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Declaration

I, (Maren Gunnarson Fallet), 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.

Date 09.05.2010

Have Fallet



Young girls from the village of Gaik collecting water

This thesis is dedicated to Makuei;

For proving that the future can be bright irrespective of the colour of the past

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Abstract

This master thesis investigates the impact of the oil-industry on the local communities in Block 5A, Sudan. During the war the people here experienced harassment, attacks and forced displacement because the central government and oil-companies wanted to access the black gold underneath. The Comprehensive Peace Agreement (CPA) ended the over twenty year long civil war in Sudan. Here it is stated that the local communities living in vicinity to oil-extraction areas shall benefit from the oil-industry. This research maps the impact of oil-industry today and whether the statements in the CPA regarding the oil-industry are being followed. It also maps knowledge and expectations of the local communities towards the oil-industry. The research is of qualitative character based on interviews with 40 respondents in 5 villages proximate to oil-extraction areas. In addition it looks at the greater aspect of the link between war and natural resources in post-CPA time in Sudan.

The local communities benefit from oil-revenues given through local government and from development projects from the operational company in Block 5A; White Nile Petroleum Operation Company (WNPOC). While prior to the CPA they had no access to schools, health care or infrastructure, most of the respondents today utilize some access. However, the negative effects from the oil-industry outweigh the positive outcomes, mainly because of contamination of drinking water caused by oil-operations. This has devastating consequences for the people here, and therefore undermines the positive development. They also experience illness caused by the smoke originating from drilling-areas, and accidents due to irresponsible road-construction. They don't participate in decision-making regarding oil-industry, nor are they given a just compensation for previous wrongdoings as the CPA states. The level of knowledge about the oil-industry and the CPA is very low, and so are the expectations of potential benefits. The oil also contributes to destabilising the fragile post-war situation in Sudan due to the negative effects of natural resource dependency. Oil still acts like a curse for the local communities in Block 5A rather than a blessing. However, if the statements of the CPA are being followed, the oil has huge potential for promoting development and sustainable peace in Sudan.

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1. Introduction

The problem statement of this thesis is how the local communities in Block 5A in Sudan are affected by the oil-industry. During the civil war they experienced harassment, attacks and forced displacement due to their proximate location to oil-extraction areas. According to the Comprehensive Peace Agreement (CPA) that ended the war, they shall now benefit from the oil-industry. This research will map the knowledge and expectations of oil-production among the local communities, and inquire the actual impact of the oil-industry and whether it correlates with the content of the CPA. The research is based on qualitative research, with 40 semi-structured interviews conducted in five villages located in proximity to oil-operation areas in Block 5A. It will also look at the wider context of the oil-industry in Sudan, and how the civil society is experiencing the effects of being an oil-dependent country.

Oil played a key role in Sudan's second civil war between North and South Sudan that lasted from 1983 until the CPA was signed in 2005. Oil was a trigger for starting the war, and for motivating and financing the war. An important part of the Addis Ababa peace agreement that ended Sudan's first civil war in 1972 was regional autonomy for South Sudan. This included control over natural resources. When the American company Chevron discovered oil in areas controlled by South Sudan, the central government decided to withdraw this autonomy, and started to extract and ship oil to the north. In the south this was considered as a clear expression of continuation of long traditions of exploiting the culturally distinguished South Sudan. Sudan Peoples' Liberation Movement (SPLM) was created as a reaction. This was the beginning of a war that is assumed to have killed more than two million people, and displaced twice as many. The central government has been driven by greed and a desire for oil, while SPLM has been motivated more by grievance and just access to oil-reserves. Oil-revenues have also helped financing and then prolonging the war, and were an obstacle for starting peace negotiations. The people suffered most from the war actions were those living close to oil-operation areas as they were regarded as a threat to the oil-extraction, and were therefore subject to displacement in order to "secure" the oil-extraction.

The war officially ended in 2005. According to the CPA, the oil-industry shall now benefit the civil society, and war-torn communities living close to oil-extraction areas that experienced harassment during the war in particular. They have the right to participate in decision making regarding the proximate oil-industry, and shall get a share of the oil-revenues. The CPA also emphasizes that oil-extraction shall be conducted in an environmental friendly way. The negative impacts from war

times shall be replaced by positive development. This research inquired what the reality is today. The research also maps the level of knowledge of Sudan's oil-industry and the CPA and expectations of benefiting from the oil-industry.

Countries being "blessed" with large natural resource endowments often have a higher chance of experiences instability and war than countries with a more diversified economy. Natural resources can contribute to war directly by financing and motivating both governments and rebels, and more indirectly through bad governance and poor economic performance for the country. Sudan has experienced all these negative consequences of having large endowments of oil. However, if the oil is used to benefit the civil society and promote development, this trend can be revised. The oil has huge potential for development in Sudan, and making sure the CPA is being followed and the oil-revenues are used to benefit the civil society is essential for achieving development and a sustainable peace. This is also of importance for dealing with grievance feelings that can contribute to resumption of the war. The negative circle of poverty, instability and war can be replaced by a positive circle of peace and development if the statements of the CPA are being followed.

A closer examination of how the local communities are affected by oil-production is therefore of utmost importance in the study of development. In order to achieve an improvement, it is necessary to first get a formative understanding of the situation. This was my reason for choosing this theme for the research.

Research objectives and research questions:

Research objective 1: Knowledge and expectations of oil-production among local citizens living in Block 5A

- 1) How knowledgeable were the local citizens about the oil-production in Block 5A?
- 2) What were the expectations among the local citizens of benefiting from the proximate oil-production?

Research objective 2: Inquiring the impact of oil-production on local communities living in proximity to oil-production facilities in Block 5A

1) What were the positive outcomes of the oil-industry for the local communities?

- 2) What were the negative outcomes of oil-production experienced by the local communities?
- 3) To what extent were the local communities able to influence the oil-production?

The next chapter introduce the methods used for the research. Chapter 3 show different theories and approaches of war, with a special focus on the link to natural resources. Then follow chapter 4 which deal with the civil wars that devastated the country; emphasizing the second civil war and the role of oil. The war officially ended with the CPA in 2005, and chapter 5 will look deeper into this agreement, and in particular what is says about oil-revenues. Chapter 6 will deal with the current oil-production in Sudan. Thereafter the empirical findings will be presented in chapter 7. The results of the research objectives and research questions will be treated in separate sections. A critical discussion of the findings will follow in chapter 8. Finally chapter 9 will draw a summary for the thesis.

2. Methods

This research is based on a qualitative research approach. The first part of this chapter will outline the advantages of using qualitative methods. Thereafter follows a description of the study area in which the research was conducted. Chapter 2.3 and 2.4 will provide an explanation of the sampling and interview methods used.

2.1. Qualitative methods

Research is systematic investigation of a particular phenomenon, aiming at discovering new facts or to collate old facts. It will try to answer a question, and find a solution to a problem. Research method is the technique used for collecting data about this phenomenon, and it can be of different designs; experimental design, comparative design, cross-sectional design, longitudinal design and case study design. The main distinction of approaching these research designs is between quantitative and qualitative research. The former has many units and few variables, the latter the other way around. Quantitative research is a more exact measurement, using numbers which are easier generalized. The analysis is done through the use of numbers, percentage etc. Qualitative research cannot be measured in the same way, and the data and analyses come in form of words and arguments rather than numbers. Reliability and validity are some of the challenges. The information in qualitative research can be collected through discourse and conversation analyses, analyses of texts, documents etc., ethnographic and participant observation, focus groups and qualitative interviews (Bryman 2008).

This thesis is based on qualitative research. This approach is most feasible since the research goes in-depth of understanding the impact of the oil-industry on the local communities and personal knowledge and expectations regarding the oil-industry. This requires investigation of many variables, and qualitative design is then most useful. It is essential to consult the local inhabitants in order to collect this information. Very little research has previous been conducted on similar topics in Unity State. The study area is located very remote, with large distances, low degree of infrastructure and few communication tools. The best way of obtaining information is to physically go there and meet and talk to the inhabitants. A qualitative method will then provide an in-depth understanding of the situation from a local perspective.

Qualitative semi-structured interviews were the research method adopted. Direct conversation with the people was the most effective way of understanding the situation and their knowledge and expectations of the oil-industry. This provided answers to the relevant topics for the research, and the possibility for asking following up questions and obtains other information the interview object may have. It also gave the possibility to ask about previous impact from oil-production, both before and after the signing of the CPA, and how they see incidents in connection to oil-industry. Most of the respondents were illiterate and asking them would be the only way of getting information. Due to the possibly political sensitivity of the oil-industry and personal traumas from the war, I chose not to have focus groups.

2.2. Description of the study area

Sudan has 8 provinces, with 25 states (see appendix 1). The research was conducted in Western Upper Nile/Unity State (see appendix 2), in the province of Upper Nile. The state is still referred to as Western Upper Nile by many southerners, despite that the central government renamed the state during the war in an administrative re-division of South Sudan (Doctors Without Borders 2002). In this thesis it is referred to as Western Upper Nile in pre-CPA situation and Unity State in post-CPA situation. Unity State lies in central Sudan, belonging to South Sudan. It borders Southern Kordofan, Western Kordofan, Upper Nile, Jonglei, Lakes, Warrap and Northern Bahr el Ghazal. The two former are located in North Sudan, while the five latter located in South Sudan. Unity State covers an area of 35,956 square kilometres. There are no exact numbers of how many people living here, but the registration for the national election that ended in December 2009, registered more than 500,000 voters (Sudan Tribune 2009). These numbers are much larger than previous assumptions. In addition many displaced people are still living in refugee camps and other places of the country. Bentiu is the capital of the state. Taban Deng Gai is the governor. Unity State is divided into nine counties; Rubkona, Mayom, Parieng, Koch, Leer, Payinjiar, Abiemnom, Mayendit and Guit. The counties are further divided into smaller units called payams.

White Nile Petroleum Operation Company (WNPOC) is the oil-company operating in the area, and the area is referred to as Block 5A (see appendix 3). They have three operational oil fields there, Thar Jath, Mala Main Field and Mala Satellite Field. Thar Jath is located in Koch County, and Mala Main Field and Mala Satellite Field is located in Guit County. These two counties border each other. There is approximately one hour drive from Thar Jath to Mala Main Field, and another half hour to Mala Satellite Field.

Two ethnic groups inhabit Unity State: Nuer and Dinka. The Nuer people are dominating the state, but Dinka also reside here, mostly in the north-eastern part of the county (Doctors Without Borders 2002). These two groups have traditionally competed over resources, and been raiding each other's cattle and people. The civil war has unified these two groups in resisting a common enemy, but also divided the two groups, especially by the two Nuer men Riek Machar and Paulino Matiep whom segregated from the Dinka controlled SPLM/A. This has happened despite the fact that the two groups area culturally similar to each other.

The interviews were conducted in the Nuer controlled areas, and all of the respondents belonged to Nuer people. The Nuer people are semi-nomads and agro-pastoralists. Cattle are important for measuring wealth and for food security. The majority also have a small garden, growing corn or sorghum. The men are hunting gazelles, which is providing the family with meat in addition. During the wet season they live in their permanent houses, and these are located close to the oil-extraction areas. This is the place where the research was conducted. In the dry season they move closer to River Nile in search of water. When the rainy season starts and River Nile is flooded, they move back to their permanent settlement.

The month of November is a suitable time for visiting Unity State. The wet season is over, and most of the roads are again accessible. The dry season is emerging, and in December most of the villagers living close to oil-extraction areas are moving. Finding interviewees would then be difficult.

As an independent researcher travelling on a student's budget, only a short fieldwork was feasible. The security situation in Unity State is tense, and in case of an emergency I was lacking the necessary backing from UN or NGOs for evacuation. Europeans are not likely to be the targets of any uprising, but clashes might still occur, making the area rather unpredictable. The UN camp was only for employees, and there are few other safe accommodation options in Bentiu. I experienced the great hospitality of the Nuer people, making my stay both possible and far more informative and interesting. Few options for dining, accommodation and car rental makes Unity State a rather expensive place. Especially the latter was problematic since I depended on transportation for reaching the communities. So because of the tense situation and high expenses, the fieldwork was limited to two weeks of formalities and field preparations in Khartoum and two very intensive weeks of data collection in the field.

2.3. Sampling method

Interviews were conducted in five different villages. The villages were selected after purposive sampling principles, chosen by proximate location to the oil-extraction areas. The villages closest to oil-extraction areas were assumed to be most affected by the oil-industry, and therefore most relevant for the research. My research assistant is from the area, and he assisted me in identifying five villages in the vicinity to the oil-extraction areas. The five villages are called Kuernyen, Lanfhtang, Guina, Gaik and Willuak/Thak. The latter are in fact two villages, but in this thesis they are treated as one due to their small size and close emplacement. All of the villages are located in Guit County. The two former are located in Kadett Payam, while the three latter are located in Kach Payam. Few villages are located close to Thar Jath in Koch County, and therefore all the villages visited are located in Guit County.

Eight people were interviewed in each village, making the sampling size 40 people. In Nuer tradition, a village is built in a long row of houses. The people are living in a small hut called "duel" while the cattle lives next door in a larger hut called "luak" (Doctors Without Borders 2002). This made it sufficient to take an interval sampling, after random sampling principles. Due to the lack of a population list, my assistant made an estimate of the number of households in the village, and selected the intervals between the houses accordingly. Some of the villages where the households were far between we were forced to make the intervals shorter than the expected number of households. Lack of roads made us walk to reach the households and lack of electricity and lights forced us to finish the interviews and return before sunset.

The majority (75%) of the interview objects were women. Most men were hunting during daytime, and therefore difficult to reach. An interview in the evening would have been difficult since we needed to return before sunset. When the man was home, he was interviewed. When he was not, the oldest woman was interviewed. In other places men are usually in charge of political life, giving them more knowledge of political issues. However, in this community most men are in the bush hunting most of the day, and their knowledge was therefore assumed to not differ significantly from the women's knowledge.

In addition I interviewed the commissioner of Guit County, the chief of Kadett Payam, one key informant, 5 representatives from the Community Development (CD) department of WNPOC, 3 doctors that investigated pollutions from oil drilling that polluted several inhabitants, the father of a

child whom died as a result of polluted water, and a mother who experienced the death of her child due to irresponsible road construction work done by WNPOC (see box 1 below).

Box 1. Interview objects

40 individuals from local communities

1 commissioner of Guit County

1 chief of Kadett Payam

1 key informant (my assistant)

3 representatives from WNOPC / CD in Khartoum

2 representatives from WNPOC / CD in Thar Jath

3 doctors investigating pollution

1 mother of a deceased child

1 father of a deceased child

Total: 51 people (one was interviewed as both local citizen and as chief of Kadett Payam, and one was interview as both local citizen and father of deceased child)

2.4. Interview method

Qualitative interviews can be done unstructured or semi-structured (Bryman 2008). The latter approach was used in this research. An interview guide with the topics and questions relevant for the research was used. The interview guide was used only as a guideline, leaving open the possibility for asking follow-up questions and getting other relevant information from the interview objects. Each interview lasted between thirty and sixty minutes. An interview lasting for more than one hour would have made it easier to lose concentration.

Some of the questions asked were of sensitive character. Therefore the principles of ethics in research were taken seriously (Bryman 2008). Before starting the interview, the research object was informed about the aim of the research, voluntary participation and the possibility to avoid answering any question and to withdraw from the interview at any time. Confidentiality was underlined, and they were all anonymous, unless we agreed upon something else. The participants were also informed about possible benefits from participating, but without giving them false hope of rapid improvements of their situation after participating in the interviews.

3. Theories of war and natural resources

"Those who wish to facilitate peace will be well advised to understand the nature of war" (Keen 2000: 19).

This chapter examines causes of war on a theoretical level. How the local communities in Sudan are affected by the oil-industry today must be seen in coherence to the civil wars. Oil played a major role in Sudan's second civil war in terms of triggering, motivating and financing the war. In the post-war situation oil is still important because oil-dependency influences the fragile peace. Understanding the nature of war and the negative effects of natural resources is then necessary for understanding the post-war situation in Sudan today.

I will start by defining war. Thereafter I will look at how natural resources can contribute to war. The discussion of greed, grievance and the legitimacy of war will also be presented. Then I will see how to end a war, before I conclude the chapter by presenting some priorities and challenges in peace building and post-conflict development.

