

# Cooperation instead of Conflict

A Minor Field Study of Lake Victoria

Anna Stina Nilsson  
841210

# Abstract

Conflict over declining water resources has been a highly debated issue the last decade. Theorists suggests that environmental degradation may in some cases cause violent conflict or war. A different school of thought proposes the opposite – that water is more likely to create cooperation, rather than conflict.

This thesis will focus on Lake Victoria and why there is cooperation over the lake between Kenya, Uganda and Tanzania, instead of conflict. A theory on environmental cooperation by Ken Conca will be used, specifically looking at whether or not a transnational network has arisen as a part of the cooperation over water and in what way these networks have contributed to the creation of an imagined security community. The material for the thesis was collected during a minor field study in East Africa during May-July 2010. The findings suggests that a transnational network exists, but that it does not yet reach out to enough people to have been able to create an imagined security community. This does not rule out any other community-feeling around the lake, just that it has not originated from the environmental cooperation. Instead other ethnical, historical and political factors have contributed to the nonviolent relations around the lake.

*Key words:* environmental peacemaking, Lake Victoria, cooperation, transnational networks and imagined security community.

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# List of Abbreviations

BMU	Beach Management Units
EAC	East African Community
ECOVIC	East African Communities' Organization for the management of Lake Victoria Resources
LPIANF	Lead Partner Inter Agency Network Forum
LVBC	Lake Victoria Basin Commission
LVEMP	Lake Victoria Environmental Management Program
LVFO	Lake Victoria Fisheries Organization
LVRLAC	Lake Victoria Region Local Authorities Cooperation
NBI	Nile Basin Initiative
NBD	Nile Basin Discourse Forum
NGO	Non Governmental Organization
UCSD	East African Sustainability Watch Network c/o Uganda Coalition for Sustainable Development
VicRES	Lake Victoria Research Initiative

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# 1 Cooperation instead of Conflict

Without water there would not be any life. We need water for our survival; to drink, to grow our food, to cook and to wash. In some religions water is even considered to be something sacred. For some the supply and access to water is not a problem, for others it is a daily struggle to get the bare minimum. The growing awareness of water and the scarcity there of reflects the importance of water for our livelihood. Due to a range of factors, population growth and urbanization being a few, the demand for water has grown, making sustainable use of clean water an extremely important topic.

## 1.1 Introduction

In recent years a vast literature has grown on environmental degradation and its effects on national and international security. One part of environmental degradation is the growing shortage of natural resources such as land and water, and because of that theorists argue that resource scarcity will lead to conflict, predominantly in the developing world (Canter & Ndegwa 2002: 40). Growing population, higher living standards, unequal distribution and urbanization are a few reasons why world consumption of valuable natural resources have gone up, and also why some states consider access to resources a national security issue (Homer-Dixon 1994: 19, Klare 2001: 23). Thomas Homer-Dixon, one of the leading researchers within this field, claims that in the coming decades the world will see a steady increase of conflict and violence caused, at least in part, by environmental scarcity (Homer-Dixon 1999: 4). Michael Klare suggests that conflict over valuable resources has already become an increasingly important characteristic of the global landscape, and that as the world resource consumption grows, shortages will occur. Thus forcing governments to take action and thereby increasing the risk of states maximizing their control over conflicted resources. Therefore the risk of conflict between countries sharing important natural resources will grow (Klare 2001: 23).

Homer-Dixon emphasises scarcity-induced interstate war over water as one of five general types of violent conflict caused by environmental scarcity, possible to erupt in the coming decades (Homer-Dixon 1999: 5). Other researcher also suggests the lack of fresh water as a contributor to conflict in different parts of the world (Canter & Ndegwa 2002: 41). Klare states that conflict over water has been part of the human history ever since the time of the Old Testament and that for centuries warfare has been connected to the protection or destruction of vital water systems (Klare 2001: 138). However, the resource scarcity-conflict thesis is

not uncontested. Jon Barnett discusses the theory that cooperation over water resources is a more likely outcome than conflict, and that empirical evidence shows water has acted as a focus for dialogue and confidence building instead of disagreement and violence (Barnett 2001: 57). Others agree with him, and recently the discussion has taken a little turn from viewing environmental degradation and resource scarcity not as the sole reason for social or violent conflict, but as a possible triggering factor, that if combined with other social or institutional factors, could cause or worsen instability (Conca 2002: 1). From this standpoint it becomes more important to discuss and analyze the different ways of limiting the volatile effects of resource scarcity, and also highlight the cases where resource shortages has lead to cooperation instead of conflict.

In order to clarify the somewhat abstract concept of environmental cooperation and to narrow the scope and limits of this thesis a theory regarding environmental peacemaking will be used, which now will be briefly presented.

Ken Conca argues that environmental problems create incitements for cooperation, and that this is already obvious in the plurality of environmental agreements that has been made in the past decades, both bilateral as well as globally (Conca 2001: 225). His main argument is that there is a gap in the discussion regarding environmentally induced conflict and ecological insecurity, which is that if environmental degradation can trigger violent conflict, then maybe environmental cooperation can be just as effective in decreasing tensions, further stabilize and demilitarize, broadening cooperation and promoting peace (Conca 2001: 226). Conca goes as far as suggesting that environmental cooperation can produce concrete and specific political opportunities to build more broadly peaceful international relations. In achieving this, Conca sees two hypothesized pathways, referred to as “changing the strategic climate”, and “strengthening post-Westphalian governance”. These two pathways can also be seen as a way to evaluate environmental peacemaking, or to find out in what different ways environmental peacemaking can occur (Conca 2001: 227, 2002: 10).

The first general pathway, “changing the strategic climate”, relates to a realist worldview with states being the most important actor, and shows how environmental cooperation can change the processes of strategic bargaining between governments, alter the supposed benefits and costs that creates that bargaining and also ease the cooperation itself by strengthening the confidence in the benefits of cooperation and diminish the obstacles for collective action (Conca 2001: 227).

The second pathway, “strengthening post-Westphalian governance”, looks at broader transformative actions that are in effect not just between governments, but also across societies. What is stressed here is the environmental cooperation’s possible effects on institutionalizing new norms, change state and societal institutions and generate or influence trans-societal linkages (Conca 2001: 227). Peace is seen not only as agreements between states, but as a shared collective identity between the societies that makes violent conflict unimaginable (Conca 2002: 10). This pathway can be divided into three parts; fostering new norms, building transnational civil society and transforming state institutions.

