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Declaration

I, Kristin Lauvstad Tufte, declare that this thesis is a result of my research investigations and findings. Sources of information other than my own have been acknowledged and a reference list has been appended. This work has not been previously submitted to any other university for award of any type of academic degree.

Signature 13/6/02

Date 3/8/2012

Acknowledgement

First of all, this thesis would not have been possible without the help and support from a lot of people, both in Norway and South Sudan. I would like to thank all my respondents, who helped me gain the understanding and data necessary for this thesis. A special thanks to Trygve Berg, who helped me gain insight in South Sudan, and contact with necessary people, such as the University of Juba. Thanks to the Center for Peace and Development in Juba for helping me getting in touch with people, and facilitating my stay. To the Royal Norwegian Embassy in Juba, the Norwegian People's Aid in both Oslo and Juba, and the association for International Water Studies (Fivas), for the valuable contacts and inputs.

Thanks to my supervisor John Andrew McNeish, who has helped me navigate through the confusing part of analyzing the data and writing the thesis. Also thanks to Simon Pahle, who helped me with the preliminary work of the thesis and field work.

I would like to express special gratitude to Norway Water Resources and Energy Directorate (NVE), especially the section for international work; thank you for including me and discussing with me, helping me to expand my understanding of energy- related aid. Additional thanks to the others at NVE, and making me feel welcome.

I would also like to thank all my friends for supporting me. A special thanks to Hilde Faugli, Anniken Lund, Aina Østreng, and Kent Aron Vabø for helping me with the proofreading and good advices. And of course, Ingrid Witsø, without you the fieldwork would have been much harder. Thanks to my parents for always supporting me. To my dad, whose role as a political scientist was a great help for me. Thank you for helping me getting this thesis on right track.

Lastly, to Bjørn Erik Løken. Your support, patience, and critical reading of all my academic work throughout these last four years have helped me push a little bit harder. You brighten up my days, always.

Abstract

Both the UN and the Norwegian government present increased energy access as a step to poverty reduction, and improved human living conditions. This development narrative is also combined with an environmental concern, because it focuses on clean energy. Hydropower is frequently cited example of clean energy, and is often packaged by northern governments and institutions in the narrative 'energy leads to development'.

In this study I analyze how a development narrative influences policy and strategies in the case of Norwegian plans for hydro-electric dams in South Sudan. This study is based on qualitative methods, whereby 31 semi-structured interviews were carried out during my seven weeks stay in Juba, South Sudan. The respondents' consist of mostly official state actors in the South Sudanese government, but also Norwegian actors involved in both development work and hydropower, and various business and NGO-people.

In this thesis I aim to find out how the development narrative 'energy leads to development' explains Norway's involvement in South Sudan. I also discuss what type of development this narrative represents, and how different powerful actors, mostly in South Sudan, narrate the impact of the hydropower projects. Using discourse analysis I explore the interplay between the various arguments, interest and relation between powerful actors. As such, I explore how the term 'development' is constructed across levels between the local and global, and in turn how the global debate also has influenced the Norwegian development policy. In this thesis Norway is used as an example of a key actor in South Sudan, where as we will see international development policy is dependent on domestic understanding of Norway as 'green'. Norwegian hydropower history and experience has influenced their role in developing countries, of which South Sudan is one example. In turn, I also argue in the thesis that this perception has affected how South Sudanese view both Norway and hydropower. In this thinking hydropower is presented as catalyst for development, and one that is equivalent to partnering concepts such as modernization and economic growth. The thesis proposes that there is need to pick apart these resumptions and critically reconsider the value and meaning of hydropower and other energy resources.

List of abbreviations

CPA – Comprehensive Peace Agreement

EIA – Environmental Impact Assessment

GROSS- Government of the Republic of South Sudan

IEG – Independent Evaluation Group (World Bank)

IFC – International Finance Cooperation

IMF – International Monetary Fund

LDC – Least Developed Country

MDG - Millennium Development Goals

MW-Megawatt

NATO - North Atlantic Treaty Organization

Norad – Norwegian Agency for Development Cooperation

Norconsult- Norwegian consulting company

Norfund - Norwegian Investment Fund for Developing Countries

NCA – Norwegian Church Aid

NOK - Norwegian Krone

NPA – Norwegian People's Aid

NRC – Norwegian Refugee Council

NVE – Norwegian Water Resources and Energy Directorate

Rio + 20 – United Nation's Conference on Sustainable Development

SAPs – Structural Adjustment Programs

SPLM – Sudan's People Liberation Movement

SPLMA – Sudan's People Liberation Movement's Army

UN- United Nations

UNDP - United Nations Development Program

UNMISS - United Nations Mission In South Sudan

WB - the World Bank

WCD - the World Commission on Dams

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Chapter 1 Introduction

This thesis researches the link between energy and development, as we know it from current academic and political debate (Scott:1998, Usher:1997), and development and state-building in South Sudan. I have chosen Norway's hydropower involvement in South Sudan as my case.

In particular this study aims to critically discuss the narrative that 'energy leads to development'. This is a narrative that has dominated international and Norwegian aid policy thinking in recent years. In this narrative clear linkage is seen to exist between energy and development. 'Without energy, there can be no development' is the sum argument of this narrative. In this thesis I will focus on the actors behind and the foundation of the narrative in Norway, and its application in South Sudan. In doing so the thesis also aims to study how Norwegian aid policies have been influenced by dominating narratives on development. The study is concentrated around how South Sudan is an example of this aid policy, and how data collected during my fieldwork demonstrates the practice of this aid policy. The main argument of this thesis is that the 'energy leads to development' narrative whilst providing the basis for complex policy decisions ignores the political and social realities of context such as South Sudan. In this thesis I chart the Norwegian development and international political reinforcement of this narrative, and highlight its mismatch with domestic interest and development dynamics.

1.1 Rationale

At the Rio+20 summit of June 2012, the Prime Minister of Norway was quoted; 'There can be no development without energy' (my translation, Dagbladet 21.06.2012). The Prime Minster's statement echoes a narrative that has been active in providing the foundation for policy in international development over the last 60 years. Since the 1950s, there have been discussions around the linkages between economic growth and development, and this has been linked up to Western standard of living, such as the need for infrastructure and energy (Potter:2004, Scott:1998, Simensen:2003). Another Norwegian journal reported from the Rio+20, that Norway will 'give more green energy to Africa' (Teknisk Ukeblad 22.06.2012). According to this journal, Norway will give 850 million NOK to clean energy to Kenya,

Ethiopia and Liberia. This economic commitment is linked to the goal of achieving social and economic development. Prime Minister Jens Stoltenberg refers to energy as the 'key to development', which is connected the Norwegian 'oil adventure'.

These newly published articles refer to the reinstating of energy in development aid, with a special linkage to the Norwegian effort. Norway's hydropower history goes back over a 100 years, to the creation of the Canal-Directive in 1804 (NVE:2012). In Norway over 90 % of the electricity comes from hydropower (Statkraft:2012). Hydropower is linked to Norwegian aid politics, because it has a focus on renewable energy. Renewable energy can also be seen as clean and cheap, and it is an area where Norwegian experience dates back many decades before oil was drilled in Norway. The Norwegian oil concession system was built on the experience of developing concession for hydropower production.

Fostering development, producing clean energy and protecting the environment are central elements in this discussion. A hydropower project can bring access to electricity and potentially lower energy prices and more stable power supply. Still, the challenges connected to a hydropower affect the local communities, both economically, socially, and environmentally. Often local populations are made to resettle, and the compensation given does not always match the former way of living. Examples of controversies connected to human relocation are the planned Xayaburi dam in Laos and the Three Gorges dam in China. Norway has also a history of dispute between energy plans and protest from civil society (International Rivers:2012d). The most referred to is the case of the Alta dam, which I will go further into in chapter 6. Despite the straight-forward logic of the narrative 'energy lead to development', it is too often forgotten that decisions regarding who shall get access to the electricity produced and the profit shall be distributed, is determined by the complex interplay and power relations among local, national and international actors (McCully:2007).

Norway is one of the countries with an interest in constructing and funding a hydropower project in South Sudan (Solheim:2012). This is being done in order to guarantee a more stable energy production, and to ensure access to electricity for South Sudan, now totally dependent on supply from diesel generators. Participation from the Norwegian side will be discussed in this thesis, with a particular focus on how the general development policy has formulated Norwegian aid policy, and how this again affect projects such as the Fula rapids in South

Sudan. The hydropower projects in South Sudan can be put in a larger, international frame. It is an image of development politics, and provides a perspective on how aid can be framed. This thesis will show how the hydropower project represents a certain development narrative in South Sudan.

The rationale of this thesis is; to explore whether the narrative 'energy leads to development' is relevant in the perspectives of my interviewees and informants in South Sudan. The interviewees come from many institutions, people from South Sudan ministries, people from NGOs, from the Norwegian embassy, and NVE.

1.2 South Sudan's independence

On July 9th 2011 South Sudan declared their independence, as Africa's 54th country. After more than 20 years with civil war, Salva Kiir was finally elected the president of the independent and sovereign state. The world's eyes are now on South Sudan, and how they will build up their state. The figure below shows the tentative borders of South Sudan. Fula Falls, the suggested area of the potential hydropower projects to which I refer in this thesis, is located in the state of Central Equatoria, in Nimule, close to the Ugandan border.

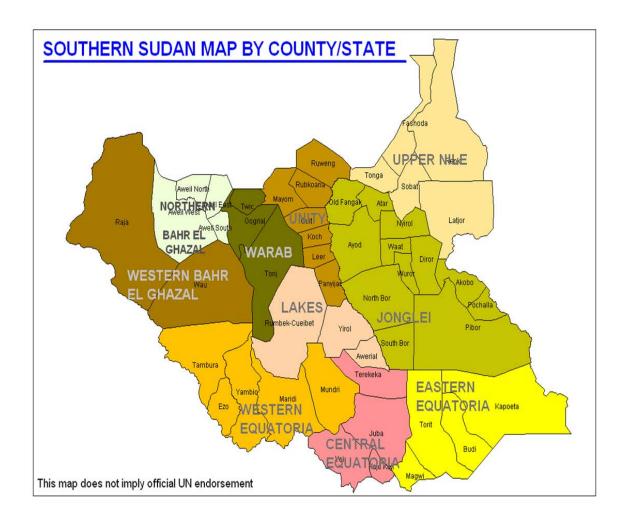


Figure 1 Map of South Sudan (South Sudan Info:2012)

1.3 Norway's involvement in South Sudan

Norway has been strongly involved in the southern Sudan since the 1980s, in other words long before this area became an independent state. Through NGOs such as NPA and NCA, there have been development projects going on throughout the civil war. Hilde Frajord Johnson, then the Norwegian Minister of Foreign Aid, was involved in the Comprehensive Peace Agreement in 2005, and now works for the UNMISS as a special representative of the secretary general in the UN.

1.4 Energy Leads to Development

As I understand this narrative, the focus on the need for energy has an economic foundation, and it explains development as economic growth. The purpose of this problem statement is to

give an overview of the impact of a narrative in development projects. An important aspect of this is to provide insight in the discussion around the term 'development', and how discourse analysis can enlighten the development debate.

1.5. Research objectives

To shed light on the general problem statement, I have three underlying research objectives.

1. What type of development does the development narrative 'energy leads to development' represent?

With this question, I link the development narrative of 'energy leads to development' to the general development debate, and how this narrative has been formed by dominant development theories.

2. What characterizes Norway's hydropower development?

This objective is meant to clarify the historical background of Norway's involvement in South Sudan, and Norway as strong 'hydropower' state. I will also look into what drives Norway's energy-related aid policy, with particular focus on hydropower.

3. How is the development impact by the hydropower projects narrated by official state actors?

This is the descriptive part of the thesis, describing the empirical context of my research. By this description I hope to show the development narrative of 'energy leads to development', and demonstrate the practical power connected with this narrative. I will explore the connection between the political and economic dimension of Norwegian engagement in South

Sudan, and the social and environmental impact this may have. To answer this I will mostly use empirical data from my fieldwork, such as interviews with different respondents.

1.6 Structure

My thesis consists of eight chapters. **Chapter 1** is an introduction and rationale of this thesis, with the structural layout. In the following chapter, **Chapter 2**, the methodological considerations and impacts are explained. The focus is on the empirical data collection, and ethic and limitations connected to field work.

Chapter 3 gives the political background of South Sudan and its challenges related to energy, and a historical background on Norwegian linkages to hydropower, both national and internationally. It gives an insight on the commitment to energy in aid policy.

The conceptual framework is introduced in **Chapter 4**. I present some key concepts related to discourse analysis, and the debate around 'resource curse'. This provides the concepts for discussing of South Sudan's challenges, and how aid policies are also connected to theories, such as the 'resource curse'.

In **Chapter 5** I discuss the debate around the term 'development', and the different interpretations this have had, and the implications of this debate. I will outline the idea of development, and how this is connected to ideas on modernity, and their common appearance in narratives.

In **chapter 6**, I present the first part of the discussion. Here I present how Norway's development policy is influenced by domaint narratives, such as 'energy leads to development'.

In the second analysis chapter, **chapter 7**, I analyze the debate around hydropower, and how it is presented as a catalyst for development. Here I discuss the power relation between different actors, and possible implication of this narrative.

Chapter 8 summarizes the findings in the foregoing chapters, thereby answering the main research question; *how the 'energy leads to development' narrative influences policies and strategies, which affects South Sudan*. It will also put the finding in a larger theoretical context discussion how the findings relate to development theories.

Chapter 2 Methodology

Due to the nature of the research questions, I found qualitative methodology to be most useful in order to answer my questions. My position in the traditions of qualitative research in this thesis is largely in the postmodernism tradition, as the traditions are suggested in Bryman (2008). In this tradition, the world is viewed as a context of which many versions can be patterned, and that the researcher herself to a greater extent is aware of the role of the research as part of the construction of knowledge (Bryman:2008).

In this chapter I will describe my research approach, data collection and data analysis. I will also discuss the ethics involved in doing field work in a country with culture and traditions are very different from that of the researcher, and present the limitations I met and a further description of the research site. First, I will discuss the discourse method I used to analyze my data.

2.1 Discursive method

A discourse analysis focuses in the meaning, and the meaning is studied where it originates, i.e. in the language. The discourse is the social constitutions of the language, and a discourse analysis shows how we view the world is not neutral. The presentations of the world add meaning to what we experience. Language is one tool we use to present social reality (Neumann:2001). Tove Thagaard (2009) presents in her book 'Systematic and Empathy: An Introduction to qualitative method' (my translation) a review of discourse analysis. Thagaard states that discourse analysis exist in various types. She describes discourse analysis on a general level (as opposed to an individual) as a method to look at how the informants speak about the topic we want to shed light on. I find this to be convenient for my purpose. The same goes for Thagaard's point that a narrative can be interpreted in various ways, and that the interpretation of the researcher can be different from that of the informant (ibid:2009:115-124).

Neumann (2001) introduces the origins of discourse, and how the interpretation of the discourse differs between various disciplines. The French philosopher Michel Foucault is a name that Neumann (2001), Tor Arve Benjaminsen and Hanne Svarstad (2010), and Tim Robbins (2012) mentions as one of the important actors in defining discourse. Foucault refers

to discourse as a type of archeology, where one dives into the archive, which contains: 'a set of practices that enables the generating of contents and maintenance of a set of statements' (Neumann:2001:13).

In doing a discourse analysis one has to be clear of one's epistemological and ontological position. Ontology is the study of what is, what the world consist of (Neumann:2001:14). With this perspective the social reality is in a permanent state of change. The discourse analysis is therefore more concerned about why the social reality is depicted in a certain way, and not how the social reality is. It is then the epimistological position that investigates how we develop knowledge about the world. A discourse analysis is one way of differ between the reality as physical reality and the reality as a social representation. With this type of analysis it is possible to get an understanding of specific political actions, such as hydropower construction.

To be more precise, a discourse is in this case not the same as a discussion. Neumann (2001) presents a definition of discourse as;

'a system for prevision of a set of statements and practices, by enrolled in institutions and merge as more or less normal, the reality is constitutive of their carriers and have a certain degree of regality in a set of social relationships' (Neumann:2001:18).

Three schools have been domaint in the knowledge tradition that has contributed to the discourse analysis; the structuralism, the Annales-school, and the Frankfurt-school. The structuralism focuses in studying *meaning* of which it origins; the language. The language is here not just a set of terms that refers to subject, but also a social system which follow its own logic. In this school, it is a divide between the focus on the *langue*, which is the language understood as a relational system, and the *parole*, which is the specific language action (Neumann:2001:19). It is a connection between the text and what can be called a network of potential meaning (Neumann:2001:23). Neumann argues that everything can read and understood as text. Since language is the connection between humans and the world, it is nothing that is independent from text. In this case, one can say that everything is discourse.

The Annales-school is a direct reinterpretation of the structuralism. It fills the gap between the ideograpichness of history, and the generalization of social science. This schools focuses on

how each time period has each own set of tools in order to present their reality (Neumann:2001:25). The Frankfurt-school was a German interdisciplinary experiment to formulate a critical theory, and to demonstrate that social variation is possible (Neumann:2001:26). The goal was to 'dethrone' the domaint perception of social reality, and revile other interpretations of the social reality.

Before beginning a discourse analysis, Neumann (2001) argues that it is important to have cultural competence of the area/subject of what is going to be analyzed. My knowledge of the subject I research in this thesis is based both on my general education in development studies and international environmental studies, and mainly on the fieldwork in South Sudan during October and November in 2011.

When discussing discourse analysis, Neumann (2001) talks about *text* as the object of analysis. However, in my field work I have focuses on what is *spoken*, and this is the foundation of the analysis. I have analyzed what is said through my theoretical framework (chapter 4), which can help give an understanding of what my interviewees mean with development. Even though Foucault emphasized that it is important to read and analyze everything, this is not practical possible. Neumann (2001) argues thus for a understand that at one point in time one have to said one has read *enough*, even though one has not read *everything* (Neumann:2001:55).

This is also related to my field work. Even though I have not interviewed *everybody*, I say I have interviewed many of the most important actors, in order to gain an understanding of how official state actors present development. Their answers to how they define development, and more importantly, how they view the role of hydropower in South Sudan, will provide the discourse analysis. Their answers represent the narratives of what is told about development, which again affects their representation of what development is. I cannot therefore state that I have 'read everything, and analyzed everything'. I would still argue that my fieldwork gives an indication of how a development narrative influences the representation of social reality. In this case; how hydropower is good for development in South Sudan. I focus on how their answers help tell the perspective of the respondents, and how and why they think things appear as they do. I relate to the understanding of social reality as a social representation, and not as something that is definite and given.

Neumann (2001:50) presents three steps in conduction a discourse analysis; 1) delimitation of the discourse, 2) identification of the representations of the discourse, and 3) stratification of the discourse. I have used these steps to form the framework of the data analysis.

With the first step; delimitation, the process it to refine what is to being studied. Since the social reality is represented through discourses, one discourse is not separated from others. This delimitation has also a time specter. In this thesis the case is hydropower development in South Sudan, but the discourse this is based on can be drawn back almost to infinity. I have chosen to focus on how development narratives have been represented after the end of World War II, because this is a common start in many books that discuss 'development' (i.e. Nustad:2003,Potter.et.al:2004). My delimitation of the discourse has then be through following threads from articles I read and people I interview to other relevant information. Through this step, I get a picture of the framework of the discourse and the various positions.

Step two can be to set up a list of the representation that exists in the chosen discourse. The methodological task is to find the different representations. Neumann (2001) also argues that a discourse analysis is good to study situation where there exist a cultural hegemony, where the power constellation is maintained by cultural power effects (ibid:2001:60). It is hard for a discourse to be completely closed, since it is a relation between. However, one definition of a closed discourse is if there exists a dominant representation in the discourse. Again, the methodological task is to find the various representations in the discourse. The second step helped me disclose the underlying assumption behind different statements.

In the step three, the question is if all trait by a given representation are resistant (Neumann:2001:62). Here I continue the identification of the underlying assumptions, and conceptualize the relation between the different positions. The complexities in the situation make it difficult to put representations in certain position, and I found it necessary to simplify the complexities in order to do my analysis.

Neumann (2001) also brings up how the discourse of development can be viewed. Since development is often defined as a progress from one stage to another, the representatives of this change can only be those who know both stages (developed and underdeveloped). They then have the power of representing both sides, and thus, the discourse on development. The whole idea of development predict a trustee, which will deliver the goal of development

(ibib:2001:148). The development discourse transform the question of 'who gets what when' to a technical question in order to ensure quantifiable goals (ibid:2001:149).

Since the discourse analysis focus on the language and representation, and the underlying assumptions, the material for a discourse analysis is immense. The data from my field work is the focus here, which provides value to the text I otherwise use. Seeing that the outcome of the analysis is an understanding how development narratives influence policies and strategies, I found it relevant to emphasize how my interviewees talked, and thus presented their social reality.

The case study is the potential hydropower projects in South Sudan, but it can also be drawn into a bigger picture. The language and underlying assumptions gives an indication of the power in a development narrative. In understanding this, one can reach knowledge of how the social reality presented. This knowledge can be used to clarify alternative narratives.

2.2 Research approach

A key challenge in writing this thesis has been the rapidly changing political environment in South Sudan. Preparations for the thesis and the field work began around March-April 2011. As Bryman (2008) has stated, the whole research strategy has to be carefully planned out before one starts the data collection, an advice I tried to follow as best I could. However, one also has to allow for flexibility. Because of my closer familiarity with the qualitative way of thinking than the quantitative, the choice of strategy was easy. The epistemological and ontological considerations following this have not been carefully discussed. This is because I will rather focus on the criteria of the research and the specific fieldwork I did, and the outcome of this. It will be sufficient to say my epistemological considerations are that the reality of social actors has to be discussed in their social setting itself, and the way I analyzed my data was not from a naturalist perspective. My approach to the data was inductive. First I collected the data, then I focused on forming a theory to explain what I had gathered (Bryman:2008).