3.1. What is civil war?

Disagreements can lead to conflict, but conflict does not automatically lead to war. Conflicts can be violent and non-violent. Examples of non-violent conflicts are political strife, civil disobedience, lawsuits and labour disputes. Conflicts can erupt in violence without being defined as war, e.g. genocide or terrorism. Violent conflicts can also erupt in war. We have two main types of war: interstate war and civil war. The latter is the focus of this thesis. There are also other labels for concrete forms of conflict, such as the cold war and the war against terrorism. Categorizing violence can be useful in describing a complex world, but on the other hand the process of clarifying through classification necessarily involves simplifying the world (Cramer 2006: 84).

The most common type of war is civil wars. They account for 95 % of armed conflicts in the world today (Shanmugaratnam 2009). Since 1945, civil wars around the world have killed approximately 20 million people and displaced at least 67 million. In the past 15 years, 80 percent of the world's 20 poorest countries have suffered a major armed conflict (World Bank 2006).

Civil wars have certain hallmarks. The fighting must be between the central government and organized non-state groups from within the same country seeking to replace the government, secure power in one region or secession from the country. Secondly, the conflict must produce enough deaths to cross the casualty threshold, usually set at 1000 deaths per year. Thirdly must at least 100 of these battle deaths be on the government's side (Cramer 2006: 62), or at least 5% of deaths on both sides (Singer and Small 1982, in Collier and Hoeffler 1998).

The nature of civil wars has changed after the Second World War. Wars used to be reduced to fighting between armies, but now civilians are more often being targeted. Approximately 90 percent of the deaths used to apply to military personnel, now 90 % of the victims are civilians. Attacking civilians has become a tactic of fighting, for example in DR Congo where rape of women is used to disband whole communities. Civilians are also targeted in order to steal land and resources.

3.2. The role of natural resources in civil wars

Natural resources often play a key role in wars. This topic is divided into two sub-chapters, one focusing on natural resource scarcity, the other on natural resource abundance. The former is associated with renewable resources, the latter with non-renewable resources. Both are fights over how to share the resource. I start with the former.

3.2.1. Resource scarcity and conflict

According to Homer-Dixon (1994) there are six types of environmental change that can lead to conflict. These are climate change, ozone depletion, loss of agricultural land, deforestation, and depletion of freshwater and fisheries. This can be caused by supply-induced scarcity (decrease in quality or quantity of the resource), demand-induced scarcity (population growth), and structural-induced scarcity (unequal distribution of resources). Reduction in the quantity or quality of a resource shrinks the resource pie, while population growth divides the pie into smaller slices for each individual, and the unequal resource distribution means that some groups get disproportionately large slices (Homer-Dixon 1994: 9).

Scarcity has social effects that can foster conflicts. The three types of scarcity can influence each other and increase the scarcity, and further promote conflict. Environmental scarcity can lead to migration, which can lead to ethnic conflicts because the social balance is being disturbed.

Environmental scarcity can also lead to decline of economic productivity. A consequence can be deprivation-conflict. Low status groups can be frustrated over the overusing elite, despite decline in resources. Another consequence of migration and economic decline can be weak state. This increases the chance for ethnic conflict, coup d'état and deprivation conflict. Developing countries are more vulnerable to these changes because they lack financial, material or intellectual resources of the developing world for dealing with and adjusting to the new situation (Homer-Dixon 1991, Homer-Dixon 1994).

One of the main criticisms against the environmental scarcity school comes from political ecology. Here the focus is on political and social construction of scarcity. Access, control, struggle, power relations and misuse of power are more important in explaining the link of scarcity and conflict than scarcity itself. Peace and conflict studies also criticizes the scarcity school, because they claim the link between scarcity and conflict lacks evidence, and because other causes of conflict are being neglected. Other counter arguments against resource scarcity come from Ranis (1987 in Le Billon 2001: 564) who emphasizes that as populations grow and human capital develops the likelihood for violent conflicts decreases. This is, for example, because international trade and market mechanisms can counterbalance localized scarcities or motivate innovations and shifts in use of resources.

3.2.2. Resource abundance and civil wars

Natural resources can contribute to civil war in four ways; directly by financing and by motivating for war, and more indirectly due to bad governance and poor economic performance.

Firstly, natural resources can contribute to financing war. They can finance both governments and rebels. During the cold war many civil wars were financed by the US, Soviet Union or France. In a post cold war situation, natural resources are more commonly used.

Governments extracting natural resources are often considered the most legitimate. But sometimes the revenues are spent in a way that doesn't benefit the civil society. To the contrary, sometimes revenues are utilized to oppress citizens. Oppression can give possibility to continued control over natural resources and further oppressions. Governments often depend on support from foreign states in extracting and selling natural resources.

Rebels are also often financed by natural resources. They can make money through direct looting. Some resources, such as diamonds and minerals are easy to extract, and if rebels get in control over these resources, there is a lot of money to gain. Booty futures happen also, when the rebels get help from outside against a promise of future rights to the resource. Natural resources can also finance rebels through extorting and kidnapping of workers to get ransoms. The resource is often located in remote areas and cannot be moved to safer places (Ross 2003). Rebels also sometimes get direct support from foreign countries or groups in foreign countries, from political, ideological or solidarity reasons.

Secondly, natural resources can be important for motivating a conflict. Le Billon (2001) divides resource locations according to proximity or distance to the government, and whether the resource is of point or diffused character. This is of importance for the motivation of rebels and what kind of conflict is likely to arise. If the resource is located in proximity to the government and is a of point character, then there is a risk of populist movements attempting to capture control over the state in a coup d'état. When the resource is located in proximity to the government, but is of more diffused character, the outbreak of a rebellion or riots are more likely. If the resource is located more distant from the government, then it is more difficult and costly for the government to keep control. If the resource is distant and diffused, warlords can emerge. A warlord is a strongman controlling an area through his ability to wage war while not obeying to higher authorities. The warlord's motivation is more often commercial than political (Le Billon 2001).

When the resource is located distant from government and is of a point character, secessionism is most likely to occur. The likelihood of political secessionism increases when "outsiders" are perceived to extract "local" resources without sharing the wealth (Le Billon 2001). The areas where the natural resource is found are often remote and far away from the government, making it difficult for the authorities to provide law and order. The people living in these areas can have a distinct identity, and often they have to bare much of the costs, and getting few of the benefits in return. This makes them believe they would be better of independent (Ross 2003).

Thirdly, resources can lead to conflict through bad governance. When a country is resource dependent, the government tend to perform worse. Strong evidence shows when governments get more revenues from oil and other resources, they are becoming more corrupt. The government can only absorb and effectively use limited amounts of money. It is also difficult for the citizens to track the money flow; making it easy for the government to slip some away (Ross 2003).

Bad governments tend to become less democratic, and then less accountable to the citizens. Democratic governments are more likely to solve grievances and social conflicts, making an outbreak of violent conflict less likely. Less democratic governments tend to have an unfair distribution of resource revenues. Public goods such as education and health care are seldom prioritized. Military spending is two to four times higher in countries rich in minerals and oil than resource poor countries. The state turns weaker when the government no longer demands taxes; a straight is has taken decades to develop and is important for demanding accountability from the government (Ross 2003). Political leaders will rather establish a regime based on rewarding followers and punish opponents. Windfall rents provide little incentives for rulers to develop a diversified economy that could give rise to alternative sources of economic power strengthening political competitors. This also turns the state weaker by undermining the effectiveness of the states bureaucracy, and it creates dissatisfaction among the citizens (Le Billon 2001).

Weak governments receive less legitimacy from the citizens. With little prioritizing on wealth for the citizens, the wealth gap increases. As the gap between the ruling and ruled increases, the frustration of the marginalized groups grows. They will seek political change as the only way to achieve wealth and power (Le Billon 2001). Frustration together with low level of legitimacy increases the risk of conflict.

The last consequence of natural resources is of economic aspect. A resource dependent country tends to perform badly. The economy grows slower than in countries less dependent on natural recourses. This is mainly because the governments in such countries do a poor job in investing in education and health for the citizens. One study found a strong correlation between greater dependency on oil and mineral exports and higher child mortality rate. For each increase for minerals dependency of five points, the mortality rate for children under five years rose by 12.7 per thousand; for each five point increase in oil dependency, the under-five mortality rate rose by 3.8 per thousand. This is caused by the greed from the ruling elite that exclude more marginalized groups and this increases inequality and creates dissatisfaction and grievance (Ross 2003).

Resource dependent governments are more vulnerable to economic shock. International prices on natural resources are unstable, and then unpredictable for the governments. The importance of saving is often not taken seriously enough, and when funds are created, they are often poorly managed (Ross 2003).

Dutch disease is another consequence of resource abundance. Success in one sector can breed failure in others. Greater export revenues lead to an appreciation of the national currency affecting negatively on non-resource sectors already shrinking because talent and investments are allocated to the resource sector and rent seeking activities rather than into less rewarding productive activities (Ross in Le Billon 2001: 566). The effect of the Dutch disease is debatable. Some argue that deindustrialisation is caused by other, more fundamental factors, and that the Dutch disease effect can be circumvented by effective economic policy (see Cramer 2006: 119).

Resource dependent countries tend to experience week and less democratic governance, corruption (since money comes irregularly), complacent and slow economic growth (due to negative investment in human capital and the government just live of the income of resources), unpredictability (due to lack of stable market prices), and Dutch disease. All these aspects can contribute to the so-called resource curse. This theory says that countries with large amounts of natural resources to their disposal grow more slowly than those with lesser amount of resources. There are exceptions, such as oil depended Norway and Canada, but those are exceptions rather than the rule.

All these factors contribute to poverty. Poor countries have higher risks of facing civil wars. Middle-income countries have a risk of civil war four times higher than OECD countries. 4 billion live in these countries. For low-income countries the risk is fifteen times higher. Approximately 1 billion people live in such countries (World Bank 2003).

Civil wars have devastating consequences that further increase the poverty and intensity, proxy wars and eruption of old wars in fragile states. The consequences of civil war can be divided into three circles. The inner circle contains the domestic consequences of displacement, poverty and death. United Nation High Commission for Refugees (UNHCR 2010) estimates the number of internally-displaced people to be more than 5 million as a direct result of civil war. At the end of a war the rate of people living in extreme poverty has increased about 30 percent. The middle circle refers to neighbouring countries. The refugees bring diseases with them. For example every 1000 international refugees are bringing 1400 additional cases of malaria. The neighbours also suffer economic by low economic grow rate and increased military spending. The third and outer ring takes into consideration the global scenario. Potential global consequences of civil war are the increased spread of HIV/AIDS, drug flows and terrorist activities (World Bank 2003). And the suffering continues long time after the end of the war, increasing the poverty and risk of resumed war.

Countries experiencing civil war can easily get trapped in the so-called conflict trap as conflict causes poverty and poverty causes conflict (World Bank 2006). War generates leaders and organizations that have invested in skills and equipment only useful in wars. Some people, especially military leaders, gain from the war and will have no interest in ending it. For many it becomes a way of life. The civil wars are lasting longer when rebel groups can raise financial means and acquire armaments more easily because of the war (World Bank 2003). Poverty and bad governance makes is easier to recruit members to rebellions. The army and often also rebel groups can offer jobs with relatively good salary. Increased poverty will lead to more rebellion, which foster increased military spending, which again gives more poverty. Especially hard is it to escape the conflict trap war when other countries, including super-powers are making money on the war. An argument is that the western world needs wars to justify the large amount spent on weapon.

If the dependency on natural resources becomes very high the risk of war can decrease. This is because the income becomes so high that you can afford to buy all the things that keep you in power. It can make everyone happy, or it can destroy all hopes of uprising.

Both resource scarcity and resource abundance can lead to conflict. But according to Le Billon (2001) and political ecologists both theories fail to take into consideration the socially constructed nature of resources and in so doing fail to explain why abundance or scarcity of resources is not a sufficient factor for conflict. "Resources are not; they become" (Zimmermann 1951 in Le billion 2001: 565). Resource dependency is to be understood as a historical product, influenced by global economy through colonial powers, private commercial interests and domestic elites, and even international aid. The desire for resources is a result of social constructions, not of geographical circumstances (Le Billon 2001).

3.3. Greed vs. grievance and the legitimacy of war

"The idea of war can confer a kind of legitimacy upon certain types of violence, given the widespread belief that certain kinds of war are just and legitimate" (Keen 2000: 19). In addition to the motivation factors mentioned in the previous chapter, greed and grievance can also motivate to the outbreak of war.

The source of conflict lies in need. Needs comprise basic commodities that human being depends on for physical survival, as well as a desire of maintaining a certain way of life. Conflict can occur when these needs are not sufficiently satisfied. Poverty itself cannot explain conflict, since many poor people are not in revolt, but it can create the conditions out of which conflicts can grow (Zartman 2005).

Grievance and deprivation of basic needs have a motor role in conflict. "Grievance comes from unmet needs, unwarranted deprivation, felt hurts, and resentment against the withholding of just deserts and thus they relate to other dimensions such as distribution and justice" (Zartman 2005: 263). Certain types of conflicts start because people feel discriminated for what they are. This can be race, ethnicity, religion and nationality. Other types of conflict grow out of a sentiment of relative deprivation which results from the state's neglect to meet rising expectations of its citizens. Relative deprivation can turn grievance into creed and a demand to access what is considered ones rights. Then conflict becomes possible (Zartman 2005).

In order to mobilize grievance into conflict, political entrepreneurs are needed. This is a top-down approach (Keen 2000). They appeal to identity as a factor to mobilize support and exploit the subjectively felt sentiment of deprivation. Class, livelihood and ethnicity are contributing to our own and others perceptions on ourselves. All three can be mutable to some degree, but when they are difficult to change, conflict is more likely to erupt. Only when two groups are in a zero-sum relationship, meaning that one group cannot be themselves except at the expense of the other being themselves or when need is restricted or targeted to an identity group, then conflict can arise (Zartman 2005).

Keen (2000) suggests that civil wars are not static, and the agenda changes over time. Conflicts usually start with grievance, but turns into a fight driven by greed where the economic agendas become more important than the political that started the violence. Others are arguing that grievance alone is not enough motivation for going to war; greed is needed as well. Greed deforms and obscures the original bases in need and grievance. Social motives turn into personal benefits, and destroy the solidarity and motivation of grievance. When the conflict has entered the greed phase, it weakens the possibility to achieve a resolving settlement of the conflict. Greed inside a state promotes rebellion, ongoing failure in the rebellions struggle for rights and grievance promotes greed among the rebels, and greed within the rebel groups promotes greed within the state (Zartman 2005).

War can be considered a rational process, based on utility theory. Before deciding whether to start a war, possible benefits and costs will be weighed against each other. If the benefits outweigh the costs, war is likely to erupt. Calculations of benefits consider of the probability of a victory and the potential gain. The costs of the conflict will depend on the costs of the war itself, the disturbance to economic activity, and on costs of coordination. Four factors become important in these calculations: per capita income, ethno-linguistic fractionalisation, the natural resource endowment and initial population size. A country with the highest risk of war is a low-income country, rich in natural resource, with a general large population and two large ethnic groups (Collier and Hoeffler 1998).

Higher per capita income means a lower risk of civil war. This is because it will increase the costs for a rebellion; a high-income population has more to lose than a low-income population. In case of a conflict a high per capita income also reduces its duration significantly. The probability is 0.63 if the country has half the mean income and only 0.15 percent if the country has double mean income. Civil war is mainly a phenomenon in low-income countries (Collier and Hoeffler 1998).

The effect of natural resource endowment is non-monotonic. Initially, a high amount of natural resources increase the risk of war. This is due to the taxable base of the economy constituting an attraction for rebels wishing to capture the state, promising a higher gain in case of victory. However, a good access to natural resources of the government lowers the risk of war, because this increases the possibility for defence. The maximum risk of war lies at 27 % natural resource dependency and 24 % dependency for its duration (Collier and Hoeffler 1998). Collier (2000) argues that the difference between criminals and rebels is that the rebels are stealing from natural resources, while regular criminals are stealing from households. For civil war is absolute income level important since poor countries face a higher risk of rebellion. For crime it is the other way around, since high inequality tends to create more criminal behaviour. Conflicts are less likely in wealthy societies, and more likely in countries rich in natural resources.

Countries with a large population size have higher risks of war, and the duration of the war is longer. This is because it increases attraction of secession. A country with double mean population has an increased probability of war at 0.56, and an increased duration of war for 12 months compared to one with mean population. The danger of civil war also arises when the society is polarised into two groups. Polarised communities have a 50 % higher risk of civil war than highly homogenous or highly ethno-linguistic fractionalised societies. Coordination is more expensive for

rebel groups in fractionalised communities (Collier and Hoeffler 1998), and the motivation for conflict is lower in homogenous communities.