### 1.1.1 The initial research puzzle

Lake Victoria is one of the most important water basins in Africa, and an extremely vital source of water for the 35 million people whose livelihoods depend on it. The lake is shared between three countries, Uganda, Kenya and Tanzania, and as the source of the Nile the lake has strategic importance for all of its nine riparians, which also includes Rwanda, Burundi, Ethiopia, Congo, Sudan and Egypt. Simultaneously as the population around the lake has grown, the quality of the water in the lake has deteriorated. Industrial and human pollution has led to environmental damages, the effects of which include, but are not limited to; destruction of catchment areas, algae increase and declining fish stocks (Canter & Ndegwa 2002: 44). About a century ago, the lake contained more than 400 species of fish – in recent years only three different species has been found.

According to the theory of resource induced conflict this would make Lake Victoria a critical example of a declining resource that could lead to conflict between the three states that share the lake. But instead Kenya, Uganda and Tanzania are cooperating in targeting the various aspects of the degradation of the lake, and according to a study by Marielle Canter and Stephen Ndegwa there is a clear lack of violent conflict regarding the lake between the three states (Canter & Ndegwa 2002: 50). This contradistinction is what makes this case such an interesting puzzle to study and also what serves as the backdrop of this thesis.

## 1.2 Aims

The overall aim of the thesis is to further broaden this field of research, and above all draw attention to a case where violent conflict has successfully been avoided. Although Lake Victoria and its declining water quality has not yet caused conflict, does not mean it will not do so in the future, or that the cooperation is in any way perfect. Still Lake Victoria is an interesting example to study because of the fact that many of the aspects of resource scarcity that can cause conflict are present, although conflict is not.

### 1.2.1 Research question

The research questions are divided into two parts. Firstly;

*Why has cooperation, instead of conflict emerged over Lake Victoria?*

The second part focuses on Conca's theory, and especially the second pathway "strengthening post-Westphalian governance", and will serve as a way of trying to answer the first overall question.

*What, if any, transnational networks exists around Lake Victoria?*

*In what way have these transnational networks contributed to creating an imagined security community?*

## 1.2.2 Delimitations

When conducting field study and writing the subsequent thesis one has to make choices, which consequently creates delimitations. The focus of this thesis will be on the second pathway and especially whether or not fostering of new norms and building transnational civil society has occurred in the cooperation over Lake Victoria. Both pathways are according to Conca important in order to create a robust strategy for environmental peacemaking, because it needs to create trust, transparency and cooperative benefits between the governments that are usually locked in a realistic, zero-sum thinking regarding national security. There also needs to be a transformation of the state itself - the civil society and its norms, otherwise institutions and societies can work counterproductive to the intergovernmental relationships (Conca 2002: 11).

However, this thesis will focus on only one of Conca's suggested pathways, "strengthening post-Westphalian governance", and only on two out of three of its elements, since the question of transforming state institutions will not be discussed any further. This obviously limits the possibility of a broader understanding of the whole cooperation over Lake Victoria, but instead opens up for a deeper understanding of the two selected aspects.

Even though the Nile has its departure point in Lake Victoria and all the three countries that share the lake also take part in cooperation over the Nile River Basin, the Nile and the politics surrounding it will not be discussed further here.

## 1.3 Operationalization

This chapter will outline how the somewhat abstract theory on "strengthening post-Westphalian governance" will be translated into more physical and measurable concepts. This operationalization was also used as a foundation for the field study that was conducted for this thesis.<sup>1</sup>

Conca argues that the importance of building transnational network is twofold; firstly because it can empower groups that usually are marginalised in the decision making progress, and when environmental degradation exacerbates or resource use escalates, effective international or regional cooperation needs to give voice to different stakeholder in order to be effective (Conca 2001: 243). The second

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<sup>1</sup> More information about the field study and the methodological aspects of it will be discussed in the next chapter.



reason is connected to social psychology theories regarding cooperative behaviour, which claims that individuals are more inclined to cooperate if they perceive that they are members of the same common category. Such a common category is as likely to emerge from trans-societal linkages as from interstate relationships (Conca 2001: 243).

Regarding Lake Victoria a number of questions can be asked in connection to transnational networks. What, if any, transnational network has emerged and what is the nature of those networks (environmental, social, political, NGO-based, CBO-based, externally or internally produced)? For who are these networks open for, and whom do they target? How do these transnational network function and what are their role, scope and aim?

The second aspect, fostering new norms, is important because relations of peace and conflict are not just concerned about material circumstances, but also internalized norms (Conca 2001: 241). Emanuel Adler is arguing that new identities are being constructed, without being defined by territorial boundaries or the nation state, but instead of shared norms of peaceful conflict resolution (Adler 1997: 225). Such communities, Adler continues, are socially constructed “community-regions”, where borders run irrespective of national borders, but instead along shared understandings and common identities (Adler 1997: 250). These communities also become security communities, because this shared identity arises when the people within the community feel as though they know each other, and therefore see the other as trustworthy, which creates a feeling of security, within the community. Adler argues that these security communities are “imagined”, since people that are experiencing the security communities are imagining that they all share the same destiny and identity. They have never met all the people that live in the security community so they have no way of knowing what each individual actually thinks, so instead they imagine it. An example of such a community is post-war Western Europe, or the European Union (Adler 1997: 254). International and transnational institutions and networks are critical to creating security communities, since they can internalise norms and knowledge about how to peacefully resolve conflicts.

Concerning the case of Lake Victoria and the states surrounding it, it is interesting to look into whether or not these shared norms has emerged or not, and if they have, what affect they have for environmental cooperation. Adler means that a security community emerges when “its members possess a compatibility of core values derived from common institutions and mutual responsiveness – a matter of mutual identity and loyalty, a sense of “we-ness”, or a “we-feeling” among states” (Adler 1997: 255). Questions that would be interesting for this case would be whether or not this “we-feeling” exists around Lake Victoria, and what affects it has on the cooperation. Since “we-feeling” is a very abstract concept, it will here be interpreted as a feeling of mutual interests, understanding and belonging towards people of other nationalities around the lake.

## 2 Methodological aspects

This thesis is, as mentioned above, based on empirical material collected through a minor field study in Uganda, Kenya and Tanzania between the 5<sup>th</sup> of May and 1<sup>st</sup> of July 2010<sup>2</sup>. Around 30 semi structured interviews were conducted with local authorities, governmental officials, researchers, nongovernmental organizations spokespersons, aid and development workers, community members and other people living around and off the lake and who are for the thesis interesting.<sup>3</sup> There are many methodological factors to consider when on a field study and also afterwards when it is time to turn the collected material into a thesis. In regards to that the following chapter contains a discussion on the most important methodological aspects.