Another common aspect of field work is that relevant ideas before you enter into field may not be relevant in the actual field. As the Fula Rapids, the hydropower project who Norwegian actors are involved in, is still in the planning stage and has not yet had an Environmental

Impact Assessment, I decided to place this project more in the background and attempt instead to focus on the larger issues of hydropower, and especially on issues linked to energy and development from a state building perspective.

2.3 Data collection

I chose to conduct the interviews in a semi-structured form. This made it easier to have a conversation, with the questions being only a guideline for the process. Many of the interviews took an hour, but the most common lasted between 30 and 45 minutes. This allowed me to get informative answers while not taking too much of the respondent's time. I also used much of my time looking for possible informants. As this was unfamiliar territory, I used some time to get to know the relevant offices and getting hold of the necessary people. After seven weeks in the field, I felt I had a worthy collection of respondents. 'When is there enough data?' is difficult to answer, especially when you are in the middle of collecting data and may lose sight of the final goal. However, in the end I found that my respondents referred me to people I had already interviewed. This indicated that I had interviewed at least the some of the most relevant actors, and hence sufficient relevant data.

Most of my respondents are from 'elite groups', with power and knowledge in their society. Researching elites can often be difficult because it is hard to gain access. In my case, this was easier than gaining access to the non-elite, often due to the language barrier. Also, as an outsider it was easier to get access to the academic area of Juba than the non-academic. I was, in some way, an *insider* more than an *outsider*, and used my position as a student to gain access. It is essential to interview the elites in this situation, because their motivation and the rationale behind their behavior are central to their perspective on the state-building process they are in now. With the widening global gap between elites and non-elites, it is vital to gain an understanding of the divergence in views, related to the idea and practice of development. In relation to the dependent-structuralism nexus, we need to understand the different sides' worldview. The elites have become more 'glocal', with more interaction between elites globally. Elites are more closely interlinked than non-elites, because they have more power and can stay connected through global networks (Scheyvens & Storey:2006).

'Elite' is not a globally defined term. My definition of elite in Norway is not transferrable to elites in South Sudan. One can differ between local, glocal and global elites. With my

involvement with Norway, I am in this paper mostly interviewing what might be called *glocal* elites. Many of the Norwegian people I interviewed had worked with South Sudan for years, and some of the South Sudanese I interviewed had been in Norway. The glocal elite network was close-knit.

As I have already mentioned above, there may be some difficulties in getting access to the elites. My access was through the academic elites, hence giving me a 'free pass'. Personal interaction is vital to gaining access, even though this may sometimes result in a lack of seriousness and cancelling of appointments. Personal interaction makes the network grow faster, and the possible interview objects are easier to get hold of. Name-dropping seemed important. My last question to my respondent, and one of the most central was if they knew of any I should talk to. This increased the number of respondents. With regard to this, it is important for the researcher to be flexible and try to adapt to the situation. There is a scale of intimacy, and my role is not static.

I used a lot of effort to find representatives from the civil society and persons outside the government area. This was challenging. The term civil society seemed to be unfamiliar to most of my respondents. One explanation can be the uncertainty in defining 'civil society'. However, I did get answers that indicated that there was a weak representation of the civil society. This can be linked to the high level of illiteracy in the country. Without the ability to read and write, it is difficult to know your political rights and follow what the government is doing. This could probably improve with a longer stay in the country, as I could get to know the cultural factors more. The language barrier is another factor. With English as my only working language in South Sudan, there were many areas and cultural factors I could not understand. Even with knowledge of Arabic, this was still difficult, because that is also a language for the educated. Generally, the population of South Sudan only speaks a tribal language. Since my focus in this thesis was on how state officials and other powerful actors define the linkages between energy and development, I interviewed mostly people who could speak English.

2.4 Semi-structured interviews

Overall I interviewed 31 persons. This was both in Juba and in Oslo. The interviews were mostly done in the respondents' offices, but also in cafés. Even if I had an appointment with a

respondent, I often found myself interviewing between meetings, and people would often interrupt the interview. I have also experienced being 'double booked', and have had to conduct the interview with other parties present. This is not ideal, and a disturbing factor in the interview. It could also inhibit my questions, but the questions were not sensitive in this regard. Since this interruption was not disruptive to the respondent, I also did not see the need to point it out. As a non-native researcher I found it best to adapt to each situation. As I informed the respondent of my intention with the interview and that their participation was voluntary, I also regard the interview as ethically valid.

I chose to not use a tape recorder during the interviews. One the one hand it would be easier, as quotation and transcription of the interviews would be more detailed. On the other, as most of the interviews were conducted in noisy areas, there was a limited possibility of actually getting good data from this. I concentrated on taking good notes and wrote them out immediately after the interview. I also had a separate document where I wrote my reflections on the interview. This document helps me see the process of the data collection, and the similarities and differences in the answers I got to a question.

Since my focus is on the influence of narratives, it is important with reflection. Each interview is a social relation, and this relation influences the knowledge. The interview was purposely in a semi-structural form, which left me opportunities for flexibility. The questions were formulated before, but adjusted to the person I was interviewing, based on context and knowledge. The interviews were mostly conversation, and not a rigid interview. This was a helpful way to 'loosen up' the interview. When I gained more knowledge about the subject, and got more familiar with the individual interviews, I was able to ask additional questions.

Even though Jan Hesselberg (1998) argues that questions such as: 'How do you understand development' is too general, this was one of my main questions. Since this concept is a central part of my thesis, I wanted to get a view of how my interviews defined development. With this knowledge I was able to analyze how development was viewed by central actors, and how the hydropower projects were supposed to help the development of South Sudan.

The interview area was limited to the city of Juba. It would be more beneficial to my study to go outside the capital and have more distance to the center of power. I tried getting access to Nimule, the area around Fula Falls. This is close to the border of Uganda. Due to the

difficulties in getting access to transportation this was not possible. The lack of infrastructure makes it difficult to get around, especially outside the city center. Inside Juba I walked and used the minibuses, or 'taxies' as they are called there. This mode of transportation made me more familiar with the city than I would have been if I had only been driven around.

Observation can be used as a tool to get the perspective of the natives' worldview. Though I did not use the method of participatory observation, it is a natural part of the interviews and familiarizes me with the territory. Observation is particularly useful when asking questions the respondents are reluctant to answer. In this way I got a lot of information through observing body language and what is *not* said (Bryman:2008).

2.5 Sampling

Getting access in an unfamiliar territory from a far away country is one of the biggest starting difficulties of field work. Already in Norway I began the search for relevant interview objects. Trygve Berg has worked in and with South Sudan since the 1980s, and through him I got in touch with many relevant actors. Among these was the University of Juba, where I was assigned a local supervisor who directed me to relevant offices. Also through Trygve Berg, I got in touch with Norwegian actors involved in hydropower, especially in South Sudan. With this I was able to build on a network of relevant actors.

It was typical snowball sampling, which according to Tove Thagaard (2009) is a method used to select informants (ibid:2009:56). I asked the people I interviewed if they knew anyone I should talk to. The difficulty with this way of sampling is that you can quickly end up with a narrow perspective on reality. However, I tried to avoid this by approaching the field from different angles. As well as listening to my respondents, I researched on my own who could be relevant agents to go to. A problem with snowball sampling is that one has a tendency to meet people with higher education than the majority (Thagaard:2009:57). In my setting it meant that I interviewed people who were not representative of the inhabitants in South Sudan. However, within the framework of my study, this was not an obstacle since I aimed at mapping the views of elite person (as mentioned above).

2.6 Data analysis

One of the purposes of this thesis is to have a discourse analysis of what the ministries, the NGOs and representatives from the Norwegian side (the embassy, NVE, Norfund) think about the link between energy and development. I will analyze their answers continuously within the analytical framework I use, and also compare and contrast the answers to give a clearer picture of the similarities and differences.

According to Bryman (2008), there are certain features that follow qualitative research. First of all there is an inductive relationship between theory and research, where the research forms the foundation of the theory. The epistemological position is to understand the social world through the respondent, in contrast to the natural scientist perspective. The ontological position is constructionist; the interactions between the individuals form the outcome, it is not separated from the actors involved.

Important criteria in qualitative research are 'trustworthiness' and 'authenticity'. Trustworthiness follows four criteria (Bryman:2008). First is credibility, which means that there should be a correspondence between what has been observed and the theoretical ideas developed from it. Second is transferability, which asks if the results can be generalized to a wider setting. As my interviews were mainly with elites, and not with representatives of the wider population, it is difficult to generalize my result. The role of civil society is one of the topics I will further discuss in my analysis. As I focus on hydropower plans in a newly independent state, the comparison to other states and their hydropower projects can be somewhat difficult and not relevant for this thesis. First of all, South Sudan does not yet have a clear bill or laws on energy and regulation of electricity. Second, the hydropower plans have not started, so the analysis will be based on a discussion of what challenges lay ahead, and how the government views these plans as a part of their state-building process. After the projects begin, more research will have to be done in order to see if the authorities actually follow up on what they plan to do.

Dependability refers to if the study is described in detail, in order for it to be replicated. The data collected should be possible to replicate by being re-collected by another researcher. In this particular study this provides some difficulty. As the topic I study is currently changing, the exact same results can be difficult to replicate. When I was doing my fieldwork, the

hydropower plans had not been finally decided. They were still negotiating the different plans, and had not decided who should get the contract. In February I read the news about a Chinese contractor getting one of the projects, in Bedden (China Knowledge: 2012). This was not discussed during my field work, and my observations indicated that China was not a popular name. This shows the rapid changes in the newly independent state.

Conformability is another criterion that refers to objectivity. As a researcher it is important to recognize bias, and try to avoid it. Every researcher has to reflect on what his or her bias might be, and the reason for the interest in the subject. The interest often shapes beliefs, and can form the questions. The formulation of the interview guide has to be done carefully in order to avoid my bias, and needs to have open-ended questions. I tried not to 'push' my interviewees to answer in a particular way. However, I did ask more questions if they responded with a short answer or not at all. Often more questions led to a deeper answer and could help me clarify misunderstandings. I found this particularly relevant for my most important questions regarding what they think of development and how these projects were relevant for the development of South Sudan. As these were key questions for the analysis, I needed clear answers.

One the other hand, the most interesting informants were perhaps the ones that did not respond to these questions. Some stated that the questions had obvious answers and hence did not need a response at all. I sometimes had to ask in another way or 'play stupid' in order to get a response. Since they seemed to think the answers were 'obvious', I needed to know what they meant by that. As I will show in the discussion chapter, these answers were focused around development as economic growth with physical evidence, such as infrastructure and electricity. 'Without development there would be no light' and 'we cannot live without energy' and 'Come out from the darkness' were often-heard answers. The importance of these terms will be discussed later on.

2.7 Limitations

As a Norwegian student growing up in a culture with relative equality between the sexes, I met additional challenges doing research in a country with a male-dominant culture. The most evident biases connected to research in a foreign country regard gender roles and nationality.

Despite the male-dominated environment I researched in, I did not feel my gender or age as a burden. Often I felt I gained access to areas that I otherwise would not have. As a student I may not be as threatening as an NGO-worker or state representative would have been. Nonetheless, due to the heavy dominance of NGO-workers in the area, I had some difficulties explaining my role as a student, and not a representative of an NGO. When this became clear, I was mostly met with overwhelmingly positive attitudes and a willingness to help my research.

An overwhelmingly positive attitude does not necessarily mean more truthful answers. As a Norwegian researcher asking about Norway's role, I might have gotten more positive answer than another native researcher would have received. Just the fact that I did not get any negative answers could be a sign of Norway's huge influence. The overwhelmingly positive answers I got could be a result of my native background. This became especially apparent during one interview. The respondent presented a power point presentation with the opportunities of investments in South Sudan. When trying to ask questions, I was met with 'I will get to that'. In the end, I felt I never got the answers I was looking for and he seemed to think I was interested in investment in South Sudan. However, I have to focus on the data I collected, and use this as a base for the discussion about Norway's role in South Sudan.

2.8 Rumors as a disturbing element

Another challenge I met during my field work was the lack of confirmed information. I realized quickly that one challenging aspect was to find secure sources of relevant information. I often felt I did not get truthful information, and I heard a lot of rumors when I was in Juba. Respondents from different ministries were rarely aware of the other ministries work. How many, where, and how big the projects were going to be, was hard to get exact information about. Respondents made contradictory claims about the output of the planned projects. There were different plans suggested, with different potential of electricity. The plans varied from providing 30 MW to a 1000 MW. These rumors affected how I could analyze the data I collected, and I made sure the information was verified by different sources, including in the thesis. The role of rumors in a country where the majority of the population cannot read or write is harmful in many ways, because the public information can be jeopardized by false rumors. In the next subsection I deal with the involvement of the civil society.

2.9 The involvement of the civil society

I had difficulties getting access to representatives from the civil society. This was a problem I was aware of before I left, due to language barriers that I knew would be problematic for me. However, I was not aware that another challenge could be the *lack* of representations from the civil society. The lack of a strong voice from the civil society was evident. The civil society's role is often critical, and their views often challenge dominant development narratives. They contribute with local knowledge to the formulating of development policies. Therefore this is one of the key groups when it comes to any development project, also hydropower projects. One of the key questions is how civil society has been involved in the decision-making process of the project, because they can contribute with their knowledge of the local area, and how the suggested hydropower plan may affect their livelihoods.

Yet I experienced a lot of difficulty getting information from civil society, and access to representatives of it. When I asked about information regarding representatives from the civil society, I got answers as 'there was none'. Honorable Henry Omai Akolawin, a representative in the national assembly, responded with 'We represent the people, we have been elected', when I asked how the civil society is included in the hydropower plans. He clearly implied that he represented the civil society. Even though he did in a way, this was not the representation I was looking for. This lack of voices from the civil society is problematic for the discussion of the hydropower projects. Because it is difficult to identify opposing views, it is also difficult to discuss how the government behaves. One explanation of this is that the majority of the population cannot read or write. It is also difficult to know how to gain access to information. This is one of the most critical elements. One of the major parts when conducting an EIA is that the local community is informed. However, this can have various meanings. In some projects, project representatives just give top-down information to the local community. In these consultations one of the most problematic issues is to explain the development consequences from the hydropower projects on the civil society.

One explanation for the weak voice from representatives from civil society can be that there is lack of strong activism, and the population does not generally involve themselves in politics.

The government consists of one party, which also is dominated by one ethnic group. This hegemonic representation is diverse country may be problematic. One challenge is language, and that many of the ethnic groups have their own language, and do not speak English.

The very concept of 'civil society' is difficult to give a concrete definition of, and there has been a change in its meaning (Ferguson:2006). Now the term of civil society is often connected with democracy. Civil society has been universalized, and is used both on the left and right sides of the political sphere. It has some equal traits as development, which it is something no one can be against. The view of a modernized state is with a strong civil society. The 'good governance' perspective includes an active civil society. However, when discussing civil society, one should be careful with defining what kind of civil society one is using.

2.10 Ethics

With social research comes a responsibility for the information. There are four common denominators; harm to participants, lack of informed consent, invasion of privacy and deception (Diener and Crandall:1978 cited in Bryman:2008). Below I will discuss how I met these issues in my fieldwork.

Doing harm is difficult to measure, and can refer to both physical and mental harm. It can involve physical harm and stress, and can vary between different social and cultural settings (Bryman: 2008). In my fieldwork I tried to avoid harm to participants by first discussing behavior with people familiar to the South Sudan culture. In this way I tried to conduct my interviews in a way that was socially acceptable in the setting. One example of this is the way one addresses people, and how one should go about with the interview. Long handshakes and remembering names are important elements in gaining the respect of the respondents. I also starting my interviews with general questions, about themselves and South Sudan's newly gained independence. These were often easy subjects, and this seemed to open up the respondents.

Lack of informed consent refers to that the informants do not get the information needed in order to make decisions of participation (Bryman:2008). This is important because the

respondents need to fully understand what they consent to, in order for the data to be valid. For my research, I started with explaining who I was, what role I have, and the purpose of the study and how it is going to be published. I also informed them about their right of refusing to answer and being anonymous, which are elements of informed consent (ibid).

In some research, there are elements of personal questions that can lead to sensitive information. Since I did not conduct interviews on the personal level, but had questions more on the governments and the NGOs level, I did not have any sensitive questions. However, what is sensitive in one culture does not mean the same in the other, and one should be aware of this when conducting research. Still, based on my observations and the answers to my questions, I did not feel I invaded anyone's privacy.

A lack of understanding of the purpose of the social research can lead to deception of the respondents (Bryman:2008). To avoid this, I was careful to explain my role as a student and the limits of the master thesis. This was one of the challenges with my field work. Due to the large number of NGOs in the area, many thought I was a member of one of these. I also had to carefully explain the limitations of the scope of the master thesis, that it was not a report in the same lines as an NGO's report. Yet, my role as a student meant often that the respondents where more than willing to talk to me. As some stated, they wanted more research on South Sudan and were glad that someone was interested in their country and line of work.

2.11 The research site

I spent the seven weeks of field work in Juba, the capital of South Sudan. This site was chosen because it is the largest of the cities in South Sudan, and that the ministries and most of the NGOs are located here. It gave me a fairly easy geographical access to the different respondents. Most of my time the first week was used to walk around and familiarize myself with the city. It meant a lot of walking to get to know the locations of the different NGOs and ministries, since maps are not easily accessible, and the ones you can get, are often too old. Due to the rapid expansion of Juba, and the continuous building of new hotels, offices, etc., one cannot rely on maps. With the help of Trygve Berg and the University of Juba, I started collecting names and information about key informants. Another benefit of staying in the capital is that it is fairly easy to access information of what is going on in the government and

follow the state-building process. It is interesting to be in a state and actually see and follow their state-building plans. As Juba is the capital, it is also the location of the different embassies. The Royal Norwegian Embassy provided information and access to respondents I would not get on my own. A lot of additional information, not necessarily on a strict interview basis, was given to me during informal talks with representatives from NGOs and companies represented in Juba. This information is treated anonymously.

2.12 *Summary*

This chapter has summarized my methodological choices before, during and after the fieldwork. The basis of this gives the foundation on the data collection and analysis. In the following chapter I will provide a brief political background of South Sudan and its relation to energy, and also introduce Norwegian aid history and hydropower background and how energy and aid are interconnected.

Chapter 3: War, Energy and Norway's Aid

This chapter will provide a look into the historical background of the conflict between Sudan and South Sudan, as well as the current status. I will add a brief overview of Norwegian hydropower history, their role in hydropower projects internationally, and Norway's history in South Sudan. This addition is important in order to understand Norway's role in South Sudan. The intention of this chapter is to understand present-day South Sudan, the reasons behind Norwegian involvement, and the energy challenges ahead for the newly independent country.

3.1 British rule and Civil War

Problems with political stability in the Sudan started in the period after independence from British and Egyptian rule in 1956. The southern part did not want to be controlled by the Sudan regime, which was based in the northern part of the country. Islam is the dominant religion in the north, but in the south they follow traditional religions, with only a minority of Christians. The Arab-African divide is also one of the main 'natural' divisions between the now, two countries. Due to the diversity of languages used by ethnic groups, communication is also difficult (Johnson:2003). Ten years after the first civil war ended, the second civil war begun in 1982. The Sudanese government broke their promise when they cancelled the autonomy agreements. The rebellion was started by the Sudan People's Liberation Movement (SPLM) and their army; Sudan People's Liberation Army (SPLA). SPLM is now the dominant political party in South Sudan, and has the political power in the country (Collins:2008).

There are two factors that can be claimed to be the reasons for the start of the second civil war. Firstly, the Arab - African divide has always been a sore point. Due to its size and ethnical division, governing Sudan was a hard task. Second; the discovery of oil started a scramble by north and south to control these rich resources. It has not been a source for economic growth and development for the country. It has rather split the country in half and created a wider gap between the rich and the poor. The oil was found in the southern part of Sudan. In order to get the oil on their side, the then president Sadiq al-Madhi created a new state called Unity, in 1982. The SPLA raided the oil fields and destroyed the equipment. Another reason for the start of the second civil war was the discussion over the Sudd, one of

the largest wetlands in the world, situated in the Jonglei state (see the map in chapter 1). The plan was to lay the Sudd in pipelines, and lead the water to Egypt. This would be a beneficial deal for both the government in Sudan and Egypt. However, it would have meant devastating ecological consequences for the population in the south. This plan was started, but the pipelines were also destroyed in 1983 (BBC News:2012a).

3.2 Comprehensive Peace Agreement and independence

In 2005, after 22 years of fighting, the CPA was signed, with a strong Norwegian participation. At least 1, 5 million people lost their lives and more than four million people were displaced during the fighting. The CPA granted the south regional autonomy along with guaranteed representation in a national power-sharing government. It also provided for a referendum in the south on independence in 2011. Here 99 % of the South Sudanese voted for a split from Sudan (BBC News:2012). The road to the agreements was, as the name implies, complicated due to its comprehensive nature. Among the difficult matters to agree on were borders, division of revenues from oil and distribution of resources, as well as a power-sharing. The main issue of the CPA was security, and how the borders were to be defined. The borders are connected to resource abundance, because the oil is located at the disputed borders. Since the borders between the now two countries are yet to be defined, there is still conflict over the distribution over the oil revenues (Collins:2008, BBC News:2012).

