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Department of Political Science

Will People make it Sustainable?

- A minor field study testing if and how public participation improves the environmental sustainability of projects in Kenya.

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Abstract

People tend to be in favour of the democratic idea that all people should be able to participate and tell their point of view. At the same time we want to ameliorate environmental impacts. It is however uncertain how well these two goals correspond with each other, wherefore it is a suiting area for research.

The thesis will test if public participation can improve the environmental sustainability of three Kenyan projects. The material will consist of 16 informant interviews with different stakeholders. The thesis is showing that there is a positive correlation between public participation and environmental sustainability, wherefore the causal mechanism then is sought for by looking at four social goals of public participation. The study shows that the goal to inform and educate the public is likely to be an important causal mechanism to improve the environmental sustainability of a project. It can also be seen that it is important to incorporate the public's values into decisions, improve the substantive quality of decisions and also to resolve conflicts among the competing interests, even though these goals are not as distinct.

The thesis is an attempt to fill part of the gap of knowledge on how the public participation can be used to improve the environmental sustainability of projects in the developing world.

Key words: deliberation, development, environmental sustainability, public participation

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Acronyms

CBO – Community Based Organisation

CSR – Corporate Social Responsibility

DEO – District Environment Officer

DO – District Officer

EIA – Environmental Impact Assessment

EPS – Environment Programme Support

GO – Governmental Organisation

KEFRI – Kenyan Forest Research Institute

MDG – Millennium Development Goals

MFS – Minor Field Study

NEMA – National Environmental Management Authority

NGO – Non-Governmental Organisation

Sida – Swedish International Development Cooperation Agency

WIFFO – Wagai Integrated Farmers Forum Organisation

YASCCO – Yala Swamp Community Conservation Organisation

1. Introduction

Empowerment of local societies is today considered to be a necessary prerequisite for a sustainable development. This is a very popular belief, everybody wants to include people in the process but the question is if it is an effective way to ensure environmental sustainability. Even though we want to have a very democratic society, we also want to ameliorate the environmental problems, wherefore it might be necessary for experts to lead at some point. One example of this is through environmental impact assessment (EIA), which is one way to ensure the environmental sustainability of a project. An EIA however includes a public consultation, which comes in as a somewhat democratic element in the otherwise quite administrative process, but is it actually deepening the environmental consideration of the project?

In developing countries many donors set up the public participation to be very important for sustainability reasons, wherefore it is integrated in most projects. So is the case with the Swedish International Development Cooperation Agency (Sida) as many others. The public participation can also be important to highlight the relationship between social and environmental impacts of a project, which tends to be particularly striking in developing countries where social customs have evolved closely with the natural capacities (See Glasson et al. 2005, p.284).

There are however little research done today testing if there is a positive correlation between public participation and environmental sustainability in developing countries, and if so why. To fill this gap of knowledge I will in this study, on three different projects in Kenya through a Minor Field Study (MFS), test if and how public participation can improve the environmental sustainability.

1.1 Research Problem and Purpose

Public participation has its base in the democratic belief that power should be in the hands of the people. In the development cooperation the democratic idea is central, wherefore it is natural that donors are using public participation as a tool in the projects they finance. Environmental consideration is likewise of high priority, Sida is for example regarding it as a necessity for effective poverty reduction (Bergström 2003, p. 10). Both the issue of public participation and environmental consideration are hence of great importance in the development cooperation. These two targets are however not necessarily corresponding with each other, which makes it an interesting area for research. Throughout the study the concept

of EIA will be mentioned and used as an example since it is a process where public participation commonly is used as a tool to ameliorate environmental problems.

The purpose of this study is to see whether a higher level of public participation really contributes to more environmentally sustainable projects. If a positive correlation nevertheless can be seen between the two, the causal mechanism will be sought for so that knowledge can be created to elaborate the public participation for increased environmental sustainability. In this study four social goals of public participation will be used to see if they have a potency of explanation between the level of public participation and the environmental sustainability and hence work as causal mechanisms.

1.2 Environmental Sustainability

Most countries agree with the principles of sustainable development but the good intentions have not yet shown in improved environmental conditions in the world (MDG Report 2005, p. 30). To see results the principles need to be implemented in effective environmental management, which protects and guides the use of the natural resources. Environmental sustainability is in the Millennium Developmental Goal (MDG), number 7 of ensuring environmental sustainability, defined as “Environmental sustainability means using natural resources wisely and protecting the complex ecosystems on which our survival depends.” (MDG Report 2005, p. 30). This definition is also what Sida and Danida is working by when advising the Kenyan government through the Environment Programme Support (EPS) (EPS 2006, p. 12). The definition is rather broad and it can be difficult to see what it implies on local projects in Kenya, some of the things that are demanded are however ensuring natural resources, improved livelihoods and to work with the poverty -environment linkages (EPS 2006, p. 5, 12). In this study the projects have been chosen due to variation on the environmental sustainability, which has been pointed out by experts at Sida and National Environment Management Authority (NEMA).

1.3 Disposition

After this introductory chapter a review of earlier research will be done discussing the relationship between public participation and environmental sustainability, partly by looking at four social goals of public participation. Chapter two will conclude with the question formulation for the thesis. In the third chapter the methodological choices will be discussed after which the analysis of the result will follow. In the analysis three projects will be reviewed to test if a higher level of public participation can improve the environmental

sustainability. Four social goals will at this point also be tested to see if any one of them has a potential to explain the relation between the level of public participation and environmental sustainability. The closing chapter five will bring about a discussion and conclusion of the thesis. In the appendices a list of informants, the interview guide and the scoring criteria for the social goals of public participation can be found.

2 Theoretical Framework

2.1 Earlier Research and Theoretical Base

The subject of public participation has been up for plenty of discussion in the field of political science and is also an essential part in the sustainable development discourse (Tabbush 2004, p. 147). The idea of public participation was promoted at the United Nations Conference on Environment and Development in Rio de Janeiro 1992. In the Rio Declaration it was stated that environmental issues were best handled at the local level with the participation of concerned citizens (Ribot 2004, p. 22). Empowerment of local societies is by many thus considered to be a prerequisite for a sustainable development. Public participation can in this process be an important tool for people to be involved and take responsibility in the planning of the local area.

The process of local participation is also an essential element of democracy according to Ribot (2004, p. 13). The public participation of today can be regarded as a complement to the official decision making rather than a substitute, where the views of the stakeholders in the local area are included (Jones 2007, p. 616). By letting the broader public participate effectively and include their views in decision making the democratic system can be considered to be enhanced. It will enable the public to influence and control decisions that affect them, in accordance with the principle of subsidiarity (See Jones 2007, p. 616f; Jones et al. 2001, p. 6; Ribot 2004, p. 22). To involve some kind of meaningful powers to the local people it is essential that the participation is built up by the concerned groups and not imposed by outside agendas, which has often been the case (Ribot 2004, p. 13).

According to Dryzek the public participation within EIAs can be seen as an example of a democratic element within an otherwise rather expert lead process (1997, p. 86f, 91). It has however shown to be important that this is done early in the process for the participation to be effective (Jones 2007, p. 619; Jones et al. 2001, p. 10). This would hence enable mitigations to be planned together by the different parties as a way to prevent rather than to adjust impacts afterwards.

The more intense forms of public participation involve a two-way communication where the parties are collaborating. This kind of deliberative process is thought to improve the environmental issues of a project since the discussion itself activates the commitment to environmental values (Dryzek 1997, p. 94). The quality of deliberation has also been noted by Beierle to be of great importance for the success of the participatory process (Beierle 2002, p. 52f). The deliberative process makes the participation more intense when participants feel they are heard and when they can understand each other.

The German sociologist Weber argues though that bureaucracy is a far more rational form of social organisation (Dryzek 1997, p. 76). When problems get complex, as in the example with environmental issues, they are not handled effectively by a large group of individuals, which instead should break up into smaller groups to create effective solutions.

Many researchers have also pointed out that thinking the interests of the public will be attained by letting the 'public' participate in the decision making is a somewhat naïve thought (Glasson et al. 2005, p. 158; Dryzek 1997, p. 98; Tabbush 2004, p. 147). The public vary greatly between different groups and their interests, views and values differ equally as much. In the capitalist world the public participation is seldom a discussion where all interests are of equal weight. Instead it tends to be the economically influential interests, which often coincide with the socially powerful forces in a community, who rule the debate (Dryzek 1997, p. 98). Problems with the public participation may hence develop when the decision represents the views of the most vocal interest groups rather than the general public (Glasson et al. 2005, p. 158). This may conclude in a public participation where greedy self interest will dominate the debate instead of having a creative public dialogue. To improve the environmental result of the project the latter is preferable, wherefore the set-up of the public participation is thought to be crucial.

Public participation can in this study be defined "as a social process through which people are able to influence and share control over the decisions which affect them" (Jones et al. 2001, p. 45). Four levels of public participation are identified (Jones et al. 2001, p. 45):

1. Information sharing activities
2. Consultative activities
3. Collaborative activities
4. Empowerment activities

The four levels are characterised by a growing intensity of communication and power-shift towards symmetrical relationships, as equal partners (Jones et al. 2001, p. 47). This progress

can be regarded as part of the increasing social capital¹ of a community, which is thought to be an important mechanism for resolving difficult natural resource problems (Jones et al. 2001, p. 45).