Others (e.g. Le Billon 2001) criticize this view of greed and economic rationalism because it depoliticizes violence. This view can be said to be narrow, and ignores the grievance, legitimacy and positive outcomes of war.

Most often the violence is actively embraced by a variety of ordinary people as a solution to the problems of their own. This is called bottom-up violence. Violence is not perceived as a problem, but as a solution. Wars have generally been considered as a breakdown, caused by hatred among different ethnicities and tribal violence characterized by a situation of anarchy, causing serious setbacks to development. This interpretation can be wrong. The problems of war should be viewed in a more positive term, with the use and functions it has. Sometimes war can be the only solution for oppressed groups to gain justice. In this perspective war can have positive effects in the long term. A war can contribute to the shift of laws and administrative procedures in a society, and lead to the emergence of an alternative system. Sometimes war can result in protection of vulnerable groups, and it can provide economic justice and security (Keen 2000).

War can also provide psychological satisfaction for individuals and groups. It can lead to the immediate reversal of relationships of dominance and humiliation that have previously prevailed in peacetime. War can also offer excitement and a chance to revenge past wrongdoings. Sometimes it is safer to be in an armed group than outside one. A combination of fear, need, grievance and greed creates the willingness to be mobilized for violence. Participation in violence can happen voluntary and solution oriented with the promise of a more just resource distribution in the future. It can also be provided via an appeal to group solidarity (Keen 2000). Recruitment of soldiers can also happen with force.

The aim of the war does not necessary have to be military victory. The term war can also be misused to legitimize actions that in peacetime would have been considered crimes. The proclamation of the "war against terrorism" by the Bush-administration helped to legitimize actions such as the invasion of Iraq and the detention of alleged terrorists in Guantanamo that would not be legitimate in peacetime. War can also be utilized by individuals to obtain economic benefits. Both rebel groups and governments are exploiting the civil society in terms of taxes and labour. Other examples of exploitation can be to pillage soldiers for salaries, forcing locals to pay for protection, institutionalized benefits accruing to the military, and steal food and land from locals. Violence can

also serve as a purpose in firstly precipitating relief, and then gaining access to the relief once it arrives (Keen 2000).

3.4. How to end a civil war?

Civil wars can end in two ways, by surrender or by negotiations. They are hard to negotiate in; only a forth ends up in negotiations compared to fifty percent in interstate wars. The rest ends with one of the parties surrendering (Zartman 1995). The Wagner hypothesis claims that negotiated settlements of civil wars are more likely to break down than settlements based on military victories. Here I will discuss how to end a civil war, and the chance of resuming the war.

A military victory means that one side has defeated the other. The loser's organization has been destroyed or irreparably damaged, and are forced to accept the politics of the winner and live at their mercy. Since one side has been capable of establishing its supremacy, the likelihood of a resumption of the war is low (Shanmugaratnam 2009: 8).

The other possibility is the negotiated settlement. This is often considered the preferable option by many peace movements and international organizations. But these settlements are less sustainable and the risk of resumed war is high since the main problem is often not sufficiently solved. A major problem is that of power sharing, with demilitarization, demobilization, democratization etc.

Resumption of war can also erupt due to disputes over how to develop war-torn areas (Shanmugaratnam 2009: 8).

If war can be a rational process, so can the peace process. The preferable situation for one side will be unconditional surrender of the other side. By this the war can be won by one side without making any compromises. A peace agreement is another possibility, but this is only likely if both sides profit from it. The benefit of continuing the war must be lower than the expected benefit of settlement. The utility of continued fighting depends on the political and military costs of war, the probability of victory, and the possible gain of victory. When calculating the value of potential future outcomes, outcomes in the distant future weigh almost as heavy as outcomes in the near future (Wittman 1979).

Negotiations with asymmetric power and asymmetric legitimacy will be difficult. The governments are usually the strong part in the sense of legitimacy, sovereignty, allies, armies and access to

resources. The weak part will try to equalize the asymmetry, because both parts must have equal influence and veto. This explains why there are so little negotiations in civil wars. When rebel groups usually surrender, why shall the governments even bother to negotiate (Zartman 1995)?

Wittman (1979) on the other side claims that power balance is irrelevant. There is no relationship between probability of victory and probability of settlement. If one side is more likely to lose, they will decrease their minimum demands in negotiations. At the same time the strong part will increase their minimum demand, not making it any closer to settlement. If one side is closer to loose, the other side increases the chance of victory and the utility of continued war increases. The better one side stands in the negotiations; the worse it is for the other part. One strategy is to equalize the power gap before starting negotiations, by for example bombing the enemy. Then they will lower the minimum demand in negotiations since this action can inflict heavy costs on the other side.

A country will only reduce the war effort if this action increases its expected utility. If a reduction of efforts only results in a slight decrease of the probability of victory, the country might decide to withdraw some of the forces. Then the expected utility increases even though the probability of victory decreases. When the costs of continued war decrease, the possibility of a settlement is reduced because the expected utility of war increases (Wittman 1979). This also allows the parties to fight longer.

A non-rational motive can be grievance. In this case negotiations become more difficult, since the situation is locked. There is little room for negotiations since there is little room for compromises or for trade-offs (Zartman 1995).

Misunderstandings as a result of propaganda and errors in academic literature have given both sides wrong perceptions, especially on the reasons for the outbreak of the war. War is often a result of optimistic calculations, and they are often overestimating their chances of winning. The more optimistic the country is, the greater is the probability of war and the less is the chance of a peaceful settlement (Wittman 1979). There is a close link between how a war begins and how it ends, and these misunderstandings must be clarified.

Civil wars are not static. The agenda changes over time. This will often prolong the war since a demand and solution at one stage, does not work on a later stage (Keen 2000). Therefore possible solutions must change according to the demands. A civil war usually starts as a cultural protest, and then moves on to the stages of political violence and military confrontation. War can erupt, but is

costly and damaging, and not desirable if there are peaceful solutions to the problem (Zartman 1995).

There is never an appropriate time for negotiations, but starting as soon as possible is best. The longer the parties wait, the more locked in positions and hostility they will become. A governmental regime change can create a positive situation for negotiations. A mediator is needed and most negotiating parties make use of one. Mediators must be neutral, objective, and capable of changing the perspective of the involved parties through manipulation and communication. They should listen to both parties and pose suggestions. They can contribute additional information, theoretical ideas, analyses of situation, and help to redefine the parties' mutual relationship. Information flow is important for solving possible misunderstandings. The mediator has no power to enforce anything, the only power he has is to make the parties change their perspectives. The conflict must be deescalated to normal politics, and the result is usually the creation of a new political system. The sides must consist of recognized leaders that represent their population and must be capable of making and holding an agreement. All solutions are experimental; there are no textbook answers (de Reuck 1983, Zartman 1995), but it shall be "more than an attempt to turn the clock back to a rural idyll that never actually existed" (Keen 2000: 40).

Negotiations can have two outcomes. The first is settlement, which usually means ending the war without solving the root causes. The other is resolution where the parties change their perspectives towards the conflict and work towards a transformation of the system (de Reuck 1983). Settlement is not a resolution because the problems are still alive, waiting for later eruption.

Successful negotiations and the signing of a peace agreement do not necessary mean peace. Peace can be said to be absence of war, but sustainable peace is not necessary achieved after a peace agreement. It is difficult to measure durable peace. The boundary between war and peace, as between war and crime, may be quite blurred.

Some studies assert than one-sided victory is more stable. If the result is military victory, then the risk of resumed war is 15 %, compared to 50 % after a negotiated settlement (Shanmugaratnam 2009: 10). Rebel victory may be more sustainable than government victory if a new political system is created as a result. However, longer-term analyses underscore that this undermines grievance and the conflict can again arise later. The longest lasting peace can be achieved when the deep-rooted causes of the conflict have been addressed, and when forward-looking mechanisms to handle future outbreaks are provided (Zartman 2005: 277).

Liberal theorists are claiming that capitalism provides the ideal environment for peace. They believe peace and development appear to be the unintended but highly beneficial outcomes of efforts driven by individual economic rationality. Kant said, "it is the commercial spirit that cannot coexist with war and sooner or later takes hold of every people" (Kant in Shanmugaratnam 2009: 8). In a free trade economic order the tendency to fight wars declines since the costs are most likely to outweigh the spoils of war. Fredric Bastiat put it clearly, "when goods cannot cross the borders, armies will" (Bastiat in Shanmugaratnam 2009: 8). Marx was among the first to criticize this liberal pacifist thesis. He stressed the violent history of capitalist development and the reality of unequal power relations behind the apparent equity in the realm of exchange. The idea of the "democratic peace" stating that democracies don't fight each other gained increased credibility during the cold war. However, the three largest democracies (the US, the UK and France) are those most involved in wars today, and democratisation was a violent process in Europe. Wars have been fought in the name of capitalism, but the peace in Europe was not based on free markets. The economy was mixed with the use of protectionism. So the history does not show that free markets and liberalisation is best for peace (Shanmugaratnam 2009).

3.5. Peace building and post-conflict development

Peace is more than ending a conflict. Galtung makes a distinction between negative peace (cessation of armed hostilities) and positive peace, which refers to a stable situation where new disputes do not escalate into war (Galtung 1996, in Shanmugaratnam 2008: 2). In this section I will discuss how to obtain this positive peace after the end of a conflict. Peace building and post-conflict development are of importance.

The term "peace building" was first used in the 1992 UN report "An Agenda for Peace". The discussion is how to best strengthen the work for international peace and security, and how the UN can contribute to this. Peace building can contribute to prevent violent conflicts where this is a threat, arrange and support peace-making processes in countries with ongoing conflict and rebuild a post-conflict community to prevent re-emergence of violence. Peace building deals with changing the environment that causes war, with positive peace as its desired outcome.

Peace building has three dimensions that mutually influence each other. These are security, political development and social and economic development. Peace building must include all these dimensions (Norwegian Ministry of Foreign Affairs 2004).

Security dimensions include the country in war and its citizens. DD&R (disarmament, demobilization and reintegration) of previous soldiers and others who participated in war is essential for building a sustainable and lasting peace. This must also include children and women. The goal is to get former soldiers back in productive activity in the local community. Another security issue is the problem of mines. Mines pose a great danger for local populations, and prevent social and economic development as well as the returning of displaced people. Mines must be removed, and their production regulated in mine-producing countries. Regulations must also cover hand weapons. After war there is a great abundance of weapons. Strict international control over trade of all types of weapons requires international cooperation and agreements. The domestic security sector must also be improved and included in the country. General poverty strategy and development politic; including military forces, paramilitary groups, civil police, monitoring, lawand prison system, and private security-companies. The security sector has the responsibility for protecting the state and the community, people, property and infrastructure. Reducing military spending is important, but difficult. If the outcome of the war is one state, the rebellion army must be demobilized since the state can only have one army. The money previously spend on military is now highly needed in the post-conflict development. In a transition period a neutral peacekeeping force can be the only guarantee for peace by monitoring abides of peace agreement (Norwegian Ministry of Foreign Affairs 2004).

Some of the underlying causes of violent conflict are weak or illegitimate institutions characterised by corruption, lack of respect for human rights and democratic deficit. A legitimate regime must be developed, meaning one that does not needs to resort to instilling fear, but that can provide welfare, security and democracy. Sustainable peace is dependent on this, and support can be given to political and administrative governments in a transition period to secure the position of peace-and development oriented governance and to maintain law and order. Reconciliation of trust and friendly relations between people and institutions must be established, across ethnic, religious, geographical and other divisions (Norwegian Ministry of Foreign Affairs 2004). During the war some of the tasks for the state have been moved to super-state organisations, such as the WTO with the power to sanction the country, or IMF's power of forming a post-conflict country in lack of money by giving certain criteria and demands along with the loans and grants. The power must be

given back to the state. NGOs are doing an important job in the post-conflict period, but it is the state that must develop the economy, the bank-system etc. (Shanmugaratnam 2009).

Developing good and legitimate governance is essential in peace building. With good and legitimate governance, the use of violence will be less relevant in solving disagreements. This must come from inside the country, but in a post-conflict time the international community can contribute to processes in selection of such governance. It is easier for the international community to establish good governments than removing them. That can include reformation of election system, help to accomplish free elections, constitutional commissions, juridical reforms and control of the human rights situation. Support must also be given to civil peace oriented organizations. Media is of special importance, since they can provide information to the citizens, be a forum for different views and work as a watchdog for potential harassment from governments (Norwegian Ministry of Foreign Affairs 2004).

In a post-war situation the judicial system must function in order to punish those responsible for crimes against civil society. This is of importance in order to defuse feelings of grievance and discourage future violence. It shows respect for human rights, peace, reconciliation and democracy. How to accomplish this differs in every country, but the International Criminal Court (ICC) can judge the most serious crimes.

Social and economic development is important. As stated before, poverty fosters conflict, which in turn increases poverty. The goal is to step out of the conflict trap, and into the good circle where positive development assures the absence of war and leads to durable peace. UNHCR has developed the 4R-initiative; Repatriation, Reintegration, Rehabilitation and Reconstruction. When roads, health clinics, schools, electricity, and houses are being repaired the civil society will feel and appreciate peace in a short-term. Social development, with schools and health clinics are of special importance for long-term peace. Quality, accessibility and non-discrimination must be emphasized. The productive sector with jobs, trade and investments shall be stimulated in order to gain economic development and long-term and sustainable peace (Norwegian Ministry of Foreign Affairs 2004). Poverty and relative deprivation are seeds for conflict, and post-conflict development should be aimed at preventing this.

The international community tends to give most aid in an early stage of the post-conflict period. Thereafter follows a decline, leaving a vacuum that is often filled with violence. In the most vulnerable period, which is three to five years after the end of a conflict, the external support is

usually very low, at the same time as the needs are still high. Inadequate or even wrong support can increase the danger for violence (World Bank 2003 in Norwegian Ministry of Foreign Affairs 2004).

Natural resources play an important role in conflicts. Countries should move away from the resource dependency and towards a more diversified economy to prevent the resource curse. This can be achieved through investing parts of the profit from natural resources in other industrial sectors, and by investing in human capital and good governance. Natural resources have huge potential for development and should be extracted in a way that benefits the citizens. This must happen in a transparent and non-discriminating way. To prevent rebellion in the first place, the resource must be protected from theft, making it less lucrative or possible to steal from. This can be done when the resource benefits the locals, or by guarding it militarily. The former is ethical more desirable.

Some international efforts have been successive in preventing sale of natural resources that contribute to war; such as the international Kimberly process for regulate the trade of blood-diamonds, but more similar agreements are needed. The international community can also help preventing economic shock and price fluctuations by stabilizing the market and making trade more accountable for the country. The Millennium Development Goals should also include peace work, since this is essential for reaching other goals. Unfortunately the world community is not working hard enough for peace since they want to secure access to resources. Private capital and economic interests weight more than victims of conflict (Le Billon 2001: 578). This also applies for Sudan.

4. The history of oil and civil war in Sudan

"A war once described as being fought over scarce resources is now being waged for the total control over abundant oil reserves" (Johnson 2007: 1).

This chapter deals with the role of oil in the civil war in Sudan; a war that lasted more than twenty years and claimed the lives of two million and displacing more than four million. I consider oil the greatest cause of the war in terms of trigger, motivation and financing. I will start by presenting some general information about Sudan. Thereafter follows two chapters on early history and the first civil war. It is important to understand the broad picture of Sudan and the history before the second civil war for understanding the second civil war and the post-CPA situation in Sudan today. Thereafter I will examine the second civil war. This is divided into three sub-chapters. The first one will look into how oil was a trigger for resuming the war in 1983. Then follows two chapters on how oil has been a motivation and financier of the fighting and how oil was an obstacle for peace negotiation. The chapter end with a presentation of post-CPA war in Darfur.

4.1. Introduction to Sudan

With more than 2, 5 million square kilometres Sudan is the largest country in Africa, almost eight times the size of Norway. It is estimated that about 41 million people live in Sudan making a highly distinguished country in terms of culture, religion, economy and politics. 39 % of the population are Arabs living in the desert-like north, most of them close to River Nile. They have about 2/3 of the country's land mass. The remaining 61 % are Africans living in south, with Dinka and Nuer as the largest groups (CIA World Fact Book 2009). The North was early influenced by Arabic culture, values and religion through migration and trade. North Sudan is today Muslim, and shari'a is the foundation of the national laws for Muslims in the north. Islam has contributed to unify the North, something the South itself has lacked through times. In south are smaller ethnic groups, based on kinship and economic interests important for social and economic life. A religious diversity often referred to as animism, in addition to Christianity dominates the South. Culturally they belong to Sub-Sahara Africa. Official languages in Sudan are English and Arabic, but there are 14 minor languages with more than 100 different dialects. Half of these are found in South Sudan (Johnson 2007: 1). This diversity of the country is important to keep in mind when trying to understand the civil wars and post-CPA situation in Sudan.