Despite the independence of South Sudan, there are still tense relations between the two countries. The oil dispute is just the tip of the iceberg. There are numerous land use conflicts (pastoralists vs. sedentary populations), and areas where the violence is more spread out than the peace (BBC:2012b, BBC: 2012c). To add to the conflict, there are several rebel groups that oppose the SPLM-dominated government of South Sudan. One of them is the South Sudan Liberation Army (SSLA) lead by Peter Gadet and former SPLA general George Athor. The accusation by the government of South Sudan is that they are funded by Sudan, which in turn denies the accusation (BBC:2012 a).

The current peace between Sudan and South Sudan is fragile, and one cannot even refer to negative peace, which is peace with the absence of violence (Galtung:1969). With this tense

present political situation, it is difficult for South Sudan to concentrate about state-building; the focus is more on trying to reach an agreement with Sudan, in order to get a stable peace. Most of the South Sudanese government effort goes to securitization and peace-building, development is wanted, but difficult in a country where violent conflicts are common.

3.3 Geography, economy and resources

In this part I will often refer to the Sudan prior July 9th 2011, due to limits of references on South Sudan. The articles and books discussing Sudan and water, is mostly written before the independence, and I will then refer to the whole of Sudan, including South Sudan. Most of the geographical facts are the same, and is still valid today.

The statistical numbers of Sudan are depressing. More than 80% of the population in Sudan is based in rural households, and 90% fall below the poverty line, in the south of Sudan there are 115 languages that are spoken, with numerous tribes and ethnical groups. Sudan is considered to be one of the least developed countries in the world (Hamad & Battahani:2004). Sudan's economy is dependent on the oil revenues. An estimated 75 % of the oil in the former Sudanese state is located in South Sudan, but the refineries and pipelines are in the north. As previously mentioned, this is one of the major causes of the conflict. There are negotiations on how to divide the oil, but it has already had a severe breakdown. In January 2012 Juba closed down the oil production, and it was closes until August. The African union has been heavily involved in negotiations. In April the situation became even worse, and fighting between the two parts started again. This was the worst violence since pre-independence. In august the negotiations came to an end, with an agreement of the distribution of the oil revenues (Sudan Tribune:2012).

As I will come back to in the chapter 4; 'theoretical framework', South Sudan's abundance in resources have been one of the explanation of the long civil war; the theory of resource curse (Ross:2003, McNeish:2010). This conflict over resources might also cause the same tension in South Sudan, as it did pre-independence.

There are broad political and economical objectives to the civil war, and Douglas H. Johnson (2003) argues that it has been fought as a resource war. The conflict is not only about seeking resources, but denying others these assets. The civil war in Sudan has been fought over a territorial divide between resources, ethnicity and race. The ethnical and geographical distance are factors leading up to the civil war. The continuing conflict with Sudan, and the numerous cattle-herd conflicts, leads the South Sudanese government to focus on security issues, and they have had little opportunity to deal with development and peace-building (Johnson:2003).

There is a unique environmental, socio-economic and political context of Sudan. The water share is connected to upstream Egypt and downstream Ethiopia and the Equatorial lakes. 70% of Sudan falls in the Nile basin, and 85 % of the population depends on the river. The use of water is critical for the development potential and is also often the way of life. The Nile has both positive and negative impact on the country, as floods, soil erosion, and water-borne diseases are large problems in the country. Climate change has impact on water use, and it is a threat to the water security. This may also have socio-economical ramifications such as agriculture being affected by scarcity of water. Agriculture is one of the key economic sectors in Sudan. Water is also a key source for electricity, through hydropower, and it can be a source of economical diversification (Hamad and Battahani:2004).

71 % of the energy in Sudan is driven by biomass, the burning of charcoal and wood (Hamad and Battahani:2004). The electricity production is established at 2,000 GWh/year, and the consumption is suppressed due to limitations of the supply. Hydro-electric power is generated by the three dams built in Sudan before the 1970. Since these are located in the northern part, there is no supply to South Sudan. There are project underway through the Nile Basin Initative, and power trade is one way of collaboration. This is also referred to in my interviews, where my respondents referred to the possibility of export of electricity. This is also connected to the development nexus, and that with the ability to export electricity also brings economic and political power.

3.4 Energy

Though oil is a major causal factor for the second civil war, and prolonged the negotiations between Sudan and South Sudan, I will in this thesis focus on the importance of water. Water is vital for life and energy, making the resource more complicated in some way than oil. The UN has a declaration of the human right of water and water was one of the main issues in the Rio +20 conference in 2012. There have been no water wars yet in South Sudan, but many believe they will come. Some (Wolf:2007) say it just depends on time. In an increasing degree water has been treated as a commodity, and this can in the end result in war.

The complexity of the natural resource water is necessary to have in mind when discussing the links between energy and development. Norad argues (2012a) that energy is interlinked with development, and that you cannot have one without the other (Norad:2012a, Dagbladet:2012). However, as I underline in this thesis, this is an example of a development narrative (Benjaminsen and Svarstad:2003, Scott:1998), which comes with a specific worldview and simplified solutions, to a 'crisis'. I will use the case of South Sudan to show the implication of this development narrative. South Sudan is a country in dire need of development, and the electricity need is not even met in Juba, the capital. Diesel-generators are running everywhere, and this is also the government's source of energy. In this 'energy and development' narrative, questions of distribution and type of energy need to be brought up. Access to energy does not only mean physical access, but also the ability to afford the energy. Different types of energy will also affect the population different, for example the difference in solar panels for every hut and a large-scale hydropower plant.

The 'energy leads to development' narrative also implies that the energy is clean, and uses the example of hydropower. Despite the argument, hydropower is not just clean energy. It has socio-economic and environmental consequences, such as soil erosion, disturbing the ecological balance, and limiting the fish migration (International Rivers:2012a). There is a large environmental community working against larges-scale dam building and enlighten about the possible consequences. There is also big money to be earned in developing hydropower (McCully:2007). The various international regulations have different emphasis on the environmental and socio-economic impacts. The World Bank's regulations are more common than the World Commission of Dams, but also less strict. These regulations are set

standards for construction of hydropower plants, in order to minimize the socio-economic and environmental impact, and to increase the benefits (Usher:1998).

South Sudan is one case where the links between energy and development have been drawn. There is a dire need for electricity. All public sectors, including hospitals and schools, will benefit from electricity. But there is a difference in large-scale investments and rural electrification. One of the challenges in South Sudan is the scattered population. The grid systems will be difficult, and another questions if the households can afford the connection, or if they want it at all. A report; '*Towards an 'energy plus' approach for the Poor'* (2011), from the UNDP about electrification project in Asia shows that electrification does not necessary lead to development. The infrastructure is often still lacking, and the jobs they need to get money to be able to afford electricity. Even if one cannot speak of a causal relationship between energy and development, the Norwegian aid policy states that energy is a basic necessity and therefore focuses on energy development (Norad:2007). The focus here is obviously more on a larger scale than rural electrification.

3.5 Water

In spite of what has been referred to so far about the importance of oil, there are people who claim that water is the main asset of South Sudan (Johnson:2003). South Sudan has higher rainfall than the North, and is a meeting place for several rivers arising in East Africa, Ethiopia and Central Africa. A great deal of the water is dispersed through the swamps. The idea of using the water in the swamps was first posted in 1901. Even so, there are still inadequate measures of the amount of water available, the demands on that water, and percentage of the water used. Egypt is an arid country that could benefit from a more efficient use of their water resource, but prior to 1984 they were on an outlook for new sources of water. Their needs were prioritized higher than the ones in the Jonglei area in the north eastern part of South Sudan by the government of Sudan, creating local discontent. The Jonglei canal in the Sudd area of Jonglei was proposed for creating new opportunities for agro- industrial expansion for both Egypt and Sudan. There were even planned some benefits for the local community, such as transport facilities, drinking water, and drainage. The consultation between the central authorities and the local community was influenced by the possible socio-economical benefits of the canal for the people downstream in Egypt and

northern Sudan, and the information about the project was not widely spread. The government's promise to provide for socio-economical project turned out to be a sham. This revealed that the government's intention to prioritize the area, which at the time rested in the southern part of Sudan, was not very real (Johnson:2003).

Douglas H. Johnson (2003) expressed the intentions of the central government in Khartoum in the following quote:

'As with oil, so with water: Khartoum proved itself to be more concerned with the extraction of the South's resources with the minimum return for the region itself, an attitude more in keeping with the old Sudanic states' exploitation of their hinterlands than with modern nation-building' (Johnson:2003:48).

This project was halted by the outbreak of the war in 1984, and is also seen as one of the background reason leading to the outbreak (Johnson:2003).

3.6 Aid challenges

8, 8 million people live in South Sudan, 51 % live under one dollar a day and 85 % of the adult population are illiterate (Global Humanitarian Assistance:2012). South Sudan has only 60 km of paved road, and the running water is scarce (CIA Factbook:2012). The government uses most of the money on a large army, and is dependent on import of goods from neighboring countries. These pessimistic numbers give an idea of the challenges ahead for South Sudan, and also the difficulty of distributing electricity where the majority of the population lives in the rural areas. Most of the population does not know how to read or write, and thus lack the power to hold written government documents accountable.

Aid is in a transition phase in South Sudan (Global Humanitarian Assistance:2012). Investments are coming in now that the country is independent. Of course there are huge efforts needed in a country that is economic dependent on a single commodity, and where

humanitarian crises are frequent. Norway has been one of three leading donors, alongside United States and the United Kingdom. The countries are referred to as the 'Sudan Troika', who also supported the CPA negotiations process. After the independence, the priorities of GROSS (Government of the Republic of South Sudan) seen to be security such as military funding, roads, primary healthcare, basic education, water and production. A large part of the aid has been focused on building the capacity of the government and civil society (Global Humanitarian Assistance:2011). The state-building of South Sudan has to concentrate on a broader picture than security issues. It is difficult to develop a state still in conflict with their former state power. The South Sudanese government can still use the argument as 'Sudan as the enemy', and thus justify the focus on security.

3.7 Norway and development aid

Norway has been involved in development projects since the 1950s. Now the focus areas of Norad is cross-cutting themes such as democracy and good governance, human rights, economic development, environment and natural resources, energy, health and education. Gender is also a main issue in all these areas. Bilateral aid from Norway to Sudan was in 2010 705, 4 million NOK (Norad:2012b). According to Norad's (Norad:2012b), the reason for the aid is the long connection between Norway and Sudan. Recently, more organizations have joined the work in South Sudan, such as NRC. There is also strong academic collaboration between universities in Sudan and South Sudan on the one side, and Bergen and UMB in Norway on the other side. The traditional role of Norway in South Sudan has been as aid donor. However, with the independence of South Sudan, the focus has changed from emergency relief and aid, to state-building and development. The hydropower project is one step in this direction.

3.8 Norway and hydropower

Norway's hydropower history goes back to the start of the Canal-Direction in 1804, which in the beginning mainly focused on the regulation of canals and rivers, before the hydropower came into focus around the 1880s (NVE:2012). The role of hydropower has been important in the development of Norway, because it is the main source for energy. Norway's history in

this regard makes it natural to include hydropower projects, and later also oil policy, in the aid policy of Norway. Norad, and especially NVE, are strong agents for this part of Norway's development aid.

However, the positive role of Norway does not always apply. The project with the Alta dam in the northern part of Norway gives a bleaker picture of Norway's role. It led to a change in how hydropower projects were implemented in Norway. The project met a lot of resistance, especially from the Sami population who had lived in the area for many hundred years. The project had not been negotiated by the local population, and the damming of the Alta River could mean devastating consequences for them (Usher:1997). In the end, the project was build, but in a diminished scale. The protests helped change the rules of hydropower development, and improve the rights of the Sami people of Norway. Sustainable development became a familiar term when discussing dams, and EIA became a necessarily part of a hydropower project. These experiences from Norway's own hydropower projects since the early 1970s are now part of Norway's development aid project in this regard (ibid).

3.9 Summary

I have in this chapter presented a brief political and geographical background of South Sudan, and touched on the Norwegian aid politics' history, with regard to hydropower. The turbulent landscape of South Sudan is not unfamiliar for Norway's development aid projects, since the country has been involved in other postwar countries during their phase of state building. The stage is set for a discussion of Norway's experience with hydropower in an aid related context. As Norway's development aid history is also turbulent, there may be lessons learned before starting on hydropower projects in South Sudan. In the following chapters, I will discuss the role of Norway's development aid history on their work in South Sudan. Before this, I will present the theoretical framework, which will provide the foundation of the analysis of my data from the fieldwork.

Chapter 4 Theoretical framework

The purpose of a discourse analysis is to map how a discourse is made, and how it shapes how people view a certain subject, and which actors who have the power to formulate the discourse (Benjaminsen and Svarstad:2010).

4.1 Introduction

In this chapter I will discuss some of the concepts necessary for the discourse analysis applied in the thesis. It consists of three parts; presenting my research approach, secondly; clarifying the use of discourse narratives in the thesis, and thirdly; explaining the use of 'resource curse' as a dominant development narrative of the global south. Using a basis of discourse analysis, I will further elaborate on the 'resource curse' narrative, and indicate how a critical approach to this thesis assists my analysis of the 'energy leads to development' narrative. I will reflect on the power and actors involved, and whether what is being *said* influences what is being *decided*. There is a power in what is said, and by whom. The leading discourse can control the political hegemony, and also how the aid is distributed and polices made. Throughout the chapter I will explain how different concepts contribute to the analysis. Though I am not arguing against the benefits of energy, it is necessary to see the power of the narrative, and how energy does not automatically lead to development.

4.2 Research approach

In the process of this thesis, I have had to delve into discourse analysis of development narratives (Benjaminsen and Svarstad:2010, Nustad:2003,Potter et.al:2004), political decision-making processes, technical issues in hydropower, legislation in hydropower construction, and theories around conflict, state-building and peace-building processes. I use concepts from political ecology to provide an overarching theoretical framework in which the complex reasons of the governments of South Sudan and Norway in relation to the hydropower projects can be comparatively understood. Hydropower projects in South Sudan are in particular here seen to be connected to the overarching development narrative of 'energy leads to development'. In the next two paragraphs I present descriptions of 'grounded theory' and 'thick description', which are essential in my approach.

4.2.1Grounded theory

In social science methods grounded theory approach describes as holistic research strategy (Bryman:2008). This method prescribes a close relationship between data collection, analysis, and eventual theory (Strauss and Corbin:1998 cited in Bryman: 2008:541). The outcomes of grounded theory are first concepts, which constitute the first step to develop a theory. When concepts have been elaborated into a category, it can reflect real world phenomena.

My work with concepts and categories started the development of research questions based on my existing knowledge of hydropower issues, mainly from activists working in a small NGO in Norway. My starting point was to delve into the Norwegian influence in South Sudan, and to look closer at the planned hydropower project. Also, I wanted to understand how the government of South Sudan talked about this project, and how South Sudan and Norway cooperated. As such, the thesis considers in particular how my respondents, equally from South Sudanese ministries and from Norwegian actors, link hydropower to the energy and development narrative, and to competing ideas for development.

4.2.2 Thick description

'Thick description' (Geertz:1973 cited in Bryman: 2008:700) gives detailed accounts of a social setting, which can create general statements about culture and its significance in people's social lives. Through the data collection and analysis of them, I developed temporary explanations using inductive logic, such as answering questions about why these hydropower projects have been in the developing stage since the 1980s, why Norway is involved in South Sudan, and why the South Sudanese government links the hydropower project into their state-building process. The analysis of the data was a continuous process. I had daily reflections of the new data during my fieldwork, and after I got home I made several reflections on the data collection in order to understand how the respondents think about the matter. By using 'thick description', I use both the respondents' perceptions, and add information I collected through public documents and observation during my stay in Juba.

4.3 Discourse and narratives

A discourse is a social construction, which is shared by several people (Benjaminsen and Svarstad:2010). Every discourse is based on assumptions and arguments, and they can be 'lenses' of which we view the social reality through. A discourse analysis is then the investigation of assumptions, in order to define the discourse. Culture and ideology are often central parts in a discourse. A discourse is an example of a social structure that limits the actor's actions. Discourse and narratives are social constructions, and the construction of these have a powerful background. In order to understand the influential role of a certain discourse narrative, it is necessary to look into the actors' actions and how social structures influence the narrative. The actors behind the discourse can be both individual, state governments and international companies (Benjaminsen and Svarstad: 2010).

Constructivism or realism is two scientific views that are seen unmatchable. When doing a discourse analysis, there is clear constructivist perspective. Realism is a view of the reality as something separate from human's views, and constructivism view the world as a reality that is defined by the people observing the world. In this thesis I place myself somewhere in the middle; in critical realism. This perspective acknowledges that there is a social reality, but also accept that there exist different construction of the phenonomena which can be studied (Benjaminsen and Svarstad:2010).

The perspective of nature as constructed, can be drawn back to philosopher Immanuel Kant, who argued that objects are constituted by the world of our ideas (Kant:1882 cited in Robbins:2012:123). This perspective has implication of how environmental management is done, because environmental issues can be defined as social constructions. James Fairhead and Melissa Leach (1995) argue how colonial policy and environmental policy has been influenced by a dominant environment perspective. There is also a non-conscious way of how state actors, local people, and international agencies hold different normative ideas of the environment. This strategies focuses on how 'naturalization' occurs, and how the social constructedness of the concepts are forgotten (Robbins:2012:131).

Time and space are also central effects when discussing narratives. Local and national structures are interlinked, and this relation needs to be understood, in order to understand the power effects of the structures. To understand the situation today, it is necessary to view the historical background. For example; narratives of development are connected to the history of colonization, and Western state-building. This history needs to understood to discuss the effect of development narratives today (Benjaminsen and Svarstad:2010).

In this thesis I use discourse analysis to point out the similarities within the same discourse. The intentions is to map how discourse structures the understanding of certain concepts, and which actors who is the important contributes in this structuring (Benjaminsen and Svarstad:2010). To define the analysis clearer; I use discourse narratives to understand how the 'energy leads to development' has influenced certain development polices, in particular the hydropower plans in South Sudan. It is not only the story in it self we want to discuss, but the causal linkages between the different parts of the story. The actors involved have different parts, from sender to receivers, and even heroes and villains. The producers of the narrative are the people who contributed to the production and modification of the narrative (Benjaminsen and Svarstad:2010).

Discourses and narrative makes it easier to simplify the reality, and easier to interpret it. There are four types of discourse narratives; win-win, traditionalist, preservation and prometheus discourses. They are ideal types, which can be a base for comparisons between different narratives. The win-win narrative focuses on the beneficial social cooperation between local and external actors. The traditionalist narrative focuses on how the local are disturbed by external intervention. Thirdly, the preservation narrative focuses on how resources should be protected against any intervention, and the locals are seen as a hindrance for this. The last narrative, the prometheus-narrative, focuses on how technology will solve the environmental problems. There are variations in each of these types of narratives. If one were to place the 'energy leads to development' narrative, it would be as a 'win-win' narrative. The argument is that with energy comes development, and that this will create a beneficial scenario both for the local and external actors. The energy will provide electricity for the local, and the external actors benefit through increased investment possibility (Benjaminsen and Svarstad:2010).

4.4 The power of discourse narratives

The power/knowledge dynamics of 'energy leads to development' narrative has a strong authoritative background. Government officials, NGOs, and investors support this statement. This narrative has been influential of Norwegian aid policy, which includes an emphasis of poverty reduction by infrastructure and energy access. To make this discourse less stable, one should analyze the interest they serve, and demonstrate the relationship to social institutions, and their social and environmental effects. Alternatives to the discourse become evident when we show that the 'timeless truth' has a historical and social context (Robbins et.al:2011). Using a discourse analysis, one acknowledges that; 'statements and text are not mere representation of a material world' (Robbins et.al:2011:122), but represent the social reality of which we live in.

The French theorist Michel Foucault connected power with discourse, and stated that a discourse is never innocent (Foucault cited in Robbins et.al:2011:124). Stated simply; all knowledge is power/knowledge. It is not the powerless against the powerful, but this power is possessed by everyone. This 'field of power' is not synonymous with a 'level playing field'. It reflects more the relationship between people, and how certain types of knowledge are more accepted than others. This power is not static, and is socially connected, and it can be changed. Foucault shows that political discourses can be challenged, and it is possible to destabilize authoritative discourses (Robbins et.al:2011).

Since there is power in what is being *said* and by *whom*; the leading discourse narratives can control the political hegemony, and also how the aid is distributed and policies made. Thomas F. Homer-Dixon's concept of scarcity driven conflicts, is one example. Another concept connected to power in discourse, is the changing definitions of development. This discussion has formed development aid since its beginning. These narratives help explain the discourse (Benjaminsen and Svarstad:2010).

There are different types of power. According to Benjaminsen and Svarstad (2010);

the power is exercised when one or more players are performing intentional actions in relation to other actors (ibid:2010:20, my translation).

The power effect of this is that it may influence how polices are made. Fredrik Englestad (cited in Benjaminsen and Svarstad:2010), argues that there are three ways to define power resources. He defines power as something intentional, relational, and which generates a result. The intention is when power is used in order to gain something. The causal effect (result) is that the actions provide the intended effects. The relation effect of power is when someone is forced to do something they do not want to, and is an extreme form of using power. Benjaminsen and Svarstad (2010), argues that these three elements are necessary to have in place, in order for the action to be an exercise of power. However, an exercise of power can also have unintended effects. James Ferguson (1990) shows this when he talks about unintended effects with development projects. Often the power relation is asymmetrical, which means that some have more power than others. Powerful actors can follow their interest despite the consequences of other involved actors. When discussing power, one often talks about how powerful actors can influence less powerful actors, and diminish their objective interest. As Benjaminsen and Svarstad (2010), argues, this is a problematic field, because it is difficult to define what 'objective' interest is. As I will show in the discussion of narratives; people's interest are often influenced by their world view, and then the world view they share, the narratives they tell to define their world.