Public participation was originally set up to solve various problem areas, which Beierle argues can be used as evaluating criteria of public participation, he arrives at a set of social goals, which take a broad view on the outputs from public participation (Beierle 1999, p. 80f). Four of these goals, with benefits and critique involved, will be presented below. These are also the ones that will be scored in the analysis to test if they have a potential to explain the hypothesis and hence work as causal mechanisms.

2.1.1 Incorporating Public Values into Decisions

For a project to be socially legitimate it is important that the public that are affected are able to have a voice in the project process and that their values are incorporated into the decisions (Daniels & Walker 2001, p. 3f). It is hence essential to include the public in decision making through an open process of discussion, negotiation and incorporation of different views and values to secure legitimacy for a project (Dryzek 1997, p. 86; Jones 2007, p. 617f; Jones et al. 2001, p. 48f). Zachrisson argues that “When people are listened to, paid attention to, treated politely and with respect, the legitimacy for the final decisions is increased.” (2004, p. 24). It is hence easier for the local community to approve a project that they have been able to influence and have control over and where their values have been incorporated. As in the example of EIAs Dryzek argues that the public participation is a way of strengthening the legitimacy among the public for the project (Dryzek 1997, p. 87).

It is though argued that one weakness of the participatory decision making, in the environmental area, is that the values of the public might differ substantially or not even support environmental values. This could however be corrected by the deliberative modes of participation where the values are thought to be altered towards more community oriented values (Beierle 1999, p. 84).

There are also observers who are sceptical whether public participation actually secure legitimate decisions and argue that it is only a way of disarming troublemakers (Dryzek, 1997, p. 86-88). The inclusion of the public might hence only be symbolic, since the project does not actually need to take the comments from the public into account. The project

¹ For a wider discussion of the concept see Jones et al. (2001, p. 47ff) and Elinor Ostrom (in Dasgupta & Serageldin red. 2000, p. 176ff)

implementers are however made aware of the views and values of the public through the participation.

2.1.2 Improving the Substantive Quality of Decisions

Participatory methods are assumed to increase the environmental sustainability of a project. The more stakeholders that participate will likely increase the possibility to gain knowledge about relevant issues and current problems, so that these facts for example can be regarded in an EIA (Sida 2002, p. 22).

Beierle is arguing that public participation is desirable in several arenas but in decision-making about environmental issues it is particularly important (1999, p. 77). One reason is the emerging complexity of the environmental issues wherefore there is a need for the broader public to be involved. By incorporating the public's knowledge, values, viewpoints and behaviours the decision makers will get a better idea of the public's perceptions. Yet another reason is that it has shown that the perspectives of the experts and the public tend to be fairly different wherefore they both are needed to find good and lasting solutions (Beierle 1999, p. 77). The management of natural resources needs local knowledge, beyond that of outside experts, which local people can bring into the decisions. There are for example cases when the most advanced technological solutions are not the most appropriate since they lead to decisions that are not culturally or politically viable (Daniels & Walker 2001, p. 2f). It can thus be said that local participation can be used as a mean to increase the management effectiveness and equity of the project (Ribot 2004, p.17).

A challenge that some researchers however are recognising is the concern that the public make environmentally bad decision if they are allowed to influence and have control over the decision making. It is argued that decisions of this sort would not be grounded in scientific and technical data (Beierle 2002, p. 27). The experts are, according to these researchers, justified to take the lead since the issues are too complex for the public to handle, or for the short-sighted politicians for that sake who operate on the electoral timescale rather than the biological (Dryzek 1997, p. 76, 78). The public participation may however not give direct traceable effects on the project but rather it will alter the context in which the decisions are taken and implemented towards both more environmental and democratic values, which still can be of great importance (Dryzek 1997, p. 87).

2.1.3 Resolving Conflict among Competing Interests

One of the major incentives to involve the public early in a two way consultation may be to reduce conflicts between competing interests (Beierle 1999, p. 86). Through face-to-face deliberations people are able to be heard and to understand each others in discussions and negotiations. The objective is that by letting the opposing parties meet and talk regularly they will arrive at consensus or at least create accepted compromises (Jones 2007, p. 618). According to the democratic pragmatists this is one of the most effective ways to confront public conflicts (Dryzek 1997, p. 92).

There are however concerns that when giving the control of a resource to the public the conflicts will instead increase due to different interests and underlying ethnic conflicts. Environmentalists might fear corrupt local officials using the natural resource for personal interests or that local authorities do not have the capacity to handle conflicts, which might be a well-founded fear (Ribot 2004, p. 15). The debate and controversy in itself should though not be regarded as a failure; rather it is an important part of the deliberative process forming public values and contributing to the society's self-understanding (Daniels & Walker 2001, p. 6). It is however important that the institution hosting the public consultation have the capacity to keep the discussion within certain boundaries so it does not evolve into an open conflict.

2.1.4 Educating and Informing the Public

Education and information sharing is considered to be a prerequisite for the public participation, for the participants to gain knowledge and understanding of what is happening (Jones et al. 2001, p. 13, 47). Since it is essential for the participants to be effective partners in decision making it is important that the technical complexities do not risk getting in the way of the public's ability to participate (Beierle 1999, p. 82).

The education of the public on environmental issues is hence part of the social capacity building within the project and surrounding communities. Capacity in terms of making the public understand the environmental problems of the project, to make them involved in the decision making and act collectively to implement change (Beierle 2002, p. 13).

The education about environmental issues could include workshops, reports made by technical advisory committees and direct deliberations with experts (Beierle 2002, p. 31). It could also include discussing the different and competing values of the public that are at stake and attached to the project (Jones 2007, p. 624). The desired education thus goes beyond ordinary science for the particular issue of the decision making. It involves the understanding

of tradeoffs involved in different outcomes and the knowledge of the different stakeholders' interests (Beierle 1999, p. 82). This is hence believed to provide the process with some credibility and legitimacy among the public.

This aspiration for knowledge might though be too ambitious for the wider public and could at the best involve the most engaged people, which is likely to be even more difficult in a developing country where the educational level is comparatively low. The technical solutions are also often increasingly advanced which make it more and more difficult to combine the dual goals of technical competence and participatory process (Daniels & Walker 2001, p. 4f). How can the public's participation be meaningful if they do not have the slightest idea of even the terms, concepts, mitigations, or technical trade-offs? Lack of information is thus likely to affect how well the public can be part of the decision making. It might consequently also risk restricting the public's ability to put pressure on the project (Beierle 1999, p. 82f).

2.2 Question Formulation

The questions for the study, which have aroused from the earlier research, are the following:

- Does a higher level of public participation lead to more environmentally sustainable projects?
- Can any one of the four social goals of public participation explain the relation between public participation and the environmental sustainability of a project?

3. Research Method and Material

3.1 Qualitative Research

To answer the two preceding questions I firstly need to test the hypothesis that a higher level of public participation improves the environmental sustainability of a project. If this hypothesis is gaining support I will move on to seek for the causal mechanism that can explain the linkage between the two variables. In this study four social goals of public participation will be scored to see if they are suitable for this purpose. The location for the study is Kenya, where no extensive database on the research area is available. Because of this matter a qualitative approach is instead taken to get a more detailed picture of the public participation in three projects. Since it thus is a study of few cases it enables a deep study where much information can be gathered for each project, this will thus also be suitable for the development of the causal mechanism.

The study is set up with the help of a backwards Most Similar System design (Esaiasson et al. 2004, p. 112). Three projects are strategically selected due to variation on the dependent variable but otherwise the projects are fairly similar. The comparison of three projects will increase the study's external validity; that the result can be generalised outside the projects studied (Esaiasson et al. 2004, p. 175). Being a qualitative study it is however only reviewing three cases, which is not enough to say something for certain but it can at least give an indication of how the public participation affects a project's environmental sustainability. Key informant interviews will be used as research method to collect data and to make a mapping of the public participation within the three projects.

3.2 Delimitations

3.2.1 Kenya as a Case

Kenya is a developing country where Sweden and other donor countries have been involved for a long time, which makes it relatively easy to find suiting projects. The Kenyan context is also quite typical for a developing country in Africa South of Sahara. Corruption within the government is one of the factors undermining development and the economy and also tends to widen the gap in between rich and poor (Sida 2009). This might hence be one of the reasons why the expectations can be very high when a project enters a specific area.

3.2.2 Selection of the Projects

The selection of the cases are crucial for the study's external validity, how well the expected result can be generalised outside the study, to its' population. An initial question before the selection of cases is therefore 'what is my population'? (Esaiasson et al. 2004, p. 174). The answer I claim to be projects in general that are thought to have impact on the environment. These would hence be the cases, which I possibly could say something about from this study, I would though be careful to do such generalisations before further studies are made. Cultures vary greatly between countries and continents and it is one of the factors that largely could affect the result of how the level of public participation can improve the environmental sustainability of a project. This is moreover a qualitative research, which means that I can not say anything for certain but that the result from the study only can give an indication of the relationship between the two variables and the possible causal mechanism. (Esaiasson et al. 2004, p. 174f).

The projects were chosen strategically on the dependent variable, their environmental sustainability, according to a backwards MSS design to test the hypothesis that a higher level of public participation improves the environmental sustainability of projects.