### 2.1 The qualitative study

The different aspects of the cooperation with regards to Lake Victoria will form the basis for the empirical case study. Bruce Berg defines the term case study as “... a method involving systematically gathering enough information about a particular person, social setting, event or group to permit the researcher to effectively understand how the subject operates or functions”. He also mentions Hagan’s definition, which discusses the case study as an in-depth and qualitative study of one or a few illustrative cases (Berg 2009: 317).

Advantages of a qualitative approach are that it has a good ability to handle complex situations, and it has room to develop and understand contradictions in the material, which usually limits the quantitative research (Denscombe 2000: 260). This is important when analyzing such an intriguing study object as a cooperation. But there are also some disadvantages with qualitative research – the interpretation of the collected material is always done by the researcher himself, and this affects the outcome of the study. The identity, background and opinion of the researcher will matter in the analyzing of data, making the interpretation closely connected to the researchers “self” (Denscombe 2000: 261). This is important to consider when conducting a field study in a setting unfamiliar to the researcher, especially when interpreting the information retrieved as it is sometimes difficult to understand certain social or ethnical practices for an “outsider”.

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<sup>2</sup> The study was financed with the Minor Field Study Scholarship from SIDA

<sup>3</sup> See full list of interviews in Appendix A

Although the problem of reliability is more common when conducting survey studies, it is also relevant when performing interviews. Reliability can be defined as the absence of unsystematic measuring faults. Such a measuring fault can be that the respondent over- or underestimate his answer, and if the measurement is repeated a fluctuating image of the phenomena the researcher wants to picture, is created (Teorell & Svensson 2007: 57). One problem when carrying out a field study abroad is the language barrier. Even though English is the official language in East Africa and most people talk English, there is still a chance for misinterpretations that might cause unsystematic measuring faults. The misunderstandings can be both from the researcher's side - not completely understanding the answer, and also from the interviewee's side - not completely understanding the question. This problem is especially hard to get around, since it is difficult to tell whether or not the respondent has understood the question, and if I as the researcher have understood the answer. One way to try and get around this problem is to repeat and do an interpretation of the answer from the respondent and ask it as a question ("So what you mean is...?"). During the field study the language only became a problem in Tanzania where some spoke better Swahili than English and therefore felt more comfortable in conducting the interview in Swahili. On those occasions an interpreter was used, which also created problems since it was hard to tell whether or not the interpreter was using his own words or the interviewee's, or if he left out things that he did not think was important, but that I might have thought to be interesting. Once again this is a difficult problem to overcome, but I found that the best way was to try and have a good relation with the interpreter (who was not a professional interpreter, but a man who worked for a local NGO and who spoke good English), and make him understand the importance of trying to translate as direct as possible and try not to exclude too much.

## 2.2 The Interviews

The reason for choosing interviews is the opportunity that gives for the interviewed to talk more freely and in greater detail about the subject, than one would be able to do, for example, in a survey which would only provide one or two word answers (Denscombe 2000: 132). Another advantage with interviews is that it gives the interviewer a level of insight that he or she could not have attained by reading about the topic. Interviews may also allow the perspective of the informant to come to the fore. Researchers frequently bring their own perspective of what is important to their work; interviews allow their preconceived ideas to be challenged and if needed, changed. Finally an interview also gives a much higher answer frequency than a questionnaire study would (Denscombe 200: 162).

The type of research interviews that was used is the semi-structured interview. The benefit of using semi-structured questions is that the interviewer has a greater flexibility to the respondents answer and can let the interview focus on the topics that seems to be most important to the informant. The questions, as well as the

answers, are open and the emphasis lie with the informant to develop their points of view on the issues discussed (Denscombe 2000: 135). The interviews all lasted between 1-2 hours, and an interpreter was needed twice, and on all the other occasions the interviews were conducted in English.

When conducting interviews one must be aware that the age, sex and ethnic background of the interviewer may impact upon the interviewee and his or hers responses. Research has shown that people respond differently depending on how they perceive the person asking the question (Denscombe 2000: 138). SIDA is an important financial supporter of the different projects and organizations around Lake Victoria: whilst this on some occasions was advantageous when contacting people that would be interesting to interview, their answers may have been affected by the fact that I was from Sweden, making them feel obliged to give answers that they thought I wanted to hear, or answers that in some way reflected positively on SIDA. As Denscombe argues; with interviews there is always the risk that the respondents answer might be affected by the researcher: informants may try to give answers that they believe will please the researcher, informants may also exaggerate – or in some cases falsify – their responses (Denscombe 2000: 162-163). It is therefore important to point out that I informed the respondents that I in no way was evaluating the project for SIDA or in any way was connected with the financial support from SIDA, and by that at least trying to get a true picture as possible from the respondent.

It must also be recognised that some informants may not feel that they are able to be completely unguarded during the interview process – conflicting loyalties, such as employment, must be considered. (Denscombe 2000: 162-163).

The intention with the field study was also to gather information which was difficult to retrieve from Sweden, such as policy documents, project outlines and evaluations.

## 2.3 Selection of Respondents

Esaiasson et al. writes that “centrality” is the most common principle of selection of respondents for interviews. In such a study the researcher wants to interview persons who are centrally located in the organization, community or company that is interesting for the research. The selection of respondents were made through the so called “snowball principle”; the first informant tells the researcher who he should see next, and that person points to the next person and so on. The interviewing stops when the researcher feels he has enough information, or when the informants start pointing to people who has already been interviewed (Esaiasson et al 2004: 287). This technique was used when it came to studying the transnational networks. For the second research question another method was used. Since the nature of the question was slightly different - it was based on people’s opinions and emotions, rather than cold facts, therefore their views cannot be said to be “true” or “false”. When doing such interviews it is suggested to follow three advices; choose strangers, a small number and people who are not

“subjective” experts. To choose strangers was in this case not really a choice, since I had never met any of these people before. Choosing strangers makes it easier to keep a scientific distance to the respondent, and also for the respondent to open up, since he has a very limited relation to the researcher (Esaiasson et al 2004: 286). The advice to keep to a small number of respondents is due to the fact that the basic data rarely improves when interviewing 30 instead of 15. The most important thing is to have well prepared interviews with carefully selected respondents. Thirdly, in contrast to the notion of “centrality” it is here important to focus on people who do not have leading positions, but are “usual” community members. Besides these three recommendations I also had to take into consideration other aspects that is connected to doing field study; choosing respondents who spoke good or relatively good English so that I would not have to use a translator and also who I was able to get in contact with, since it did not really work to approach respondents without being introduced by someone else first. With qualitative research respondents do not have to be statistically representative, as in a quantitative study, but strategically determined (Svensson et al 1996: 224). The respondents that were finally chosen for the field study were so according to these criteria.