The actors' use of power is limited by the social structures that define the relations between the involved parties. These structures are often examples of the unintended effects of the power exercise. Foucault uses the term 'governmentality' (Benjaminsen and Svarstad:2010:23), in defining how state officials use their influence to administrate the actions' of the population. Another element is how individuals are formed by the existent structures, without seeming to have any official actors behind. These may be social norms that are often an 'invisible' part of a society, or a structural action.

One example of a powerful discursive narrative is the narrative that describes the African landscape as 'untouched', and that the 'overpopulation' of Africa has led to a deforestation

(Fairhead and Leach:1995). 'Knowledge is power' is an often herd term, which underlines how access to information is an important power resource. This is often asymmetrical divided, which is also the case of South Sudan. The information of the hydropower plans is at the government, and little information is distributed to the local population. This divide leaves the government with the power when presenting the hydropower projects, because they are the ones with the information. Use of violence is also a power effect, which sometimes is the case with the resettlement of people with a hydropower projects. However, the local population has also a power resource, in that everyday resistance may hinder the plans. This is the case of the Alta dam in Norway, where the resistance changed some of the construction plans (Usher:1997) Emery M. Roe (1991) sums up the power of development narratives;

[...] development narratives tell scenarios not so much about what should happen as about what will happen' (Roe:1991:288).

The power in a narrative, can be connected to the notion of *hegemony*, which Antiono Gramsci (1891-1937 cited in Robbins:2012:62), introduced. Gramsci raised concern on how the state can use coercive power to achieve the consent of the non-elite, through control of culture, opinion, and ideology. The limits of hegemony are where the resistance can occur. This definition of hegemony is related to Foucault's *governmentality* (Robbins:2012:75). With this perspective, people act out their social and political interaction in the world, and come to govern their selves. With this view, our social actions are a product of interaction and indirect influence (Robbins:2012).

Edward Said argues that specific forms of writing are enmeshed in context, within which it is produced. 'Orientalism' (Said cited in Robbins:2012:67), is that specific form of knowledge is created to establish the differences between the East and the West. These differences were characterized by 'backwardness' in the East and 'rationalism' in the West. This is a colonial way of defending the domination of one part of the world by the other. This 'orientalism' can also help explain how the global south often is depicted, as 'backwards'. The West is 'modern', and can then 'help' the progress of the global south. This is in line with the modernization take on development. Poststructuralist can help explain how there is

uncertainty in the concept of self, truth and knowledge. Again according to Foucault, the truth is a generation of power, and how it generations knowledge of which we take for granted (Foucault cited in Robbins:2012:70).

This understanding of power and knowledge is necessary to have in mind when investigating development narratives. An analysis of this is trying to understand how social and environmental condition are formed and made powerful by influential actors. This knowledge generates how we look at the social and environmental reality. One seeks a 'dethroning' of the discourse. Since the discourse locks the alternative perspective, these concepts need to be unlocked for other realities to be made possible. Said underlines the political character of research; that

'the general liberal consensus that 'true' knowledge is fundamentally non-political (and conversely, that overtly political knowledge is not 'true' knowledge) obscures the highly if obscurely organized political circumstances obtaining when knowledge is produced' (Said:1978:10 cited in Robbins:2012:71).

When viewing narratives, it is then important to have the political specter in mind. Since the generation of knowledge is a source of power, this may have political implications. To ignore the political specter may leave alternative explanations out, which limits our framework of social reality (Robbins:2012). Among the more famous narratives, is the 'Tragedy of the Commons' posted by Garrett Hardin in 1968. The story began with a pasture and several herdsmen, and it ended in ruin, because the herdsmen made the 'rational choice' and overgrazed the pasture. According to Hardin, this is due to happen to a common which is shared (Hardin:1968). The solution, according to Hardin (1968), is privatization of the pasture, making each herdsman responsible for their own land. Ellinor Ostrom (1999) is one of the critics of this narrative, arguing that distribution is often regulated by local people themselves.

Even though a development narrative is less normative than an ideology, it is programmed to explain development complexities. Narratives have descriptive powers, and often make the listeners believe or do something (Roe:1991). Often development narratives are met with

counter- evidence that reveal the narrative as a myth or a fad. Roe (Roe:1991) points out that a failed development narrative may lead to more uncertainty. Instead of neglecting it, it is better to manipulate the original development narrative, create a counter-narrative, or modify the old narrative to reach a more accurate narrative, in order to reach our aim.

Counter-narratives are a result of learning from experience. Blueprint development does not necessarily mean 'one size fits all', rather that the development narratives have to be examined in order to learn what to take as the outcome. Some development narratives will cease to be narratives, and become 'plausible assertions' (Roe: 1991:296). These are development narratives that through long experience and observation can be justified to be applicable to a site. One of the most well-know narratives is how road infrastructure facilitates the surrounding economic growth. My impression from the data gathering in South Sudan is that this narrative is very common among people. It is hard to test the narrative itself, since much of the road construction happen before the development comes, often along with other changes that may have influenced the development. Seeing infrastructure as a prerequisite for development is then a weak linkage based on experience.

In another article Roe (1995), present a development narrative that describes the view of Africa. He refers to it as 'Except-Africa', where the techno-managerial elite conclude that 'development works...except in Africa' (Ibid:1995:1065). In general, the narrative gives a doomsday verdict of Africa. Africa is often seen as the exception, where traditional development cannot work. A consistent policy is hard to form from these scenarios. According to Roe, Except-Africa is a creation of outsiders (ibid:1995). It is the technomanagerial elite, the NGOs, and the media that formulate the view of Africa as a place where nothing works. Roe criticize people as recommending development more than making development work.

The *raison d'être* of the techno-managerial elite seems to be the crisis. What happens when one focuses on the latest crisis in Africa, such as 'desertification', is that one generalizes the whole region, and forgets the complexities. The questions of 'what do to with', leads to the view of 'Except Africa', where nothing will be done, because nothing will work. Instead of

just looking at the internal factors, we should look into the role of the outsider, who are the ones that formulate the 'Except – Africa' narrative, and look into how we can formulate development that will last longer than the next blueprint development narrative (Roe:1995).

Power is an important issue to assess in discourses and narratives, and thus in the formulation of development policies. Who has the power to influence the development policy, and who has the power in the recipient country, does again affect the effect of aid. Power may be seen as a result from relations between different groups of people. What needs to be explained is why some people have the ability to create power effects. Power requires freedom. The ones that are dominated need to have the possibility to make a choice that is limited by the power relation. This definition gives also the power right to define reality (Nustad:2003).

4.5 Resource curse

There is power in what is said and by whom, and since this power influences the definition the social reality, it is important to look beyond the narratives that are told, and look into the actors involved. The 'resource curse' is one such narrative.

Conventional wisdom often dominates the development theories. However, conventional wisdom may also change. The development theorist Walter Rostow (1960 cited in McNeish and Logan:2012), argues that natural resources were a necessary element for the underdeveloped countries to 'take-off'. Since the late 1980s, the consensus has changed to the opposite. Resource abundance can increase the likelihood of violent conflict, both as a motivator and for pro-longing of the conflict. A positive outcome of resources may therefore cause low socio-economical outcomes, and have negative political effects. This perspective has had an influential role on aid polices (McNeish and Logan:2012).

Tim Forsyth (2003), argues that science and politics are coproduced, and mutually reinforcing each other. The political specter is prevalent in the shaping of science. Politics are influential in the strategies for explanations of the reality, which creates a legitimized base for policy (Forsyth:2003). This perspective of the relation between science and politics, help explain the

impact of narratives such as 'resource curse' and 'desertification'. The scientific 'evidence' is provided in a beneficial way for the intended policies.

The concept of resource curse is one of the popular narratives of describing the 'problem with Africa'. The consensus from the 'resource curse' narrative, is that resource abundant countries in the global south are more prone to violent conflicts than less resource abundant countries. It is a paradox, because a high level of resources would otherwise presumably lead to economic growth, and hence, more stability. When examining African countries through a 'resource curse' lens, there is evidence that countries striving with violent conflict often are resource abundant. Even with large deposits of valuable resources such as oil, gas and minerals (i.e. diamonds), the countries do not reach above the developing stage, and the majority of the population lives on less than a dollar a day, according to Michael Ross (Ross:2003). 'The scramble for Africa' (Frynas and Paolo:2007) can describe both the imperialist bullying of African territory, and the way international companies and NGOs work in Africa today. The region has plentiful of resources is met with interest from both foreign investors interested in increasing their income, and NGOs wanting to 'develop' the region.

This 'resource curse' may also be a catalysator for violent conflicts. Homer-Dixon (1994) explains climate change as one of the reasons for more violent conflict. With fewer resources due to climate change there will be more violence over the distribution. Tor Arve Benjaminsen (2008) criticizes Homer-Dixon's (1994) analysis of resource conflicts. The essence of Homer-Dixon's argument is a narrative that has been strongly emphasized in international politics. There are two domaint arguments; i) the global climate change lead to drought, which again leads to resource scarcity, and ii) this resource scarcity leads to migration and new conflicts, or unleashes already latent conflict. Benjaminsen points out that there is often a more complex background than the scramble for resources. An example that is often used is the violent conflict in Mali, the Sahel desert. This conflict has been explained in environmental terms, but Benjaminsen has also shown that the conflict has a broader political and historical context than the scramble for land. Yet there is a wide spread acknowledgement of the Homer-Dixon explanation of a connection between climate change, resource scarcity and the risk of violent conflict. There is not scientific evidence of the 'desertification' of the

Sahel, and the main reasons for the conflict in the Sahel-area has historical and political reasons (Benjaminsen and Svarstad:2010).

This narrative of desertification is based on term of 'need' and 'scarcity', which are subjective terms. The needs of recourse are often based on human needs, and the scarcity created by humans. The scarcity of a resource is thus created by humans and not necessarily an environmental phenomenon. The conflict over the scarcity of the resource is then an example of the already political and historical dispute between the involved actors. Even though the scientific basis is not sound, the narrative has spread to international claim. It can help explain the conflicts in the Sub-Saharan Africa, without giving blame to anybody but the environment. The solution of these conflicts is mitigation for climate change, or reducing the scarcity of the resource, with increasing it. By doing this, the social reality of global actors and the influence they have, are diminished. The historical and political reasons behind are seen as escalators of the resource conflict (ibid).

4.5.1 Economic causes for the resource curse

If there is abundance or scarcity in a resource, there is a risk of conflict if the country has an ethnic fragmented population, with low GDP per capita, weak government, and a rebellious group. The economic causes are connected to the resource, because it can be both a motivator, and prolong the conflict (Collier:1998, Collier and Hoeffler:2000, Lake and Rotchild:1998). Yet it is difficult to separate economic factors from the social, political, cultural and historical factors, as Christopher Cramer in his article *Does Inequality Cause Conflict?*, points out (Cramer:2003). An unequal economic situation depends on the strengths of state and particular conditions on the society. Transition mechanisms such as ideological shifts, external interventions or changes in the relationships between groups may increase the likelihood of violent conflict.

The above mentioned arguments can be used as an explanation of the civil war in Sudan, and also how this conflict led to the secession of South Sudan. The oil abundance, the ethnical diversity, the poverty, and the weak governments are all present. The civil war can be

described as a 'resource conflict'. This explanation is an example of the impact of a narrative, and how this narrative helps construct the social reality of a 'resource curse' in Sudan.

Philippe Le Billon in his article *The Political Ecology of War: natural resources and armed conflicts* (2001) give a political ecological perspective on natural resources' effects on war. Le Billon (ibid.) argues that resource dependence leads to vulnerability, which is linked to the political economy of war. Violence is used as a demonstration to the rights for resource extraction. These linkages have major implications for peace. Le Billon argues that both the resource abundance and resource scarcity perspective are a simplified debate about the social constructed nature of resources. These perspectives fail to explain why a resource abundance or resource scarcity is not sufficient factors for a violent conflict. Michael Zimmermann (Zimmermann:1951 cited in Le Billon:2001) puts it like this; '*Resources are not, they become*'. From a political economy perspective, the transformation from *nature* to a *resource* is based on the conditions, means, and forces of production.

Water is a typical example of a natural resource which has multiple roles, from symbolic importance to materialistic use. The role of 'water' depends on the perspective of the affected interests. Several factors participate in the resource linked conflicts. One is the dependence upon valuable resources the society has, and the 'conflictuality' on the political economy. Le Billon (2001) states that the spatial distribution or 'lootability' (Le Billon:2001:566) affects the accessibility of the resource and how easy it is to extract it. The total effect on the political economy, materiality and geography of resources influence the likelihood of violent conflict.

'The nature of war has again influenced the pattern of resource exploitation and state of the environment. It is a political ecology of war' (Le Billon: 2001: 566).

Most of the research of the 'resource curse' has focused on the factor 'greed', and this combined with failed state institutions and poor decision-making, are used as the key factors of the 'resource curse'. McNeish (2010) claims that one needs a further look into the historical grievances, such as gender, ethnicity, class, ideology, which he labels *resource sovereignties* (McNeish:2010:20). To solve the 'resource curse', there is a need for strong

institutions. These solutions are ideologically skewed, and according to McNeish there exist no consensus either in theory or based on empirical observations, about the form and influence of strong institutions (McNeish:2010).

4.5.2 Resource curse put into context

Resource dependence is a product of the global economy with relations to colonial powers, private transborder commercial interest, and elites (Le Billon:2001). Le Billon also refers to international aid as a resource, and that it creates dependence and can form local strategies of accumulation. Treated as a resource, aid in abundance can create dependence. A country in the global south with resource dependence often has weak economic performance and great socio-economic inequalities. Such a country has often a focus on securitization of resources, and revenues are used on the military. In unstable environment there is motivation for opponents, and the government will often protect itself from them. Resource rents are often used to reward followers and punish the opponents, and thusly shape political power. It is also the case of Sudan, and now South Sudan. The leaders and active opponents in the struggle between South Sudan and Sudan, wants their reward now that independence is gained. Foreign investors can also diminish the political opposition. Groups that receive little or no tax are often less concerned with government's accountability. A 'private' diplomacy is upheld with foreign investments (Le Billon:2001). However, with the tight political and economic control of the resource, there is little room for diversification in the economy. The gap between the rulers and the ruled increases, and the frustrated marginal groups sees political change as the only solution.

Michael Ross (2003) describes how resources may increase the risk for violent conflict; it can weaken the country's economic performance, it makes the government more corrupt, weaker and less accountable. These reasons represent an incentive to opponents of the regime to form an independent state, and to finance the rebel movements. He states that these patterns help explain 'the high rate of civil wars in Sub-Saharan Africa a region with many resource-dependent states' (Ross:2003:2). He emphasizes that an outburst of a conflict may have numerous causes; poverty, ethnic or religious grievances, and unstable governments. Though resource dependence increases the risk for a violent conflict, it is still rare outside of Africa. The author's emphasis on Africa and unstable governments with weak performances shows

how the 'resource curse' discussion has focused on the global south, with Western ideals as solutions (good governance, strong state, market economy). Ross (2003) summarizes his perspective on the resource curse in the following way;

'Many of the countries suffering from resource-based conflict are stuck in low-level development traps. In these countries - most of them in Africa - poverty, weak governance, and violent conflict reinforce one another. Left on their own devises, these countries will generate extraordinary hardships for their own citizens, and ultimately, impose substantial costs on the international community' (Ross:2003:26).

A lack of good governance can lead to violent conflict. Not only will it create difficulty for the local population, it is also a security risk for the international community. Ross (2003) underlines that due to the weaknesses of the governments in the respective countries; the international community has a responsibility to build up the government. If a violent conflict escalates, it is a threat to the international community. One of Ross' solutions is more transparency in the government, and he emphasizes financial transparency as a strong tool. In the next subsection I shall deal more with the discussion of solutions to the resource curse, and criticism towards these solutions.

4.5.3 Solutions and criticism

The proposed solutions to the resource curse have shifted from focusing on imperialism and dependence, to focusing on failures and inefficiencies in the state institutions of the global south, according to McNeish and Logan (2012). This is line with the general change in development politics. Before the 1980s, the general idea of development policy was that one shouldn't interfere with internal affairs. This changed in the 1980s, where the World Bank's conditionality program was launched, which included specific demands of the recipient countries (Simensen:2003).

The resource curse has also tried to explain why countries contributing to the global economy, have trouble with their local economy. The instability in international commodity markets is

transferred to the unstable domestic economy, which affects the reliability to government revenues and increases the risk for private investors. The damages of the economy of the Netherlands in the 1960, which was caused by the country's rapid use of its huge gas reservoirs in the North Sea gave rise to what is later referred to as the 'Dutch disease'. The 'Dutch disease' is;

| 'a condition in which a resource boom leads to the appreciation of the real exchange rate and in turn damages manufacturing and other tradable sectors' (McNeish and Logan: 2012: 10).

Many of the countries with abundance in natural resources are claimed to have an irrational behavior, which contributes to poor economic policymaking and institutional deterioration (McNeish and Logan:2012:12). This abundance can lead to optimism of what is doable, and can result in the use of excessive money. One way is that political actors fill their own pockets with money, through rent-seeking. Rent-seeking is when a government, company or private, generate economic benefits without creating wealth for the rest of the society. If one focuses on the state, resource abundance can diminish the state's capacity to handle their economic development. These perspectives share a negative attitude towards resource abundance countries. Though the origins of the 'Dutch disease' were in the Netherlands, it is now used more in relation to countries in the global south. This is also true with the general 'resource curse' debate, which is not used on western resource abundance countries (i.e. Norway) (McNeish and Logan:2012).

The rational-actor perspective is seen as one of the causal mechanism linking natural resource and likelihood of civil war. This perspective argues that resource dependent states can change their 'irrational' behavior through incentives from programs like 'Oil for development', which emphasizes capacity building of the state institutions and creating good governance. The program is actively involved in the negotiations over the oil between South Sudan and Sudan (Norad2012b).

Critics of the resource curse (as Stevens and Dietsche:2008 cited in McNeish and Logan:2012), argue that the reliance on strong institutions and democracy is more ideological than scientifically based. The 'Dutch disease' experience happened after all in a stable democracy with strong institutions, as the Netherlands.

4.6 My framework

The resource curse is a narrative that has been used on the oil situation in Sudan and South Sudan. Numerous articles have been written about the relevance of this narrative on the long-lasting civil war and these articles have most often doomsday perspectives on the future if this 'curse' is not solved (Basedau and Lay:2001, Carmody:2009, LeBillon:2001, Patey:2010, Ross:2003). With this 'curse' in mind, the focus from the international community has been on diversifying away from the reliance on oil. Since oil is seen as one of the dominant causes for the civil war, and one of the main reasons for the Heglig incident (where the South Sudanese army invaded the Sudanese town Heglig, Al-Jazeera:2012a) and the prolonged negotiations, resolving the 'oil curse' is seen as necessity in order to stabilize both Sudan and South Sudan. One suggested way of stabilizing the conflict is trough hydropower. With hydropower as an energy source, South Sudan will become less reliant on oil.

As I will show in the analysis chapter, there is an on-going debate about the likelihood of 'water wars'. Egypt has given strong signals of their 'right' to the Nile. If one follows the line of argument of the 'resource curse'; there is an increased likelihood of conflict over the Nile. Especially if one also include Homer-Dixon's argument of 'scarcity conflicts' (Homer-Dixon:1999). With climate change there will be more demands on the water. With all hydropower projects that are planned from other countries where the Nile runs, this resource is already under pressure. Privatization has also been suggested as a solution to the global water crisis, in the same line as the suggested solutions by the rational choice theorists regarding the 'Tragedy of the commons', mentioned earlier. With privatization of water, the natural resource is changed from a basic human right to a tradable commodity. Former vice president for 'Environmentally and Socially Sustainable Development of the World Bank'; Ismail Serageldin, declared;

'if the wars of this century were fought over oil, the wars of the next century will be fought over water' (cited in McNeish:2010:3).

4.7 Summary

In this chapter I have demonstrated how discourses and narratives can be used as political strategies to exercise power. The resource curse is one example, and it has influenced the debate on the civil war in Sudan. Due to the narrative's power, this will also influence how development strategies are formulated now when South Sudan is independent

My thesis studies a powerful development narrative with a similar modernist background, i.e. that energy leads to development, and its impact on policy in South Sudan. The arguments used in the debate about the development role of Norway in South Sudan is necessarily founded in a development discourse, and I aim to uncover the various linkages between descriptions regarding Norwegian involvement in South Sudan and this development discourse. The issue of hydropower is framed by various actors in different ways. One approach in the analysis of 'energy leads to development' narrative is to look for competing narratives that support particular interest and practices. These would involve narratives involving development and environment, connected to hydropower.

There are many ways to discuss the energy-development narrative in South Sudan and the implications it has for the new state. I have chosen to focus on the discourse, which are used by my respondents in South Sudan and my additional data, and used the data as *narratives*. In the next chapter I shall deal more thoroughly with the development narratives. These narratives describe the development discourse as we know it from academic and political debate of today (Benjaminsen and Svarstad:2010). I describe some powerful discourses from the development aid agenda, and then how these influence aid policy and projects. Regarding Norway; I will show how the leading discourse also leads the Norwegian political agenda.