One of the projects that are reviewed in this study is the Vi Agroforestry in Wagai Division, which is part of the SCC-Vi Agroforestry project in Kisumu. According to Sida it is considered to be a relatively successful environmental/developmental project. The objective of the Vi Agroforestry project is environmentally sustainable development and is therefore somewhat different from the other two projects, which are more traditional commercial projects. It could thus be argued that the Vi Agroforestry is a critical case in favourable conditions for testing the hypothesis, while the other two are more typical cases (Esaiasson et al. 2004, p. 179ff). If the hypothesis of the study is correct it should however be functioning for Vi Agroforestry as well and can be tested. This matter could though affect the external validity negatively, since the cases are not completely matching. The fact that the projects are rather different is though increasing the likeliness to get the wanted variation on the dependent variable (Esaiasson et al. 2004, p. 113).

The other two projects were identified at place in Kenya through contacts with the Sida office in Nairobi and through NEMA. These two projects are the Dominion Farms at the Yala Swamp and the Sondu Miriu hydro-power project. According to NEMA the Sondu Miriu hydro-power project can be considered to be a more environmentally sustainable project while the Dominion Farms project can be regarded as less so. Both the projects are though within the legally permitted boundaries and have gotten the necessary EIA approvals, which limits the variation some.

All the three projects are situated in the Nyanza province in western Kenya. The time in Nyanza province was though limited to seven weeks, which resulted in a pproximately two weeks for each project and one spare week. The review can therefore be thought as somewhat brief considering the size of the projects. The projects were nevertheless visited at sight which is hoped to give an adequate and in depth understanding.

The fact that three cases were studied instead of two or four makes the study to some extent asymmetrical. I argue though that the Sondu Miriu hydro power project is a bit in between the other two since it has some negative impacts on the environment to an extent that is not there in the Vi Agroforestry project. The later similarly has a clearer mission on environmental sustainability.

3.2.3 Selection of the Informants

When the projects had been chosen, central persons or groups in the public were identified for key informant interviews. The selection of the informants for the Vi Agroforestry project was done after talking with the Vi Agroforestry staff about who were the central stakeholders in the Wagai division and who had been participating in the project. The Vi Agroforestry staff could though be considered to be biased to produce a positive picture of the project and hide the critical voices. During my time with them I however got a transparent impression of the project and due to the comparatively short time frame, two weeks, this was a compromise made.

The selection of informants for the other two projects was done after speaking with the District Environment Officer (DEO) in the district where the projects were situated; Siaya and Nyando district. The DEO is working at NEMA, which could be regarded as a relatively objective party in the respective projects.

The selection of the key informants was done so that I would get a good idea of the views from the different stakeholders, for example the public, the local administration and the implementer. To get the views from the public I normally turned to different community based organisations (CBO) and non-governmental organisations (NGO). The chiefs who are part of the local administration are however also close to the public and their views could therefore be regarded as somewhere between the public and the local administration. In some of the cases there were also other persons that had been central in the public participation, such as EIA experts and line of ministry staff, wherefore these were also interviewed. The informants were chosen so that they would be independent of each other, consequently I could confirm their information with other informants (Esaiasson et al. 2004, p. 308f). The selection was completed by a so called snowball selection where one key informant points out another important stakeholder and so on (Esaiasson et al. 2004, p. 286).

The informants were contacted by phone and with the help from the Vi Agroforestry office and NEMA respectively. Six informants were identified and interviewed from the Vi Agroforestry Project in Wagai Division and Dominion Farms project in Yala Swamp respectively. For the Sondu Miriu hydro-power project only four key informants were identified, these central persons were however easily found and it is believed that the course of event was sufficiently covered with these. When deciding the number of interviews it is argued that one should interview as many objects as it is necessary to find out whatever it is that I want to know (Kvale 1996, p. 102). It is though important to consider the quality of the interviews as well and not fall for the delusion that the more interviews the more scientific ,

wherefore a compromise need to be done between quantity and quality (Kvale 1996, p. 101ff). The total number of key informant interviews that was performed is 16, a list of the informants plus one pilot interviewee can be found in appendix one.

3.3 Interviews

To generate descriptive information and mapping of how the public participation was undertaken in the different projects key informant interviews is used (Mikkelsen 1995, p. 105). As in this study, interviews are commonly used when there is insufficient material available on the area of interest, wherefore new data needs to be collected (Esaiasson et al. 2004, p. 280). The key informant interviews are believed to provide an in-depth, inside information of the process of the public participation and thereby help to understand the motivations and attitudes that have directed people's actions (Mikkelsen 1995, p. 105).

The interviews were semi-structured and an interview guide was used to make the data collection somewhat systematic for each informant and each project but at the same time give the informant a possibility to develop its' answer further (Mikkelsen 1995, p. 103). The interview guide, which can be found in appendix two, is divided into two parts. The first part includes questions to be able to make a classification of the public participation in the projects while the second part included questions that assisted the scoring of the social goals of public participation. The interview guide was thus developed with the help from earlier research by Jones et al. and Beierle (2001; 2002). I tried to keep the first questions as wide and open as possible to gradually narrow them down to the more specific information that I wanted.²

Interviews imply a great deal of craftsmanship since the interviewer both has to be knowledgeable on the subject and have major conversational skills to ensure trust in the conversation (Kvale 1996, p. 147). The interviewer also needs to be able to make fast decisions of what and how to ask questions. For this study I only conducted one pilot interview before starting the more formal interviewing as a way to learn the techniques, which is best learnt by doing. Considering the limited size of the study I argue that one pilot interview was enough. This can however be thought as a constraint of the data collection and I did also notice that the interviews gradually became more relaxed.

A MFS scholarship made the study possible at place in Kenya and the interviews were conducted between the 24th of February and the 7th of April 2009. The interviews were conducted in the informants' offices or in their homes, where they felt well-settled and

² The order of the questions and suitable follow-up questions was however adapted to each interview so that the conversation would feel as natural as possible.

comfortable (Esaiasson et al. 2004, p. 294). The locations were also preferable since they normally were calm and quiet places, which ensured a good recording quality (Kvale 1996, p. 162). At the starting point of the interview the informants were informed about the study and of its' purpose so that they could give a spoken informed consent.³ The subject of the study is not considered to be very controversial and the question of confidentiality was hence weighted against the credibility of the study, wherefore the informants were not promised anonymity.

Each interview took between 30 minutes and one hour after the interviewees were informed about the study and had given their informed consent to the interview. During the interview I took notes as well to be able to easily sum up my overall impression immediately after the interview. Soon after the interview occasion the interviews were transcribed so that nothing was forgotten by accident and thus to strengthen the reliability of the study. I tried to transcribe everything but at the same time not transcribe anything that was not clear and distinct, this is however a fine line which need some practice (Kvale 1996, p. 163). The interviews were conducted in English, which was for both me and the informants our second language, which at some points implied difficulties in understanding. The recordings were however listened through at several occasions to minimise the risk of incorrect transcriptions and to secure their reliability (Kvale 1996, p. 163f).

Informant interviews should be handled just like any other source, wherefore they have to be analysed with respect to the four criteria of source criticism; credibility, independence, concurrency and tendency (Esaiasson et al. 2004, p. 304). In this study there are some obvious concerns with the concurrency since there have gone some time between the initial public participation and the interview. There were also some concerns with tendency, given that some of the projects had been rather antagonistic and the informants could be biased towards one or the other side. This is though partly handled by interviewing many independent actors who also are primary sources to include the different perspectives.

3.4 Analytical Framework

The analysis is divided into two parts, where the first part tests the hypothesis; if a higher level of public participation improves the environmental sustainability of a project. If the hypothesis is proven to be correct the causal mechanism is sought for in the second part of the

³ At this point I also asked the informants if they thought it was okay that I recorded the interview. All but one gave their consent to this, and notes were instead taken at the interview where I could not record.

study by reviewing four social goals of public participation . The analysis will hence include two different analytical frameworks.

The data collected through the key informant interviews constituted the base for both parts of the analysis. The transcribed interview material was categorised with the help of the two analytical frameworks to be able to structure and narrow the otherwise long and complex transcriptions to what I am interested of in this study (Kvale 1996, p. 198f).

3.4.1 Level of Public Participation

The participatory techniques in different projects can vary widely, which is to a large extent depending on the purpose of the public participation. In this thesis a four stage classification scheme developed by Jones et al. is used to grade the public participation within the projects . The framework can be regarded as a link where one stage has to be fulfilled before moving on to the next level. As for example to reach the level of collaboration activities the participatory process first has to fulfil information and consultation to be effective. (Jones et al. 2001 , p. 45)

Table 1. Four Stage Classification of Public Participation (Jones et al. 2001, p. 46)

Level of public participation:	Examples of techniques:	Purpose of the participation:
1. Information sharing	Newsletters; websites; leaflets; videos; displays; slide presentation; media briefing	To place information in the public domain.
2. Consultative practices	Questionnaires; focus groups; public meetings; face-to-face briefings with key individuals/organisations	To encourage a two-way exchange of information
3. Collaborative activities	Collaboration to scope a problem and solutions, site-based events, discuss ecological surveys	To engage the knowledge and resources of stakeholders
4. Empowerment activities	Creating management groups and co-opting individuals from relevant bodies; devolving budgets and resources	To share power and responsibility for the decisions being made, and their outcome

Note: The analytical framework used to classify the level of public participation for the three projects studied.