### 3 Water cooperation

Discussions whether tensions over freshwater resources will become more frequent or not, and whether this will lead to cooperation or conflict, have been a growing field of academic research the last decade. Thomas Homer-Dixon argues that due to a worldwide growing population “environmental scarcity” will occur, which will cause conflict. The world population is estimated to reach eight billion by 2025 and 90 % of the projected growth will take place in developing countries, which are already highly dependent on local renewable resources (Morriessette et al 2004: 86). The concept of “environmental scarcity” is defined as consisting of three sources; decline in the quantity and quality of renewable resources, population growth which reduces the per capita amount of resources and unequal resource distribution (Homer-Dixon 1994: 8). From this notion Homer-Dixon identified five different types of environmental change likely to cause inter-group conflict, with depletion and pollution of fresh-water supplies and depletion of fisheries being one of them. Others agree with him; Thomas Naff argues that water due to its fundamental essentiality to life will be a significant potential for conflict and Alwyn Rouyer also says that rapid population growth, notably in the developing world, will cause scarcity of renewable resources, such as water, causing violent civil and international conflict (Morriessette et al 2004: 88).

However, studies show that there is little empirical evidence that environmental scarcity of renewable resources such as land will cause conflict between states, apart from one important exception – river water. Seeing that water is a critical resource for personal as well as national survival and since it flows from one area to another, thereby one country’s actions is affecting the other countries access to the resource, makes it the renewable resource most likely to stimulate interstate war (Homer-Dixon 1994: 19). There are many rivers in the Middle East and North Africa around which water conflicts exists, such as the Nile, Euphrates and Tigris and the Jordan River (Jägerskog 2000: 3). Waters central importance combined with the dependence of a natural water source, since transporting water long distances and desalinating water is too expensive for many of the countries that are suffering from water shortages, makes water access in many cases a national security issue. Therefore rivers transnational character makes it into a powerful political weapon, and a source of either conflict or cooperation (Jägerskog 2000: 4).

Conflicts concerning water often deals with two factors; questions concerning the distribution of water between states and pollution of the water resource. Usually many water conflicts contain elements of both. As many theorists today discusses, conflicts over water resources are not simply caused by a declining resource – a number of factors also needs to be considered. Anders Jägerskog argues that it is also important to observe population growth in the region,

economical and institutional stability within the states, political relations and any eventual tradition of conflict in the area, the existence of agreement regulating the distribution of the water as well as the power symmetry between the parties of the conflict (Jägerskog 2000: 4-5). Other studies also show that there are very few cases where environmental degradation has led directly to interstate war, and instead environmental change should be viewed as possible catalyst for conflict, rather than a direct cause. Evidence points towards environmental problems working as a triggering factor for conflicts along existing social cleavages, such as ethnicity, class or region, which can cause more widespread violence (Conca 2002: 5). Another factor that could trigger or worsen a violent conflict is the absence of strong social institutions that could otherwise handle or mediate such tensions of environmental problems (Conca 2002: 1).

The political relations between states along a river are one of the more important factors when it comes to assessing the risk for conflict. If there is an unresolved dispute in the area, it is easy that the issue of access to water becomes a factor that immerses the conflict, and consequently if the river basin has a tradition of peacefully cooperating over other issues, there is a better chance that the disputes over water will also be solved the same way (Jägerskog 2000: 6). Even though Lake Victoria is clearly a lake and not a river basin, it shares many of the attributes of a river, therefore many of the arguments concerning conflict or cooperation over river basins can be applied on Lake Victoria. One of the strongest arguments for this is that not any of the three countries in the basin can do anything to the lake without it affecting the water for the other two countries. An example of this is pollution, which is one of the biggest problems affecting the area. There is no point in one of the countries trying to combat industrial pollution being released into the lake, if none of the other countries try to do the same. Another example of this is this is when after the genocide in Rwanda in 1994, thousands of bodies from victims of the massacre was washed down the Kagera River, and into Lake Victoria. Apart from the obvious horridness of it all, it also created a serious health risk for the Ugandans living along the southern shores, as infectious diseases such as cholera was spread with the dead bodies ([www.nytimes.com](http://www.nytimes.com)).

Another thing that can cause conflict in river basins is the power symmetry. An upstream riparian have more control over the water flow, compared to countries downstream, as is the case with Turkey compared to Syria and Iraq concerning the water of Euphrates and Tigris (Jägerskog 2000: 6). With a lake basin no country is a downstream or upstream riparian, this however does not necessarily make them equal. Regarding Lake Victoria the three countries do not have equally big parts of the lake; Kenya has 6 %, Uganda 45 % and Tanzania 49 %. Having a larger part of the lake might be considered advantageous when negotiating agreements or streamlining laws and policies affecting the lake. Also different levels of economic or social development between the countries can give a country a stronger position when cooperating (Ashton 2002: 239).

Despite pessimistic prophecies about water wars, it is important to highlight that even states with a very nationalistic or even hostile approach, can find common grounds in issues concerning water. Israel and Jordan is good example of

this, who in the 1950's cooperated with each other on water issues when they officially were engaged in war towards each other. According to research made by an American university, cooperation seems to be the most common outcome; out of the worlds 263 transboundary rivers, whose basins cover more than half the land surface of the world, cooperation over the water was more common than conflict (The Economist). Shlomi Dinar clarifies – water has caused seventeen disputes which have required military assistance between 1900- 2001, and the last total war over water took place 4500 years ago. Conversely, thousands of water agreements have been signed, making Dinar draw the conclusion that cooperation is the usual outcome, whilst conflict is the exception (Dinar 2009: 109). Ken Conca expresses a similar opinion, although he acknowledges the role that environmental problems play in exacerbating intergroup violence, he still sees that environmental problems also create incentives for cooperation and collective action (Conca 2001: 225). However, Conca takes on a new approach to environmental problems and its possible effects. He highlights the fact that even though water scarcity can both cause conflict or cooperation, most research has been on the subject of conflict. Few theories exam why and how water scarcity causes cooperation and what its effects are on regional and international peace. In his own words:

*“The cooperative potential surrounding environmental problems suggests that the discussion of environmentally induced conflict and ecological insecurity has overlooked what may be a critically important corollary. If environmental degradation can trigger violent conflict, then perhaps environmental cooperation can be an equally effective catalyst for reducing tensions, broadening cooperation, fostering demilitarization, and promoting peace.”* (Conca 2001: 226).