Chapter 5: 'Development' as an Academic and Political term

5.1 Introduction

Development is a term for which there exist a great number of definitions, each with a set of perspectives connected to it. My thesis touches on this seemingly endless debate, and I will discuss both traditionalist and more radical understandings of the term. I have previously discussed the meaning of discourses and narratives, and I will now present some analysis of the term. I used the narrative perspective in order to understand different development theories, how development theories can be understood as different narratives. This is a way to pair the various parts in the thesis.

In order to discuss the narrative 'energy leads to development', I shall give an overview of the term 'development' as an academic and political term. My goal is to provide a discussion of how the respondents from both the South Sudanese and the Norwegian side see development, and how this again affects their view of the hydropower projects. In the end I will discuss how these development theories can be used as *narratives* within the development discourse, and how this affects the energy – development.

5.2 Definitions

To find an objective definition of the term development seems an impossible task. This can be connected to the power of discourses. These discourses often have powerful actors behind, who are leading the discussion, thereby deciding the definition (Benjaminsen and Svarstad:2010).

To start with the discussion; development has traditionally been understood as economic growth, industrialization and modernization (Bull:2003). The opinion of how the term can be understood has changed during the recent years, Potter et.al (2004) points out how development can be understood in several ways. Development can be economic growth, sustainability, improved living conditions or good governance. Some, including Arturo Escobar (1995), criticize the definition that states a positive link between development and economic growth, by focusing on how it increases the gap between the rich and the poor.

The 'invention of development' began after World War II, in a period when there was a wish to formulate comprehensive development strategies for countries affected by the war, and for 'Third World countries'. A visit to Columbia in 1949 by the World Bank concluded with a need for 'multitude of improvements and reforms' covering all aspects of the economy (Escobar:1987:429). This was the beginning of strategies aimed at countries characterized as 'underdeveloped'. A discourse was developed around this concept, which included the necessary techniques to reach the goal. According to Escobar, this creates a 'professionalization of development' (ibid:1987:430). The politics of development was professionalized through existing disciplines or creating new, such as development economy. There was also an institutionalization of development, were discourses where modified into operation; i.e. through NGOs. Through the NGOs the knowledge of development is used, and it creates a network of power. The creation of 'development economy' was developed around Western Economy, and was build upon the theory of 'Homo Oeconomoicus' (ibid:1987:437). When viewed with anthropological eyes, it is easy to see that 'development economy' from a Western perspective has had significant impact on the institutions and culture in the 'Third World' (Potter et. al:2004).

5.3 Economic growth as development

The introduction of 'development' as a theory has led to different approaches. Many of these approaches, ranging from classical-traditional, alternative and bottom-up, radical-political economy to the dependency and historical- empirical approaches, have a dualism. This dualism is the division of 'modern and western' on the one hand, and 'backwards and underdeveloped' on the other hand (Potter et. al:2004).

Many of the development strategies, such as modernization and dependency theory, originate from the post World War II-period, and focuses on the weakness of the public sector, and how the public sector impacts the economic growth. These strategies are based on economist theorists, such as Adam Smith and David Ricardo (Potter et. al:2004). These theorists have inspired the neo-liberal strategy. This includes privatization of public owned utilities and a reduction of governmental economic regulation (Pollitt and Bouckaert:2004). During the 1980s, Ronald Reagan, President of the USA, and Margaret Thatcher, Prime Minister of Great Britain, were influenced by this, and this lead to an increased role of market principles in the

public sector. These principles influenced also the Bretton Woods Institutions, such as the World Bank and the IMF, who developed structural adjustment programs (SAPs). These adjustments were broadly speaking to reduce the public sector in the recipient countries, and to give room for the free market and private sector (Potter et. al:2004). Even though the state has had a central role in the development of Western countries, the preferred aid policy from Western countries over the last thirty years has been to reduce the role of the welfare state. The main reason for this is that the welfare state is said to be the ultimate threat to the market system (Potter et. al:2004).

Economic growth can be seen as the quantitative change to create development. With economic growth, modernizations provide for increased consumption and providing basic needs (Potter et. al:2004). The core values of Western modernism (education, cities, industry, democracy, science, and judiciary) will enhance the economic growth and welfare. As I will show; there is power in defining the problems, and creating instrumental solutions. This power in defining the problem is especially visible in the 'development' term, which is seen to have several conflicting problems. Development is seen as a provider for economic growth, but can also create a dependent process. The national progress can improve, but the spatial inequalities may increase. Development through western lines can undermine local cultures and values. It improves the provision of basic needs, and can create sustainable growth and good governance. Still it can be environmental unstable, and infringe human rights and undermines democracy (Potter et.al:2004).

The conventional debate about development has been based on authoritative intervention, where Western ideals are the guidelines for going from 'underdeveloped' to 'developed' (Scott:1998). The post-colonial growth theory was based on Keynesian¹ economy, which also was the foundation of the European recovery program, the political agenda of the US and the nationalist developmenatism. The planning systems, aid mechanism and economic growth models creating the background for planning growth in the global south, and to recapilate the historical experience in the West (Potter et.al:2004).

¹ Keynesianism argues that the state needs to have a strong role in the market, in order to promote growth in capitalist systems (Potter et.al:2004).

Criticism to the conventional development theory began to surface in the 1960s. The eurocentricism in the development theory was particularly criticized. These westernized development theories continued to make the West as the beneficiaries, and the global south the 'looser' (Potter et. al:2004). One of the major criticisms of the eurocentric development strategies was that 'development should come from below'. The diminishing role of the state became evident in the 1980s. However, there were also those who rejected development as a whole. The general thread of the post-developmentalist or post-structuralist is the language of discourse, and how the West has created 'crises' such as poverty, underdevelopment, and desertification. The actors behind the development discourse use their power to map and create solution in the Western ideology frame. Anti-developmentists put emphasis on the development from below, and the impact of new social movements as the actors of change (Potter et. al:2004).

This anti-development theory has certain similarities to the dependency theory of the 1970s, which also emphasized the power relations between the west and the global south, and how the former use their authoritive power to influence the latter. The criticism towards the dependency theory has been that it romanticizes and universalizes the lifestyles of indigenous people. It also overestimates the power of discourse. Even though the dependency theory is a creation of the criticism of the modernization theory, it is still based from Western ideology, and has also a creation of 'problems' and 'solutions'. The change is how they from the debate and the definitions of what the causes of these problems are (ibid).

Since powerful discourses influence how we view the world, it will also influence policies and strategies. A powerful development discourse may create a homogenization of development aid. This reflects a view of non-Western countries as the same, and that the basic need is development. Theories such as modernization and dependence ignore the differences between pastoralists in an African village and citizens in Asian states. This homogenization is a product of what the models are supposed to be used for - they are tools for practical development policy, and the definition need to come with a practical solution. Poverty as a result of lack of development may be solved by technological solution. This way of defining poverty separates the richness in the Western world and poverty in the global south. The causes of this poverty are internal for the countries. From the beginning development aid has

been a political project, which is important to remember now that this policy has been depoliticized. In the start of development aid, poverty was viewed as representative of a different time zone, and that the countries in the global south needed technology to 'catch up' (Nustad:2003).

5.4Development for whom?

The critics of the homogenization of development aid can be met with the question of 'Whose development' we are discussing. Emma Crewe and Elizabeth Harrison (1999) argue how the construction of 'evolution' has been merged into the development debate. The notion of 'evolution', and that every society goes through different stages from 'traditionalist' to 'modern' describes the very idea of development. This way of thinking shape the world view, and are often assumptions that are taken for granted. Even though the assumptions vary between institutions, the basic idea of 'evolution' stays mostly the same. As Crewe and Harrison (1999) argues, it is difficult to discuss mental constructs that are more *implied* than *spoken*. The assumptions are often tied to social and political relations, and thus can be connected to ideologies. The very idea of development being a sort of evolution connects to a diverse political specter, both neo-liberal and Marxist theory relies on evolutionist assumptions. It reflects that the idea has a broad historical specter, and that the common denominator is the movement from static to economically growing societies.

The idea of evolution justifies foreign intervention, and can be dated back to the colonization of Africa. One of the objectives to development was to enable countries to 'catch up'. This idea also constructs categories of people, referring to 'us' and 'them', where 'them' were often pictured as underdeveloped. These categories have been used both negatively and positively, for example with Jean Jacques Rousseau 'noble savages' (Rousseau 1712-1778 in Crewe and Harrison:1999). Though these categories are now unacceptable, there is still some evidence of the categorization of 'us' and 'them' left. For example, one popular categorization is that rural people are more environmental friendly than urban. There has been a shift from the grand theories of modernization and Marxism, to a more local perspective, where there is much weigh on local knowledge. However, this creates a problem of whom the 'local people' are, and who has the right to define who they are. The paradigm shift has not lost the emphasis of 'they' having the 'problems'. James Ferguson (2006) argues that the term 'civil

society' has discursive origins, meaning that it is socially constructed. One has to look into what the 'civil society' means in the different countries. The representation from NGOs can often be strongly connected with the government, making the 'NG' representation weak (Ferguson:2006:101).

5.5 Technology ladder

One of the 'problems' with traditional culture is that it is often presented as static, which will be transformed to develop with technology. Crewe and Harrison (1999) refer to it as the 'technology ladder'. The image of modernity without technology is not possible. Technology has been seen as a necessary precondition for social progress for a long time. It has come to the point of technology progress being synonymous with development. Technology is a way of 'taming nature', and controls it for human benefits. It is a catalysator for a more efficient economy and targeting poverty reduction. It is also emphasized as being 'neutral'. If the technology fails, the blame is laid on local conditions, such as people's attitude or project management, not on the assumptions of technology as a catalysator for development. The 'problem' is defined as a lack of technology, and the solution is then more technology. Though technology can help people improving their daily life, poverty is not solved by technology alone (ibid).

Poverty is often connected with political and economic inequalities, but these are issues far beyond the scope of the 'technology ladder'. Since these issues are a complex social problem, it is easier to develop strategies targeting the more technical problems. The motivation for technological change lies in the 'rational economic man', which has his own materialistic interest at hand. This individualistic attitudes help understand the shift in the 1980s, where private sector was seen as an important development actor. Today this sector is also considered to be one of the most important actors to have on board, and the technology ladder is often brought in through private companies (ibid).

There is then a view of poverty as an instrumental value, which can be solved by an instrumental solution. The 'crisis' of poverty is explained by the lack of technology. The definition of both the crisis and the solution is made by powerful actors, which can be state

officials, or representatives from the private sector. Since the definition of the problem often is made from the outside, there is a risk of diminishing the local community's definition of what is needed. Culture is often seen as barrier for development, and that the local people's behavior is the reason for failure of development projects. 'Evolution' as development is kept dominant by international systems which divides the world into categories of 'developed' and 'underdeveloped' (ibid).

5.6 What is 'Africa'?

When talking about the geographical landscape of 'Africa', the language has often a moral concern. The language is in troubled tones, and 'Africa in crisis' is the domaint picture. It is an example of how the development narratives influence the language. The 'crisis' in Africa is an explanation of how 'they' are different from 'us'. Africa represents the radical other, which is the opposite of the Western progress. Africa is depicted as what is absent, such as development and modernity (Ferguson:2006). This is in line with Roe's (1995) argument that there is a development narrative of Africa as the exception. The 'underdevelopment' is an anomaly, which needs explanation. This definition of Africa has resulted in both defining the region as 'backwards' and 'tradionalistic'. For some the modernity is seen as the solution, and for others this will 'destroy the culture'. In recent years the literature on Africa has focuses on how the African countries 'fail' in what they are supposed to do (Ferguson:2006:8). This perspective shows how the narratives have a normative background.

As Ferguson (2006), has shown, the idea of 'Africa' is that it is either 'backwards' or 'beyond the scope of modernity'. Critical scholar of these evolutions timelines have focused on the alternative definitions of modernity. The idea of modernity began around the decolonization time, where there was an emergence of 'new nations'. This perspective was used to help define the inequalities between the 'developed' and the 'underdeveloped' world. The concept of 'modernity' was connected with scientific technology, liberal democratical politics, and secular world views. The degree of which the societies differed from the modern was indexed as their 'level of development'. The development narrative included a scale of modernization, which the countries not yet developed, could use as a step ladder.

5.7 Summary

In this chapter I have presented parts of the debate considering the term 'development'. This debate complicates the issue of 'creating development'. There is an also an issue of *who* the development strategies are shaped for. Most often the decisions-makers are far from the area of which the development policy will apply. The spatial distances are made larger by the constructed differences between 'us' and 'them'. This perspective is necessary to have in mind when discussing the hydropower plans in South Sudan. When viewed closer, we will see how these projects are influenced by powerful discourses, which again are formulated by powerful actors.

In the next chapter I will begin the discussion of how the 'energy leads to development' narrative influences the Norwegian aid policy, and more specifically their involvement in South Sudan.

Chapter 6: Discussion – Norwegian aid policy

6.1 Introduction

Due to Norway's strong linkages to the US after the World War II, the Norwegian government wanted to follow the same political tendency shown from the then US President, Harry S. Truman. The Norwegian government also considered aid to poor countries in the Third World to be a possibility to show international solidarity, in accordance with the dominant political party (the Labor Party) view (Nustad:2003,Simensen:2003).

The Norwegian business sector was from an early stage involved, with an aim to expand Norwegian companies through development projects. Norsk Hydro is one example of companies growing due to aid projects. The choice of partner countries was a mix of Nordic cooperation and geographical concentration. With the decolonization, many of the countries were in a process of state-building and development, much as South Sudan is experiencing now. Post WWII Norway could identify with this state building, as Norway received Marshall aid for rebuilding the nation. Thus, Norway identified with the newly-independent nations. Norway has, both nationally and internationally, a role as hydropower and oil experts (Mcneish and Logan:2012,Tvedt:2009) Norwegian companies often get the chance to develop a market in the partner countries through the aid from the Norwegian government. One effect of this was that the local knowledge and capacity to maintain the development projects were often neglected. The external knowledge was imported, to the receiving countries among the locals.

6.2 Modernistic perspectives of development

In James C. Scott's book; 'Seeing like a state' (1998), he argues that the state often has a certain agenda with the development project. The development planning is often based on the idea of 'high modernism'. The powerful actors behind are often capital entrepreneurs and state actors, which have a strong influence in planning of state policy. The perspective that infrastructure is a necessary factor for development is shared by the narrative of 'high modernism'. Large scale infrastructural plans are then made to improve the living conditions

for the population, and help the country develop. This perspective can be drawn back to end of World War II, and parallels with the idea of development. High modernism, as development seen as economic growth, is 'founded' by actors such as engineers, architects and technicians. The idea was that a strong state power was necessary to bring change into people's lives. These projects often serve political interest, such as hydropower producing electricity in order for investors to be interested.

Scott (1998) argues that the state's authoritative power is increased in 'crisis' situation, such as rebellion, war or secession. In South Sudan, the post-war situation and the threat of a new war with Sudan, may classify as a 'crisis' situation. The government is then the strong, controlling force, and has the authoritative power over the people. Due to the legitimate election last year, the power of the South Sudanese government cannot be questioned from the outside. The government in Juba is kind of 'elitist', because they are in control over much resources and power. This is reinforced by their background as a rebel movement, and defenders of the independence. Without the SPLM/SPLMA, there would be no independence. They are widely respected and have much power. There is also a lack of opposition, which strengthen their power even more. The government of South Sudan also gets respect for fighting the common enemy; Sudan. The new independent nation is faced with many challenges, but also opportunities. The opportunities are often linked to the resource abundance of South Sudan, which General Joseph Lagu argues; 'South Sudan is a land of abundance, with plenty of oil, gold, water, and pastoral land.' – General Joseph Lagu.

From my interviews with different officials from the government, I got the impression that the rhetoric around development in South Sudan was based on the modernity perspective. As Isaac Liabwel, the undersecretary of Ministry of water resources, put it; 'We need to think big now, and catch up.' Here he refers to the debate around large-scale hydropower projects, and the statement illustrates the modernistic perspective of development. The technological solution of hydropower is seen as a solution to the poverty in South Sudan, in this case represented by the lack of electricity. With this statement he also illustrated the 'impatience' of becoming developed. Liabwel referred to the late President of Southern Sudan, and the leader of SPLM; John Mabior Garang; 'Late hero and founder of our nation Garang said that one should not start where the world began, but where it is now.' This is also what Liabwel

means when he talks about 'catching up'. The statement refers to the view of development as economic growth, and that with certain steps a 'traditionalists' country can become 'modern'. 'South Sudan is trying to climb.' – Loboso Cosmo Manse, South Sudan Electricity Cooperation. As we can see from this quote, the language in the development narrative is referring to a modernistic perspective, which includes 'climbing up a ladder'. It is an illustration of how development is viewed as a 'progress from traditionalist to modern'.

The idea 'development' in South Sudan, by my interviewees, is then often connected to construction of infrastructure and physical evidence of modernity. This is often common in new regimes that will show the state's power. One example of this is the construction of the High Aswan Dam in Egypt. This dam was the 'pet project' of the then President Nasser, which wanted to give a physical evidence of Egypt's power, after the coop against King Farouk (McCully:2007).

6.3 'Taming nature'

Scott (1998) defines high modernism as a strong version of the beliefs in scientific and technical progress that were associated with industrialization in the Western Europe. It is paralleled with control of nature. The benefits of scientific and technical knowledge will be used on the society to improve human living conditions. The welfare of the population became an end in itself, not only for national strengthening.

Many of my respondents among government officials argued in the same lines as the high modernism. However, this idea of high modernism relies strongly in their ideology and belief in scientific and technical knowledge, in a degree that other criticism is not relevant. The state's simplification of the social context through 'mapping' of the social context does not have room for alternative views. It is also the state's responsibility to create social transformation and state building. In the 'high modernistic' terms; it is the state's responsibility to transform technically backward population into the twentieth century (Scott:1998). In relation to South Sudan, this would imply that the government makes plans for the development of the whole country. One of these plans is the construction of hydropower. As I mentioned in the chapter on methodology, I had difficult to get access to the

representation of civil society. When I asked about this to my respondents, they often referred to that there was no civil society. This view puts even more power into the state, and they are then the sole procurers of the definition of development. In relation to hydropower, it was often talked about providing the information about the project to the local population. The acceptance of information was there, but more from a top-down perspective. The hydropower projects are involved in the general state plan fro development. This plan has often a simplified version of the social reality. This simplification makes it difficult for counternarratives to emerge. When my respondents talked about how the hydropower project is supposed to create development, the answers I often go to was that it would attract investment. With investment, the development would come. I tried to push the questions of investment, and what type of legislation was in place. However, there is weak legislation in the country, making it easy for investors come in without giving anything back. The assumptions can be defined as 'development effect that trickles down'. It refers to a linkage between investment and development that is commonly known, but without much scientific proof.

'Hydro can increase the economic potential.' – Simon Nyongong, Ministry of Water Resources.

'Economy is struggling, and industry is needed. Without power it is difficult'- Patrich Schaefer, Fitchner.

'Almost everyone is here, it is a rush to get in here. Grateful that they [foreign investors] come her, will impact [the development of]South Sudan.' – Victor Wurda Lo Tombe, Ministry of Environment.

'This resource can develop South Sudan alone' – Joshua Franco Paul, Ministry of Foreign Affairs and International Cooperation.

6.4 Reasons for involvement in South Sudan

Norway's involvement in South Sudan can be drawn in a bigger global picture. The influence of former Norwegian Minister of development, Hilde Frafjord Johnsen, is not to be diminished either. Her role in the CPA is often brought up by my respondents. Her friendship with John Garang was also beneficial for Norway – South Sudan relations, because it gave an insight to a group which many defined as a guerilla group.

Norway has experience and expertise something South Sudan will benefit from' – Bojoj Moses, University of Juba.

These are some of the reason for the strong link between Norway and South Sudan, which is linked back to Norway's long involvement with the country. One of my questions during my interviews was regarding this link. My respondents were mainly positive to this link, and Norway was ultimately seen as a good actor, with the best for South Sudan in mind. I again have to emphasize the importance of *what* is said is the main point of narratives. This example is an illustration of how many of my respondents viewed the role of Norway in South Sudan. The overwhelmingly positive response I got can be analyzed as evidence of the good Norway is doing. It is also an example of how narratives are influential. Norway's reputation as a 'peacemaker' and being 'green' is strong in South Sudan. The contrast is the reputation of China, which is often synonymous with 'bad quality work' and 'only in it for the money'.

6.5 Norway's as a 'green development actor'

The above mentioned perception of Norway as a 'green development actor' is in line with the official aid policy of Norway. In a plan from 2007 (*Initiative for Clean Energy in Development*, UD:2007,[my translation]), it is stated that there has been a general notion in the international development debate that access to clean energy is an important for poverty reduction and a prerequisite for economic growth. It is stated that clean energy is a way to sustainable development.

In the preface of the Norwegian government's action plan for environmental aid policy, the former development minister, Erik Solheim, argues that the government's goal is for Norway to take the leading role in environmental aid in order to reach the Millennium Development Goals (MDGs). Access to energy for the poor is necessary in order to reach the MDGs. One of the concrete goals is to support small power plants, and to see that this is developed in correspondence with water needs, flood control and irrigation. The Fula falls project in South Sudan can be seen as one examples of Norway's environmental aid policy. However, there is a need to look beyond the statements in Norwegian aid policy, and to look at the assumptions behind.