4.2. Before independence

Egypt invaded Sudan in 1820. Egypt's ruler wanted to become an international power, and needed gold and slave-soldiers from Sudan. At this time the south was ruled by several groups, such as the Shilluk kingdom on the White Nile and the Dinkas along Kiir (Johnson 2007: 5). After 60 years Egypt had occupied the area we today know as Sudan, and this disturbed the power balance in the country and between groups. Khartoum was made the capital, but the south was never under direct rule. An uprising ended the Egyptian rule in 1885. In 1898 the Sudanese army was defeated, and Sudan became a condominium under British and Egyptian rule. The north was prioritized in terms of development, commercial agriculture and education. In the south Christian missionaries were responsible for the education. Negotiations for independence started after the Second World War, and Sudan received its independence January 1, 1956 (SFS 2008).

4.3. The first civil war

A year before independence there was a mutiny starting in the Equatorial province in the south. The government in north wanted to transfer the garrisons to northern officers and weeks of dissatisfaction with the situation and increased tension resulted in a mutiny in 1955. It started in the garrison Torit and spread to other garrison. Some hundreds were killed, but the mutiny was in general poorly organized (Johnson 2007).

After independence most of the power was still centralized in Khartoum. The Arabs were well prepared for independence and knew how to handle modern states. Southern politicians faired the marginalisation from before independence would continue and preferred federal government with autonomy for South Sudan. Northern politicians opposed what they considered first stage towards independence for south. The political situation in Sudan from independence was highly unstable. From 1956-58 Sudan was lead by Sovereignty Council, until Ibrahim Abbud took power in a coop.

Early 60s a number of senior political figures, as well as a larger number of students left for the bush and neighbouring countries where they joined the remaining mutineers to form the exile political movement and the core of a guerrilla army. They called themselves Sudan African Nationalist Union (SANU), but colloquially Anyanya. They called for self-determination for South Sudan (Johnson 2007).

The first years the fighting was modest since they lacked external support. This changed in 1964. One of the main policies in Khartoum from the very beginning was to spread Islam, and in 1964 Abbud expelled all Christian missionaries. The missionaries were responsible for education in the south, and this boosted the war and increased the resistance against a unified Sudan. Abbud was forced to step down. Elections were held in 1965 and Ismail al-Azari became president. But political stability didn't occur neither in the north or the south. When the new government supported rebels in DR Congo, part of the military support ended up in the hands of Anyanya and the fighting's escalated (Johnson 2007 and Leraand 2009).

The government in Khartoum invited for an infelicitous conference early 1965 that only lead to a separation of Anyanya. In 1969 the military took to their weapons again, lead by Jaafar Muhammed Nimeiri. He introduced socialistic, radical governance. The new government declared that they wanted to solve the conflict diplomatically instead of using military force. They made an outline of regional self-government for the south. Abel Alier was given the Minister of Southern Affairs post, and he managed to unify the southern leaders to a common voice. The south also got increased international support. Nimeiri on the other side was increasingly unpopular, and this gave him a new will to negotiate with neighbouring countries and with South Sudan (Johnson 2007).

In 1971 Joseph Lagu created Southern Sudan Liberation Front (SSLF) under the command of expanded Anyanya armed forces. The increased international military support made them a stronger power, and negotiations became more lucrative for both parties. A costly war is not desired if there is a peaceful solution to the problems. They agreed to meet on neutral ground for negotiations and the Addis Ababa Agreement was signed in February 1972 between Nimeiri and Lagu (Johnson 2007). This ended the first civil war in Sudan. The Anyanya army was incorporated into the governmental army. An important part of the agreement was a regional autonomy for the three southern states. This included control over natural resources.

4.4. The second civil war

The peace lasted for 11 years. In this chapter the focus is the second civil war, emphasizing the role of oil. Oil has been a trigger for resuming the war, provided both motivation and means during the war, and been an obstacle for peace negotiations.

4.4.1. Oil triggers war

The American company Chevron was the first company to search for oil in Sudan. They were granted large oil concessions in 1974. They started their search in Red Sea, and expanded inland. Oil was discovered in 1978 in Western Upper Nile, first in what today is called Block 1, and soon after, further north-west in the Heglig field (Human Right Watch 2003). It was believed the oil reserves were enormous, and a Lebanese newspaper claimed that there was more oil here than in Saudi Arabia (Sudan Update 1999). According to the Addis Ababa Agreement, this was in a region with southern self-autonomy, including control over natural resources. In 1980 Nimeiri embarked a re-division of the autonomous unit to three states, created Unity State where the oil was located, and put it under northern Sudan. By starting the search for oil, and later extracting and transferring oil north, the government clearly ignored the content of the peace agreement (Human Rights Watch 2003).

The decision to ignore the peace agreement was a result of rational calculation. The north has traditionally exploited the south, and expected little resistance. Even if they met resistance; the expected benefits were estimated to outweigh the expected costs. Benefits here are access to the possible large oil reserves. The benefits will also depend on the probability for victory and this was estimated to be high. The costs will depend on the costs from fighting itself, and since they can expect low resistance this was set low. If resistance was to erupt, in was most likely to happen in the south, and the disturbance of the normal economic activity in north would then be low. Then the benefits outweigh the costs, and made it lucrative to ignore the Addis Ababa Agreement.

South claimed the north was stealing their oil. Urban southerners took to the streets to demand participation in decision-making regarding the oil-industry, jobs in the oil-industry, an oil-refinery and pipeline in south and off course their share of the oil-revenues (Human Right Watch 2003: 96). But the demonstrations yielded no results.

The next years were characterised by violence. Early 80s, the government armed the Arabic Baggara nomads living in Southern Kordofan. With these weapons they were able to loot cattle and humans and force Dinka and Nuer from their land and pastures. Most of the oil fields were located in the land of Nuer, and some in the land of Dinka. Displacement was introduced to open up for oil-extraction. The Baggara got a profit from looting cattle and slaves, and the government got access to the resources in the area (Human Right Watch 2003: 101).

Anyanya 2 is a common term for several guerrilla groups in the south, which in contrast to Anyanya 1 never fully accepted the Addis Ababa Agreement. Throughout April and May 1983 more and more police and soldiers deserted their units for the bush in Ethiopia to join Anyanya 2 movement. By July a new organisation was established there in the bush, under the commander of John Garang (Johnson 2007). They called themselves Sudan Peoples' Liberation Movement (SPLM) with Sudan Peoples' Liberation Army (SPLA) as the military wing. The movement consisted of many ethnic groups, and the Dinka was strongest represented. This was during the cold war, and pro-Soviet SPLM/A received support from the Mengistu Haile Mariam regime in Ethiopia. They received arms from the Soviet Union, and military training from Cuba.

While the government were driven by greed for oil, SPLM were motivated more by grievance. The south has always been poorer and marginalised, and this had sown the seed for conflict. The seed was irrigated when the north started to steal oil that legally belonged to the south. This created relative deprivation and turned need into creed and a fight for their rights to oil. But in order to turn creed into violence, political entrepreneurs are needed. SPLM wanted to create a New Sudan with genuine autonomous or federal government for the various regions of the Sudan, a restructuring of the central government and a commitment to fight against racism and tribalism (Johnson 2007).

The war resumed in 1983. In May Khartoum officially revoked the autonomous power for the three southern states. Shari'a law was introduced in September to the whole country, including the non-Muslim south. The government in the north manipulated ethnic divisions and the desire for oil by disguises it as a religious war (Keen 2000: 35). According to shari'a, Muslims have the right to rule over non-Muslims.

4.4.2. Oil and second civil war

The later part of 1983 was characterised by small clashes between SPLA and the government, mainly along the Sudan Ethiopia border. In 1984 SLPA expanded by contacting other guerrilla units in South Sudan. Those who joined in did it mainly to get access to weapons from SPLA which they needed to defend their homelands (Johnson 2007).

In February 1984, SPLA attacked the newly constructed pipeline built by Chevron to transfer the oil north. 3 foreign workers were killed in the attack, and Chevron suspended their activities. Some of the operations resumed for a short time, but in December 1985 Chevron suspended their activities in

Western Upper Nile again because they needed to reassess the commercial viability of the project. The company never returned to the oilfields and sold their rights in 1992 (Human Right Watch 2003: 110-112). Threat is a powerful weapon for an otherwise subservient military power.

President Nimeiri was overthrown in April 1985 and Abdel Rahman Swar al-Dahab came to power. This military junta was in power for one year, and free elections were held in May 1986. Ahmad al-Mirghani became president. This was an optimistic period with peace conversations between the government and SPLM. SPLM made an agreement with the Baggara militia to temporarily stop the raids in Western Upper Nile. SPLA was in control over most of Western Upper Nile by 1986, except from some garrison towns and oil fields north of Bentiu and the Bul Nuer area (Fatal Transactions and ECOS 2008: 6). The reminders of Anyanya 2 broke out in 1987, and peace conversations with SPLM resulted in the majority of Anyanya 2 being incorporated into SLPM/A.

This optimism came to an end when a military coup took place in June 1989 and put National Islamic Front (NIF) and Omar al-Bashir in power. Al-Bashir is still in power, and the party is now renamed National Congress Party (NCP). Shortly after the coup they received large amounts of arms from China, paid for by Iran (Sudan Update 1999).

The war escalated when Mengistu was overthrown in May 1991, and more than 100,000 refugees fled from Ethiopia together with SPLM/A returning back to Sudan. At this time 90 % of South Sudan was in control of SPLM/A, but in the next three years they would lose considerable grounds to the government (Sudan Update 1999). This happened after the collapse of Soviet Union, and there was a geopolitical shift for SPLM/A towards pro-West, liberal ideology. Khartoum was later branded as a sponsor for terrorism, and SPLM/A who was not banned as terrorists anywhere enjoyed international sympathy.

A few months later, Riek Machar, SPLA zone commander of Western Upper Nile, led an attempted coup against John Garang. He failed, and created a rebel secessionist claiming Nuer area, including Western Upper Nile areas where most of the oil is located. He called the forces SPLM/A-United, and later renamed it South Sudan Independence Movement/Army (SSIM/A). Nuer and Dinka have traditionally been fighting over resources and the government took advantage of this division. The government had also allied with the remaining of Anyanya 2 that didn't join SPLM/A, lead by Paulino Matiep, another Nuer. Once again they used the tactic of divide and conquer that they used with the Baggara militia, and the division was along ethnic lines. The Dinka lead by John Garang on one side and Nuer lead by Riek Machar and Paulino Matiep on the other side (Human Rights

Watch 2003: 93-94). SSIM/A allied officially with the government in 1997, and fought against SPLM/A.

The economic situation for Khartoum worsened in the 90s. In 1990 IMF suspended the country due to defaulting in debt service payments. Chevron left the country in 1992. The U.S. put Sudan on the list of countries supporting international terror in 1993 because of its support of Al-Qaida and Osama Bin Laden. The government became desperate for oil-revenues. Unfortunately most of the oil fields were located in the South, in areas controlled by rebels (Human Right Watch 2003).

The oil production in Sudan boosted in the 90s when foreign companies entered the ground. In 1992 the Canadian companies Arakis Energy Inc. and State Petroleum Inc. were granted large oil concession in block 1, 2 and 4 in Western Upper Nile, former Chevron concessions. They made several new oil discoveries and began shipping oil to domestic refineries. But Arakis was unable to finance exploration, development and pipeline alone, and in 1996 they sold 75% of their interests to three state owned companies, which formed a consortium called Greater Nile Petroleum Operation Company (GNPOC), consisting in addition to Arakis' 25% and field operator position, of China National Petroleum Corporation (40%), Petronas of Malaysia (30%) and the Sudanese national oil firm Sudapet (5%). The operation area was in Unity and Heglig fields north of Bentiu. But Arakis was unable to raise finances to carry out further oil operations, and in 1998 they sold their share in GNPOC to Talisman. Talisman became the operational partner of GNPOC, and brought with them financial means needed to escalate the oil-extraction. It built a 1,610 km pipeline from Unity Field to Port Sudan that was completed in 1999, and began pumping oil in August same year. The first export was of 600,000 barrels, giving the government a share of 2, 2 million USD (Human Rights Watch 2003 and Johnson 2007).

The new pipeline made nearby areas more lucrative for oil development, and the International Petroleum Company (IPC) owned by Swedish Lundin started a partnership with Petronas, the Austrian OMW (Sudan) Exploration GmbH, and Sudapet. Lundin started drilling in Block 5A and found oil in Thar Jath in April 1999 (Human Rights Watch 2003: 120, Johnson 2007: 162).

Once oil production actually began, estimates of Sudan's oil reserves were revised upward: GNPOC's holdings were put at 800 million barrels, and Lundin at 300 million barrels. The future revenues for the government were estimated to be between three and five billion dollars from Unity and Heglig alone (Johnson 2007: 163).

In 1995 the government introduced the strategy "peace from within" where they encouraged smaller rebel groups and dissident SPLA commanders to join. The government in Khartoum signed the Political Charter with Machar in 1996. A year later it was incorporated into the Khartoum Peace Agreement of 1997, where five other rebel factions joined in. Khartoum called this peace agreement a solution to the war and blamed SPLM for not signing. In this agreement a self-determination referendum was to be held after four years. Al-Bashir appointed Machar president of the Southern States Coordinating Council (SSCC) and as chief of the newly created southern army. Matiep was announced the major general in the Sudanese army in 1998. But short after Machar and Matiep became enemies, and Paulino Matiep created his own movement and army with governmental support, counting 10,000 soldiers in 1998 (Human Rights Watch 2003: 129, Fatal Transactions and ECOS 2008: 7, Sudan Update 1999).

The government moved Matiep's troops to Block 5A to protect the newly started operations. Machar's forces reacted by attacking the Lundin exploration in May 1999, and forcing one hundred crew-members to leave. Three Sudanese employees were executed. Then they went to fight Matiep's troops who were left to protect Thar Jath, while the government army went north of Bentiu to abduct women and boys to porter their loot, burned homes, raped women and sowed fair. Machar ran to SPLA controlled areas, and was armed with ammunition, but withdraw when the government intervened with helicopters and Antonovs. This resulted in mass exodus from Bentiu. But Machar had succeeded in his goal to shut down Lundin's operations (Human Right Watch 2003).

When Machar received arms from SPLM/A, this was the first time they were united since the split in 1991. He did not join SPLM/A, but fought with them against a common enemy. Two years later, in January 2001 they were again formally integrated in SPLM/A (Human Right Watch 2003).

After a short abode, Lundin resumed their operations and were in need of better infrastructure. Land was captured, and a road linking Thar Jath and Ler and a bridge crossing the Bahr el Ghazal River were both completed by 2001. The government guarded the road to Thar Jath and Lundin made progress in oil development. In March 2001 they declared they had made a significant oil discovery. SPLA and the government continued fighting each other and tens of thousands were displaced while the development of oil operations and infrastructure, both in Lundin's and GNPOC's areas (Human Right Watch).

In dry season 2001-2002 the situation worsened for the civilians in Block 5A. The government launched a counter-offensive with Antonov bombers and helicopter gunship, with Baggara militia, Nuer militia and government troops, aimed at people living too close to the road. Mass displacement was the result. Lundin were forced to suspend the activities in January 2002. Operations were suspended for 14 months. Against all expectations, the government and SPLM agreed on a temporarily ceasefire in the Nuba Mountains, and the Machakos protocol was signed in July 2002. This was the first of six protocols that would lead to the finally peace agreement in 2005. However, this was not taken seriously enough, and in April 2003 the government started an offensive in Block 5A. Lundin agreed to sell its interests to its partner Petronas (Human Right Watch 2003).

Protests from Canadian church groups were one reason for Arakis withdrawal in 1996. Many organisations have been reporting on human rights violation. Only two companies responded to this criticism of human right abuse; Lundin and Talisman. The prime minister of Sweden Carl Bildt joined the board of directors the day after Amnesty International released a report. He later claimed he did so to ensure the company follows the code of conduct. However, the company did not adopt any code of corporate responsibility and denied displacement was happening peer to celebration of significant oil discoveries in its block. Talisman also denied participation in unethical actions in Sudan (Johnson 2007: 164).