Conca means that peace can be seen as a spectrum, ranging from absence of violent conflict to the inconceivability of it, and that environmental cooperation can push states and societies along that spectrum, and building more broadly peaceful international relations (Conca 2001: 227). Environmental cooperation is not something that happens automatically and neither will all forms of cooperation develop these broader peace-enhancing effects. In order to better understand which mechanisms are interacting, the link between environmental cooperation and peace needs to be further examined. The two suggested pathways discussed in the theory chapter of this thesis, are possible ways in which environmental peacemaking might occur. The next chapter will contain a discussion on what makes Lake Victoria an example of an environmental cooperation, as well as a closer look at the two selected aspects of Conca's environmental peacemaking theory and the findings of the field study.



# 4 Cooperation over Lake Victoria

## 4.1 Lake Victoria – a potential conflict?

Lake Victoria was “discovered” by British explorer John Speke in 1858 and named after the Queen of England. With its 69, 800 km<sup>2</sup> it is the world’s largest tropical lake and the second largest freshwater lake. With more than 30 million people relying on the lake for its livelihood the reports on the deterioration of the lake since the 1980’s has been alarming. According to UN calculations the population is estimated to reach 53 million by 2020, which will make one of the densest regions in the world even more populated, and at the same time increase the pressure on an already stressed natural resource.

One of the more recent problems that the lake is experiencing is that the water level has gone down due to rising temperatures, newly introduced species, the dams on the Nile River and the surrounding community’s daily use of the lake. This severely disturbs the fish’s breeding ground, which usually lies at the banks of the lake. Another consequence is that the fishers have to go deeper into the lake to get their catch, which in turn creates new problems of who is allowed to fish where, since the lake has clear boundaries between Kenya, Uganda and Tanzania (clpmag.org, www.newssciantist.com).

Other problems that the lake is experiencing are overfishing and declining fish stock, industrial and human pollution and algae and weed infestation. Untreated waste water from residential areas as well as industries has dramatically affected the quality of the water. It is estimated that Kisumu, Kenya’s third largest city, dumps 1,7 tons of waste into the lake every day and in Mwanza, Tanzania’s second largest city, that number is even higher (Canter & Ndegwa 2002: 44).

Despite the problems of the lake there are a few reasons for optimism. According to Brian Marshall, Resource Monitoring Specialist and freshwater biologist at the Lake Victoria Fisheries Organization, some improvements have been observed the last few years. He says that although the pollution is quite bad, especially around the communities along the shores of the lake, there are other positive signs. For instance the algae bloom is declining and the water hyacinth that was a catastrophic problem in the middle of the 1990’s is with a few exceptions almost entirely gone. The level of oxygen in the water has also improved, despite the high level of herbicides and fertilizer run-offs into the lake. But the main problem, he says, is still overfishing, especially of the Nile Perch, which was introduced into the lake in the 1950’s for commercial purposes (Brian Marshall 1/6 2010). Since 1973 the number of fishermen at Lake Victoria has increased with more than 300 percent and combined with the recent decline in the water levels, it creates a vicious circle of declining fish stock (Canter & Ndegwa

2002: 45). Another problem that exacerbates the overfishing is that prohibited fishing equipment is still being used. Authorities have tried to regulate and forbid nets with too small holes, to avoid catching the smallest fish which is not yet fully grown, but this has proved to be a lot more difficult than expected. Some fishers still use nets with too small holes, and some even use mosquito nets that leave nothing behind (Alfred Odira 18/5 2010).

In the case of Lake Victoria two out of three elements of Homer-Dixon's "environmental scarcity" theory are present – growing population and declining resource. Still, the study made by Canter & Ndegwa as mentioned earlier, found little evidence of violent conflict in the region. They suggest that an indicator for this is that the governance regimes created for the environmental management of the lake, and their policies, never discussed the logic of preventing conflict, which made Canter & Ndegwa assume that conflict over the resource was in that region a non-issue.

## 4.2 Aspects of cooperation

So what does the cooperation over Lake Victoria look like? How are the three countries working together in order to meet these environmental challenges and what are the elements that make Lake Victoria an example of a cooperation, instead of a conflict?

The East African Community is an agreement and regional intergovernmental organization between Kenya, Uganda and Tanzania established in 1999 (Rwanda and Burundi joined in 2007), with the aim of integrating the region for more effective development. The countries in East Africa have a history of cooperation dating back to the early 20<sup>th</sup> century, although EAC in its current form was not established until 1967. The cooperation was dissolved 1977 due to several factors, one of them being the dictatorship of Idi Amin in Uganda in the 1970's, and was not officially resumed until 1993 ([www.eac.int](http://www.eac.int) A). Today the EAC and its leaders are working hard towards a more integrated region; in 2010 they ratified the Common Markets and negotiations for establishing a monetary union are under way. There are also discussions on transforming the community into an East African Federation ([www.eac.int](http://www.eac.int) B).

The EAC has recognized Lake Victoria and its basin as an "area of common economic interest" and a "regional economic growth zone". Therefore, the EAC has a number of institutions and programs aimed specially at the lake and its basin. The Lake Victoria Development Program was established by the EAC in 2001, which later became The Lake Victoria Basin Commission (LVBC). The LVBC is the EAC institution that coordinates, facilitates and promotes all the sustainable development actions in the Lake Victoria Basin region. They are especially focusing on harmonizing the different policies and laws that concern the lake and the practices around it, as well as the environmental management of the lake, including fisheries, tourism, agriculture and infrastructure ([www.lvbcom.org](http://www.lvbcom.org) A, Samuel Gichere 18/5 2010). One example of a program

aimed for the sustainable management of the lake is Lake Victoria Environmental Management Program (LVEMP), which is coordinated by the LVBC ([www.lvbcom.org](http://www.lvbcom.org) B).