In an article in Dagsavisen (Solheim:2012, also published at regjeringen.no), Solheim illustrates how Norwegian development policy focuses on energy access for the poor. Since Norway wants to contribute to stable economic growth in Africa, Norwegian aid policy is focused on how to enlarge the electricity access without burdening the environment. He uses the example of the Fula Rapids project in South Sudan, and how the purpose is to enable development and economic growth through electrification. The title of the article is 'Hydropower for development' playing on the name of another Norad program; 'Oil for development'.

Norad (2012) argue in their annual report '2011 Energy for sustainable development', that access to energy is vital for social and economic development. The report continues to argue that energy access is perhaps the single factor that has meant most to the development of modern societies and their citizen. It can transform lives. There is 1, 3 billion people without access to electricity, and one of Norad's main agendas is to increase the access to electricity. There are challenges connected to the dilemma of environment or development, thus; Norad focuses on clean energy. Clean energy will be less harmful for the environment, and will also help increasing the access to electricity to the global south. Renewable energy is included in the pursuit of sustainable development, and the principles of good governance (transparency, accountability and anti-corruption) are also necessary elements. Norad claims;

'there is a substantial demand for Norwegian assistance related to clean energy- a testimony to Norway's reputation as a responsible and competent partner' (Norad:2012:3).

The language in this statement is clear; Norway has a responsibility to ensure access to clean energy for developing countries. It is an example of the narrative of Norway as a 'good actor', thus having the responsibility to 'help' other countries. It is a testimony of the 'collective we' as Terje Tvedt (2009) refers to. This wish to 'help' goes back to the start of Norwegian aid policy. With the Norwegian membership in NATO, the Norwegian government wanted to do something that was a counterweight and 'making up' for being a part of NATO. This was during the Cold War, which divided the world into two rough parts. This was also true when it came to development policy. The two sides of the Cold war directed the aid to different countries, and then dividing the world even more.

'Norway is very good with economy and oil, does not have interest in political affairs.' – Alison Faruk Robert, Ministry of Foreign Affairs and International Cooperation.

Robert shows here the assumption of Norway's as a 'good' actor in international affairs. This is line with the official aid policy, but it does not take into account Norwegian political interest in aid policy. From the beginning Norway's aid policy has been inspired from the Euro-American politics. Even if the aid policy was seen as non-political, the undertone was clearly political. Knut Nustad (2003) argues that the aid policy follows with a certain power. If one follows the narrative perspective, one can see that the actors defining the problem also have the power. The role of Norway as a 'good and green' actor is based on Norwegian common resource management. This is based both on the experience from hydropower (NVE:2012a), and management of oil revenues. However, both oil and hydropower had environmental consequences. This is commonly known with oil, but more disputed with hydropower. I will get more into this in the next chapter. For now I will emphasize that the role of Norway as a 'green' actor is mostly formed by the inside. It is a narrative that is produced by powerful actors, such as the Norwegian government, and engineer, consulting and other companies working with hydropower. The role as a 'good' actor is also mostly formed from the inside. The aid donors are also the ones formulating the aid policy. The

problem and solutions are produced by the same actors. Since there is power in what is said by whom, Norway has power when developing aid policy. The narrative they tell is also based on a belief that 'we' have the responsibility to 'help them'. This is based on a view of us as 'modern', and they as 'backwards'. Though the traditional development theory that depict development as a linear process has lost most of its followers, it is still evident in today's development policy. The words are not the same, but the attitude can be said to be most of the same. This is also emphasized by Ferguson (2006), who argues that it is a temporal and spatial division of the world. The countries are in different time zones, where 'they' have not 'caught up'. Hakim Tiberius, an engineer who has involved in the hydropower projects from the start, illustrates this by claiming;

'To catch up, believe countries like Norway can help' – Hakim Tiberius, SMEC.

Tiberius refers here to development of South Sudan as 'catching up', thus referring to the modernization theory of development. The argument is that certain elements need to be in place in order for development to happen, and one of these elements is energy. In the next chapter I will return to this point. Norway is presented as a 'good and clean' actor in most of my interviews. This was related both to the general Norwegian involvement in South Sudan, but specifically the hydropower projects. This view was backed up by referring to Norway's long experience in hydropower. It shows how the narrative of Norway as 'good and green' is re-narrated by other actors, thus presenting it as the social reality. However, as I have shown in the theoretical chapter, there are often numerous narratives with different presentations of the social reality. Thus, one has to go behind the narrative, and see who produces it, and what interest it serves. The actors behind this narrative are often powerful actors, which is directly linked with development work. If one wants to look beyond the narrative, one has to look at examples of how Norway has not been 'good'.

'Just wait, in a couple of years we will be just like Norway.' – Informal conversation.

This informal conversation is an example of the answer I got when discussing Norway's motives for involvement in South Sudan. I asked this question during my interviews to get an

idea of how the idea of Norway was narrated in South Sudan. Often the answers I got indicated that Norway's role was somewhat 'samaritan' (Tvedt:2009), which means that Norway do not have any motives, and 'generally wants to help'. Though this might be the case, this narrative block out counter-narratives that may show how Norway also has interest in investing in the country. Hydropower is one example. Consulting companies are often involved in these types of projects, and they have interest of seeing the project through.

'Norway is not like China' – Hakim Tiberius.

Tiberius refers here to the general negative view of China in developing countries, especially in Africa. The Chinese construction is generally viewed as bad quality, and that the Chinese are only in the country for the oil revenues. Tiberius is contrasting the role of China with Norway, thus presented Norway as 'good' opposite China as 'bad'. There is a lack of scientific evidence, and this narrative is based on one presentation of social reality.

'Norway can relate. They were colonized by Sweden'- informal conversation.

Norway's relation to South Sudan has links since before the second civil war. Since Norway has been present in the country drying the struggle, South Sudan feels a strong bound with Norway. This bound is often referred with the example of Hilde Frafjord Johnsen, as I have mentioned. The statement above present Norway as having the same experience as South Sudan, and can then relate. Though this statement is extreme, especially for me as a Norwegian, it illustrates again how Norway is presented as a 'good' actor.

'Norway does a big job, very good thing. Perfect, dream come true.'- Informal talk; Yonas Michael Gebrewubet, SMEC.

This informal talk was mainly focusing in Norway's representation in Ethiopia, where Norway also is involved with hydropower projects (NVE:2012b). Still, it illustrates how

Norway is look upon internationally. This presentation re-enforces itself by both developing aid policy with this perspective in mind, and by getting the confirmation by outsider. However, this presentation is based on the dominant narrative, and does not add alternative perspectives.

To demonstrate some challenges of Norwegian development assistance, I will use examples from Tanzania and Nepal. The first example is from Tanzania. In the beginning of the 1970s a project called the 'Stiegler's Gorge' was suggested from the Norwegian side. It was project within Norwegian expertise. The problems started when the environmental evolution begun. This was a new field in the 1970s and it changed how the hydropower projects are thought off. In the end the project was never realized. From the Norwegian side, it was decided that the Tanzanian government should take the responsibility. Despite that Tanzania's water and energy directorate; Tanesco, had been reluctant to the project from the beginning. A critical report from a Canadian company was also toned down (Simsenen:2003). In general, the skeptic to the projects was muzzled down, making it appear as the project did not have any consequences. This is a product of a strong narrative. It is also an example of how counternarratives bring valid information into the presentation of social reality. If the environmental concern was listened to from the beginning, the project might adapt and limit the negative consequences.

The second example is from Nepal. This country is often presented as similar to Norway, due to the rich natural resources and high mountains. They then share the potential for hydropower development. One project in Nepal is the Khimti project, which proves ¼ of Nepal's power. It was a strong collaboration between Statkraft and Norad (Liland and Kjerland:2003). It shows how the presentation of 'Norway' often involves both consulting companies and the government. The mix of these can make it unclear what role 'Norway' has. For the consulting companies, they have an interest of investing in project that will give return back. For the government, they may have mixed motivation of both 'helping', but also to provide good relations with other countries. There is a strong linkage between Norwegian foreign policy and the aid policy (Nustad:2003).

This last example is especially relevant to South Sudan. The involved actors in the suggested project is both from the royal Norwegians embassy, Norad, NVE, Norfund, Norconsult and NorPlan. The different actors have the same perceptive of hydropower as a provider of clean energy, and that it can help provide a more stabile energy to South Sudan. These actors are both private and state actors, but share the same presentation of hydropower. It is then difficult to depict the various actors from the each other, because they share the same narrative. This limits the possibility of counter-narratives, and enforces the already dominant one. It is particular relevant to look into the consulting companies' role.

Usher (1997) refers to consulting companies as operating in a 'grey zone'. For both the project in Nepal and Tanzania, there was little room for alternative views. This provides a golden opportunity for the consulting companies, because their job is made easier when there are no counter-narratives. In principle the consulting companies should be neutral. However, the consulting companies are often Norwegian when there is Norwegian hydropower projects planned. There is often a wish to include Norwegian experience and equipment in Norwegian hydropower projects (Usher:1997). Norwegian experience and competence have made significant impact in several development countries, such as Mozambique, Botswana, Laos and Nepal (Simensen:2003).

This example can also be used in South Sudan. There Norway is represented by different actors, who all cooperate. NVE cooperates closely with the government and building capacity of state institutions, such as the Ministry of Electricity and Dams. There is institutional cooperation between NVE and Government of the Republic of South Sudan (GROSS), and NVE is also involved in the project of Fula Rapids. Both Norfund and Norad are also involved in this project, as well as the embassy of Norway, which coordinates the different actors' collaboration.

'Norway is necessary, because they have money and are leading in hydropower, respect Norway's handle on the environment.' – Hakim Tiberius.

'Norway is number 1, leading in energy'- Hakim Tiberius

With these two citations Tiberius supports the narrative of Norway as a 'good and green' development actor. Norway's role in both oil management and hydropower construction is internationally acclaimed (McNeish and Logan:2012,Usher:1997). When I pushed for answers to *why* Norway had this image, my respondents often answered that this was 'a known fact'. This presentation of the social reality has become the 'truth', and the evidence is not needed.

The project in Nepal was also presented as beneficial for the environment. With hydropower as the energy source, the reliance of firewood is minimized. The collection of firewood is often presented as environmental harmful and leading to deforestation. This is an argument that goes well with Norway's image of being environmental sustainable. With this image it is important to ensure that the development policy reflects this. However, the image of collection of firewood as environmental harmful is also an example of a narrative. This narrative is produced by development actors from the outside, which lays the 'blame' on the locals. It is a continuation of the division between 'us and them', and 'they' presented as backwards. This backwardness is here presented as collection of firewood, which leads to deforestation. This deforestation is also a narrative with weak scientific evidence (Benjaminsen and Svarstad:2010). It is presented as further evidence of the benefits from hydropower.

However, the energy from the hydropower may not be distributed to the local population. Thus, it will not diminish the firewood dependence. This argument is meant to show how the assumptions behind a narrative often do not have scientific evidence. There are two assumptions here; i) firewood collection are harmful for the environment, and ii) hydropower may diminish this harm. The 'problem' is lack of energy access and the 'solution' is another form for energy. The 'deforestation' is a dominant narrative in the development environment, and is also a visible perspective in the UN polices (Sustainable Energy for All:2012). The implications are that collecting firewood is seen as harmful to the environment. The logic of hydropower is that the production of energy will diminish the use of firewood. However, this is a simplification of the locals use of firewood, and it does not take into account the power relations and interests that exist in the sector, which will decide where the energy goes and

how the natural resources will be used. This is an example of how policies are legitimated by science and environmental explanations (Benjaminsen and Svarstad:2010).

This narrative is evidence of what happens when the producers of the narrative comes from the outside. The locals are not involved in the narrative, and then the 'solution' does not solve the lack of energy. Energy from hydropower relies on construction of grid network and increase the possibility for distribution. Without this, the energy cannot be distributed to other than large cities. This perspective is necessary to bring when working with South Sudan. The construction of hydropower may stabilize the energy access, but this is more aimed for the cities, not the general population. Further construction of infrastructure needs to be in place. The population in South Sudan live very scattered, and there is a lack of tarmac roads. These are factors that make the distribution difficult. They are arguments that need to be presented together with the narrative 'energy leads to development'. As with other narratives, the assumptions behind the narratives need to be questioned.

'Hydro is badly needed.' - Simon Nyongong, Ministry of Water Resources

This quote shows the assumption that hydro is needed, because there is lack of energy access in South Sudan. However, one needs to be aware that hydropower does not lead to energy access for all.

6.6 Criticism

In 'Dams as Aid' by Ann Danaiya Usher (1997), the author gives a critical outlook on the Nordic model for hydropower development. She criticizes Norway's dual role as both green and a 'pusher' for hydropower development. The Alta dam project is used by Usher (1997) as a local example, and the Pangue dam in Chile as an international example of Norway's dual role in this regard.

The Pangue dam in Chile is, according to Usher (1997), one example of how Norway has changed its opinion in meeting with donors. The Norwegian government was initially negative against the project, but changed after they met with the World Bank donors. This project was met with resistance, not just because of the possible negative environmental consequences, but also that the project was initiated by a private Chilean company. The aid perspective was weak. Upon this project the Norwegian government had been reluctant to cooperate with Chile. This was both because of the suppressive regime of Augusto Pinochet², but also that it was not defined as a developing country (Usher:1997). This example shows how the Norwegian government has changed perspective after meeting with donors. On the one side, this might be a good side, because it shows flexibility in the narrative. As in the case of the Pangue dam, this attitude changed after meeting with donors. These donors have an interest of going through with the project. This attitude builds up the narrative, and does not bring counter-narratives, for example from the local population in.

These examples show how the 'green' color of Norway sometimes is faded. Norway as a strong development actor, with additional experience in hydropower, has led to an assumption of Norway as 'green and good'. However, as with other narratives, it is important to look behind the statements, and interpret the assumptions. The 'truth' of this narrative are upheld by the same producers; such as Norad, the official Norwegian development policy, and certain NGOs. The critical alterative narrative is less present. In order to actual gain from Norwegian hydropower knowledge, it is important to show the weaknesses of the narrative as well. With depicting the assumptions behind, one can also develop the narrative to adjust to broader definitions of the social reality.

Historically, Norway has been reluctant to get involved in the political situation in the recipient countries. Especially after the fall of the Soviet Union and the end of the Cold War, the legitimacy of authoritarian regimes was weakened. The foreign politics became involved. When the Norwegian government moved the office of Norad closer to the office of Ministry of Foreign Affairs in 2011, the motivation was to adapt Norad's polices closer to the Norwegian government (Norad:2012:17). This can be seen as a clear example of the change

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² http://latinamericanhistory.about.com/od/20thcenturylatinamerica/p/pinochetbio.htm

in development policy in the direction of connecting aid polices to the Norwegian authorities' view of the political situation in the recipient countries. The World Bank report from 1989, 'Sub-Sahara Africa: From crisis to substantial growth' was an important element in changing the internal development debate. The change in Norwegian aid policy had an international backdrop, and the World Bank's structural adjustment program was one of the reasons. The general idea of development changed. The ideological change was more aimed at creating long-lasting, stable, economic growth (Simensen:2003).

In Knut Nustad's book 'Gavens makt' (Nustad:2003), Nustad discusses whether the Norwegian aid politics have been formed by the geopolitical landscape, and whether the development aid can be seen as a reproduction of the Western dominance over the Third Word. Norwegian aid politics was formed by the Euro - American politics, and therefore it has been formed by the membership in NATO. Development aid was seen as a counterweight to the NATO membership. Nustad talks about the 'power effect' of development aid. One of them is the segregation of time and place. The idea of underdevelopment refers to the countries as 'stuck in time'. Hence, the developed countries do not have responsibility for the underdevelopment, because they are in a different time-age. Walt Whitman Rostow's linear progress of economic growth is an extreme example of the reliance on Western modernism. According to these stages, there is no causal relation between the rich and the poor (Nustad:2003). With the change in the development aid policy in the 1980s, 'recipients responsibility' became a familiar term. It meant that the focus of the donor countries was more directed towards changing the value of the recipient country.

The notion of 'good governance' is now included in the term of 'development'. This is also evident in Norwegian aid policy. The reasoning is that there is a need for strong institutions in order to 'develop' a state. This is also evident in South Sudan, where NVE has worked closely with the South Sudanese government in order to create new legislation to energy distribution and energy policy. Norad is also involved in the development of the new legislation, with the 'Oil for development' program. The consensus is that a new state needs legislations and regulations, in order to secure benefits for the state and its population, instead of leaving its resources opens for foreign actors and their interests.

Terje Tvedt argues in his book, 'Development aid, foreign politics, and power- the Norwegian Model' (2009, my translation), that the formulation of the development aid and foreign politics is a result of an identification of a 'collective we' (my translation). Our national identify is only made useful in relation to others. With this perspective in mind, one can see how the Norwegian aid policy is influenced by the 'collective we', and that 'we' have responsibility of others. There is a dichotomous divide between 'us' and 'them'. 'The others' are here defined as something different form 'us'. It is an example of a discourse narrative which creates a monopoly of the how the development of a state should be. The process of development is made out from the perspective that the global south should benefit from it. There is a dualism connected to the Norwegian model. Tvedt also mentions the Norwegian model as a representation of Norway as a 'do good -regime' (my translation). The lack of development is seen as anomaly, of which the aid policy can change. The aid policy is supposedly neutral, and based on universal values. However, with the lens of a discourse analysis, this perception is 'dethroned'. 'Universal' values are difficult to define, mostly because the way we see the world are formed by our view of the social reality, which again is defined by the social structure we are in (Tvedt:2009).

6.7 Summary

In this chapter, I have discussed Norwegian aid policy, and how it is influenced by the global development debate. I have discussed the perspective of Norway as 'good and green', implying that Norwegian development policy focuses on sustainable development, which is beneficial for the recipient country and the environment. This is the leading rhetoric of the energy-related aid policy. The picture of Norway as 'good and green' is a picture that is build up both from the national and international side (Tvedt:2009) ,which is shown by the examples of citations by various state officials in South Sudan. With this perspective, Norway has a responsibility to bring in what they are saying; an increased energy access to the poor. In order to this the assumptions behind the narrative need to be changed. Though hydropower is an alternative, it will not provide electricity without the distribution network in place. In the next chapter I will go into how hydropower is look as a catalyst for development, and the types of challenges this narrative brings.

Chapter 7: Discussion: Hydropower as Development

7.1 Introduction

When reading literature on the construction of dams (McCully:2007, World Bank:2009), there is a certain language which formulates the debate. I feel it is important to place this thesis outside of the debate. I will not argue against the benefits or challenges that come with hydropower. Nonetheless, I will illustrate that the development narrative of 'energy leads to development' is dominant in influencing the Norwegian aid policy, and I will use the case of South Sudan. I aim to show how the language in the development policy is formulated by dominant development narratives. In depicting this narrative I will show how certain narratives construct our view of the social reality.

7.2 The narrative 'Energy leads to development'

There is then a dominant narrative that energy will lead to development. There are several political rationales connected to the narrative. It has three axes;

- i) The Development argument,
- ii) The Environmental and Sociological argument,
- iii) The Comparative advantage,

These narratives are mainly presented by state and government actors, and relevant companies. This narrative is present in the interviews and how the respondents reflect on the subject of 'energy and development'. The objective of the hydropower projects to provide South Sudan with a stable supply of electricity that will enable investors to come. These axes will be explained using data collected from my field work.

The *development argument* argues that there is a need for cheap energy, and that this need is essential for the development of the country. This need is illustrated by the government's prioritization of electricity as one of the main targets for their state building. Statements such as 'All development relies on electricity' and 'we [South Sudan] will not develop without [electricity] were repeated, mostly from government actors. Development is seen as involving

economic development, with increased trade and investment. The right of using the natural resource as a source of energy, places the human needs in the center (anthropocentric). Bojoj Moses emphasizes this view;

'Development is energy driven. Can't develop anything, need to have power. Modern technology needs the tools to do the job. Without power it is useless. Then one cannot benefit from technology.' – Bojoj Moses, University of Juba.

Second is *the environmental and sociological argument*, which stresses the importance of changing the reliance on fossil fuels to renewable resources. The use of fossil fuels is a threat to the environment. In order to mitigate the climate change, clean energy solutions need to be used. Hydropower is referred to as 'clean' energy and thus a preferred alternative compared to fossil fuels. This argument is backed by the international focus on 'renewable energy', 'sustainable development', and 'climate change'. South Sudan has an international responsibility to use renewable sources of energy. Alternatives to hydro, such as wind and solar energy, are seen as non-feasible due to the costs and capacity tied to these alternatives. With hydropower the idea is to develop alternative (to fossil fuels) sources of energy fast, which will diminish their reliance on polluting (both noise and air) diesel generators.

'Water is the main source for energy. We have that in abundance' – Honorable Henry Omai Akolawin, national assembly.

'Clean energy - is better for environment' - David Bateli, Ministry of Environment.

The above quotes show how the language of environmental benefits is used in favor of hydropower. The possible negative consequences are often seen as obstacles to mitigate. The increased dependency on hydropower may diminish the ecological resilience of the water source, creating more water stress. This might create scarcity of water, and diminish the livelihoods that are depended on the water source (International Rivers:2012a, McCully:2007,Usher:1997).

The *comparative advantage argument* focuses on South Sudan's large potential for hydropower, and how the exploitation of the natural resource may save the country from an 'energy crises'. This argument is backed up by comparing water with oil. Oil is also a highly contested resource, due to the conflict between Sudan and South Sudan. Since South Sudan relies on Sudan in order to get the benefits from oil (the pipe lines run to Khartoum), the idea is to use water as an alternative option. In this way, they are less dependent on Sudan. Some of the most ambitious plans even suggest exporting the excess electricity produced by the hydropower. However, this possibility will depend on the infrastructure development and grid construction. For electricity to be exported, tarmac roads and grid network needs to be built. The idea of South Sudan as an exporter of power is far in the future. These plans are also a signal of the government's idea of electricity, and how the prospects of trade and economic growth are the idea of development, not necessarily electricity distribution for the local population.