The link between oil development and displacement and harassment of local communities is closely related. Oil exploitation has been made possible by clearing the oil fields of their civilian population through the activities of Sudanese armed forces and Baggara militia, and by securing the areas through the alliances with Nuer breakaway factions of SPLA. Once the roads, airstrips and bridges were built, the government used them to attack civilians. Civilians suffer most from civil wars, and Sudan has been no exception (Johnson 2007).

Displacement was first introduced early 80s with the Baggara militia. It escalated in 1992 with the concession to Arakis. Many flew to the so-called "peace camps" in Nuba Mountains were they were expected to pay by being free labour for government soldiers (Johnson 2007). Displacement increased in 1996 with the formation of GNPOC. In December the following year, they cleared the areas around Heglig fields for people. Lundin started drilling for oil in Block 5A in April 1999 and the government supported Matiep's troops for protecting the operations. The army swept through Block 5A, causing mass displacement and destruction of property, and the Nuer people fled to Dinka dominated areas. Several attacks were carried out during 1999, and the worst came in July.

1,200 people from government forces sweep through Ruweng County in Western Upper Nile, killing scores of civilians, abducting hundreds and burning over 6,000 homes. In a 10-day offensive on the edge of the Heglig oilfields, Antonov bombers, helicopter gunship, tanks and artillery attacked civilians across a 100-km swath of territory. All relief to people living around the oil fields were banned (Sudan Update 1999). When the oil started flowing through the GNPOC pipeline, the area had been cleared by inhabitants (Human Rights Watch 2003).

In the period of mid-1998 to February 2001, approximately 204,500 people were displaced from Western Upper Nile. In March 2002 alone about 174,200 fled the state. Displacement was the mean of control for oil operations. People were pushed from their lands, in some cases many times, for the purpose of emptying the oil areas of southern civilians whom the government regarded as "security threats" to oil development, solely on account of their ethnic origin and therefore presumed to be of rebel loyalties. The government addressed this threat by the most extreme means, using land and air invasions, killing, looting, burning and destroying local subsistence economy and by cutting off the areas from humanitarian assistance (Human Right Watch 2003).

In August 1999 Sudan became oil exporter. From 1999 to 2001, the military grew 43 % in size. In 2001, when the president announced that he would build a domestic arms industry, 60 % of the oil revenues (580 millions) were spend on the military. This influenced the fighting tactic. For example in 2001-2002 the government tripled the helicopter base when they bought 16 new helicopters abroad. The displacement increased in sum and in brutality, peer to increased oil-revenues in order to maintain control over oil fields (Human Right Watch 2003). Oil revenues have clearly facilitated the government's military insurgency.

SPLM has not had the same possibility to use oil revenues to finance the war. Direct looting has been difficult because the oil fields have been heavily guarded. Booty futures might have happened to some degree. Strong indicators are showing that the US has supported SPLM/A (Aftenposten 1998). When Chevron left the country, the US no longer had access to Sudanese oil. And a law from 1997 forbids Americans to do business with Sudan. An independent South Sudan could once again open its doors for American interests in Sudanese oil-sector. However, both SPLM and the US are refusing this. A South Sudanese victory could also force the pro-China president al-Bashir out of power, which will also open up for American oil-interests.

SPLM has been driven more by grievance. The history of inequality in economy, education and political development started in the nineteen century through slave-rides, and grew with the

introduction of Islam and colonial rule. The cold war has also contributed, especially through arm trade. Inequality does not lead to conflict alone, but together with relative deprivation war becomes possible.

When the resource is located distant from government and is of point character, the fight for secessionism is likely. This was not a motive in the beginning, but came on the agenda officially in 1993 when John Garang officially declared proposes referendum on southern self-determination (Sudan Update 1999). Three things can motivate rebels for secessionism. The first one is that the rebels often have a distinct culture than the rest of the country. In Sudan north and south are cultural distinct. The risk of conflict is highest when there are two large groups. Cultural diversity is not a motive alone, but it can be important when one group feel oppressed by another, as have been the case in Sudan. Another motive for secessionism is that the benefits are often unfairly distributed. North Sudan has been prioritized with modernization programs, education, health and religion, both before and after independence. This became more visible, when the government used money from oil in the south for developing the north, and later even on oppressing south. This makes them believe they will be better off if they become independent. Inequality together with relative deprivation can soar conflict. The last aspect is that the resource rich area often has to carry most of the burdens. In South Sudan the burdens have been extreme because of oil-extraction, with loss of land and resources and displacement. When this became more visible, the motivation for secessionism also increased.

The government and rebels both got support from abroad. SPLM/A were sponsored, housed, supplied and trained by the Ethiopian president until 1991. This was a reaction to Sudan's support of Ethiopian and Eritrean dissidents. Ethiopia, and then also SPLM/A got support from communist countries. Military support was given from Russia, military training from Cuba. The government in Sudan on the other side have gained international support from other Arabic and Muslim countries for ideological reasons, and eastern countries, especially China for commercial reasons.

Oil in Sudan has contributed to bad governance. From independence Sudan struggled with weak and bad governments, and this escalated with the discovery of oil. They became more corrupt, and less democratic. The second civil war has experienced two military coups. Free elections have only happened once, in 1986, but the degree of freedom has been debated. The current president al-Bashir has been in power since a coup in 1989. He is also expected to win the elections held in April 2010, since the only challenging candidate from SPLM withdrawn when elections appeared to not being held in a just and transparent way. The government have completely failed in solving the

grievance of their citizens and spent the oil revenues on oppressing and harassing the citizens. Public goods have only been a slightly prioritized in the north, and completely ignored in south. They have been, and are still rewarding followers and punishing oppositions (Bistandsaktuelt 2010). Increased wealth gap and frustration over non legitimate government, has made the citizens believe that violence is only way to wealth.

Sudan has also experienced all aspects of the resource curse. With a human development index of 0,531 (UNDP 2009) Sudan is a low-income country with a risk of war fifteen times higher than that of OECD countries. The war in Sudan has influenced other countries, especially Ethiopia, Chad, Uganda and Kenya and has created regional instability.

4.4.3. Oil as obstacle for peace negotiations

In a rational process, peace is only going to happen if it makes both sides better off. For the government the expected utility of continued war was high, because probability of winning was high. The access to infrastructure made by oil-companies and oil-revenues increased their chances of winning by buying a lot of arms and artillery. When the result is usually elimination or surrender of the rebellions, why bother to negotiate? The prize of expected victory was high because of further access to oil. The political costs were high in the western world, but this was inconsequential since they received the needed support from the Arabic and Eastern world. Extraction of oil was a short-term and long-term benefit only possible in war time. Therefore oil made continuation of war more beneficial than peace negotiations for the government.

SPLM was the stronger political part, since they gained more legitimacy from the western world than the government did. However, in a military context they were weaker. They got some international support, but not in same magnitude as the government who accessed oil-revenues. This asymmetric power relation can have a negative effect on the peace negotiations. When being the weaker part, expectations from peace negotiations will be lower. Therefore they will try to equalize the power relation before going to negotiations. This can explain why it took so long time before peace negotiations took place (Zartman 1995). However, Wittman (1979) claims power relations are irrelevant, since then the weak party will only decrease their minimum demands in negotiations. If SPLM had to lower their minimum demands (which includes controlling the oil), then the whole war would have been wasted. They would not give up the demand for controlling oil, independent of power relations. Since the government expected to win, they would only

increase the demands in negotiations including further control of oil. SPLM could not accept this. In both ways, oil made peace negotiations little lucrative for SPLM. Greater gain for the other side is considered a loss for themselves. The government were considered winners in both scenarios, of continuation of war and peace negotiations.

SPLM has been driven by grievance, and then negotiations are more difficult. What they consider just is the only possible solutions for them. There is small room for compromises. The war was about justice and an end to the long lasting marginalization that increased with discovery of oil. SPLM/A has several times pronounced they will "continue fighting as long as oil flows without the consent of South-Sudanese" (Journeyman pictures 2007).

Civil wars are not static, and the agenda change over time. When the agenda changes, so must the possible solutions. But misunderstandings and optimism makes this difficult. Negotiations should happen as soon as possible. Sudan was stuck in the conflict trap for twenty years. Once one are, getting out is extremely difficult since the parties are locked in a position of hostility. War became a lifestyle for many of the involved parts. Child soldier had been granted new "families", which provided food and protection. With 90 % of victims being civilians in modern wars, it can be safer to be in an armed group than outside one. War can also give psychological payoffs for individuals and groups. When some participants prefer war over peace, negotiations is hard. The government, SPLM/A and foreign stakeholder invested and benefited from the war. The oil-companies were able to get lucrative contracts, and the government benefited on these contract. All these factors made peace negotiations difficult.

Early 2000s saw several changes take place that made peace conversations more lucrative for both parties. The low intensity that characterised the first years of war changed when the government became oil exporter. Then the costs of war increased and the expected utility decreased. This also gave both sides an understanding that they could not win the war with military force (see e.g. Horjen 2005). According to Talisman, many of the oil blocks will experience a strong decrease in oil-revenue from 2005 (Human Right Watch 2003). This has later been confirmed by Anders Hannevik (Kristiansen 2009). This made the expected outcome of the war less gainful, and peace negotiations more lucrative. They were also under heavy pressure from the international community, NGOs and governments from home countries of the western oil-companies.

This led SPLM and the government to peace conversations in 2002. After three years finally an agreement was in place. The Comprehensive Peace Agreement was signed January 9, 2005, and officially ended 21 years of fighting.

4.5. Post-CPA war in Darfur

Even though the war between North and South Sudan officially ended in 2005, there is another war going on in the western part of the country; the Darfur crisis. The conflict is roughly between African farmers, including Fur, Masalitt and Zaghawa on one side, and Arabic nomad groups on the other side. In February 2003 The Sudanese Liberation Movement (SLM) and The Justice and Equality Movement (JEM) started an uprising against the government in Khartoum. The demands were to end the history of marginalization of the African tribes, fairer sharing of natural resources and power, and more economic development and justice. They also felt overlooked in peace negotiations and in the final CPA (Fallet 2009).

The government reacted by creating and supporting a militia called Janjaweed consisting mostly of Arabic nomads. They are responsible for murders, rapes, displacement and burning of villages. It is estimated that the war has claimed 300,000 lives and displaced more than 2 millions.

Climate change has been given as a reason for the war by e.g. United Nation Environment Program (UNEP), Thomas Homer-Dixon, Jeffery Sachs and The Norwegian Nobel Committee. The argument is that global warming is leading to desertification and forcing Arabic nomads south in search of water. Here they ran into conflicts with other groups over scarce resources (UNEP 2007).

The evidences of global warming and desertification are based on too poor data, and even though this is correct; there are few evidences of this causing the war (Benjaminsen 2008). This explanation disregards other reasons for the war, such as marginalization of the African farmers, the search for oil and the role of the government. It is hardly random that the war erupted about the same time as oil was discovered in the region. Two years after the war erupted, ABCO Cooperation (partly Swiss owned) started drilling for oil in Darfur (Alertnet 2009). The knowledge about these oil fields can have been a motivator for the war. Resource abundance is more of a sufficient explanation for the war than resource scarcity. It can be a motivation for SLM and JEM as well as for the central government. For the latter it helps financing the war, as also was the case in the north-south war.

A further linkage can be done to the international community. The US is interested in oil in Darfur, but China holds most of the concessions. UN believes the SLM and JEM gets support from outside of national borders, especially from Chad whose government is supported by the US. The US calls the war in Darfur genocide. If UN acknowledges this, an intervention is likely to appear and the pro-China president al-Bashir can be forced out of power and Sudan can open up for access to oil for the US (Fallet 2009).

Other areas of Sudan are also still highly unstable, especially the Nuba Mountains, the oil-rich Abyei and the eastern part by the Ethiopian border. The ICC arrest warrant on al-Bashir in May 2008 led to expel of 13 aid-organisations accused of cooperating and spying for ICC. Shortly after huge clashes between SPLM/A and the central government led to several deaths and 50-60,000 were displaced. There is also believed that there is a secret weapon race going on. 32 Russian tanks were hijacked by pirates in Somalia, and there are reasons for believing they were going to South Sudan (Bistandsaktuelt 2008). Sudan, both north and south highly depend on foreign aid, and the United Nation Mission in Sudan (UNMIS) is essential for conserving this fragile peace.

5. The Comprehensive Peace Agreement

This chapter examines the CPA. It first looks at the agreement with an emphasis on the Wealth Sharing Protocol. After that I will consider the implementation of the CPA and present some of the criticism that has been raised against it.

5.1. The agreement

The Comprehensive Peace Agreement was signed January 9, 2005 and officially ended 21 years of civil war. It was a result of negotiations between the central government and the SPLM/A which had started in May 2002 and ended in December 2004. The Intergovernmental Authority for Development (IGAD) had established a committee of mediators to assist the peace process. The EU, the U.S, Norway as well as the UN played significant roles in this committee.

The agreement consists of four protocols, two framework agreements and two annexes regarding implementation modalities. The first protocol is the Machakos Protocol, signed in Kenya on July 20, 2002. Here the two parties agreed on the status of the state and religion, and that South Sudan shall have the right of self-determination. The next protocol, the Security Agreement was signed September 25, 2003. This protocol contains the parties' agreement on an internationally controlled ceasefire. This also allowed for a UN peacekeeping force, and the forces should go through DD&R programs. The Wealth Sharing protocol was signed January 7, 2004, in which the parties agreed on creating wealth-sharing mechanisms. This protocol will be closer examined on the next page. The Power Sharing Agreement signed May 26, 2004 states the creation of a coalition government; Government of National Unity (GoNU) that shall respect human rights and democracy. Al-Bashir was announced the president of GoNU and the leader of SPLM, John Garang, the vice-president. In the south a new government was created, Government of South Sudan (GoSS). Garang died in July 2005 in a helicopter accident. Vice-president Salva Kiir Mayardit took his place and is, together with al-Bashir, still in power (per April 2010). A special agreement was made for the Abyei area and the Kordofan and Blue Nile area, both signed on May 26, 2004. This agreement contains of administrative modalities for these areas. There shall be "popular consultation" and before the elections in April 2010, 55 percent of the seats go to National Congress Party (NCP) and 45 percent go to SPLM. Abyei shall also have its right to vote whether it will belong to North or South Sudan. These three areas shall receive special reconstruction and development programs (Manger 2008: 28-29).

The implementation of the CPA is being conducted in two stages. In the first step, during a preinterim period of six months, the CPA was incorporated into the transitional constitutions. This step is followed by a six year interim period which will end with a referendum in 2011 in which the southerners will vote whether they will be an independent country or a part of a united Sudan.

The wealth sharing protocol was a very important part of the CPA, and oil was a hot topic. The protocol sets out by stating the importance of equity in wealth sharing, without "discrimination on the ground of gender, race, religion, political affiliation, ethnicity, language or region" (CPA 2005 chapter 3: 1.4). The nation, the oil-producing region and the local population shall all get a share of the oil resources, and a special priority is granted to war-torn areas. The extraction shall be done in a way that protects environment and sites of cultural heritage (CPA 2005 chapter 3.1.1). The appropriate level of governments, in cooperation with local communities, shall be empowered to develop and manage the various stages of oil-production (CPA 2005 chapter 3: 3.1.2). The communities in the affected area have the right to participate in the negotiations for contracts regarding the development of oil-resources (CPA 2005 chapter 3: 3.1.7). The people having land rights in oil-production areas shall be consulted and their views shall be taken into account. They shall profit from the benefits of development, and receive compensation on just terms (CPA 2005 chapter 3: 3.1.5-6). They shall also participate in the negotiation of new contracts (CPA 2005 chapter 3: 3.1.7).

A National Petroleum Commission (NPC) was to be established during the pre-interim period. They consisting of an equal number of members from the north and the south, as well as representatives from the oil-producing state. The NPC's tasks are to formulate public policies and guidelines in the petroleum sector, and monitor and assess their implementation. Strategies and programs for the petroleum sector shall be developed. The NPC shall also negotiate and approve new oil contracts (CPA 2005 chapter 3: B).

Already existing contracts are not subject for re-negotiation. South Sudan will have a limited number of representatives to access information and influence already existing agreements. If they are considered to have fundamental social and environmental problems, it is up to Khartoum to decide whether any changes shall be implemented (CPA 2005 chapter 3: 4.1-3). This means in practice that South Sudan has no influence over the already existing contracts.