By using this analytical framework the hypothesis can be tested by seeing if there is a correlation between the level of public participation and the environmental sustainability of the project. The level of public participation in a project is identified with the help of the framework, which includes both the purpose of the participation and examples of techniques used to include people. The interviews therefore included information of which techniques that had been used for the public participation and what the objective was , which hence enables the classification.

It could however be argued that the lower level of public participation is better suited to include the wider public and that the empowerment activities only have the capacity to include a smaller group and hence exclude some. The classification is however designed so that for the collaborative activities to be effective the project has to fulfil information sharing and consultative practices as well, which then should include the wider public.

I am thus arguing that this operationalisation is reasonable, since the level of public participation is classified both with the help of the desired purpose of the participation and how the participation actually was conducted through the techniques used. It could though be argued that other factors such as number of participants, gender and what kind of participating groups should have been included in the classification. Due to the available data this approach, which also have been applied before, however seemed realistic.

The environmental sustainability of a project is pointed out by experts at Sida and at NEMA, which, for this type of study, was thought to be a reasonable way to approach the problem. It could however imply a possible source of error in the analysis, wherefore the following questions should be considered. Is the project really high, or low, on the environmental sustainability or is the variation on the dependent variable big enough?

If a project that is high on the environmental sustainability has attained a high level of public participation, and if a project that likewise is low on environmental sustainability has only attained the first level of public participation the hypothesis is believed to be correct. The correlation could however be inadequate. An example of this is if a project with high environmental sustainability only is achieving a lower level of public participation while the other projects are in line with the hypothesis. Such a situation must hence be discussed thoroughly to make a conclusion. Worse off the correlation could be completely nonexistent or negative and the hypothesis then has to be rejected for this study.

3.4.2 Social Goals of Public Participation

If the hypothesis is proven to be correct in this study, the second part of the study continues to seek for the causal mechanism with the help of the four social goals of public participation developed by Beierle (2002, p. 14f). The goals are hence believed to possibly explain the linkage between the public participation and the environmental sustainability of a project. The four social goals of public participation are the following:

1. Incorporating Public Values into Decisions
2. Improving the Substantive Quality of Decisions⁴
3. Resolving Conflict among Competing Interests
4. Educating and Informing the Public

The four goals can be scored as high, medium or low for the projects. The scoring criteria contain a potential ground to make objective conclusions even though the scoring of course implies some subjective judgements. Since this is hard to escape a thorough and transparent discussion of the judgements made, is critical. The criteria for scoring the social goals of public participation can be found in appendix three. The scoring of the social goals is believed to show if some of the goals are more important than the others, or if they can be obtained even without a high level of public participation. The criteria for conclusion are based on the idea that the hypothesis is verified. To be able to make the conclusion that a goal is a causal mechanism a project that have a high level of public participation and also environmental sustainability has to score high on that goal and likewise the opposite project has to score low on the same goal. There can however be cases in between when a thorough discussion will have to argue for a qualitative decision since the world is rarely systemised as clearly as we would want it to be. Such a qualitatively decision can however not be the base for a clear conclusion but still it could point out a direction for further studies that the goal can be a possible causal mechanism or not.

4. Analysis

4.1 Vi Agroforestry Project in Wagai Division

The Vi Agroforestry started their project in Kisumu 2002 and is working in different divisions in the area (SCC-Vi Agroforestry 2007, appendix 3). When they start their work in a division it first becomes an outreach area. In the next phase they introduce full staff for the implementation, thereafter they gradually phase out for the farmer groups to take the lead. In this study one of these division were looked upon, the Wagai Division, where Vi Agroforestry is now in the implementation phase.

Because like the thesis in Vi Agroforestry, in Wagai, we work for a period of time and after that period of time we phase out, and leave the farmers to take the lead. Now, if we don't inform other partners in implementation of the activities, we may not realise an hediment of

⁴ The substantive quality here refers to the environmental quality, so if information that came up during the public participation leads to improved environmental quality of decisions the project scores high on this goal.

sustainability, so to affect the sustainability we include all stakeholders in development that is the core thing in involving stakeholders, just for sustainability reason s. (NGO representative)

4.1.1 Level of Public Participation

In the Vi Agroforestry project the public are at the core of the organisation, since they are the implementers of the activities in the project. The farmer groups in the Wagai division have formed an umbrella organisation, Wagai Integrated Farmers Forum Organisation (WIFFO), which is closely collaborating with the Vi Agroforestry.

Very regularly, nearly every week, every Wednesday, when we have our meetings on Wednesday, they normally visit us, as they have the field officer and the officer in charge of Vi Agroforestry within the division Mr Arimba, who are very regularly meeting us, coming for our meetings, teaching us whatever we can do and at the moment they have their field officers, they have got down to each and every location. (CBO representative)

The farmer groups are empowered through different farmer and enterprise trainings to be able to work with farming as business. Vi Agroforestry is assisting them mainly with trainings, advices but also with seeds. No economic incentives are being used except for partly facilitating the coming and going to trainings or meetings and some expenses for food during such activities. The farmers own initiative and involvement are essential for the organisation to expand their activities to a new division, which was also the case in the Wagai division.

I can remember that when they were operating in Sinaga, our coordinator Mr Peter joined them from the other side and he's, was the one who brought them down to Wagai, after all, he took us up there, we met them, we talked and became a member. (CBO representative)

For the planning of how the project is going to work in the division all stakeholders, such as representatives from CBOs, NGOs, local administration and line of ministries, are gathered in stakeholders' forum to share responsibility of the project. The organisation is hence building on the existing network that is available in the Wagai division. This will enable the activities to continue in the long run, even after Vi Agroforestry has phased out their work. This way of working is showing on empowerment activities, where the different stakeholders are sharing power and responsibility for the decisions being made and also for their outcome.

Yes we have been doing that together, and not only us, even the farmers have been part of the planning, it has been a bottom-up, where every stakeholder is involved, farmer groups, the organisations that are around here, the governmental departments on health, have been participating in this plan. (Line of Ministries representative)

Working with empowerment activities shows on a high level of public participation where the stakeholders have to take part in the activities to gain from the outcomes. Without the farmers taking an active part in the project there will not be a project. It is clear that the project have

got to this level of participation through involving the stakeholders through information sharing, consulting them. Vi Agroforestry has also been engaging the public in an active two-way communication to engage the knowledge and resources of the stakeholders.

One could argue that only some of the stakeholders have got to the empowerment activities while others, for example the environmental clubs at the schools, only have got to the consultative practices. This is though a developing process, which will be gradual and the objective might not be that the school children should be part of the planning meetings. Instead they can learn about these issues at an early stage in their life so that they can take an active part in the project later.

The Vi Agroforestry project has previously been pointed out as an environmentally sustainable project and according to this analysis of the result they have reached the fourth level of public participation; empowerment activities. The empowerment activities in the Vi Agroforestry project in Wagai division could be thought to have increased the environmental sustainability. The participants are here involved in a democratic and deliberative process where environmental values are activated.

The result this far is hence proving the hypothesis that public participation improves the environmental quality of a project. This is shown by the positive correlation between the public participation and the environmental sustainability at Vi Agroforestry.

4.1.2 Social Goals of Public Participation

Incorporating Public Values into Decisions

The feeling of poverty is highly present on the Kenyan countryside, and so even in Wagai division, which the Vi Agroforestry have taken into account when planning their different activities.

We want a change, we don't want to be poor as we are right now, we want to have a change so that we become self reliable. (CBO representative)

Vi Agroforestry has integrated economic growth and poverty reduction into their agroforestry mission. They have done this through empowering farmers on enterprise and microfinance program. Another example of how stakeholders believe that the project has brought in their values is when they are collaborating and networking with different partners in the division.

And our policy is on collaboration, partnerships and networking, that is very important for agriculture today, you can not leave anybody out on issues relating to food production because Vi Agroforestry is also brought in environment there. (Line of Ministries representative)

Through the planning meetings it is assumed that the different stakeholders have been able to affect the decisions being made so that their values have been incorporated.

And the issues of our ideas in planning I have been taken up, and we have open, especially Wagai, when they were coming in for this project, they were needing a lot information from us, from our base line surveys data, we have data, on the division, on areas they didn't have data, we gave them the data, that they have been using building base line surveys, a part from their external reviews. (Line of Ministries representative)

The values of the Vi Agroforestry might though not be far from what the public hold as their values, which could even have been taught to them. This makes it difficult to see whether the incorporated values actually are the values of the public and not the Vi Agroforestry's. The values that the local administration point out, as for example accountability and transparency is normally something that donor countries have pushed for, which also Vi Agroforestry have as some of their core values. The values of the stakeholders can though still be considered to be incorporated into the decisions since the Vi Agroforestry build their activities upon the public input, which makes the project score high on this goal.