The Lake Victoria Fisheries Organization (LVFO) is another institution under the EAC, specially focusing on the fishers in the region ([www.lvfo.org](http://www.lvfo.org)). One of the main projects of the LVFO is organizing all the fishers around the lake in so called “beach management units”; BMU’s. Each landing site along the shores belongs to a BMU, and to be able to keep your boat and unload your catch there, the fisher needs to be part of the BMU. There are a lot of advantages with the BMU’s; not only do the fishers get organized which makes it easier both for them and the governmental institutions (as the LVFO and LVBC) to communicate with each other, but they also acts as law enforcer, as each BMU tries to make sure that all the fishers at their landing site keeps to the regulations regarding fishing areas and fishing equipment. The BMU’s also tries in different ways to allocate funds in order to improve the quality of the landing site, for example by installing cold storage possibilities for keeping the fish fresh longer, or buying a car so that they easier and more effective can transport the fish to the market (Caroline Kirema-Musaka 1/6 2010, Biseko Kuboja 18/6 2010).

### 4.3 The research questions re-visited

The second aspect of the research questions of this thesis focused on two different aspects; whether or not a transnational network exists around Lake Victoria and if an imagines security community has emerged. The remainder of this chapter will concentrate on these two subjects, starting with the transnational networks.

#### 4.3.1 Transnational networks around Lake Victoria

Environmental problems have been one of the most used examples for the argument that the world is experiencing an emerging transnational or even global civil society. Social and cultural collective action is seen as an important counterbalance to the concentrated power of society’s state and market institutions. The driving forces of the civil society in the transnational sphere are suggested to be the communications revolution, the effects of economic globalization and the intensified crisis of the state’s authority when it comes to challenges such as environmental degradation. This has led to an expanding transnational civil society, noticeable as networks that link local nongovernmental organizations (NGO’s) with other social-movement groups and transnational actors (Conca 2001: 242-243). The importances of the transnational networks are twofold; firstly they have a huge opportunity to empower marginalized groups in society to have a voice in policy decisions, both domestically and internationally. The second aspect lies in the realm of identity, and the role that the transnational network may have in creating a perception of belonging to the same category, or

the “imagined security communities”, as Adler suggests. So, what, if any transnational networks exists around Lake Victoria, and in what way have they contributed to creating a common norm or identity for the people living in the communities around the lake?

Besides the governmental institutions that operates around the lake (mainly under the EAC), there are also a number of NGO’s that work transnational. The NGO’s mentioned here are not the only ones working in the countries and communities around the lake, they are however the ones that work transboundary, and they have been chosen in order to see whether or not their work have contributed to creating a norm as a consequence of the regional cooperation. It should also be mentioned that there are a number of international NGO’s working in the area, such as the Swedish NGO VI-Agro forestry and UN-Habitat. Nevertheless, the focus here will be on local NGO’s, because of their specific opportunity to create internalized norms around the lake.

The local NGO’s working transnational are; Osienala (Friends of Lake Victoria), ECOVIC (East African Communities’ Organization for the management of Lake Victoria Resources), LVRLAC (Lake Victoria Region Local Authorities Cooperation), VicRES (Lake Victoria Research Initiative), NBI (Nile Basin Initiative), NBD (Nile Basin Discourse Forum) and UCSD (East African Sustainability Watch Network c/o Uganda Coalition for Sustainable Development).

Osienala was created in 1992 due to the problems with the water hyacinth, which created the need for cooperative actions between the communities around the lake. They mainly work with education for the communities on resource management, as well as research on environmental and fisheries management ([www.osienala.org](http://www.osienala.org), Righa Makonge 11/5 2010).

ECOVIC is an NGO that advocates and lobbies for policies, laws and programs that enhances sustainable management of the lake. Formed in 1998, they work with strengthening the capacity of its member organizations, so that they can implement national resource management programs (James Olonde 14/5 2010).

LVRLAC works towards the local authorities in the region around the lake. They target a variety of issues, ranging from environmental issues to income generation. LVRLAC is somewhat of a hybrid organization, since they are registered as a NGO, and in most ways they also act as an NGO, but they work towards local authorities, such as municipalities and town or city councils, meaning that they are a NGO with its members made up by governmental institutions (Zacheus Okoth 12/5 2010, Patrick Oteng 25/5 2010).

VicRES is a regional research initiative with focus on the lake basin with the aim of providing scientific research for the partner states of the EAC to be used in policy making and law harmonizing. The program employs approximately 500 researchers at different higher educational institutions around the East African community ([www.vicres.net](http://www.vicres.net), Joseph Obua 21/5 2010).

NBI consists of the nine riparian countries of the Nile River and works on developing the river through a shared vision program and subsidiary action program ([www.nilebasin.org](http://www.nilebasin.org)). Even though the Nile River is not the focus for this

thesis, its basin also consists of the Lake Victoria basin, and therefore the programs and actions of the NBI also affect the lake and the communities around it.

NBD is a network of civil society organizations in the Nile Basin. It's a sister organization to NBI and focuses on getting the perspectives of the communities in to the decision making progress of above all the NBI but also the EAC ([www.nilebasindisource.org](http://www.nilebasindisource.org), Sarah Naigaga 28/5 2010).

UCSD is part of the East African Sustainability Watch; witch is a regional network working in the Lake Victoria basin. Their goal is to develop civil society through the implementation of sustainable development ([www.ugandacoalition.or.ug](http://www.ugandacoalition.or.ug), Richard Kimbowa 26/5 2010).

These NGO's all work individually with offices or partner offices in all three of the basin countries, but they also try to work together, for example through the LPIANF, which stands for Lead Partner Interagency Network Forum and serves as a platform where the NGO's can meet in order to create a stronger voice in policy decisions as well as getting cooperative benefits from each other ([www.lvbcom.com](http://www.lvbcom.com) C).

So, yes, it would seem that there are some transnational networks around Lake Victoria, but it is hard to say whether or not these NGO's and the governmental institutions previously mentioned would be enough to constitute the trans-societal linkages that Conca describes in his theory. Since he does not mention more specifically any requirements of the transnational networks – their scope, aim or quality, the best way to argue whether or not these networks are powerful enough to create movement along the peace continuum, is to look at if they can create an imagined security community, which leads us to look further to the next research question.

#### 4.3.2 Creating an imagined security-community?

Adler argues that transnational institutions can help diffuse and internalize norms and knowledge about how to peacefully resolve conflicts and therefore play a critical role in the social construction of security communities (Adler 1997: 250). Such a community constitutes of people whose common identities and interests are made up by shared understandings and normative principles;

*“who actively communicate and interact across state borders, who are actively involved in the political life of an (international and transnational) region and engaged in the pursuit of regional purposes and who, as citizens of states, impel the constituent states of the community-region to act as agents of regional good, on the basis of regional systems of governance”* (Adler 1997: 253).