The net revenue from oil-production in the south is subject of sharing between GoNU and GoSS. Gross revenues are revenues from export and from deliveries of oil to the refineries. Exports shall be valued at the actual Free on Board (FOB) export prices. Oil delivered to the refinery shall be valued at the average export-price of the former month. The charges for delivering oil to the export destination, including a management fee and a pipeline fee are deducted from the revenues. An Oil Revenue Stabilization Account shall be established from government net revenue derived from actual export sales above an agreed benchmark-price. Oil produced in North Sudan will not be shared with South Sudan (CPA 2005 chapter 3: 5.3-4).

The net revenues of oil production will be shared as follows. The oil-producing state shall keep at least two percent of the revenues. After the payment to the Oil Revenue Stabilizing Account, the net oil revenue will be equally shared between the government in north and the government in south (CPA 2005 chapter 3: 5). Once the production reaches two million barrels per day, a Future Generation Fund is to be established (CPA 2005 chapter 3: 5.5-7).

All revenues collected nationally for GoNU shall be pooled in a National Revenue Fund (CPA 2005 chapter 3: 7.1). To make sure all this is followed, a Fiscal and Financial Allocation and Monitoring Commission (FFAMC) is established. This body will ensure and monitor a transparent money distribution according to the guidelines of the CPA (CPA 2005 chapter 3: 8).

The district of oil-rich Abyei is considered a special agreement in the CPA. During the interim period the Ngok Dinkas and the Masseriya that inhabit the area, shall belong to both Western Kordofan and Bahr el Ghazal. The area will be represented in both districts through a local Executive Council elected by the residents of Abyei. The net oil revenues will be divided between the government in north (50%), the government in south (42%), Western Kordofan (2%), Bahr el Ghazal (2%), Ngok Dinka (2%) and Missiriya people (2%). After the interim period the residents will have a separate ballot where they can chose whether they will retain a special administrative status in north or become part of Bahr el Gazal and South Sudan. The results will be valid, irrespective of the results of the southern referendum (CPA 2005 chapter 4: 65-66).

5.2. Critique of the CPA

The CPA was of great importance for ending the civil war. However, the peace is fragile, and there are still many unstable areas in Sudan. This brings us to the question of whether the content of the CPA was good enough.

The central government was the dominant military party during the conflict. Hence they were able to set higher demands in the negotiations. This is reflected in the agreement. Oil-revenues in the north are of subject for sharing, while the north has access to revenues from oil in the south. The end of the war makes it possible to reduce the military spending, and still they have access to oil-revenues, making peace economical beneficial for the north. The north is also in control over already existing oil-contracts that the south has no influence over. It is unclear where the pipeline fee and management fee goes, but most likely it is to the GoNU. These fees are set unreasonably high (Fatal Transactions and ECOS 2008).

SPLM was the weaker military party during the conflict, but not politically weak. They have now access to parts of the oil revenues, which they did not enjoy before. They also enjoy participation in the governmental chair in the north, despite the influence of the vice-president is rather limited. And most important; in 2011 they will probably vote for secessionism and finally control over all resources located in south. But if the prediction from Talisman and Hannevik is correct, the oil-reserves are rather small and most of it has already been extracted during the war. For both parties, the outcome of peace is higher than the continuation of war.

The CPA is written in a rather vague formulation. The content of many of the points is left open for discussion. For example what kind of compensation those affected by oil-extraction can expect, or to what degree the locals can demand to participate. Another example is that the CPA obliges the oil-industry to follow "the best known practices in the sustainable utilization and control over natural resources" (Fatal Transactions and ECOS 2008: 13) but nobody specifies what these practices are or how they should be enforced.

The peace is fragile, and many places in Sudan are unstable. Some conflicts have erupted because the people felt neglecting in the CPA. The grievances of the people in Darfur were ignored in the peace negotiations because many saw the conflict irrelevant to the north-south war since it is a conflict between Muslims in north. The central government keeps calling it a tribal conflict, and disallowed all responsibility. Also eastern and northern parts of Sudan experience conflict that has

not been considered in the CPA. Armed militias are a specific problem in several of these areas. Some conflicts have existed aside the north-south conflict, and were therefore not included in the CPA. Other conflicts have been on hold, waiting to erupt when the north-south conflict was over. For example, Nuer and Dinka which traditionally competed over land unified against a common enemy during the war, but might again turn against each other in conflict (Manger 2008).

There is not any sanctioning mechanism in place to prevent and punish defiance of these commitments. A board should have been established in order to monitor GoNU's adherence to the commitments.

Neither was the deadline of implementation of the protocols in the CPA to be held. Most of the commitments were implemented with delay. The National Revenue Fund was established shortly after the signing, though with minor delay. The agreed benchmark price had a deadline in May 2005, and this deadline was met. The transfer of oil money to South Sudan and the oil-producing state should have started in April 2005, but was delayed and the oil revenues of 2005 and 2006 fell short of the expected amount. The National Reconstruction and Development Fund, one for the whole nation and one for South Sudan under administration by the World Bank, became operational in June 2005, only one month late. Bodies that should have been implemented in June 2005 include the National Land Commission (established November 2008), the Southern Sudan Land Commission (established through presidential decree), the National Petroleum Commission (achieved October 2005, but first meeting was held in April 2007), the Fiscal and Financial Allocation and Monitoring Commission (established November 2005) and the Oil Revenue Allocation Committee (formed in February 2006, but it differs from the one laid in the CPA) (ZIF 2009).

The CPA also states that the south shall be brought up to the same level of socio-economic and public services standards as the north (CPA chapter 3: 1.7). However five years after signing the CPA, South Sudan is amongst the poorest areas in Africa. 90 percent of the people live in extreme poverty with less than one PPP (Purchasing Power Parity) dollar per day. Northern Sudan also struggles with poverty, but is better off with 50 percent living in extreme poverty (UNDP 2008). The CPA has failed in achieving poverty reduction and equalisation between north and south.

6. Current oil-production in Sudan

In this chapter the focus is oil-production in Sudan today. It starts with an introduction to current oil-industry and operational companies and their magnitude. Afterwards there will be a presentation of White Nile Petroleum Operating Company (WNPOC) which is operating the oil fields in Block 5A. The chapter ends with a discussion of some challenges Sudan's oil-industry face today.

6.1. Oil, money, companies and blocks in Sudan

Sudan has been an oil-exporter since August 1999. Oil today is by the far greatest source of income for Sudan. It is documented that Sudan has 6, 7 billion barrels of oil, which is about 0.53 percent of the world's reserves. They are producing 480.000 barrels of oil every day. According to the government in Khartoum they plan to almost double the production. 80 percent of that oil reserve is in the south. Oil accounts for 92.6 percent of the country's export revenues, and for GoSS it covers 98 % of the budget. That is more than any other government in the world, even above Angola and Saudi Arabia (Dagsavisen 2009, Fatal Transaction and ECOS 2008).

Oil is being produced in block 1, 2 and 4, block 3 and 7, block 5A and block 6. More than 1.1 million square kilometres is licensed for oil exploration, more than any other African country (Global Witness 2009: 15). Greater Nile Petroleum Operating Company (GNPOC) operates Block 1, 2 and 4. GNPOC consists of Chinese, Indian and Malaysian state-owned companies, together with Sudan's own Sudapet. Two of the fields, Heglig and Unity are in decline, but the blocks are still producing 180,000 barrels per day. The revenues from these blocks are shared according to the Abyei-agreement. Block 5A is operated by WNPOC; consisting of Malaysian, Sudanese and Indian state-owned companies. This is blend oil, depending on crude oil from block 1, 2 and 4. Therefore the production is limited to around 20,000 barrels per day. This block is located in South Sudan. The Chinese state-owned company Petro Energy, together with Sudapet, operates Block 6. The block produces 40,000 barrels per day, but the quality is extremely poor. This oil goes to a refinery in Khartoum for domestic use. This block is in the north. The last oil-producing blocks are 3 and 7. These are operated by Petrodar Operating Company (PDOC), owned by Chinese and Malaysian state-owned companies and a Kuwait based company, in addition to Sudapet (Global Witness 2009).

Box 2. Companies and oil blocks in Sudan

| Block | Operated by | Oil-type | North/South | Barrels per day |
|-----------|-----------------|------------------|-------------|-----------------|
| 1,2 and 4 | Greater Nile | Crude oil (Nile | Abyei- | 180,000 |
| | Petroleum | Blend) | agreement | |
| | Operating | | | |
| | Company | | | |
| | (GNPOC) | | | |
| | China, India, | | | |
| | Malaysia, Sudan | | | |
| 5A | Nile Petroleum | White Blend oil | South | 20,000 |
| | Operating | (Nile blend oil) | | |
| | Company | | | |
| | (WNPOC). | | | |
| | Malaysia, Sudan | | | |
| | India | | | |
| 6 | Petro Energy | Crude oil, poor | North | 40,000 |
| | (CNPC), China. | quality (Fula | | |
| | Sudan | blend crude) | | |
| 3 and 7 | Petrodar | Crude blend oil, | South | 200,000 |
| | Operating | poor quality | | |
| | Company | (Crude Dar | | |
| | (PDOC). China, | blend oil) | | |
| | Malaysia, | | | |
| | Kuwait, Sudan | | | |
| | | | | |

Nile Blend is sold at a much higher price than Dar Blend Crude. Dar Blend is heavy paraffinic, and contains much arsenic and needs to be transfer heated at about 45-50 degrees Celsius. The price per barrels of Dar Blend is 25-28 dollars lower per barrel than Nile Blend oil (Fatal Transactions and ECOS 2008: 30).

Sudan has two main oil refineries. Khartoum Refinery is owned jointly by GoNU and CNPC with fifty percent stake each. It has a capacity of 100,000 bbl/d. Port Sudan refinery takes 21,700 bbl/d. The Malaysian company Petronas plans for building a new oil refinery is currently frozen, while

South Sudan is planning to build the first oil refinery in south Sudan; Akon Refinery in Warrap State (Fatal Transaction and ECOS 2008 and Sudan Vision 2010).

In July 2009 the boundary in Abyei and block 1, 2 and 4 changed. Now the Heglig and Bamboo fields are no longer part of Abyei, but are located in North Sudan. Two new fields are included in Abyei; Diffra and Balome. Heglig and Bamboo are producing six times more barrels than Diffra, and it is not clear whether Balone produces oil at all at the moment (Global Witness 2009).

The estimates of large oil reserves are challenged by the Norwegian embassy's envoy; Anders Hannevik. He enjoyed access to the oil ministry in Khartoum, and gathered large amounts of information. Based on this he came with alarming information. The "oil-rich" Abyei is not by far as oil-rich as it had been assumed, but is in dramatic decline. Today Abyei amount for 15 percent of Sudan'a total oil production. By 2011, this will decline with ten percent, and by 2016-17 it will be bisected. This means that if 2011 results in referendum, Khartoum will be net importer of oil. It is doubtful whether North Sudan will accept this, while South Sudan at the same time becomes an important African oil-nation. Most of Sudan's oil fields are located in areas with diffuse boundaries, and no one knows how far north or south the fields are reaching. If north wants the oil, they must draw the border much further south than what have been discussing today, where they are most likely to find oil (Kristiansen 2009: 127-134).

If the result of the referendum is secession from North Sudan, South Sudan will become a landlocked country depending on North Sudan for exporting oil. North Sudan can refuse this, or they can claim a share of the revenues or high pipeline-fees. Alternatively the oil can be transported through Kenya.

6.2. White Nile (5B) Petroleum Operating Company Ltd.

White Nile (5B) Petroleum Operating Company Ltd (WNPOC) is the company operating in Block 5A in Unity state where my research is conducted, and in Block 5B and Block 8. It is a joint operation company between Petronas of Malaysia and Sudapet of Sudan. They each own 50:50 percent of the stocks. WNPOC acts as the operator on behalf of the Various Partners for Block 5A, Block 5B and Block 8. The partners on the Blocks are as follows; Block 5A: Petronas, ONGC Videsh (from India) and Sudapet. Block 5B: Petronas, Lundin (from Sweden), ONGC Videsh and Sudapet. Block 8: Petronas, Hi Tech Petroleum (from Sudan) and Sudapet. WNPOC started oil

production in Block 5A in 2006. Thar Jath oil field opened in April 2006, followed by Mala Main Field in December 2006 and Mala Satellite field in April 2008. Block 5B is not yet producing oil (WNPOC 2009a).

In December 2006, Block 5A was estimated to have a total of 175,000,000 barrels, and 168,000,000 barrels left. Sudan in total was estimated to have 2,995,000,000 barrels, and 2,229,000,000 barrels left. These numbers deal only with proven reserves and not the possibility of new findings (Fatal Transaction and ECOS 2008: 22).

WNPOCs mission is "to be a forward looking, effective, petroleum operator through the smart application of innovative technology by a competent workforce, in a safe, healthy and environmentally friendly manner, contributing to the development of the nation" (WNPOC 2009a).

6.3. Challenges in the oil industry today

The CPA provides a solid framework for management of the oil-industry in Sudan. However, these provisions have not been fully implemented, giving Sudan many challenges. GoNU and GoSS are to blame for not setting any standards and effectuating any enforcement mechanisms. The companies are to blame for not taking any responsibility for the well-being of the country and its population (Fatal Transaction and ECOS 2008: 31).

"Implementation of the CPA is significantly behind schedule and its failure risks a return of war"

(A. S. Natios; special envoy to Sudan in Fatal Transaction and ECOS 2008: 12). Many of the crucial provisions in CPA are ignored. GoNU seems to not care, while GoSS lack appropriate social, technical and environmental standards to enforce them. The Khartoum government accepted the loss of its exclusive military control and withdraw forces from oil-rich areas by 2007. The military presence is reduced compared to pre-CPA time, but not in the degree as stated by CPA. The border disputes between North and South has not been solved yet. National Petroleum Commission is not working as it's supposed to (Fatal Transaction and ECOS 2008: 13). The Oil Revenue Stabilizing Account has been drained by both CPA signatories (UNMIS 2009). All these factors combined, seem to threaten withstanding peace. A small fraction of the society benefit most from this oil, while the rest of the country suffers from acute poverty (Fatal Transaction and ECOS 2008: 13).

Also the promise of transparency has not been carried out, as stated in the CPA. The agreements between the central government and the companies on production rights, contracts, refineries and pipelines are secret. The country's oil production is not independently verified, and the companies do not report on anything. But they are known to make huge amounts of money, probably in aggregate well over 2 million USD in 2007 alone (Fatal Transaction and ECOS 2008: 34).

The oil-revenues from oil-produced in South Sudan shall according to the CPA be shared equally between North and South. However, there are reasons to believe that the North is taking far more than their share of the revenues regarding the oil-industry. The figures they present do not correlate with figures sourced elsewhere. The figures presented by Khartoum are 9 to 26 percent lower than what is stated in the annual report of the Chinese National Petroleum Corporation (CNPC). They were 9 % lower in block 1, 2 and 4 in 2007, 14 % lower in block 3 and 7 in 2007 and 26 % lower in block 1, 2, 4 and 6 in 2005. GoSS is neither able to verify whether the oil revenues received from GoNU is correct, nor if it is sold at the prices stated officially (Global Witness 2009).

There are also unresolved issues related to outstanding arrears, deduction for election-preparations, administrative costs, and the revenues of the state-owned company Sudapet.

By the end of 2008, an estimated 6.9 billion in oil revenues has been transferred to GoSS through the central bank. But at the dawn of 2009, it was estimated that approximately 265 million dollars was left outstanding to GoSS in revenue payments. Most of the sum has since been paid out, and in early June 2009 Khartoum owed less than 7 millions to GoSS (UNMIS 2009).

At the beginning of 2009, 52 million dollars were subtracted from GoSS revenues for the expenses of preparing for the national elections of 2010. This practise continued for four month before it was stopped (UNMIS 2009). Khartoum in addition is claiming a three percent management fee and pipeline fees from the revenues shared with the south, which in August to September 2008 consisted of 3-8 percent of the value of the government's oil. Sudapet does not share their revenues with the South at all. Oil paid by the national refineries is 10 USD lower per barrel than export price, and makes one wonders who cashes out the difference (Fatal Transaction and ECOS 2008: 34). According to the CPA the oil-producing state shall keep 2 percent of the revenues. However, there are few evidences on whether this has happened, nor what the money has been spent on (Global Witness 2009). This happens despite the fact that the CPA states that the development shall be conducted within a transparent and accountable government (CPA 2005 chapter 3: 1.9).

The companies involved are also to be blamed for not taking any responsibility for the well-being of the country and its population. Sudan's oil industry is possibly the least socially responsible on earth. If the CPA falls apart and war breaks out, the oil companies bear a heavy responsibility. They have no development strategy, and limit themselves to feel-good projects. Community Development programs by oil-companies are of small scale, and no need-assessment are known to be carried out and no development potential analysed (Fatal Transactions and ECOS 2008: 13).