... because the project is building of what they know, we are not starting something new but we are building on and adding more value to what they know in relation to the modern technological findings. (NGO representative)

Whenever they want us they contact us and then we meet together and discuss everything, we have some seminars when there is something plus, I think last week but one so the meeting with the officer were posted here, shared, talking how ways forward and how we are going to work together. (CBO representative)

Improving the Substantive Quality of Decisions

The collaboration with different stakeholders has affected the quality of the decisions made by the Vi Agroforestry. Information that has come up have been taken into consideration and incorporated into the decisions, as for example information about the area and on different technologies. Vi Agroforestry in Wagai Division is collaborating with different research institutes. One of these is the Kenya Forest Research Institute (KEFRI), which have contributed with research results to the information of the environmental issues of the project.

... if they can take these technologies, which they are actually doing, and take it to the farmers then something has come out of our lab, our laboratories, that is what they have done, and I want to say that to me that is an improvement, yes, ... (GO representative)

The input from the farmers has also been of value when it comes to increasing the quality of the decisions and the environmental quality of the project. Their knowledge on issues like

energy conservation has hence been incorporated into the project, which has added a new dimension to the decisions.

Yes, there is also a lot also from us, in terms of environmental conservation, yeah the issue that we are doing here is on energy conservation, and also on general crop management. (Line of Ministries representative)

How big the impacts from the public participation will be might still be a bit early to tell since the project in the division is still quite young.

Ok, I can not access it at this time, because it is still on implementation s tate, you can not know how much of what we have taken down there is being implemented, so it will take a bit of time. (Line of Ministries representative)

This goal can hence not yet be score d since the quality has not changed so far into the project. It can though be assumed that the information from the public participation will lead to increased quality of decisions and to a better environment in a longer run, since the information has widened to include the knowledge of all the stakeholders and also since the stakeholders gradually gain more knowledge from each other.

... it [the information/knowledge] is like it was narrow but now it is wide, wide meaning giving opportunity to more people to tap from the same. You see it doesn't go directly to improvement, it enhances the implement, as in the more people understand, the more trees they plant, the more you see the trees then you can say improved. (GO representative)

Resolving Conflict among Competing Interests

Vi Agroforestry has not had any major problems with conflict, which have made their work in the division easier. Most of the informants are very positive towards Vi Agroforestry and their work. It is thus obvious that they have been working with preventive actions and informing about what kind of expectations the stakeholders can have. People otherwise tend to have very high expectations when NGOs enter the division , which often can develop into a conflict .

You know there is a problem with these people when the NGOs came to the division and meet the people, they have very many expectations, yes I think those who came here before they had many people with money, yes, when they see a NGO they think that you carry money in a basket and bring to them, so that they, easy money you see. But with Vi Agroforestry what we have discovered from them they are very much in training staff and the people giving the people the knowledge how they could work... (CBO representative)

When Vi Agroforestry entered the division they did however not inform the line of ministries of trainings in the area. This could have been an issue of conflict but was soon solved by discussion and instead planning trainings together. The example shows the importance of handling concerns and conflicts immediately when they come up.

Yes, conflicts have been there once and a while. Conflicts have been there when Vi Agroforestry was starting off, as Vi Agroforestry was starting off there was conflicts because, when the training, they were starting train during outreach with partners are not aware, so they were coming here and train and go, and then farmers would come here to inquire, so there was a conflict. (Line of Ministries representative)

Another issue that the local administration thinks could be a possible area of concern is that the Vi Agroforestry primarily are collaborating with WIFFO, which might upset other groups in other parts of the division who feel excluded (Local Administration 090305). Such concerns have though not yet been heard of from the farmers but it could become a problem.

Over all the Vi Agroforestry in the Wagai division has though been spared from conflicts and when there have been issues these have easily been solved through open dialogue and discussion. The project thus scores high on this goal.

Educating and Informing the Public

One of Vi Agroforestry's main activities is on training farmers, farmer groups and other stakeholders on agroforestry methods. They also bring in stakeholders that can contribute to the trainings, such as KEFRI and the line of ministries. *"In terms of trainings, they have done a lot of trainings here, in collaboration with us."* (Line of Ministries representative) The stakeholders thereby learn a great deal to be effective partners in the project.

An important factor in the trainings has been that the Vi Agroforestry has adapted the trainings to a relevant level so that the farmers easily can understand the otherwise rather complicated issues. *"But if Vi can read that, simplify it and tell the farmer what to do, so you see that link, researcher, extension, farmer, linkage."* (GO representative) Vi Agroforestry's way of working also have the advantage that their field officers and farmer groups' representatives get trained in the official languages English or Kiswahili . They can thereafter teach others in the local language, which enables the information to reach everybody, even those who do not know English or Kiswahili .

Then these people, they are now our trainers, these are the people selected from groups, they have the know-how, they can write, they can read, they can communicate and pass the information, after they have received the information from a technical expert they can pass the information down to their groups in their own language and it teaches them. (NGO representative)

Through the trainings the participants of the project can thus be said to have learned a great deal about the environmental issues of the project, which make the Vi Agroforestry project to score high on this goal.

4.2 Sondu Miriu Hydro-Power Project

The Sondu Miriu hydro-power project started in 1999 but a year later the construction of the project stalled due to agitations⁵. As a result of this the Japanese financiers put up some conditions for the project to continue. Among the issues were concerns about environment, health and corruption. The country needed power so the company had to come up with some measures to meet the Japanese requirements. The first part of the project is now completed and is generating electricity, while the second part of the project recently has started.

4.2.1 Level of Public Participation

One of the major measures that were taken to meet the Japanese requirements was to form a technical committee where all the different stakeholders of the project could be represented.

Yes, every stakeholder was proposing representative into the technical committee. So the technical committee was formed, and technical committee negotiated with the, through the government, with the Japanese government, with the employer KenGen, and work resumed. (Implementer representative)

The technical committee thereby assured the public participation so that issues could be raised by the public and handled. This would thus assure a solid participatory process, there are though some concerns with the quality of this since some of the stakeholders are experiencing that they cannot get their message through and that their issues are not raised properly.

That is when they can hear your voice, that is when they can listen to what you are saying, but if you are not in the, you know because they elected the people from the community to represent the community through the technical committee, and if you are not one of them you have no voice to air out views, because you are not one of the committee members, the technical committee members. (NGO representative)

Due to this perception of exclusion the level of public participation in the project can be questioned and hence fits somewhere between consultative practices and collaborative activities. The technical committee is however resting on a rather solid foundation and all the informants have knowledge of the technical committee, which should be valued highly in the Kenyan context where such mobilisation often can be difficult. *“At the time we want to complain we turn to the technical committee, so he’s the one who is responsible to send our problems.”* (CBO representative)

The participatory process in the Sondu Miriu hydro-power project is therefore counted as collaborative activities. The stakeholders have been informed through public meetings and the technical committee, which also have engaged the knowledge and resources of the public.

⁵ Information that came up during the interviews.

The result this far is hence in line with the hypothesis, that public participation improves the environmental quality of a project. The project was considered to be fairly environmentally sustainable and also have been graded as collaborative practices in the classification of the level of participation.

4.2.2 Social Goals of Public Participation

Incorporating the Public Values into Decisions

The public can go to the technical committee with issues that they think need attention, which are then handled in a deliberative process. KenGen, the implementer, are responsible to implement the decision agreed upon in the technical committee.

...as a company, we don't have any control over the deliberations of the technical committees; they are shared by people from outside, the professionals. We only have the secretariat, because we have the facilities to have the secretariat. So the deliberations, we don't have any control over the deliberations, so whatever is agreed in a meeting must be implemented, must be implemented. (Implementer representative)

Suggestions that would not otherwise come up are handled and in the cases where it is technically possible they can be carried out. An example of this is water points in connection with the channel that the public suggested. The public participation is partly a matter of finding out the priorities of the public for CSR activities, even though this is not the main focus. The feed-back to the public is however sometimes a problem. The public does not always get to know how the discussions have gone or why, which is risking to undermine the participatory process. This might also be one of the reasons for suspicions of bribery to flourish.

It reach the technical committee and technical committee may, they can take it to the board to the project committee, but to take it back to the community is a big issue, a big part. (NGO representative)

It can though be seen that the public input have actually changed decisions and their views and values are incorporated. It might though not always be flawless and there are times when it is not technically possible. The Sondu Miriu project thus scores high on this goal.

Improving the Substantive Quality of Decisions

Building a hydro-power plant will always have some impacts on the environment. The Sondu Miriu project has however not created a big dam, which limits its impacts as a hydro-power plant substantially. Relatively early in the project the technical committee was formed to be able to bring in the views and issues from the public, which influenced the decisions. It has

also shown that some of the decisions were improved by these issues, as in the example of dust from the roads.

You know when it was deliberated in the technical committee as a complaint it was later on addressed to an extent that the KenGen directed the contractors now to sprinkle water in all the roads, wherever they were passing, to minimize the amount of dust that was coming out, and all of this was done. (Local Administration representative)

It might however not be easy for the participants, who often have a rather low level of education, to conceive the effects of the projects. Professionals from the universities have therefore been invited to sit in the technical committee. This has helped the committee in the deliberative process to come up with creative suggestions, which can improve the quality of decisions.

...included professionals, that is how we got in Doctor Kapiyo and his team from Maseno University, to share, to share these sub technical committees, to bring in the technical expertise, the intellectual aspects, because other stakeholders, we wouldn't expect that all the stakeholders that capacity to conceptualise issues, and how to deal with these issues. (Implementer representative)

There is however some issues concerning tree planting; the company provide tree seedlings for the public to replant where trees have been cut down. These are though in limited number wherefore some people are complaining.

