committed to the implementation of the wetlands policy because wetlands constitute an important component of national development. Their ecological and social functions provide countless benefits to the people of Uganda. Public health, economic growth and scientific exploration are all tied to these beautiful natural features.

Admittedly, there are many factors that hinder the implementation of the National Wetlands Policy; however, it is important to recognize that even though the policy isn't fully integrated into society, it has still made monumental strides in environmental stewardship in Uganda. Moreover, the aims of the policy and the innovative tools used by various institutions have been a role model for Africa, and the world at large.

RECOMMENDATIONS FOR FURTHER RESEARCH

Researching the topics listed below would contribute to a greater understanding of wetlands policy implementation in Uganda.

- The strengths and weaknesses of decentralized management of wetlands
- The attitude of locals towards wetlands
- The factors that enable successful wetlands rehabilitation
- The monetary value of wetlands goods and services
- Conflict-resolution techniques used during land disputes
- The overlapping roles of NEMA and WID in wetland management
- The effects of wetlands education incorporated into the national curriculum
- The strengths and weaknesses of collective ownership of wetlands
- Market access for wetland goods

Time permitting, students interested in this topic should utilize “Participatory-Action Research” (PAR) methods. The underlying principle of PAR is: “the reexamination of realities and the regaining of power through deliberate actions leads to the production of knowledge that can nurture, empower, and liberate persons and groups to achieve a more

humane and equitable world.”⁴⁷ The use of PAR could turn wetland users into the guardians of their resource, as opposed to conventional research methods which inadvertently turns wetland-users into obstacles to policy implementation.

⁴⁷ Susan Smith, Dennis Willms, Nancy Johnson, 1997, *Nurtured by Knowledge: Learning to do Participatory Action-Research*, New York USA: The Apex Press.

BIBLIOGRAPHY

- Akawkwasa, Deogradicus. Interview. Kabale. 20 Nov 2007.
- Bagyenda, Robert. Interview. Kabale. Nov 3 2007.
- Caleb. Interview. Kabale. Nov 20 2007.
- Chambers, Robert. 1983. *Putting the Last First*. Essex England: Pearson Education Limited.
- Harrison, Paul. 1987. *The Greening of Africa*. New York USA: Penguin.
- Helm, Dieter. 2003. *Environmental Policy: Objectives, Instruments and Implementation*. New York USA: Oxford University Press.
- Honalde, George. 1999. *How Context Matters*. West Hartford USA: Kumarian Press.
- Kamugyeragere, Dez. Interview. Kitanga Parish. Nov 20 2007.
- Kasagaki, Aventino. Interview. Kabale. Nov 4 2007.
- Kasangam, Bernard. Interview. Kabale Natural Resources Office. Nov 6 2007.
- Katarikaawe, Jackson. Interview. Wetlands Inspection Department. Nov 24 2007.
- Kitanga Functional Adult Literacy Group. Focus Group Discussion. Kabale. 22 Nov 2007.
- Mafabi, Paul. Interview. Wetlands Inspection Department. Oct 24 2007.
- Mafumbo, Julius. Interview. Wetlands Inspection Department. Oct 26 2007
- May, Tim. 2001. *Social Research: Issues, Methods and Process*. Philadelphia USA: Open University Press.
- Ministry of Water, Lands and Environment. Wetlands Inspection Department. 2001. "The Wetland Sector Strategic Plan: 2001 – 2010: Popular Version." Kampala, Uganda.
- Ministry of Water, Lands and Environment. Wetlands Inspection Department. 2005. *From Conversion to Conservation: Fifteen Years of Managing Wetlands for People and The Environment in Uganda*. Kampala, Uganda.
- Ministry of Water, Lands and Environment. Wetlands Inspection Department. 2005. "Guidelines for Compliance Monitoring of Wetlands." Kampala, Uganda.
- Nkoni Women's Craft Group. Focus Group Discussion. Kabale. 21 Nov 2007.
- Nyamuro Wetland Management Plan
- Ofcansky, Thomas. 1996. *Uganda: Tarnished Pearl of Africa*. Boulder USA: Westview Press. Inc.
- Pratt, Brian and Peter Loizos. 1992. *Choosing Research Methods: Data Collection for*

- Development Workers*. London England: Oxfam.
- Muherza, Robert. "NEMA Cracks Whip on Wetland Encroachers." *The Monitor*. Aug 31 2007.
- Rushebeya-Kitanga Wetland Association. Focus Group Discussion. Nov 20 2007.
- Rushebeya-Kitanga Wetland Management Plan
- Sabiiti, Paul. Interview. Kabale Natural Resources Office. Nov 7 2007.
- Smith, Susan. Dennis Willms. Nancy Johnson. 1997. *Nurtured by Knowledge: Learning to do Participatory Action-Research*. New York USA: The Apex Press.
- The Republic of Uganda. 1995. "National Policy for the Conservation and Management of Wetland Resources." Kampala, Uganda.
- The Republic of Uganda. 1995. *The Constitution of Uganda*
- Tumwesigye, Narsi. Interview. Kabale. 21 Nov 2007.
- Uganda Districts Information Handbook*. 2005. Kampala Uganda: Fountain Publishers.