Most investments in Sudan today come from Asia, mainly from China, Malaysia and India. China is the main export destination. In January to September 2007, they exported 83.6 percent (or 5040.1 millions) of Sudan's total export earnings. 7-8 percent of Chinas energy imports come from Sudan. Malaysia is the second largest investor, and Petronas have invested 1.45 billion alone. India is also a large investor, and oil-investments in Sudan are in progress (Fatal Transactions and ECOS 2008).

The governments do not monitor the environmental performance of the oil industry, even though most companies are known to apply very low, if any, environmental standards of their own. Oil is pumped up together with water, despite the fact that they must be separated. The better the applied techniques and chemicals, the more expensive they are. GNPOC is known to discharge large quantities of contaminated water onto the surface. It is not potable for humans, unfit for animals and too filthy for irrigation. Some of the roads built are working as dams; there is flooding in some areas and drought in others. It has also brought with it heavy deforestation (Fatal Transaction and ECOS 2008: 33).

The companies completely ignore the compensation clause for past injustice, rejecting their responsibility to provide large parts of the Nuer population in Unity State a reason to support the peace. No action has yet been taken on compensation of victims of oil contracts provided for in the wealth-sharing agreement (CPA Monitor, May 2007 in Fatal Transactions and ECOS 2008: 32). There are no functional courts in Upper Nile, no lawyers and no prosecutors. No single company has shown true compassion to the victims (Fatal Transaction and ECOS 2008).

7. Findings from the field study

In this chapter I will present and elaborate the empirical findings from the field study. The findings from each research objective and research question will be presented in different sections.

7.1. Research objective 1: Knowledge and expectations of oil-production among local citizens living in Block 5A

The first research objective maps people's knowledge of oil-production in the area, and asks about the people's expectations regarding the consequences of oil-production. The first research question deals with the former, the second research question with the latter aspect.

7.1.1. Research question 1: How knowledgeable were the local citizens about the oil-production in Block 5A?

The first research question asks about the level of knowledge of oil-production among the respondents. Knowledge is power, and provides the fundament for change. If you don't know your rights, you don't know what to claim either. Knowledge is important for holding the companies responsible for their wrongdoings, and for claiming the rights laid down in the CPA.

All respondents except of one were aware of the existence of oil in the area. This is mainly because they have seen foreign people working in the oil-fields, conducting road construction or driving water trucks. Only one young lady had never heard about oil nor seen any foreigners in the area. She was from Lanfhtang, the most remote of the five villages. However, very few knew anything about oil-production, transportation of oil, and the use, value or the appearance of oil. Only a handful knew the name of the company. One said WNPOC, the others said Petronas. Two respondents knew this because they had read the name on the oil drums that stand along the road. A few women stated that they cannot communicate because of language barriers and lack of education, and therefore they know very little about the topic. Most of the respondents considered questions about the oil-industry as rather odd; they insinuated that they had never given much thought on this matter before.

Only few of the respondents considered it possible that there is a link between the previous war and oil-production in the area. Only five of the respondents suggested that there might be a connection, the remaining respondents had no knowledge about the potential reasons for the war. The war was considered by the majority as being between SPLA and the central government and they did not know whether oil contributed to the war in any way. Neither could they see any connection between the attacks and displacement they experienced and the fact of oil existing in the area. Some suggested that the attacks against them took place because they were thought to support SPLA. Others believed the attacks were motivated by the greed for cattle and property. However, most respondents were not aware about any deeper political causes of the war.

Most of the respondents suspected a link between the illnesses that occurred in the area (see research objective two, research question two) and the oil-production. However, they cannot be absolute sure since they have no proof for a connection. They lack sufficient knowledge about how the water gets contaminated and how it infects them. 9 of the respondents were aware about the quantity and gravity of illnesses that had increased in the last few years, but they did not suspect any link to the oil-industry. It is difficult for the locals to properly determine the cause of a disease. One woman reported how her father caught a disease that made his body grow bigger. The man died a few days after the first symptoms came into appearance. A linkage to the oil-industry was assumed since this had never happened prior to the arrival of the foreigners. The respondents also lacked knowledge about the effects of smoke originating from drilling operations. One woman confirmed that she had seen smoke, but she didn't believe that it would have an effect on her. This was a common assumption among many respondents. Another woman claimed the smoke she had seen had come from God.

Neither was knowledge about the CPA prevalent. All of the respondents were aware that there is peace. This they knew because the fighting's and attacks has stopped and no more soldiers are demanding supplies. However, most were unfamiliar with the peace agreement itself. Only two had heard about the CPA, and knew it stated that oil-revenues are subject for sharing. They were both men. Another man thought he had heard something about sharing oil-revenues, but he was not certain.

In general men tended to be more knowledgeable than women. The two respondents familiar with the CPA and the wealth sharing protocol were both men. One was chief of Kadett Payam, and positions like that are usually occupied by men. The other had higher education from Khartoum. The women usually stay at home. They only go out for collecting water and for working in the field.

The young boys are responsible for herding the cattle. The men are out in the bush hunting gazelles, but they also gather in the evening. This mapping showed a correlation between sex and level of knowledge and more men in the sampling are likely to give higher level of knowledge. But the sample size of men is too low to draw precise conclusions as only 25 % of the respondents were men.

7.1.2. Research question 2: What were the expectations among the local citizens of benefiting from the proximate oil-production?

A general impression before going to the field was that when oil is discovered, people expect an extremely rapid development, taking them to the level of Saudi Arabia or the United Arabic Emirates within a few years. Therefore I wanted to find out about the expectations of people that are aware of living on top of a valuable resource.

Eight of the respondents said that they did not know if they could expect to get any positive outcomes from the oil-industry at all. Some said that they expected the oil-company to provide some jobs to the local people. Even though there are few benefits today, many hoped for future improvements that their children will eventually be able to benefit from. Several women expected to be provided with clean water by the oil-company. A woman said she had very high expectations after finding out about the existence of oil in the area. However, she did not have a concrete idea as to how exactly she would benefit from the oil. One woman was short of soap, and went to the Mala base camp to ask for it. The workers would not even let her in, and then she realised there is no point in hoping for anything. Many of the respondents considered this question a bit odd and irrelevant since they had never spend much thought on this issue.

A few of the men were the only ones expressing higher expectations. One man said he expected cars and roads as well as new schools and hospitals. Another man said he expected the standard of living to increase, including better housing, schools and health clinics as well as improved access to clean water. Another man hoped for job opportunities. The women mostly hoped for clean water, as this is the most basic need. This indicated a correlation between expectations and sex, but as in the previous research question, the sampling size of men is too small for drawing precise conclusions.

The expectations of benefits from oil-production in general were far lower than assumed before going to field. However, expectations towards the governments were higher and in particular the

expectations toward the government of Unity State. People expected the governments to provide clean water, schools and medicines. Since oil-revenues are the main income of Unity State and Sudan more generally, these are indirectly expectations to benefit from the oil-production. However, since so few respondents were aware that oil is the main income of the country; one cannot draw the conclusion that they expect to benefit from the oil-production.

7. 2. Research objective 2: Inquiring the impact of oil-production on local communities living in proximity to oil-production facilities in Block 5A

Several organisations have criticised oil companies operating in Sudan for serious violations of human rights. The local communities living in or near Block 5A experienced attacks, harassment and displacement from the central government and from breakaway groups of SPLM/A during the war. This would not have happened, at least not to the same degree, if the area would be free of oil. After signing of the CPA, the local communities were supposed to benefit from the oil-industry. This research objective inquires the actual impact of the oil-industry today, and whether the statements of the CPA regarding the oil-industry are being followed.

The research objective is addressed through three research questions. The first is focusing on the positive outcomes of oil-production, and the second on the inconveniences that the people experience due to oil-production. The third question considers the power of the local communities to influence the oil-industry.

7.2.1. Research question 1: What were the positive outcomes of the oil-industry for the local communities?

According to The Wealth Sharing Protocol of the CPA the local communities are supposed to benefit from the oil-industry. The first research question will examine how the local communities living in proximity to the oil-production areas of Block 5A were experiencing oil-extraction after the signing of the CPA in positive terms.

All the respondents agreed that there has been a huge improvement since the end of the war. The people can now live safely in their country without the fear of becoming victims of attack. They

don't have to provide food or other items for SPLA. Crops can be grown safely and food security has improved. People don't have to hide their belongings anymore. A woman made it clear: "we can finally sleep safe at night". Peace itself is the greatest improvement anyone could hope for.

In addition to the peace the local communities have experienced social development. Before the CPA was signed, they had no access to schools, health care or infrastructure. Now most of the respondents enjoy at least some access. This is a result of projects from WNPOC and indirectly from the oil-revenues via Unity State. NGOs are also contributing. I will now present the development projects of WNPOC as well as the public facilities that have been provided by the local government financed with oil-revenues.

WNPOC has established a Community Development (CD) department responsible for development projects for local communities living in oil-extraction areas. This is an initiative from WNPOC itself. The company is not imposed by any authorities in doing this. CD has 16-20 full time employees, most of them are from the home countries of WNPOC's partners and North Sudan. CD is cooperating with the central government and to some extend with the government of Unity State, but not with any of the NGOs working on similar issues in Unity State.

CD is running projects with a broad focus. They have divided the projects into nine areas; water supply, education, capacity building, agricultural development, humanitarian assistance and emergency response, social sponsorship and support, roads and other constructions, health services and livestock development.

The water supply activity has provided water to local communities through water filtration units, water wells with water pumps and delivery through water tankers. Within the area of education CD is constructing schools, giving out supportive tools, training staff and provides education classes for adults. In capacity building projects more than 600 people have been trained in health care, agriculture, women development skills, food processing, adult education, conflict resolution etc. The agriculture development program established an educational farm teaching different agricultural techniques. In the humanitarian assistance and emergency response program there have been given out non-food items during floods, evacuation of people from flooded areas by helicopter, transportation of emergency team to the flooded area, emergency health services and supply of water. Under the social sponsorship and support program help has been given to different social groups, such as women, youth and disabled people. Roads and other construction-programs have provided Block 5A with roads of a total length of 147 kilometres. CD also runs road

construction programs in Block 5B and Block 8. Health services are being provided for more than 15,000 patients per month. They get help through mobile clinics, dispensaries, health centres and rural hospitals. In addition CD runs vaccination programs and improves existing health facilities. Vector control and pit latrines are implemented to ensure better rural health. CD is also conducting a livestock development program. 200,000 animals have been treated annually in vet clinics and mobile clinics (WNPOC 2009b and conversation with CD workers).

The presented data comes from WNPOC itself. WNPOC presented their development projects and engagement in local communities in very positive terms. This contradicts with the perceptions of the beneficiaries. The quality of the projects is not satisfying, neither are they sustainable or dependable for the local communities. This will be closer examined in the following sections. The commissioner of Guit County was also less positive regarding the projects than WNPOC. He claimed that the projects are merely a strategy of WNPOC to improve their reputation. They are not aimed at helping the local communities. If they were, they would have taken the needs and priorities of the local authorities into consideration.

Several inquiries have been sent to WNPOC asking for more concrete details on these projects, accounts on monitoring and evaluations, budgets and development strategy. By the time this thesis went to press, I had still not received any answer.

Guit County has not been the focus area for CD. The five villages located closest to Thar Jath, Mala Main Field and Mala Satellite Field were included by only three of the projects; road construction, water supply, and health care. The two former have been financed by WNPOC alone, the latter in cooperation with the government of Unity state. In addition WNPOC provides some of the locals with jobs.

WNPOC is working on a new road construction project. Most of the existing roads are built by Lundin and later also WNPOC during the oil-boom in the late 90s and early 20s. The commissioner of Guit County underlined that the roads are build for the oil-facilities, and not for the local communities. A new road under construction is claimed to be for the advantage of the local citizens. The road starts from the oil road connecting Bentiu and Thar Jath, and goes to River Nile. The total length will be 28 kilometres. Construction is still ongoing (see appendix 4 for illustration).

The roads can be used by citizens in all the villages except Lanfhtang which is located too far away. 30 percent of the respondents of the villagers claimed they are benefiting from the roads. It makes it

easier to travel, especially at the end of the dry season when the food stock is dwindling and they need to go to the cities to buy food. Going to Bentiu used to take between one and two days of walking, now it can be reached in less than one hour by local bus. The road also makes it easier to travel by foot since one does not have to struggle through high elephant grass. It is also useful for reaching the schools and health clinics.

However, the majority claimed they don't benefit from the roads. They don't have cars, and buses are rare, irregular and cost money. If one is lucky one can get a lift. This occurs more seldom than before, and is not dependable. During the wet season the roads are flooded and inaccessible. The road is also disliked because the cars are driving too fast, and sometimes hit cows and even humans. One lady expressed her fear of the road and the possibility to get run over by a car. She was obviously not familiar with roads since she explained to me very carefully to walk on the side in order to avoid getting hit. There had been two accidents lately in which men were killed. Many cows have also been injured or killed on the road. WNPOC is not to be blamed for these accidents, but such incidents contribute to a negative perception of the road.

There are two health clinics in Guit County, one in Guit Town and another one in Kadett. Drugs from WNPOC and government of Unity State supply these two clinics with drugs, along with support from NGOs. The villagers of Kuernyen and Guina have access to these clinics. WNPOC and governments of Unity State also supply a clinic in Kilo 50 in Kuch County with drugs, and Gaik and Willuak/Thak have access to the services here. But the medicines in the clinics are neither adequate in number nor quality. They also cost money, which for most of the respondents was a problem. Money can be raised for example by cutting and selling grass used for house construction, or by selling a cow. But not everybody has this possibility. It can also be a problem if the disease comes urgent. One elder woman reported how she visited the clinic with her sick granddaughter and got rejected because she could not pay for the medicines. Lanfhtang village is located to remote to access any clinic, and the respondents here said they are depending on traditional medicine plants for treating illnesses.

The two villages located between Mala Mail Field and Thar Jath; Gaik and Willuak/Thak both have access to primary schools in Kilo 50 built by the local government. The people of Guina have also access to primary schools. The school in Kuernyen was built by the inhabitants themselves since the government never responded to the request of the village for help. The only village without any schools nearby was Lanfhtang. Some parents chose to send their children to a boarding school in Kadett. All these schools (except the one in Kadett), along with equipment and teachers are

provided by the government of Unity State and oil-revenues. The schools are also receiving support from NGOs.

Some parents considered the distances of the primary schools from their homes as too big and didn't send their children to school. Another problem was the quality of education. Untrained staff and lack of equipment resulted in a poor quality of teaching. Another reason for the low quality were delays and missing payments of oil-revenues to Unity State from the central government which have made development work difficult and unpredictable. Due to the non-payment of salaries teachers temporarily stopped their work for a time. Several civil servants in Guit Town claimed that payments of salaries have been delayed by several months. Neither are the schools adjusted to the nomadic lifestyle of most Nuer people. Education becomes inaccessible during the dry season when they live closer to River Nile. Young boys were often responsible for herding cattle during day-time and attended school irregularly. School fees were common but usually low and most parents are able to pay since it is a predictable fee they can save up for. No secondary schools are located in proximity to any of the five villages.

WNPOC also runs a water and sanitation project. Two trucks are transporting water from the water filtration in Rubkona to local villages. Cities such as Kilo 50 are receiving a daily supply of water, whereas Lanfhtang and Gaik are not receiving any water supply at all. Willuak/Thak is receiving water once in a while. The statements on how often water is being delivered differed between 2 and 14 days. However, most people are satisfied with the deliveries because the water is cleaner and of better quality than the water they collect themselves. The water trucks fill up old oil drums along the road near the villages. The locals go there and dip their plastic jerry cans inside them to collect water (see appendix 5 for illustration). This is hardly the most hygienic procedure. The supply is seldom and irregular, and not predictable enough to depend on. In the dry season the villagers have to move closer to River Nile. If the water supply would be more dependable, they could stay in their permanent settlements all year long, something all of the respondents desired.

A few respondents said that even though they don't benefit from oil production today, it is good that the companies are there because it might provide their children the possibility to get jobs or other benefits in the future. A woman mentioned that being acquainted with a Nuer working for the company means that he is likely to help out with money for medicines if needed. Nuer people are known for their generosity. However, only two of the respondents actually knew someone employed with the company. One respondent had a nephew working for the company and uttered his dissatisfaction with the way company treats their employees. The salary is only 700 Sudanese

pounds (250 euro) per month, which is too low an amount to assure a decent living standard. The locals are usually getting the poorly paid jobs for unskilled staff. They don't receive any training in order to obtain skills which would enable them to work in higher positions. The doctors interviewed in Guit Town said that the company and the foreign staff treat the local employees as second-rate citizens in terms of salaries and working conditions.