As outlined in the chapter on operationalization, what develops a security community is when its members possess a mutual feeling of identity and loyalty – a sense of “we-feeling” across national boundaries. Does this exist around Lake Victoria? Has the transnational networks operating in the area contributed to the creation of such a “we-feeling”?

The answer is that it depends on who you ask. Many of the people working with the regional NGO's and governmental institutions claim to be having feelings of "brotherhood", which can be interpreted as a shared identity, towards other people living around the lake, but they then usually only refer to other people working in the same network. LVRLAC is one of the NGO's that seem to have been best at creating a sense of "we-ness" around the lake, at least for the people involved in the NGO. Lameck Ogot, head of social department and focal person for LVRLAC in Homa Bay, Kenya, says that LVRLAC has really created a platform for people around the lake to meet and share knowledge and experience, which has led to producing a "brotherhood", so that "even if I go to Uganda, I am home" (Lameck Ogot 14/5 2010). This opinion is shared by others involved in LVRLAC, who say that LVRLAC has really created a network that binds people across the lake together on a basis of common understanding of resource management of the lake (Edwin Magere /6 2010, Patrick Oteng 25/5 2010). However, it is important to note that who is referred to when talking about the "network that binds people", is only the other people working in LVRLAC, meaning the other focal persons in the local authorities around the lake that is part of the network.

The concept of a "brotherhood" around the lake is also mentioned by Napoleon Weare, who works for Radio Lake Victoria, which broadcasts to communities all around the lake. He also brings up another aspect of the brotherhood - the idea that ethnical ties are stronger than any other feeling of belonging (11/5 2010). Many of the Kenyans interviewed say that there definitely is what could be interpreted as an imagined security community, although if asked to explain what it is that defines this "we-feeling" towards other people living around the lake, they refer to the fact that there are luos also in Uganda and Tanzania. Luo is one of the biggest tribes in Kenya, which are traditionally fishers with the majority living in and around Kisumu. However there are luos also in Tanzania and Uganda, which means that for them the ethnical tie towards other luos is stronger than any relation based on the environmental cooperation. This does not make it any less interesting or important, since Adler talks about the imagined security community being based on shared identity, which obviously ethnical ties can be argued to fall under. It does nevertheless mean that the community feeling ends if people are not of the same tribe, and since there are more than luos around the lake, this imagined community does not embody everyone. Alfred Odira, a fisherman from Kisumu, says that "I'm always firstly a luo" and this perspective seems to be shared with the majority of the luos (18/5 2010). But, when viewed upon with a regional perspective, the issue of ethnical ties is much more complex than that. Lily Kaseka, also from Kisumu, says that it starts with the ethnical bonds - the tribes and clans living around the lake are culturally not that different from each other, and that creates a sense of belonging together. She also adds that the national borders that run across the lake are merely colonial, and people living around the borders, for example in the Busia district that stretches out between Kenya and Uganda, do not care if they are Ugandan or Kenyans, the border exists only on the map, not between people. Kaseka furthermore points to another aspect, the fact that people around Lake

Victoria have traded and cooperated historically, long before the formal agreements of the EAC and LVBC; “People have always traded around the lake, and now when the governments are promoting cooperation and integration of the communities, people wonder ‘What’s new?’” (Lily Kaseka 17/5 2010).

Not everyone agrees on the importance of ethnical ties in the region. Joseph Obua, regional coordinator for VicRES, argues for an opposite standpoint and means that culturally there are very big differences around the lake, and that sometimes these strong ethnical ties creates problem when cooperating. He also adds that it is not everyone that still feels a strong connection with their tribes and clans. Modernization has changed a lot of the traditional practices that used to distinguish the different tribes, and urbanization and migration has made people move, making the tribes scattered across not only the country but also the whole region (Joseph Obua 21/5 2010). Furthermore the importance of tribes differs between the three countries around the lake. In Kenya the tribes are still very important and this is also reflected very much in the political scene in Kenya. In Uganda it is also still very important, but the biggest tribe, the bagandas, mostly dominates society and the politics. Tanzania differs quite dramatically from the other two; since there are more than 100 smaller tribes the aspect of ethnical ties is not that important. Another thing is that Swahili was introduced as an official language after their independence, which has really unified the country, making the people who live their feel like Tanzanians, instead of identifying with their own tribe (Joseph Obua 21/5 2010, Edwin Magere 17/6 2010).

Richard Kimbowa, program manager of UCSA, thinks that there is definitely an increasingly stronger feeling of belonging to the same community around the lake. He believes that this is mainly due to the BMU’s, which has made people all around the lake realize that they all share the same problems and the same lake. Sara Naigaga, desk coordinator at NBD, agrees that thanks to the BMU’s and other regional networks, people around the lake are starting to see that they are all sharing the same problems. She too adds that because of LPIANF and other regional network meetings, a lot of the people working on resource management issues transboundary, has gotten to get to know each other, which has created a feeling of “brotherhood” (Sara Naigaga 28/5 2010).

Despite the regional networks active in the area and the proposed affect they are supposed to have on the creation of an imagined security community, there does however not seem to be a feeling of mutual identity or “we-ness” based on the cooperation over Lake Victoria amongst the people in the communities around it. When talking to people who are not directly involved in the regional NGO’s, they give another view than the “brotherhood” usually mentioned by the NGO-workers. They say that they are very proud of the lake and for them it is an important source of income and food. But when trying to discuss whether or not they experience a feeling of “we” towards other people around the lake, they usually say; “how can we feel something towards people we have never met?” (Alfred Odira 18/5 2010, Biseko Kuboja, Christopher Mwaita 18/6 2010). This opinion shows that there probably is no imagined security community around Lake Victoria among the communities. One of the main arguments for the imagined security community was that because of the shared identity, people

imagine that they know each other, even though they have never met, and therefore expect peaceful relations.

This probably is partly due to that the NGO's do not have the capability to reach much more than their immediate surroundings, mainly because of lack of funds and resources. Since the majority of the NGO's are dependent on aid and donor money, there is also a lack of forward planning, which affects the long-sightedness that a project like environmental cooperation needs. Even though the NGO's work on a regional scale, usually with the goal of establishing a lake-wide sustainable resource management program, it is most often perceived in the local communities as local projects, even though the approach is regional. Another reason for the lack of a shared identity can be because of the lake's large size. Even though the people around the borders and in some of the more densely populated areas have a lot of interaction with each other, large numbers of the communities around the lake are quite isolated, as for instance on the southern and western shores. Another factor is time – even though the EAC has existed for a couple of years now, there is still a lot of work left when it comes to harmonizing laws and policies, and the integration efforts has not reached out to the whole region yet, and especially not the more remote areas.