7.3 Development as 'change to the better'

One of the main questions during my interviews was 'how do you define development/what is development to you'. This question was meant to classify how different persons define development, and what it means for them and South Sudan. This was often answered with infrastructure, roads, tall buildings, etc., physical structure that can be visual proof of development.

[Development for you] is being self-reliant. Roads, education, health-will work from themselves. Villages will be connected to roads, environmental protections, schools clean water, etc.' - Stephen Will, Ministry of Gender.

[For you, development] 'generally means change. From bad to better in all sectors, in all ways of life.' – Loboso Cosma Manase, SSEC.

These quotes show how development is defined through physical change. Ferguson (2006) argues that development has often been depicted as a change from the 'traditionalist' to the

'modern'. In recent years this perspective has changed, to include 'alternative' modernities. However, as the quote shows, some of the same rhetoric is still present.

'The late Garang wanted to make villages into towns.' – Andoh Mensah, African Development Bank.

The symbolism is unmistakable. Andoh Mensah shows here how one definition of development is the change from villages to towns, clear evidence of physical change, and in this case, development. These changes were often connected to the importance of investments. Industry is needed for development, and this cannot happen without investment. It seemed that the government was open to investment. Many of my respondents were critical to the idea of South Sudan doing it on their own.

'Almost everyone is here. There is a rush to get in here.' – Victor Wurda Lo Tombe, Ministry of Environment.

There was little trust that South Sudan could do 'this' (development) on their own. Particularly one interview gave interesting perspectives on South Sudan's wish for foreign investments. My respondent was a government actor in the finance department, and had a long presentation on how beneficial the environment in South Sudan was for investors. Low taxes and a legal framework which would facilitate the conditions for investors were his main arguments. It even came to the point where I was unsure if he had understood my role (even though I had explained it before the interview started), and was trying to 'sell' South Sudan as country to invest in. This interview illustrates how many of my respondents emphasized investment as a key facilitator for South Sudan's state building and chance for development.

Several of my respondents referred to the lack of electricity as a major problem for attracting investors. Many of my respondents also emphasized that South Sudan depends on foreign investment to develop; they expressed a wish for investments in the country. Joshua Franco

Paul gives an example of the most common answer I got, when I asked about how electricity was necessary for development;

'Without light, no investors will come.' – Joshua Franco Paul, Ministry of Foreign Affairs and International Cooperation.

David Bateli, from the Ministry of Environment, emphasized the linkages between power (energy), investments and development, saying;

'Power is important, without power, investors are not interested, and industry development needs energy. If we develop hydro, investors will be interested'.

He sees hydropower as a necessary factor to create investment, which in turn will lead to development. These aspects of definitions regarding development are all part of the neoliberal development strategy. The line of arguments from many of my respondents repeated this neo-liberal development perspective. Typical illustrations of this perspective were when my respondents expressed the need for investments, and the need to create a good environment for the investments.

7.4 Hydropower as catalyser for development

As the above mentioned paragraph shows; it is taken as self-evident that with energy development will follow. The following citations show how the language represent the narrative of how energy leads to development.

All development relies on electricity' – James Adam, Ministry of Water Resources.

'Energy is important to kick start development of South Sudan' – Bojoj Moses, University of Juba.

'Hydropower is very important. We are coming from darkness, and have a long way to go. Hydro can tackle the problems ahead.' – Daniel Wan Nyombe, Ministry of wildlife, conservation and tourism.

'In the South Sudan there is now no power. In Europe the engine of development is power. Hydro can do a lot of things, one being the provision of energy' – Beck Awan Deng, SSEC.

'Any society needs electricity.' - Honorable Henry Odward, in the national assembly.

'No country can develop without energy' – Honorable Henry Omai Akolawin, national assembly.

Without energy, no development. Because development as we know needs energy, roads, improving living conditions.' – Hakim Tiberius, SMEC.

The perspective is that hydropower can help South Sudan develop. In this case, the development is presented as industrial and economic growth. The narrative can help explain why the South Sudanese parliament prioritizes electricity. According to one of my respondents; the parliament prioritizes the construction of hydro and tarmac road; infrastructure projects that will give physical evidence of the state's power. The construction of tarmac roads may also help the electricity distribution, because it is a necessary element of the grid network.

The language my respondents use is clear evidence of the rhetoric around energy and development. The two elements are seen as natural enforcing, and hence a necessary part of the development process. In this case hydropower is the source of energy, where we also see how the representation of hydropower as beneficial for development has gained confidence.

7.5 Hydropower benefits

On the other hand, criticizing the lack of standards internationally, but somehow forgetting the general lack of environmental concern that was dominant in Norway before the 1980, could be called eco-imperialistic (Usher:1997). After World War II, Norway began a 'building of the country', that did not take into account environmental concerns.

The World Bank (2009) argues that hydropower can contribute to energy security and improved water management, and this might also give benefits to the regional development. A proper water management might balance the upstream and downstream interest, and transform the potential conflict into a tool for cooperation and development. Again according to the World Bank, hydropower can offer opportunities for local development, if addressed early in the planning, and;

'Investments in road, social infrastructure, communications and skill building in large projects can be leverage to support local or regional economic development or to anchor growth poles across economic zones' (World Bank:2009:2).

In relation to the risk attached to hydropower, the World Bank emphasizes good safeguards as the way to minimize the negative social and environmental consequences. Hydropower is an unexploited potential for energy. The World Bank calls for capacity building on the risks connected to hydropower. The role of the World Bank goes beyond lending and also includes technical assistance, knowledge sharing, policy dialogue, economy and sector work, and a range of support provided during project preparation. They can be seen as having a dual role, with both financing and advising on hydropower. According to the World Bank; their ultimate goal is to maximize the value of hydropower resources, with the integration of principles of sustainable development (World Bank:2009).

7.6 Electricity access

A recent report from UNDP (2011); 'Toward an energy plus approach for the poor', shows that access to electricity does not necessarily lead to poverty reduction and development. This is a research based on surveys among the poor. 'The poor's voice' is often weak in development projects, and here the conclusion is that the poor wants assets, more than electricity. Roads and jobs are the requests that come from the poor in this survey. This report gives evidence of the gap between the elitist picture of what needs to be done in order to reduce poverty, and what the poor actually want. Though this report gives examples from Asia, the same trends can be seen in the development politics in Africa. As is seen in South Sudan, the hydropower project is a part of the development policy of Norway. The projects are supposed to give electricity in order to reduce poverty. However, as my interviews show, the distribution of the electricity is not yet clear, and it is not certain that the electricity will go to the poor. Thus, these projects may give more benefit to the elite in charge, and widen the gap to the poor.

Power is described as one of Africa's largest infrastructural problems, with more than 30 countries experiencing regular power shortages (Foster and Briceno-Garmenida:2010). These infrastructural problems are often connected to the economic problems of the continent, and that Africa's infrastructure networks 'lag behind' (ibid:2001:1) other developing countries. The solution is presented as private investment and strengthening of the institutions that will reform the state owned enterprises. A report from IEG, 'Lesson from World Bank Support to Infrastructure' (2011), argues that the role of infrastructure is to give equal access to economic opportunities and social services, thus arguing that infrastructure construction is a step in development of a country.

A report from International Rivers³; 'Infrastructure for whom?'(2012), also implies that there can be no prosperity without infrastructure, but that it does not necessarily benefit the poor. They criticize earlier World Bank strategies of neglecting the poorest group. Sub-Saharan Africa is often the most used example of the need for infrastructure. More than 1 billion

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³ International Rivers is an organization that works to protect the rivers and the rights of the communities that depend on them. Viewed 11.08.2012: http://www.internationalrivers.org/resources/about-international-rivers-3679

people have no access to clean water, electricity or improved sanitation. The previous strategies have not been able to handle this gap. International Rivers argue that infrastructure has become a buzzword in the development debate. As International Rivers states;

'there is a general agreement that a strong link exist between infrastructure investment, economic development and poverty reduction, yet official documents are largely silent on how this link works' (International Rivers:2012:4).

This quote is evidence of the link between energy and development, and that this 'goes without saying. It is a dominant assumption in the development debate of today. According to International Rivers (2012), Africa is the world's most hydro-dependent region, which can be seen as a contrast to the World Bank's argument that 93 % of the hydropower potential in Africa is unused (World Bank:2009). Even though hydropower is represented as a catalyst for development, there are a dominant number of countries depending on hydropower that are poor. One exception is Norway, that have more medium level hydropower projects, and not large-scale. One of the recommendations from International Rivers is that since the infrastructure needs of rich and poor differ, the prioritization needs to be done in an open, democratic process.

7.7 Hydropower in Africa

Still, the dominant narrative is that electricity is seen as a basic necessity for people, and hence a necessary development in order to reduce poverty. The World Bank, the UN, and the Norwegian government have argued that access to electricity is a way to reduce poverty (Norad:2012, Sustainable Energy for All:2012, World Bank:2009). There are numerous hydropower plans in Africa, and these plans are most often large-scale (International Rivers:2012b). These plans are based on statistical numbers, which shows that in Sub-Saharan Africa only 26 % of the total population has access to electricity (International Rivers:2012a). Hydropower could be one solution to provide electricity. However, the majority of people without electricity live far away from the grid-based supplies, which makes it difficult to get the actual access to the electricity that is produced. The distribution networks are underfunded, because most of the hydro based investments are earmarked for big hydro and

high-voltage transmission lines, which leaves little for the distribution networks. If distribution is not prioritized; new connections will not be built (ibid).

7.8 The process of hydropower projects

The consulting companies have standards to follow when conducting a feasibility study or an Environmental Impact Assessment (EIA). However, these standards are not universal; both the World Bank and the World Commission of Dams have their own guidelines. These guidelines are meant to make sure that the social and environmental impact is minimized and that the corruption in the dam industry is limited. On the other hand these standards are often not followed. More common is that they are referred to in a hazy way, making it difficult to know what guidelines the companies are trying to follow, thus making it difficult to keep the government and companies accountable. Often the companies refer to 'generally accepted international engineering standards', but fail to define what these standards are, and who sets them and enforces them (ibid:2007).

The feasibility study is supposed to be done by an independent party, and not be related to the commercial benefits of the project. The purpose is to get an understanding of the implication of the suggested the project, and what kind of reimbursement for the local community might be necessary. It is independent and should give an objective view of the socio-economic and environmental costs and benefits of the hydropower project. As Usher (1997) has shown, these consultants of the feasibility studies operate in a grey zone. In the case of the Norwegian project, Fula Rapids, Norplan is responsible for the feasibility report and Norfund is the contractor. However, since there is little information about the methodological choices of Norplan, it is difficult to analyze the information gathering process. In such a study it is important to interview the local community, unbiased and without an agenda. The purpose is to get the local community's view, not to state the purpose of the hydropower project and how it might benefit the project.

These feasibility studies lay the ground work for the EIA, which also must be carried out before the construction phase begins. In the evaluation of the feasibility study and the EIA, it

is vital to look into how the state and consultants approach the community. This approach will affect how the community responds to the studies.

When treating a natural resource as a commodity, the holistic ecological picture needs to be accounted for. This is the point of feasibility studies and the EIA. These are supposed to give the picture of the possible consequences of the hydropower projects. However, these studies are influenced by the same high modernism ideology, and this may affect the studies. The questions asked in the preliminary studies will affect the answers and outcome of the study. The focus is often of the prospected benefits of the project, and not on the possible negative consequences. It is also driven by the need for mapping the local area for possible implications, and this need is often economic. This mapping is done by independent, foreign consultants. Their local knowledge is often limited, and the way they access the community will impact the result (Hirsch:2010, McCully:2007, Usher:1997).

One example of the challenges with local knowledge is local measurements. Local measurements are often different from place to place, and international measurement may not catch these differences. The difference in measurements may affect how land is divided, and can thus create conflict if there is a diversion in the foreign versus the local measurements (Scott:1998). Another challenge is the nomadic lifestyle many people have. It can be difficult to measure how many will be affected by a project, because the population in an area may vary. This is particularly a challenge in South Sudan. Statistics of where people live and how many live where are difficult to get, due to the post-war situation. In addition, many people are returning from Sudan. These people have lived most of their lives in Khartoum, and finding a place to stay might not be easy. The issue of how many live in an area needs to be clearer when conducting a feasibility study, because the actual feasibility depends on these numbers.

As I showed in the methodological chapter; I had difficulties in getting in touch with representatives from the civil society. This weakness of representations is a challenge for conducting social representative feasibility studies, and getting the view of the local community. Who the consulting companies talk to when doing the feasibility study, will

affect the outcome of the study, and also the project in itself. I met with one representative from the South Sudan National Environmental Association, who confirmed these views.

'Community should be part of the system; it is currently not the situation.' – Samuel Justin, South Sudan National Environmental Association.

'The gap [between civil society and government] is an issue, because the civil society is not aware of their role.' – Samuel Justin, South Sudan National Environmental Association.

Samuel Justin requests a stronger civil society that can hold the government accountable. He also argues that the lack of information is a weakness for the democracy, because there is little transparency in the government's actions.

'No information, it is hard to get' – Samuel Justin, South Sudan National Environmental Association.

I received various arguments for why the voice of the civil society was not stronger. One of the reasons mentioned was that South Sudan is a newly independent state, and therefore do not have all the elements of a well-functioning democratic state in place. Though this is a relevant argument, it is still one of the main challenges of South Sudan, and thus also the development of the hydropower plans.

[South Sudan] 'is only 4 months old, crawl first, then walk.' – Honorable Henry Omai Akolawin

Civil society just emerged, do not have power. Need to be guided, told how to organize ideas and plans, address issues.' – Victor Wurda Lo Tombe, Ministry of Environment.

Since the local community is often the people who will live with the consequences from the hydropower projects, they are a vital group to include in the plans. When conducting the feasibility studies and the EIA, it is important to look at the questions that are asked, and how the local community is viewed. Language has power, and in this case, the local community's needs are often downplayed in favor of the state's plans. The view is that local the community does not need much power, and also that the government is represented by the people, and therefore can make plans for the state.

'Pastoralists and nomads really do not need much power [energy].' – Anthony Badha, Joint Donor Team.⁴

'Do not think they [local population] will be involved, would not be affected, they want electricity will boost development in the area' – General Joseph Lagu

This last quote shows an attitude of development as ultimately good, and hydropower as an element in this. Since the hydropower project will provide electricity, the possible negative consequences are not thought of. It is also a picture of how the 'needs', in this case electricity, are seen as universal, or national. Then need of the state is then the need for the local population, and thus the electricity will benefit the whole country (Benjaminsen and Svarstad:2010).

7.9 The Nile

During my interviews I posted the question of how my interviewees thought other countries felt about the hydropower plans. Mostly I was met with an attitude that this was 'not other countries' business', because the river runs through South Sudan, and is then 'theirs'. One of the challenging questions is how to divide user right of a common resource. Construction of a dam will have consequences downstream.

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⁴The Joint Donor Team provides technical expertise to the Joint Donor Partners (Canada, Denmark, the Netherlands, Norway, Sweden and the United Kingdom) and the Government of South Sudan. Viewed 09.08.2012: http://www.jdt-juba.org/?page_id=2

'Have to take pride, and have to use max, for hydro [benefits]. It is our right. Always had a problem with Egypt and Sudan over the usage of water'. – Joshua Franco Paul, Ministry of Foreign Affairs and International Cooperation.

'Egypt has to be careful to not provoke the countries of the Nile Basin' – general Joseph Lagu.

'Problem with Egypt, don't want any other using the Nile.' - Bojoj Moses, University of Juba.

These quotes refer to the history of Egypt having the 'user right' to the Nile, which has limited the other countries possibilities to use the river. This has now changed, but there is still a skeptical view of Egypt, which has been the dominant user for so long (Kagwanja:2007).

The risk of dispute over the Nile is increased by the numerous hydropower projects that are planned or begun construction along the river. This construction might diminish the resource, and, as we already see in Ethiopia, this has led to a outburst in violent conflict (Bistandsaktuelt:2011b). The reason is the dam construction which causes the river to suffocate, and deprives the local population depending on the river for their livelihoods. The resource is diminishing and the violent conflict is rising, creating the fear of a water war. The constructions of four large scale dams (Gibe I-IV) are in different stages, but it has already made livelihoods more difficult for people depending on the river. The criticism raised against these project has been cast away by the prime minister; Meles Zenawi (ibid.). This case from Ethiopia shows how hydropower projects may have devastating effect of the local population, and that the voices of both sides need to be heard before evaluating such a project. The language is also evidence of the 'resource curse', and how a conflict can be explained by resource scarcity.

The case from Ethiopia can also happen in South Sudan. The hydropower project may affect the ecological life balance of the river, and thus change the source that is the livelihood for many. It has been a challenge in Ethiopia due to the government's plan of hydropower, without consulting the local communities. This may also be the case of South Sudan. It is an example of how the state's simplification of social reality diminishes the complexities.

This language gives also an insight in how the narrative around hydropower, the environment and risk of conflict is presented. Climate change and scarcity of resources is often used as an argument both from the pro-dam and the anti-dam side. The language on both sides uses elements from the resource conflicts debate, and how an increased scarcity of water may lead to conflict. Ethiopia is one country that can be used as an example, and the language of the narrative is apparent in the article from Bistandsaktuelt (2011c).

7.10 The Fula Falls

The river Nile runs by Juba, and has the potential of 15000 MW from the Uganda border (Nimule), 170 km south of Juba. The hydropower project can be developed step-wise to meet the growing demand, which will enable the government to have political freedom by reducing general electricity subsidies but still have room for a poverty focus (Hopland:2010).

In Fula falls the first preliminary studies regarding hydropower development were in the early 1980s. This was the responsibility of Norplan, but it was the Norwegian Church Aid (NCA) who took the initiative. Due to the civil war, there was little activity in the 1990s. After the Comprehensive Peace Agreement (CPA) was signed, the prospect of hydropower development started to regain interest. Now Norfund is also involved, as well as NVE, Norad, and the Royal Norwegian Embassy. Norplan has done some feasibility studies, where they have gone to the suggested affected area. The feasibility study shows that there will be little impact on the local community. The hydropower project is small-scale, and will have a capacity about 30 MW. The affected area is close to Nimule national park, where there is a vibrant wildlife. Especially the migration of the elephants can be affected, particularly during the construction (interview Bojoj Moses). However, the feasibility study concludes with a limited implication on the local community. There is a small amount of people living close to the affected area, and the study shows small effect on the flow of the river. The

reimbursement is connected to the fishermen, who may have to make their livelihoods another place. Norfund therefore suggest that it might be necessary to move the fishermen to another place (Norfund:2012).

In the area of Fula Falls, there are several interested actors involved. Other big companies, such as SMEC (Snowy Mountain Engineering Company, Australian) and Fitchner (German engineering and consulting company) are involved. A large Chinese company has also received a contract, in Bedden falls (China Knowledge:2012). The suggested Norwegian project, the Fula Rapids, could supply Juba with its present needs. The interest of international companies is an indication of how the hydropower project is seen as not only beneficial for South Sudan, but also the companies doing the investment.

One confusing part is that there are several projects suggested in the Fula Falls, and thus the possible consequences depend on which project one talks about. However, as these projects were all on the project table, I will here refer to them all as the same hydropower project. In fact, the government of South Sudan views all these projects as a part of the 'development' of South Sudan.

When I asked about the intention of the project, and where the electricity would be distributed, the answer varied from 'all over the country', to 'export it to Kenya and Uganda', and 'Juba, and perhaps Ramciel'. These various answers gave me the impression that my respondents did not seem to have a clear and coordinated strategy on how to distribute the electricity, and where it should go.

Some of my respondents were keen on pushing large-scale projects. They wanted to build big, and to think about future needs. Most of them expressed little concern for the possible environmental impact. Overall, there was a bigger concern for the economic benefits of the electricity than the socio-economic and environmental impacts that are connected with these types of construction.

'[I will] rather build a house with three rooms than one, so you do not have to come back and build further. Can sell the power, and it will create a better economic situation.' – Victor Wurda Lo Tombe, Ministry of Environment.

Victor Wurda Lo Tombe shows here how the logical solution, according to him, is to build large-scale hydropower projects. This will be more beneficial for South Sudan, because they will have a lot of power.

7.11Vested interest of the dam industry

The hydropower debate can be divided into two poles; pro-hydropower and anti-hydropower. This is a artificial division, but it will illustrate how the language in the debate influences development polices and strategies. Both sides have powerful interest behind them, and the debate is characterized by stereotypical descriptions of the actors. The anti-hydropower are 'against the environment, pro-fossil fuels, and eco-imperialistic'. The pro-hydropower are 'pro-environment', with a strong economic interest behind them (McCully:2007). This is clear evidence of how language influences the way we depict social reality.

The construction of dams in the global south has been supported by billions of dollars in low-interest loans from development banks and aid agencies. The reasons are that large dams are particularly attractive investments for aid funds (McCully:2007, Usher:1997). Dams are a clear evidence of technological wonders. In the macroeconomic perspective; the dams are a way of getting 'underdeveloped' areas into the global economy. The opportunities for work are one of the reasons for funding dam constructions in developing countries. It is particularly the countries with much experience in hydropower that are likely to give loans for dam building (i.e. Norway, Simensen:2003). It is evident that there is a close link between the consulting companies, construction companies and aid agencies in the dam industry. There is also a close link between the decisions makers of whether or not a dam is feasible, the ones deciding the social and environmental impact, and the people who decide how the foundation of the project will go. These close links can create a tight environment, where a difference in opinion might be difficult to get through (Usher:1997).