... 'then we will plant other trees for environmental purposes', and that was fine, it was just an information, but when it came to the reality they just planted the trees near the river bank where they took... (NGO representative)

These complaints do however need to be regarded with some scepticism since the company actually has met most of its promises and are planting trees where it is most urgently needed. It thus appears as the quality of decisions has increased as an effect of the public participation. The public have been able to bring in new information and have also formed creative suggestions in collaboration with professionals. The project hence scores high on this goal.

Resolving Conflicts among Competing Interests

From the time when the project stalled and the technical committee was formed there has been less conflict connected with the Sondu Miriu hydro-power project. A likely reason for this is because the technical committee has become a forum where the public is able to ventilate their complaints there. *"Because with us when the community has a problem there is a proper channel to address the problem that is through the technical committee."* (Local Administration representative) Hereby the project has found a problem solving mechanism,

where they can sit and discuss and talk through the issues. The discussion is hence thought to lead towards effective solutions, where all parties are integrated.

There are however problems and conflicts that remains, which appears to mainly involve employment issues and perceived broken promises. The current contractors are a Chinese company who has brought their own labour. The project thus offers little employment opportunities for locals at this point of time. This has resulted in strikes and conflicts from the community's side, who were expecting jobs. *"...so they [the contractors] are just doing with their own power [labour], that's the reason why there's conflict."* (CBO representative)

The community also expected the project to lead to more development in the area, such as roads, electricity and running water. They have only partly got this, wherefore they feel that the company did not keep their promises. *"Yes, because people had experience of the promises were not met so the people lost their fate in the project."* (NGO representative)

Since the public seem to be well aware that they could and should channel their complaints through the technical committee it appears as if it is the feed-back that is the problem. The public is thus not getting an answer or explanation to their complaints, which becomes a problem and an area of conflict. *"The main problem they never report."* (CBO representative)

The conflicts in the Sondu Miriu hydro-power project are solved to a great deal but there are still some issues remaining, wherefore it scores medium on this goal.

Educating and Informing the Public

In the beginning of the Sondu Miriu hydro power project the company was informing the public so that they could be a part of the project. *"Yes, before the project, they were enlightening people what will come to pass, what will happen."* (NGO representative) Large part of the education was concerning tree planting and the importance of not cutting down trees.

They told us about the environment, the environment, we must have to plant trees, they told us that we must dig, plant some fruits, if we have the cows, don't have too much cows... (CBO representative)

The members of the technical committee have been given assistance by the professionals who are also in the committee, which has been an important factor to educate the public. The earlier mentioned lack of feed-back to the public however results in insufficient information to the wider public. The public does thus not always know for example what mitigations are in place or why, which results in agitations.

...so the issues were coming in, the project is on, it is on, but people do not know that there is an EIA in place, so they are agitated, because of lack of information, so this information must be taken back to them, yes. (Implementer representative)

Even though the public have been taught about some issues the lack of feed-back risks to undermine the public's possibility to be effective partners in the project, wherefore the project scores medium on this goal.

4.3 Dominion Farms Project in Yala Swamp

The Dominion Farms came into the Yala Swamp in 2002 and took over the farming project that the Lake Basin Development Authority previously had been running. The company continued implementing the second phase of the project in 2005 without the necessary EIA approval. This led to a public outcry and a stop order was issued by NEMA, who demanded that an EIA needed to be done accurately (Summary of Dominion Farms Activities in Yala Swamp, EIA/5/2/223 vol.2). An EIA was conducted and approved so the company was able to continue their activities. The project has been controversial in the sense that it is situated on a wetland which is a fragile ecosystem. It has therefore brought a lot of attention from both local and international NGOs and it was also in focus during the World Social Forum held in Nairobi January 2007.

4.3.1 Level of Public Participation

A local consulting-firm conducted the EIA for the company, which included focus group discussions, questionnaires but also media briefings in radio and TV. This indicates the participatory process in the Dominion Farms project to be 'Consultative practices'.

...we have focus groups discussions whereby the people of the community, a number of them, will be about 5 to 20 in groups. You can turn them somewhere, you talk to them about that issue, you collect data from there. You can also have questionnaires, whereby you have structured questions, you read them, they answer. (EIA Expert)

The extent of these consultative processes does however seem a bit limited since none of the interviewed representatives from the public have been involved in these practices.

We as the community, or the group were not consulted when this environmental impact assessment was done, and to speak the truth, we don't know how it was done and we don't know even the outcome... (CBO representative)

This would at the most state the level of participation at information sharing, but not even this has been flawless. The mobilisation of the community in Kenyan countryside can however be difficult and when classifying the participatory process this has to be taken into consideration.

The participatory process seems to have varied considerably over time, from being near to non existing or very low in the beginning to a more solid two way consultation through

committees today. The change came after the public outcry and complaints from different levels, which have led to a more solid participatory process between the stakeholders. *“One, Dominion was more of a project between Dominion itself and the local leaders, after agitation that changed...”* (NGO representative) According to other informants the public meetings that Dominion Farms held before have now ended, which is contradicting the idea that the participatory process has enhanced. From this it can be understood that the company still has some problems reaching out to the grassroots.

Including these aspects in the judgement of the public participation the project asserts as consultative practices, since it seems like they have at least had some meetings and face-to-face briefings. There are also indicators showing that the level has increased and deepened over time but that they were nearly nonexistent in the beginning, the classification of public participation therefore has to be understood as a merged result.

The result this far is in line with the hypothesis, that public participation improves the environmental quality of a project. The Dominion Farms project was considered to be less environmentally sustainable and has also been graded lower on the public participation.

4.3.2 Social Goals of Public Participation

Incorporating Public Values into Decisions

The mission of the EIA consultant was to bring in the views and the values from the public which was incorporated into the EIA.

... so that you can get the views from each and every person, so you evaluate, are they for that project or are they not well for that project. (EIA Expert)

This does however not necessarily mean that the company has incorporated the views and values in the decisions. In the beginning of the project the values of the public were only taken into consideration when it comes to decisions outside the project. An example of this was when the company set aside some land for local farmers to farm on. This could be regarded as a quite generous decision but it did not affect the project activities, and was hence more of a CSR decision. When the company came into the swamp families were replaced. The replacement thus meant that they also had to leave their ancestral graves, which culturally is considered to be wrong. The company however thought this complaint was a bit backwards and did therefore overlook it.

... in fact let me tell you some serious cultural clash that happened, these people asked the people to leave their homes at that time, the compensation had been agreed upon for some cultural area. The people said that no, this home for us is not just a home, we have buried our people here, we have buried our ancestors here [...] but you see for Dominion that was

not an issue. [...] So cultural values, social values were completely ignored at the beginning.
(NGO representative)

After struggles and agitation the company today has to listen more to the public. *“I can’t say that the values have been incorporated, but they are really struggling and I can see Dominion today comes to talk with them...”* (NGO representative) The decisions made at an early stage, which can not be reclaimed, are still however affecting the public and the environment.

The values that are taken into consideration today are mainly focusing on finding out the priorities of the public for the company to use in their CSR activities, such as youth camps, public bathrooms and children’s foundation.

Because we do the EIA and we pick up the interests, the information they have, and that also helps us come up with mitigation measures, and it also helps us to look at areas of community [corporate] social responsibility. (Implementer representative)

The community committees have though come up as a result of the public participation but the impacts from those are too early to be seen. This results in a low score for this goal since the public so far have had little impact on the analysis or decisions about the project.

Improving the Substantive Quality of Decisions

It is obvious that the Dominion Farms project have had effects on the Yala Swamp, conventional farming on a wetland will have impacts. The question is how well these can be mitigated. Issues raised by the community are for example how the aerial sprayings of pesticides will affect the fisheries in the swamp. Issues like this were handled by informing the public how the company was going to mitigate it, but it is unclear if the quality actually improved. It can be assumed that since the issue was raised it got some attention and therefore the public indirectly improved the quality of the decisions, this can however not be confirmed.

I think they were just told about how the company was expecting, was going to get, which were documented in the minnie, the EIA document, how the company was going to mitigate the impacts, which among the concerns of the chemicals getting their way into the lake.
(DEO)

The public agitations actually lead to a stop order from NEMA at one point, which forced the company to take some environmental measures for the project not to break the law. One informant points however out that the project being on a wetland implies some intrinsic issues and adding to that that the design of the project was from the beginning problematic.

That is a question I would say yes and no and very strongly. Yes because when the people started publicly demanding accountability from Dominion that is the time when NEMA was forced to issue a stop order on the, them to stop working and ensure that the issues of the environment are addressed first. And then the number two which is also critical is, because I would want to say no, no because the design of that project is not meant to protect Yala

Swamp. If you want to protect your swamp then you seek a design that ensures that Yala is protected but that design is not about protecting Yala. (NGO representative)

The public have today also noticed that the swamp is drying out , which they believe are an effect from the Dominion Farms project. They have brought this up with the company but still there has not been any measures taken to mitigate this. A measure that has been suggested by the company has though been to introduce a type of fish in the channel that supplies the swamp with water. This would however only cure the symptoms and not the actual problem.