## 4.4 Conclusions

The reason why transnational networks and regionally grounded identities are interesting to look closer at is because of their ability to, as Conca puts it, push states along the peace continuum where violence and conflict becomes unthinkable.

With the case of Lake Victoria it is obvious that there are transnational networks that link the societies together. It can also be argued that some of these networks, especially LVRLAC and the NGO's connected to the LPIANF, have created a "we-feeling" on an administrative level, but that this sense of belonging have not yet "trickled down" to the local communities that live by and off the lake. This does not mean that there does not exist any common identities around the lake, just that they have not been created through the transnational networks operating in the region for cooperative purposes over the resource, as suggested by Conca. Instead they are based on other ethnical, historical, geographical and political elements. The question is then whether or not this is enough to create more peaceful relations. Since this thesis only focuses on two aspects of a larger theory it is difficult to make such conclusions, as the other pathway, "changing the strategic climate" has not at all been discussed here. They can however contribute to providing an answer to the question why Lake Victoria is an example of cooperation, instead of conflict. Here a couple of factors are important. The fact that the countries around the lake are cooperating around a number of other issues, makes cooperation over water in this case more likely than conflict, just as Jägerskog argues. But the findings of the field study also play an important role. The different common norms or identities around the lake,



whether based on ethnical, geographical, historical or colonial ties has probably played a significant part in establishing peaceful relations around the lake. Righa Mekonge, program coordinator of Osienala, puts it aptly; “We have always lived here, traded across the lake and fished side by side, this cooperation now is nothing new” (Righa Mekonge 11/5 2010). The prevalence of social and governmental institutions that specifically deals with the problems of the lake has also contributed to avoiding conflicts over the resource. Their ability to manage any potential tensions over the resource is an important factor for the past and future stability in the region.

#### 4.4.1 Ways forward

The overall aim for this thesis was also to further broaden a field of research that has been overlooked, by focusing at an example of a water resource without any violent conflict. One of the most important lessons that can be learnt from this field study of Lake Victoria, is the significance of involving the local communities into decision and policy making progress. Conca briefly touches on the issue in his second pathway when he discusses the role of civil-society, but he concentrates more on it as a way of creating the shared identity in which conflict becomes unthinkable. What could be a hinder for cooperation is if local communities or marginalized groups feels bypassed when it comes to enforcing laws or policies in which they feel completely alienated towards. Caroline Lwenya, Department of Marine and Fisheries, explains; “Communities around the lake don’t always see the benefits of the cooperation, instead all they see are the regulations and the restriction for their movement, that they don’t see the need for and don’t understand why they need to follow, and consequently they just don’t” (12/5 2010). There is therefore room for more and stronger emphasis being put on the transnational networks and NGO’s because of their ability to, just as Conca mentions; give the communities a voice in the decision-making progress.

This thesis should be seen as both an input to support Barnett and Conca’s theory on cooperation as a more likely outcome than conflict out of resource scarcity, and as a starting point for more research on the subject. To be able to further evaluate and develop Conca’s theory on environmental peacemaking, it would be interesting to look at the first pathway, “changing the strategic climate”, applied on Lake Victoria, and of course also on other areas. In line with the previous arguments it would also be interesting to look closer on what possibilities the local communities have to influence the cooperation, in order to make them feel more actively involved and therefore more obliged to follow the laws and regulations, created in order to protect the lake.

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## APPENDIX A

Festo, Makoye, Treasurer of Kaijiweni BMU, Mwanza 18/6 2010  
Gichere, Samuel, Deputy Executive Secretary, LVBC, 18/5 2010  
Jägerskog, Anders, Program Manager Water Resources, Swedish Embassy  
Nairobi, 7/5 2010  
Kalangi, Belinda, Department of Environment, Kisumu City Council, 12/5 2010  
Kimbowa, Richard, Program Manager, UCSD, 26/5 2010  
Kirema-Mukasa, Caroline, Senior Fisheries Management Officer, LVFO 1/6 2010  
Kisaka, Lily, Senior Operations Officer LVEMP II / LVBC, 17/5 2010  
Kisolo, Sara, General Secretary of RUDMEC, 21/5 2010  
Kuboja, Biseko, Chairman of Kaijiweni BMU, Mwanza 18/6 2010  
Labislaus, David, member of Kaijiweni BMU, Mwanza 18/6 2010  
Lager, Bo, Program Director Vi-Agroforestry East Africa, 9/5 2010  
Lwenya, Carolyne, Department of Marine and Fisheries, Kisumu Research  
Centre, 12/5 2010  
Magere, Edwin, Project Officer Tanzania Chapter, LVRLAC 17/6 2010  
Makonge, Righa, Program Coordinator Osienala – Friends of Lake Victoria, 11/5  
2010  
Marshall, Brian Eric, Resource Monitoring Specialist, LVFO, 2/6 2010  
Masoud, Frank D.E, Executive Secretary, FUU, 18/6 2010  
Matagili, Juwenary, Executive Chairman, TAFU, FUU & NSEDA 17/6 2010  
Matano, Ali Saidi, Projects Development Officer, LVBC, 18/5 2010  
Mwaengo, Lawrence, Project manager, Kisumu Recycling, 12/5 2010  
Mwaita, Christopher, secretary of Kaijiweni BMU, Mwanza 18/6 2010  
Naigaga, Sarah, Desk Coordinator, NBD, 28/5 2010  
Nyandega, Isaiah prof., department of Geography and Environmental Studies,  
University of Nairobi, 6/5 2010  
Niyongaro, Patrice, Economist and Planning Officer, LVEMP II / LVBC, 17/5  
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Obua, Joseph, prof., Regional Coordinator VicRes, 21/5 2010  
Odira, Alfred, fisher, Kisumu 18/5 2010  
Ogot, Lameck, Head of social department, Homa Bay Council, 14/5 2010  
Olonde, James, Coordinator for Kenya chapter, ECOVIC 14/5 2010  
Okoth, Zacheus, Project Officer Kenya chapter, LVRLAC, 12/5 2010  
Oteng, Patric, Program manager, LVRLAC, 25/5 2010  
Owaga, Steve, fisher, Kisumu, 15/5 2010  
Owuor, Francisca, National Project Coordinator LVEMP II, 17/5 2010  
“Samuel”, Wayraika BMU, Jinja 1/6 2010  
Weare, Napoleon, Radio Lake Victoria Kisumu, 11/5 2010