The dam industry has maintained its momentum because there is powerful political and economic interest vested into it. Also, the processes of planning, promoting and building dams are often isolated from the public. Those who suffer from the dam building, either directly through loss of livelihoods or indirectly through losing the economic subsidies from the government to the project, are rarely able to hold the dam builders accountable. This lack of accountability is clearly worse under regimes where the civil society is weak and the authoritarian power of the regimes is strong. As Scott (1998) states, authoritative regimes have an easier way of getting through with large-scale projects. One example can be the hydropower plans in Ethiopia, where the government uses it's authoritarian power to get their plans through (Bistandsaktuelt:2011c). Despite South Sudan being a democratic regime, it still has authoritarian traits. The government lacks the opponents that can keep the government accountable (McCully:2007).

Dam building is a profitable industry, drawing US\$20 billion each year on world basis (McCully:2007). A large portion of this sum goes to a relative small numbers of engineering companies, equipment manufactures and construction companies. There is huge money at stake, and this has promoted the pro-dam lobby to initiate public relations strategies, where criticism is met with all the benefits that a dam can provide. The pro-dam lobby includes the whole dam industry, and the consultants which are appointed to find out whether a project is 'feasible' or not are often biased towards that it is. These biases are formed by professional training and ideology, which focus solely on the benefits of dams, with limited focus on the social and environmental impacts. There is also a strong interest vested in the project being feasible, the companies given the construction project are often linked to the companies doing the feasibility report. The consulting companies have little incentive to criticize projects, and the possible consequences of a project are borne by the local populations, not the companies (ibid:2007).

Dams have frequently been connected to ideological statements. Stalin's statement that 'Water which is allowed to enter the sea is wasted', is a classic example of this (Joseph Stalin cited in McCully:2007:237).

It illustrates a common and widely held belief that water is a commodity, and a source of profit, which should be harvested and productively used. This view is also evident in the treatment of dam opponents as 'sentimental' when they oppose a dam construction. Although recognition may be made that livelihoods are often dependent on the river or lake that is dammed, these livelihoods are often viewed as 'underdeveloped', and thus the dam construction is seen as the 'improvement of the human living conditions' (ibid:2007).

Ann Danaiya Usher (1997) argues that there is a general positive attitude towards hydropower development. She calls the attitude 'pervasive appraisal optimism', where the benefits of hydropower project leave out the negative factors. The focus is on economic growth, and the possible ecological and socio-economic consequences are somehow forgotten. The dominance of this narrative makes it difficult for metanarrative to get acknowledged. The actors involved are often a tight collaboration between government, aid givers and donors. The representation of the poor is not present, and therefore the 'needs' are developed from the donor's perspective (Robbins:2012).

As with other narratives, the actors involved are powerful in that they influence how the social reality is depicted, and thus how strategies and polices are formulated. In the case of hydropower projects, the consulting companies may have a dual role. On the one hand, they are involved in the feasibility studies and Environment Impact Assessment (EIA) in which they have to focus on the possible consequences of the project. On the other hand, they are also involved in the organization of the project. The EIA and feasibility studies are independent works from different consulting companies, which are given to consulting companies outside the project. Still, there are often cases of strong links between the consulting companies doing the studies and the ones responsible for the project. These consulting companies often share the same social reality and view, and represent then the same discourse. Since they represent the same discourse, it is difficult to get the perspective of the alternative narratives (Benjaminsen and Svarstad:2010).

The narrative of 'energy leads to development' also has a symbolic power, because it shows how humans can 'tame nature' in anthropocentric favor (Scott:1998). Large scale dams are evidences of how natural forces can be forced under human control, which is a symbolic evidence of human progress. They are also a symbolic evidence of the power of the state who has built them, which makes dam construction a favorite for nation-builders. The dam has a powerful symbolic role, and the potential negative impacts are faced in favor of the economic and technical rational. This 'taming' of nature goes back to biblical terms, and gives an anthropocentric view of the ecological system. Nature is in the end a commodity which can be controlled by human for our benefits. The nature does not have a value in itself. It must be culturally and economically transformed (Benjaminsen and Svarstad:2010).

The construction of the High Aswan dam has a similar history as the possible hydropower construction in South Sudan. As Colonel Gamal Abdel Nasser overthrew Egypt's King Faroyk in July 1952, the idea of a huge dam across the Nile quickly came into force. The objective was to expand irrigation and produce electricity, but the political objective was for the revolutionary government to show what they could be capable of (McCully:2007). The government saw the project as a monument to national pride, and did not allow for criticism of the project. The political motivation behind the construction of the dam was made even more evident by their downplaying the costs of the construction, and the possible social and environmental impacts (ibid:2007).

Though I do not wish to draw parallels from Nasser to the president of South Sudan, Salva Kiir, the regimes do still have similarities. The regimes are both based on recent revolutionary movements, and the dam constructions are also seen as evidence of what South Sudan may be capable of doing. Hopefully, as the government is democratically elected, the opponents of the dam construction and the civil society will be listened to.

7.12 Hydropower for whom?

This leads me to the contradiction between providing electricity for the benefits of the poor, and the opposition it meets. Linked to this is the question of 'whose development' we are talking about, and who will benefits from the project (Crewe and Harrison:1999). One of the

reasons for the complexity of hydropower; is the role of water. Water, besides being vital for life, also has multiple roles. It is a provision for food and livelihood, and also a source of energy. The complexities of water are often compared to that of oil, as they both share opportunities of energy. The scramble for oil has caused much conflict, often even violent. Sudan is one good example of how the oil abundance has created a violent conflict, which ended in secession of one part of the country. A common concern is that this may happen with water as well (Kagwanja:2007,Wolf:2007). It is estimated that two-thirds of the global population will be living in water stressed countries by 2025. As previously mentioned, the conflict over the Nile already has a long history. With the increasing interest of the Nile as a source of hydropower, the concern is that this might cause a violent conflict.

This perspective can be explained by using the perspectives from the resource curse, and how a violent conflict can be motivated by the struggle over scarce resources. Thomas F. Homer-Dixon (1999) argues that the future conflicts will be over the scarcity over resources, which are stressed by climate change. The resource scarcity is a relevant dilemma for the hydropower development. Large scale development will impact the river, and may cause the ecological resilience to be damaged. Fish migration may be diminished, and this might impact local livelihoods. Increasing hydropower development may limit the water, and cause stress. This is an example of how hydropower is not only 'green', and exemplifies that construction needs to consider climate change and water stress as possible consequences (International Rivers:2012 b).

Providing access to electricity for the 'people' is not just about constructing a dam or putting up a grid. Access is not only physical, but also the ability to afford to connect to the electricity, and also, the willingness to pay for the electricity. There is a whole field of study focused on the 'willingness to pay' (Vatn:2005), and research on how much the population wants to pay for the electricity. This research is difficult when people have not gotten access to electricity, because it is a good they have done without before. Sometimes it is difficult to expect to have a clear meaning of 'willingness to pay', for a good which one is unsure of the benefits from. Also, there is the discussion of electricity being a public good, which therefore should be free or subsidized. This brings further consequences, because it is difficult to change a good from free to something one pays for.

Electricity access to the people has multidimensional challenges. Due to the lack of electricity in South Sudan, the government has many plans for development. It is mainly focused on hydropower. Other energy sources, such as solar or wind, are often stated as too expensive and difficult. Hydro is clean, cheap, and stable. 'There is no other solution' as one of my sources answered to the question of what other solutions could be.

7.13Challenges with investments

For hydropower projects, legal frameworks regarding land rights and water resources are especially important. Operating in a country without a clear legal framework will create some difficulties, especially when it comes to development projects. Since the legal framework is yet to be finalized in South Sudan, the investors may operate more freely than in other states. The ability to follow up the government's responsibility is then more difficult. Also, the civil society has less control mechanisms regarding the government's work. When the legal framework is made, it is easier for the civil society to hold the government accountable. This is why South Sudan is in a particular fragile state, and needs to be careful of what they agree with investors, both foreign and local.

There is also risk involved from the investor's side. Investing in a post-war country includes high-risk factors, and these are the concerns of the investors. After my interviews, the impression was that the government of South Sudan is focusing on making itself attractive for investment. There will be no development without investment is the general concept. The danger of this is that investment may also cause more harm than good in the fragile state. The government needs to develop control mechanisms in order to protect themselves against unethical investments.

7.14 Summary

In this chapter I have focused on how the narrative of 'energy leads to development' is influential in the view of development among powerful actors in South Sudan. I have drawn links back to the chapter on theoretical framework and discussion of the development term.

With these concepts in mind, it is evident that the 'energy leads to development' has in pass among the state officials and other powerful actors in South Sudan. This perspective has led to a belief that hydropower will create development. However, as I have argued, this development is connected to the idea of economic growth and modernization, with strong links to foreign investments. In order for energy access to improve the living conditions for the poor, this energy has to be distributed in a local scale. It is necessary to broaden the contents of the 'energy leads to development' narrative, and include elements as politics of distribution, technical know-how and education, and increase the possibility of access. The narrative is a simplification of the complexities related to energy distribution. These questions are not easy, which I also shown with the example of the Alta dam in Norway. For the energy project to be beneficial for more than the investors, aid donors and state government, alternative perspectives need to be heard. 'Energy for whom' should be a leading question.

Chapter 8: Conclusion

Analysis of the use and development of the narrative 'energy leads to development' has provided both a methodological and theoretical opening to, and better understand the interplay between interest and power relation between the multiple actors involvement in the development of hydropower projects in South Sudan.

8.1 The use of narratives

These narratives have been used to explain how certain ideas of natural resources effect policy making, through the case of the suggested hydropower projects in South Sudan. I have demonstrated that the 'energy leads to development', is backed by a series powerful actors such as the Norwegian state, the government of South Sudan, and other international companies. I have furthermore shown that this narrative reflects the experiences and beliefs of powerful actors in South Sudan. In other words, the narrative signals how the actors define development and how they look upon energy as necessity to catalyze economic growth.

The narrative 'energy leads to development' is an essential source for the planning, advices and polices of powerful actors, such as state governments, global institutions (World Bank), and international companies (Fitchner, SMEC). As with other development narratives, there are invested interests involved in the creation and maintenance of the dominant character of the narrative. The narrative constructs a worldview were development is parallel with energy, and that development is synonymous with economic growth. In other words, the narrative signals how the actors define development and how they look upon energy as a necessity to catalyze economic growth.

One critique to this dominant narrative is its failure to recognize counter-narratives in South Sudan. As Roe (1987) argues; the counter-narrative is a way of challenging the dominant narrative. Due to the weak representation of civil society, the government uses their authoritative power to implement their narrative into policy. The narrative of 'energy leads to development' is made stronger by the state's power. The language of the narrative shapes

people's worldview, and the narrative becomes the 'truth'. An even more serious challenge of having a dominant narrative, is that the weak representation of the civil society, on the area where the hydropower projects are planned to be, which makes it difficult to assemble the voices from people who lives in the area. Therefore, the lack of opposition is a weakness also for the conducting of a balanced EIA.

As has been argued in the light of my material throughout the thesis, the global development debate is formulated by different narratives. These narratives impact the policies and strategies, which are developed. The essence of the analysis is how Norwegian aid policy with regard to hydropower projects can be understood through the narrative of 'energy leads to development'.

Through my work with this thesis I have learned that there is an increased focus both outside and inside of Africa on the hydropower potential of Africa and how this can be used to 'lighten up' the continent. The narrative of 'energy leads to development' is an oversimplification of reality. There are competing interest and ideas of this kind of development. Energy is in itself not a guarantee for substantive development. Mechanism needs to be in place, in order for energy leading to development. These mechanisms have to include the recognition of the sovereignty of the developing country, which might help distribute the benefits to the wider population.

8.2 Legal framework

The newly independent South Sudan has a vacuum to fill in its legal department. The lack of legal framework can make the country as a 'haven' for foreign investors, without giving benefits back. In order for the hydropower project to not fall in the same trap, South Sudan needs to establish a stable legal framework. Advice to the South Sudanese government in this regard might be that it should strive for the legal protection of both its own interest as a state as well as of the interest of the local population.

The case of South Sudan shows the role of this development narrative. The narrative in this thesis demonstrates that development requires economic growth, and hydropower as a way of getting there. However, one might clear of the unintended effects that can come with development projects (Ferguson:1990). To give one example; the possibility of conflict is exacerbated by the legal uncertainty regarding land and properties. To avoid some of the unintended effects, the actors need to take into accountant the weaknesses of today's legal framework in South Sudan and also that of the civil society.

8.3 Civil society

Due to the weak representation of the civil society, the government uses their authoritative power to implement their narrative into policy. The weak representation of the civil society, in the area where the hydropower projects are planned to be, makes it difficult to assemble the voices form people who lives in the area. The role of feasibility studies and EIA is important in this regard, because such studies can put forward a wide range of possible consequences of the project, and not only the potential benefits from it. In order to get the perspectives of the affected community, feasibility studies and EIAS need to involved representatives of civil society too. Language barriers and illiteracy are among the most particular obstacles.

The energy and development narrative is observably present in the views of key actors in South Sudan. They firmly hold that the country's hydropower resources sooner or later can give energy. However this energy will not necessarily benefit the state and population. One has to prepare the ground for this to happen. Two critical measures, which are dealt with in this thesis, are to strive to get the views and interest of the civil society on the agenda, and to build a judicial framework to guide investors to the benefit of the country. I regard this as the most essential contribution from my thesis to academic debate and public policy.

'What we see, depends on where we are looking from', argues Ferguson (ibid:2006:48). It illustrates that discourse narratives are formulated by the producers of the actors, and the presentations affect our view of social reality. This perspective is necessary to have in mind when analyzing both development projects and the criticism. This thesis has shown how a dominant narrative can obscure alternative presentations. This 'blocking' can diminish the

possibility of development, since the definition of development is narrow. This thesis' contrition to the academic debate and influence on formulation of policy is then to look beyond and behind the narratives, and lift the alternative perceptions. Even though electricity may improve the livelihoods, it may also have devastating affects, which in the end can led to more poverty and environmental damage. In order for energy access to benefit more than the government and international companies, the local population needs to be consulted. Since this is already a part of the international standards for hydropower construction, one needs to look closer into the standards. 'How are the feasibility study done?', 'Who are doing it', and 'who are being consulted', are important questions that needs to be investigated.

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Appendix 1: Standard Interview guide

1. Opening:

1.1 What is your profession/occupation/position?

My theme for the master thesis is: How are the political narratives of hydro power development in South Sudan? What role does the hydropower development plans play in the politics of power and in the state-building?

2. Hydropower and development:

- 2.1What are the state policy of hydro power?
- 2.2 In your opinion, why do you think hydropower is important for the development of South Sudan? What are the benefits and challenges of this?
- 2.3 What could be other solutions to South Sudan's electricity problem?
- 2.4 Why do you think this is the best way?
- 2.5 What is the hydro power projects planned for South Sudan?
- 2.6 Who needs the most electricity, and who should get it first in order for South Sudan to develop?

3. The Fula Falls project

- 3.1 What can you tell me about the Fula Falls project? What types of reports have been developed, and what are the results? Any feasibility studies or reports on the social-economic and ecological impact?
- 3.2. In your opinion, why is this project important? Howe can it help South Sudan's development as a new independent state?
- 3.3 What are the main challenges with this project, and the benefits?
- 3.4 What are the possible negative outcomes of this project?
- 3.5 What happens to the local ecosystem, the sediments, the fish, the water flow, etc.?
- 3.5 What needs to be done for it to be successful?
- 3.6 And for whom is this project designed for? Who are the beneficiaries? Where will the power go, and what is it purpose?
- 3.7 How does the local population in the area respond to this project? Have they been included in the decisions-making process? How? Why/ not? Have somebody from the state been there? Have the information been given in their local language? Who conducted the hearings?

3.8 Have there been an environmental impact analysis? Why/ not? How? Who conducted this?

4. Norway's role.

- 4.1. How does Norway and South Sudan cooperate in the hydropower business?
- 4.2. What is your opinion about Norway's involvement? And when I say Norway, do you think about the state or a non-governmental organization?
- 4.3 What do you think Norway's motives are?
- 4.4 In your opinion, are other actors such as Norway, necessary partners? How do you think it is necessary? Why/ not? Or could South Sudan manage the electricity problem on their own? Why/ not?
- 4.5 Further, what are the good and the bad effects of Norway's involvement?
- 4.7 This project is suggested to be a private-public partnership. What is your opinion about this, and what could be the challenges of such cooperation?

5. Ending

5.1 Do you know other people I should have talked to concerning this?

Appendix 2: Interview Guide for the Norwegian Side

1.1 Hva er yrket ditt, og hvordan er du involvert i vannkraft i Sør-Sudan?

(forteller om temaet mitt om politikken omkring vannkraft i statsbyggingsprosessen Sør-Sudan er i nå, og spør om deres tillatelse til å bruke materiale i masteroppgaven min).

2. Vannkraft

- 2.1 Hva er planene for vannkraft i Sør-Sudan?
- 2.2 Hvorfor er det viktig for utvikling av Sør-Sudan som ny, selvstendig stat?
- 2.3 Hvorfor vannkraft? Hva kan være fordelene og ulempene med dette?
- 2.4 Hva slags andre alternativer kan bli brukt for å dekke Sør-Sudans elektrisitet behov?
- 2.5 Hvordan blir elektrisiteten distribuert?

3. Fula

- 3.1 Hvilken rolle spiller Fula falls prosjektet inn i vannkraftplanene?
- 3.2 Hvorfor er dette prosjektet viktig?
- 3.3 Har det blitt utført noen EIA og feasibilities studies? Hva er i så fall resultatene av dette?
- 3.4 Hva er de sosio og miljømessige konsekvensene av dette? Hvordan påvirker det flyten i elven, sedimenter, fisk, befolkning, det generelle økosystemet?
- 3.4 Hvordan er lokalbefolkningen involvert?
- 3.5 Hva slags tiltak blir gjort for å minske de negative konsekvensene? Hvordan blir det kompensert?
- 3.6 Hvem er ansvarlig for dette prosjektet, og for hvilke tiltak som blir gjort for å kompensere for påvirkningen, og inkludere lokalbefolkningen?

4. Norges rolle.

- 4.1Hvorfor er Norge involvert? Hva er motivene bak, og begrunnelsen?
- 4.2 Hvordan er samarbeidet med sørsudanske myndigheter? Noen spesielle utfordringer?
- 4.3 Hva slags kriteria må til for at prosjektet skal bli suksessfullt?
- 4.4 Hva slags krav stiller Norge for sine investeringer?
- 4.5 Hva slags regler finnes det for investeringer i Sør-Sudan?
- 4.6 Hvordan blir policiene utviklet, og hvem er involvert? Hvem er beslutningstakerne?
- 4.7 I forhold til vannkraft, hva slags standarder jobber de med? Hvilke vil du anbefale?

5. Ending

5.1 vet du om andre jeg kan snakke med angående dette temaet?

Appendix 3: List of Respondents

Business people:

- Dr. Patrick Schaefer, senior civil engineer, Fitchner.

IFIs

- Yonas Michael Gebrewubet, hydrologist, SMEC
- Anthony Badha, policy officer of water, sanitation and hygiene, Joint Donor Team
- Tesfaye Bekalu, water sanitation specialist, World Bank
- Andoh Mensah, principal country program officer, African Development Bank

NGOs:

- Samuel Justin – South Sudan National Environmental Association.

Norwegian actors:

- Oddvar Espegren, Christian Relief Network.
- Jonas Sandgren, NVE

South Sudan government:

- James Adam, director of hydrology and projects, Ministry of Water Resources.
- Honorable Henry Omai Akolawin, deputy chairperson in committee of economy, development and finance, national assembly.
- David Bateli, Deputy director of pollution control, Directory of Environment, Ministry of Environment
- Martha Biong, assistant inspector for planning, Ministry of Environment.
- Phil Gadin, Deputy Minister of Environment
- Beck Awan Deng, Director General of regional co-coordinator, South Sudan Electricity Cooperation
- Samuel Mut Gai, Director of Investment facilities, Ministry of Investments.
- Isaac Liebwel, undersecretary of Ministry of Water Resources.

- Victor Wurda Lo Tombe, Director General of environmental affairs, Ministry of Environment.
- Kapuki Tangun Laod, assistant inspector of pollution control, Ministry of Environment.
- Loboso Cosma Manase, director of planning and projects, South Sudan Electricity
 Cooperation
- May Akech Milla, Director of Private Sector Development, Ministry of Finance
- Daniel Wan Nyombe, undersecretary of Ministry of Wildlife, conservation and tourism
- Simon Nyongong, assistant director of hydrology, Ministry of Water Resources.
- Honorable Henry Odward, former chairperson of natural resources committee in the national assembly.
- Joshua Franco Paul, director of multilateral relations, Ministry of Foreign Affairs and International Cooperation
- Alison Faruk Robert, deputy officer for Europe, Ministry of Foreign Affairs and International Relations.
- Samuel Taban Youziel, undersecretary of the Ministry of Electricity and Dams
- Kazi Yugusuk Tombe, South Sudan Electricity Cooperation
- Stephen Will, Director of Planning, Ministry of Gender

Various:

- General Joseph Lagu, a 'legend' who has been part of the 'struggle' from the 1970s.
- Bojoj Moses, deputy academic registrar, University of Juba
 Hakim Tiberius, civil engineer, SMEC