So when the swamp dries it means that the community are not in a position to get this. And that is why we, as YASCCO, we decided to approach the Dominion Farm to see how can, how the water can be brought back again to the swamp, as it used to be. Because we believe that the channels that used to bring water into the swamp were blocked by the Dominion for reclamation, and that is why we decided to go and approach the Dominion Farm to see how they can help the local community get the water. (CBO representative)

The public participation might thus have drawn attention to some issues that they have had with the project. The public participation can however not be seen to have improved the quality of decisions, and in some areas nothing have happened and the quality is continuously decreasing. This will therefore merge to a medium score for the Dominion Farms project on this goal.

Resolving Conflict among Competing Interests

During the process of the Dominion Farms project in the Yala Swamp there have been quite a lot of conflicts between the company and the community. The conflicts have mainly concerned replacement-, compensation- and employment issues. Action Aid Kenya is one of the major NGOs that have been involved on the community side of these conflicts to mobilise and inform them. *“So there were the element of violence, an element of political campaigns, an element of arrests.”* (NGO representative) At some points the conflicts have been quite explosive with a lot of agitation, which has been both positive and negative. Positive since it has drawn some attention to the project, which have forced the company to handle the issues that have aroused. It has though been negative since it has left a rather antagonistic climate to work in, which is not thought to be constructive.

And also now when we talk of Action Aid, I think the way some of the NGOs come in, is not, I don't think is positive to development, the way should be is that they should interact with the developer, not to be seen as to be on the other side, fighting. You know when you start fighting, people hide you information. (EIA Expert)

A reason for these conflicts to come up in the first place might have been due to lack of information from the company to the community. *“Because of lack of understanding. I think*

we were doing so much first, we were not information, was not.” (Implementer representative)
After agitation this however made them come together and form community committees where issues can be brought up and discussed. *”So there were so many issues between the communities and the Dominion Farm, so that forced them to come and talk today.*” (Local Administration representative)

The conflicts have though not been completely resolved since there still are some parties that are opposing the project.

I think it was not solved to the satisfaction of all the groups, because I think even up to now there are still groups that are opposing the project. (DEO)

Since the conflict is only resolved between some participants the project scores medium on this goal. It could though be mentioned that the persons interviewed today are positive about the future participatory process in the project, even those who before were very critical.

Educating and Informing the Public

In connection with public consultations for the EIA process there were some information carried out to the public. It was however more information about the company activities rather than actually educating the public on the environmental issues of the project.

But firstly we inform them, about the project, if they know, and if they been reached, if they have views in terms of fears and, so that we can keep them informed. (EIA Expert)

The representatives from the public felt that they had got little education on these issues and that the level was very low. *“The level was very low, low level of education.”* (Local Administration representative) Instead the communities arranged seminars themselves and were educated by the civil society, who informed them on environmental issues. *”... they [Action Aid] have educated them quite well; they understand a lot, and especially about environmental issues and impacts and all that kind of thing.”* (Implementer representative) The civil society also got some help from the universities in the area.

No, not by Dominion, not by Dominion at all, not by Dominion, no no no. It was basically the civil society organisations asking questions [...] we were also very happy to get a lot of support from universities around, from local universities. They were very instrumental in terms of educating our people around the environment. (NGO representative)

The Dominion Farms project thus score low on this goal since participants learned little about the issues of the project from the company, which delayed the information and education to reach the community. The community was thus not able to be effective partners in the decision making. Instead they had to learn from other stakeholders and by themselves but at a

later stage in the process, which can not be considered to be effective for the decision making process.

5. Discussion and Conclusions

The analysis is indicating that the hypothesis is gaining support by this study on three Kenyan projects, in accordance with earlier research and the Rio Declaration from 1992. A higher level of public participation leads to more environmentally sustainable projects as it is shown in table two at page 39.

From the analysis it can be seen that the study is supporting the hypothesis since there is a clear positive correlation between public participation and environmental sustainability. The Vi Agroforestry project that has reached the highest level of public participation, empowerment activities, is also the most environmentally sustainable project among the projects in this study. The Dominion Farms project that has only achieved the second level of public participation, consultative practices, is also the least environmentally sustainable project in the study. The Sondu Miriu project which reached the third level is regarded as a fairly environmentally sustainable project.

The conclusion is confirming the earlier research that the deliberative process appears to be of great importance. The Vi Agroforestry is for example, through information sharing and trainings, activating the public's environmental values and creating a common understanding of the significance of a healthy environment. The challenges of public participation that the earlier research has pointed out are though noticeable. According to theory the public is representing a very wide set of interests, which is obvious in both in the Sondu Miriu and Dominion Farms projects. It can though be seen that problems relating to this can be avoided with a deliberative process where the participants can get an understanding of other interests. The earlier research is also claiming that there is a risk that only the vocal interest groups get heard in the public participation. One example of this in the study can be seen in the Dominion Farms project when the influential NGO, Action Aid, put pressure on the project and hence succeeded to include the public in the project process. This was however at a rather late stage in the project, which severely limited the effectiveness of the participation. The importance of the public participation to start at an early stage in the process was also noted in theory.

The research question *if a higher level of public participation leads to more environmentally sustainable projects* can hence be answered positively. That yes, in this study

a more intense public participation in the projects studied have lead to increased environmental sustainability.

I will now move on to the other part of the study to answer the second research question *Can any one of the four social goals of public participation explain the relation between public participation and the environmental sustainability of a project?*

From the analysis it can be seen that the projects that have a more intense public participation are also scoring higher on the social goals of public participation which is indicating that they might be important causal mechanisms. The goals will however be reviewed one by one to see if any of them can work as a causal mechanism.

1. The first goal of incorporating public values in the decisions can be reached highly both by projects that have achieved the participatory levels of collaborative and empowerment activities, while the one with consultative activities has scored low. The analysis is hence indicating that it can be an important causal mechanism even though it is not obviously clear. The theory is emphasising this goal to be essential to ensure legitimacy since people easier will accept and work with a project in which they feel they are listened to and where they are able to affect the process. In the Vi Agroforestry project it is the public who are the implementers and is hence a crucial part of the project. Their views and values are therefore also greatly recognised. The public in the Dominion Farms project on the other hand did not even know about what decisions were made at all times. This results in a feeling of non-involvement; they could not be part of the planning of their own area. Instead it risks leading to antagonistic feelings about the project and heavily limits the legitimacy of the project. The Sondu Miriu project, which scores high on this goal, does however have some problems with the legitimacy among the public who are not included in the technical committee. They do not always feel that their values are included, which hence indicate the importance of actually include the wider public or to at least secure the feed -back of information to the public.

2. The second goal of public participation to improve the substantive quality of decisions can so far be thought to be reached by projects with collaborative activities and not really by projects with consultative activities. The Vi Agroforestry project, which has reached the fourth level of public participation, is however too young to score for this project. The public participation in the Dominion Farms project is lacking to the degree that the public has not really been able to improve the decision, the quality is thus unchanged. The Sondu Miriu and Dominion Farms project are hence in line with the goal while the Vi Agroforestry in Wagai

division is at a too early state to score. On this base it is however difficult to deliver any clear conclusion of the importance of this goal as a causal mechanism, even though it is suggested to be important.

In the earlier research some fear was noted regarding the public making environmentally 'bad' decisions. By looking at the Sondu Miriu project this was though avoided by including professionals in the technical committee, who inform the public on the environmental issues of the project. In this way the decisions are based both on the knowledge of the experts and the behaviours and views of the public, which according to theory is an important arrangement to create sustainable solutions.

3. From the analysis it can be seen that the third goal of solving conflicts among competing interests can be reached by projects with empowerment activities and only partly by projects with collaborative and consultative activities. It might though be argued from the result that it is easier to maintain good relations, as in the Vi Agroforestry project, than to resolve existing conflicts, as in the Sondu Miriu and Dominion Farms Projects. This could show on the importance of preventive actions such as information sharing, both at an early stage and throughout the project process, which for example in the Dominion Farms project was lacking. When conflicts although arise it appear to be crucial to immediately bring them up for discussion as in the case with Vi Agroforestry and the line of ministries.

To resolve conflicts or to maintain good relations within the project could hence be seen as a possible causal mechanism between the public participation and the environmental sustainability of a project.

4. On the last goal all three projects score different and in line with the criteria of conclusion to regard the goal as an important causal mechanism. To educate and inform the public can hence explain the linkage between public participation and environmental sustainability. In the Dominion Farms project the public learned very little about the environmental issues. The lack of education and information hence hindered the public's ability to be effective partners in decision making, which is confirming the earlier research. The importance of reaching out to the wider public is also observed, as in the example of the Sondu Miriu project the feedback mechanism to the public was inadequate. The Vi Agroforestry on the contrary truly succeeded to reach out to educate and inform the grassroots so that they could take an active part in the project. By putting large efforts into educating and informing the public the Vi Agroforestry have been capacity building. This can thus be regarded as a prerequisite for the

public to effective in the project process. Vi Agroforestry is hence showing that this does not have to be a too ambitious target but instead a necessary tool for the public participation to be effective in the longer run.

Altogether the hypothesis evolved from earlier studies is gaining support also in this study on the three projects in Kenya; a higher level of public participation improves the environmental sustainability. It is however only the last of the four social goals of public participation, informing and educating the public, that clearly can be regarded as a causal mechanism and is explaining the correlation. Both the first, second and third goals can though be regarded as possible causal mechanisms.

In table two, below, the result is summarized showing how the projects' public participation is categorized and how they have scored on the different goals. The mean score shows an average of how the projects have scored, it should however not be understood as the result per se but only give a general idea of the projects. The scores are, as mentioned in chapter three, achieved with the help of the scoring criteria, which can be found in appendix three.

Table 2. Summarising schedule

Analytical Objects:	Level of Public Participation	Goal 1 Incorporating Public Values into Decisions	Goal 2 Improving the Substantive Quality of Decisions	Goal 3 Resolving Conflict among the Competing Interests	Goal 4 Educating and Informing the Public	Mean score:
Vi Agroforestry Wagai Division	Empowerment Activities (Level 4)	3	-	3	3	3
Sondu Miriu Hydro-Power Project	Collaborative Activities (Level 3)	3	3	2	2	2.5
Dominion Farms in Yala Swamp	Consultative Practices (Level 2)	1	2	2	1	1.5

Note: Schedule summarising how the public participation within the projects are categorised and how the projects have scored on the social goals of public participation.

Through this study I have made an attempt to fill part of the gap of knowledge on the role of public participation for a more environmentally sustainable project in the developing world. The study suggests that more effort should be put into education and information for the public. By doing this the public can be active partners in the project process and the public participation can actually improve the environmental sustainability. It is hoped that donor

agencies can make use of the results to create sustainable and long lasting solutions when cooperating in projects similar to the ones in the study.

I am however aware that the study is limited to a few cases and further studies are needed to make more general conclusions within the research area. I would suggest further interdisciplinary studies, which would enable a more profound and objective evaluation of the dependent variable. Studies over a longer period of time would also be appropriate to make comparisons over time within projects. Such studies would further produce more in -depth knowledge about the correlation and its causal mechanisms.

7. References

Beierle, Thomas C. & Cayford, Jerry (2002). *Democracy in practice: public participation in environmental decisions*. Washington, D.C.: Resources for the future

Beierle, Thomas C. (1999). Using Social Goals to Evaluate Public Participation in Environmental Decisions. *Policy Studies Review*, Fall/Winter, vol. 16:3/4, pp. 75-103.

Bergström, Lage (2003). *Miljö – kunskap för hållbar utveckling*. Stockholm: Miljöpolicyenheten (SIDA2816sv)

Daniels, Steven E. & Walker, Gregg B. (2001). *Working through environmental conflict: the collaborative learning approach*. Westport, Conn.: Praeger

Dryzek, John S. (1997). *The politics of the Earth: environmental discourses*. Oxford: Oxford University Press

Environmental Audit with Elements of Strategic Environmental Assessment Report for Lake Victoria Development Programme (2007). Nanyuki: SCC- Vi Agroforestry

Esaiasson, Peter, Gilljam, Mikael, Oscarsson, Henrik & Wängnerud, Lena (2004). *Metodpraktikan: konsten att studera samhälle, ind ivid och marknad*. 2., [rev.] uppl. Stockholm: Norstedts juridik

Glasson, John, Therivel, Riki & Chadwick, Andrew (2005). *Introduction to environmental impact assessment*. 3. ed. London: Routledge

Jones, Michael (2007). The European landscape convention and the question of public participation, *Landscape Research*, vol. 32:5, pp.613 – 633.

Jones, Peter JS, Burgess, Jacquie and Bhattachary, Darren (2001). *An evaluation of approaches for promoting relevant authority and stakeholder participation in European Marine Sites in the UK*, London: University College, Environment and Society Research Unit.

Kvale, Steinar (1996). *Interviews: an introduction to qualitative research interviewing*. Thousand Oaks: SAGE

Mikkelsen, Britha (1995). *Methods for development work and research: guide for practitioners*. New Delhi: Sage

Ostrom, Elinor (2000). Social capital: a fad or fundamental concept? I Dasgupta, Partha. & Serageldin, Ismail (red.). *Social capital [Elektronisk resurs] a multifaceted perspective*. Washington, D.C.: World Bank

Ribot, Jesse C., (2004). *Waiting for Democracy, The Politics of Choice in Natural Resource Decentralization*, Washington D.C.: World Resource Institute

Sida (Published 2009). *Utvecklingen i Kenya* (Electronic) Available at:
<http://www.sida.se/Svenska/Lander--regioner/Afrika/Kenya/Utvecklingen-i-Kenya/> (2009-07-29)

Sida (2002). *Hållbar utveckling?Handledning för miljökonsekvensbedömningar* , Stockholm: MKB-centrum/SLU, Sidas miljöpolicyenhet (Sida1983sv)

Summary of Dominion Farms Activities in Yala Swamp, EIA/5/2/223 vol.2, Proposed Multi Purpose Dam, Aquaculture and Agroindustrial Development Project Dominion Farms Limited – Siaya

Tabbush, Paul (2004). Public money for public good? Public participation in forest planning , *Forestry*, vol. 77:2, pp. 145-156.

The Millennium Development Goals Report (2005) New York: United Nations

Zachrisson, Anna (2004). *Co-management of Natural Resources. Paradigm Shifts, Key Concepts and Cases*, Mountain Mistra Programme report, Report no. 1 (Umeå : Mountain Mistra Programme).

8. Appendices

8.1 List of Informants

Vi Agroforestry:

John Mumbo, Acting Provincial Director of Environment (PDE), National Environment Management Authority (NEMA), 090224

George Mbinji Etindi, Dissemination Officer, Kenyan Forestry Research Institute (KEFRI), 090226

Melzedek Arimba, Wagai Division Coordinator, SCC-Vi Agroforestry, 090227

Ernest Okowa Odoul, Chairperson of Wagai Integrated Farmers Forum Organisation (WIFFO), 090303

Nancy Auma and Michaka Auur, 4 K Club at Lihanda Primary School, Wagai Division, 090303

Ken Owuor, Divisional Agricultural Extension Officer (DAEO), Ministry of Agriculture in Wagai Division, 090305

Rukia Chiteka, District Officer (DO), Wagai Division, 090305

Dominion Farms:

Francis Arunah and Sheila Okal, EIA Experts, Rural Water and Sanitation Organization (WATERSAN), 090310

Omondi Were, District Environment Officer (DEO) Kisumu East and West, previously DEO in Siaya, National Environment Management Authority (NEMA), 090313

John Odhiambo, Chief Southwest Alego, 090316

Richard Otieno Juma, member of Yala Swamp Community Conservancy Organisation (YASCCO), 090316

Joyce Opondo, Administration Manager, Dominion Farms, 090316

Phebeans Oriaro, Regional Coordinator, Action Aid Kenya, 090323

Sondu Miriu Hydro-Power Project:

James Obondo, Community Liaison Officer, KenGen, 090326

George Omulo, Chief Thurdibuoro Location, 090326

Joshua Dacho Dacho and Peter Odhiambo Odek, Kokeio Kadianga Self Help Group, 090407

Mena Owuor, Wholeman Lifecare Ministries NGO, 090407

8.2 Interview Guide

This is interview will help me collect data for my master thesis at the Gothenburg University. In my thesis I will look at the relationship between public participation and environmental sustainability.

This is an informant interview to see how --- project has been working with public participation, and you will be one of my sources for this if it is okay with you?

The information will only be used for this purpose.

If it is okay with you I will record the interview.

1. Could you tell me your name, your profession and your responsibilities/role within the project?
2. Could you tell me a bit about the project?
3. How have you and your organisation participated in the public consultations?
4. What was the objective of the public participation?
5. Who have been participating in the public consultations?
6. How many participation consultations have there been?
7. When were these consultations? During which phase?
8. Have the amount of public participation differed over time?
9. If you would grade the level of participation within this project what would it be? You can choose between: high, medium or low.
10. Was any new information revealed during the public consultations?
 - a. Did this information, from the participating groups, improve the environmental quality of the project?
11. Were the values of the participating groups incorporated into the decisions about the projects?
 - a. Could you give an example of that?
12. Were there any conflicts between the participating groups?
 - a. Why?
 - b. Was it solved during the process?
13. Was the participating groups informed and educated about the environmental issues of the project through the public participation?
 - a. How?
14. These were my questions, is there anything more that you would like to add before we end the interview?

8.3 Scoring Criteria for the Social Goals of Public Participation

1. Incorporating Public values into Decisions
 - 1) Low – Public input had little impact on analysis or decisions.
 - 2) Medium – Public input may have informed analysis but did not significantly affect the decisions made.
 - 3) High – Public input made or substantially changed decisions .
2. Improving the Substantive Quality of Decisions
 - 1) Low – Quality decreased.
 - 2) Medium – Quality did not change.
 - 3) High – Quality increased.
3. Resolving Conflict among Competing Interests
 - 1) Low – Pre-existing conflict was not resolved, or conflict was made worse.
 - 2) Medium – Conflict was resolved only on some issues or only among some participants.
 - 3) High – Pre-existing conflict was resolved, or good relationships were maintained.
4. Educating and Informing the Public
 - 1) Low – Participants learned little about the issue.
 - 2) Medium – Participants learned about the issue, but not enough to feel effective in the process.
 - 3) High – Participants learned a great deal about the issue under debate, enabling them to be effective partners in decision making.