One fourth of the 40 respondents claimed that they not benefit from the oil-industry at all. They don't benefit from the road since they lack transportation. The health clinics they access are not built by the oil-company, and medicines are not adequate nor for free. The schools are not built by the oil-company. However, the locals were unaware that the government of Unity State receives a share of the oil-revenues, and that the schools are financed by these revenues. Water is only handed out to some of the villages, but irregularly and undependable. Jobs provided by the oil company are too few and poorly paid.

The CPA states that war victims shall receive a compensation for their previous suffering. However, none of the respondents have received any compensation of any kind for wrongdoings during the war. One lady has experienced post-CPA time compensation from WNPOC. When the oil-company built a pipeline and forced her father to move, he received a compensation of 400 Sudanese pounds (140 Euro), which did not cover the construction of a new house. If the company would have added another 200 Sudanese pounds, the family would have been satisfied. Two parents have lost their children in the construction holes along the road (see next research question), but they have not received any compensation and not even an apology. Neither has the father whose son died due to exposure to polluted water received any compensation (see next research question). The commitment laid down in the CPA regarding the payments of just compensations for wrongdoings has so far not materialized in reality. Neither is any special priority given to the development of war-torn areas, which is also a principle mentioned in the CPA.

7.2.2. Research question 2: What were the negative outcomes of oil-production experienced by the local communities?

The experienced hardship and suffering of the communities living in Block 5A during the war can clearly be linked to the oil-production in the area. All of the respondents have been physically and psychologically exposed to the war. They had to supply SPLA with food, cattle, clothes, shelter etc. Some of them did voluntarily, being proud of helping the rebels in their fight for freedom and

justice. On some occasions the SPLA would just take what they needed. Most of the men from the area are former SPLA soldiers.

All of the respondents experienced military attacks against their villages. The attackers came by foot and by horse, on some occasions attacks were even conducted by the government's air force. Soldiers looted the villages, burned down houses, stole the cattle and raped the women. Many villagers have witnessed the violent death of close relatives. They were all forced to flee their homes. Most went to areas around River Nile. A few went all the way to Khartoum. Some locals were displaced for years, while others returned shortly after the attacks and rebuilt their houses. Some experienced repeated attacks. One woman reported that people were shot if they came to close to the construction site of the road that now connects Bentiu and Thar Jath. On one occasion the government's army distributed drinking water that turned out to be poisoned.

The second research question investigates whether the local communities have experienced any negative consequences originating from the oil-industry after the war.

The absolute majority of the respondents reported sporadic outbreaks of diarrhoea, and especially pointed to a larger outbreak that occurred in early 2009. The majority of the respondents in the villages of Kuernyen, Lanfhtang and Guina talked about this serious outbreak. Gabriel Duk Riek Chu was one of four doctors investigating the pollution. He identified three main outbreaks of diarrhoea.

In November 2008 doctors received information about cases of diarrhoea among the local employees at WNPOC. They visited the base camp near Mala Main Field, and discovered huge deficits in the sanitary facilities. Foreign and local employees are living separated from each other in the camp, and the cases of diarrhoea exclusively affected the local employees. The same water was running between bathroom and kitchen, and the water tanks were extremely dirty. The result was dirty water for drinking and cooking, and an outbreak of diarrhoea as a consequence.

Short time later, employees from WNPOC left 7 used oil drums outside of the camp. These drums are highly appreciated by the local people who use them for collecting water. Many drums have been given to the local communities previously. These drums where not appropriately cleaned and contained leftovers from toxic chemicals when the locals filled them with drinking water. The oil company must have been totally aware of that the locals would utilize the oil drums for collecting

water. In not properly cleaning the drums the oil company acted irresponsible causing serious diarrhoea among those who drank water from these drums.

The third and most serious outbreak of diarrhoea occurred between January and March 2009. The oil company intoxicated the soil due to mishandling of chemicals that are part of the oil-drilling process. Instead of properly removing the chemicals they were spilt on the ground. The locals then got exposed to the poison by drinking the milk of cows which had been grazing in the intoxicated area as well as by consuming drinking water that had been intoxicated by the chemicals. The result was a mass outbreak of diarrhoea causing the death of at least five people. A particular tragic incident occurred during a wedding party that many inhabitants of the village Kuernyen attended as most of the guests were severely poisoned due to unclean drinking water. Some of the people succumbed to their intoxication because they could not receive proper medical treatment in time.

Another tragic case occurred in the village of Willuak. Many of the younger children fell sick after drinking water. The two year old son of Makuor Tai was one of the victims (see appendix 6 for illustration). He died within four days after the first symptoms of poisoning had appeared. When doctors and the local government confronted WNPOC with the situation, they solved the problem by covering the toxics with soil.

In addition there have been several smaller outbreaks of diarrhoea due to pollution caused by the oil-company. The majority of the respondents claimed that the pollution on the ground would make them sick. They cannot prove that their diseases are caused by the oil-production in the area. However, since the problems occurred together with the appearance of the company and all incidents took place in close proximity to the oil-production area the villagers have a good reason to believe that there is a connection. The contemporary diseases are also different from those that the people have experienced prior to the oil extraction activities. The course of disease is more serious; the symptoms kick in rapidly and death occurs much earlier. A woman reported how her father caught an unknown disease that made his body grow bigger and eventually killed him. Without proper equipment and skills to take the necessary tests, it is difficult to determine the cause of such strange diseases. A woman told me that at some point helicopters started to come at night. Shortly after the first time this happened the villagers fell sick. My key informant confirmed this, and said that WNPOC has been dumping toxics with helicopters on several occasions. Several women from the villages reported a thin alien surface on top of the water they come to collect. The women don't know what this thin layer is, but they assume that it is harmful since many have experienced health problems after drinking the water. However, they depend on the water and have no other choice

than to consume it. In addition to humans, grazing cows as well as fish from local ponds also show signs of intoxication. This has negatively influenced the food security of the people.

Guit Town is located further from the oil-operation areas, but is still within the reach of being affected by oil-extraction. The city has several water wells, and the citizens complained that the water had become salty. According to the citizens one can observe the water turning light green after filling it into a plastic bottle. Similar observations have been reported in several other places as well.

Another problem is the smoke from drilling operations. 11 of the respondents from the villages of Gaik and Willuak/Thak that are located between Thar Jath and Mala Main Field told me that when the wind is blowing into their direction, they experience coughing and sometimes vomiting along with diarrhoea. They cannot be absolute sure whether this is caused by the smoke, but since this only happens when the smoke comes into the village, most inhabitants assumed a link between the smoke and their health problems. The doctors from the health clinic in Guit Town confirmed this. They treated the sick people and were sure that the toxic smoke from oil drilling areas caused their diseases. According to the doctors the smoke is causing eye-problems, coughs and flu.

Another incident caused by the oil-company has claimed the lives of two children and many cows. During road construction soil is taken from areas along the road leaving big holes in the ground. In the rain season these holes fill up with water and become death traps. If people fall into the holes they cannot get out again because the walls around the hole are too steep for them to climb back out of the hole. One of the victims was the son of Makueik Pam Kier, four-year-old Macher Mekon Chuol (see appendix 7 for illustration). He was playing when he fell into one of these holes. His friend ran to inform his mother, but she arrived at the hole too late. Grazing cows also fall into these holes, since the herdsmen cannot control every step of every cow. So far no compensation has been paid to the parents who lost their children, or to the cattle-owners.

7.2.3. Research question 3: To what extent were the local communities able to influence the oil-production?

According to the CPA the local communities have the right to participate in the decision-making process around the oil-industry. The third research question focuses on the degree this principle has materialized in reality, and if the local communities had any power to influence the oil-industry.

None of the 40 respondents said that they had any possibility to influence the policy of oil-company or the utilization of oil-revenues for development projects. According to the respondents no WNPOC staff member or government official has ever asked about the needs of the villagers, their opinions or priorities. The chief of Kadett Payam said that his position as chief of the payam gave him no influence on the oil-company. The commissioner of Guit County had some power. An example is the ongoing road construction. The commissioner told me that WNPOC had initially promised a lot more than a road. In a meeting between CD and the local government, the commissioner had understood that all these promises were not to be kept. Therefore he told CD to drop the other projects and solely concentrate on the road. In that way at least something was to be done. CD rather preferred build a school and a health clinic, but the commissioner made clear that this is not the focus of the local authorities, and demanded CD to build the road. The reason of CD for suggesting to build a school and a health clinic is because these projects would have a considerably lower construction cost. The lobbying showed results and the road is now under construction. But neither the government nor WNPOC has taken the views of the local communities into consideration and asked about their priorities. If they had done so they would know that the basic need and main priority of the people is clean water.

8. Discussion and conclusion

This chapter will critically review the empirical findings. The findings of each research objective and research question will be summed up shortly and discussed critically in connection to other research done on similar topics that might support or contradict the findings. In this chapter I will also consider possible factors that might have influenced and fostered the empirical findings.

Research objective one, research question one focused on the level of knowledge that the local communities have about the oil-industry and the CPA. The findings indicate that the respondents have a very low level of knowledge about oil-production in Block 5A, the Sudanese oil-industry in general as well as the CPA.

This is at least partly caused by the slow flow of information, with poor infrastructure and lack of communication devices. The villages are located very remote and information flows slowly. Most of the information they receive was from people who travel to cities such as Kilo 50 and Bentiu. That people from other places visit their villages was rare. Most of the respondents were illiterate. None of the respondents had a TV. Only five respondents had radios. Most of the news in the radio is in English or Arabic, languages they don't understand. The battery supply was also problematic. One lady told me she had not been able to listen to the radio for a while because she did not have any batteries. None of the villages enjoyed electricity. Very few had cell phones.

The only two occasions for that larger groups gather is for weddings and when the men build the "luak"; the hut for the cattle. Information flow is a general problem in South Sudan because of the far distances and the extremely poor infrastructure. Salva Kiir is sending many of his massages out to the churches (Kristiansen 2009), but this does not reach those believing in traditional religions, such as the five villages that had been subject to my field work. The inhabitants of these villages do not gather regularly for any religious purposes. Due to the high illiteracy rate posters and newspapers are little effective for transporting information to the people. Parents, however, can receive information via their children who, in most cases, attend schools. In most of the villages at least one family owned a radio and news broadcasted in Nuer language could have reach out to many more.

Another reason for the little knowledge the respondents have about oil production might be the lack of interest. Oil-production and the existence of a foreign company were often considered by the villagers as something that does not regard them. They perceived it as the business of the

government and foreigners. This perception is probably rooted in the fact that villagers and company staff have little contact and don't interact with each other. The mere lack of interest for more knowledge might also be the reason why the villagers did not have a clear idea what was going on around them regarding oil production. Even the chief of Kadett Payam showed little interest in these issues. He claimed not being able to access any information about oil-production. When I offered him reports and articles containing relevant information he showed little interest. It seemed that the respondents had never given much thought about the issues my questions were referring to. This lack of curiosity and interest regarding oil-production surprised me, especially considering all the attention and curiosity they granted me as a visitor in their villages.

Without knowledge about the CPA and the rights it grants to the local communities, it is difficult for the people to demand these rights as well as accountability from the government and the oil-company. Accordingly the government and the oil-company feel little urge for being accountable and implementing the principles of the CPA.

Research objective one, research question two focused on the expectations regarding the oil-industry, and found surprisingly moderate expectations of benefiting from the oil-industry.

The moderate expectations of the respondents towards the oil industry have to be seen in connection and can partly be explained with the low level of knowledge. The people did not develop any high expectations because they are not aware of the potential benefits the extraction of oil might give them. If knowledge about oil-production and the CPA increases the expectations of the people would probably also increase. The study indicated a correlation between knowledge and expectations. The respondents with a higher level of knowledge also had higher expectations towards the oil company considering the potential benefits.

The existence of foreign workers in the area has raised higher hopes and expectations in the villagers than the idea of oil extraction. The majority of respondents have no knowledge about oil, its appearance, use and value. They don't know how to relate to it and have no idea how they could benefit from it. In the eyes of the villagers the existence of wealthy foreigners promises a more direct beneficial effect in the form of job opportunities and development projects.

Research objective two, research question one found that there has been some development since the signing of the CPA. This is due to development projects initiated by WNPOC's and by government of Unity State financed by oil-revenues. The quality of these projects, however, is rather poor and inadequate, especially when one considers the high value of oil.

WNPOC runs several development projects, but they seem more like "feel-good" projects with the aim to improve WNPOC's reputation, rather than to seriously develop the local communities. WNPOC probably runs these projects in order to prove their social responsibility and defuse criticisms put forward against them. No need-assessments have been carried out, neither among local communities nor local chiefs. The local authorities as well as the commissioner of the oil-producing district also felt that their views have not being taken into consideration, despite the fact that they are from the area and are better aware of the people's needs than foreign companies.

I was not able to find out the amount spent on WNPOC's projects, but one can expect them to be low considering the high revenues from oil-extraction. WNPOC were kind and helpful to me when visiting Sudan, but afterwards I have not been able to make contact with them despite several attempts. This indicates little concern of WNPOC for transparency. Transparency is a general problem in the Sudanese oil-industry (Fatal Transactions and ECOS 2008). If these projects are "feel-good" projects, it is reasonable to believe that they don't follow international principles of development work or monitoring and project evaluation. None of the projects have been conducted to the satisfaction of the five villages visited. Neither is the treatment of local employees of the oil company according to human rights standards.

One fourth of the respondents claimed that they are not benefiting from oil-production at all. This belief results from their unawareness regarding the origin of money that finances the development projects. For example, it was believed by some that the roads have been built by the government, while others believed the Americans constructed them. Some of the respondents thought that I was the one who had provided them with roads. Signs in front of schools and health clinics inform about their origin, but these are unintelligible for illiterate people. Since the people have so little knowledge about the CPA, they are not aware that the government of Unity State receives oil-revenues, and therefore don't know that most of the money spent by the local government comes from the oil-industry.

A road is important in a long-term development perspective. But for fully taking advantage of the road, vehicles are also important. Public transportation possibilities are few, irregular and costly. WNPOC and the local authorities benefit from the road since they have vehicles, but the local people don't benefit from the road. Therefore a road itself is not sufficient for the local people. This

was also outlined by many of the respondents whom claimed the road has not been built for them, but for the oil-industry.

The health system was also inadequate since there is a lack in amount of medicines. It was not adjusted to benefit the poorest, as they are not always capable of raising the financial means for taking advantage of the services. The quality of the school system was also inadequate. This was caused partly by lack and delay in payments of oil-revenues from GoNU. The school system was furthermore not adjusted to a semi-nomadic lifestyle. During the dry season the pupils don't attend schools at all. Schools must be adapted to the people's lifestyle, either by mobile schools or by adjusting the schedule.

The water projects run by WNPOC are little sustainable in both the short and long run. The water delivery is too unpredictable to depend on. They only reach out to villages located close to roads, and not to remote villages such as Lanfhtang. The water projects should include more sustainable efforts, such as water wells and hand pumps, and training on how to maintain such equipment. If water would be provided in the dry season, the people could stay in their villages and the children attend school all year. However, the best water projects WNPOC can run is to follow their own guidance on non-pollution during oil-extraction.

The projects carried out by both WNPOC and the local government do not match the locals' perception of what is needed. The local government has prioritised infrastructure, although WNPOC had preferred to prioritise schools and health clinics. According to the commissioner of Guit County the preferred prioritization of WNPOC was motivated by lower construction costs, not by a genuine concern for the needs of the people. The priority of the local communities is water. It is the most basic need. And the lack of clean drinking water was the reason for most of the illnesses under which the villagers suffered. The lack of water is also the cause for their semi-nomadic lifestyle. Need-assessment must be carried out before development projects are conducted, both by the local government and WNPOC.

The development projects implemented in Unity State were of small scale considering the high value of oil and the principle in the CPA that a special focus shall be given to war-torn areas. According to the CPA Unity State should receive 2 percent of the oil-revenues from the oil produced in this area directly. Unity State shall also receive oil-revenues from the Sudanese oil-industry from GoSS. The small scale of the development projects can be seen in connection to the fact that a great amount of the oil-revenues is not being paid out by GoNU to GoSS or Unity State

as supposed to. These numbers that have been subject for oil-revenues are also underestimated by GoNU, in addition to unreasonably high management and pipeline fees. Corruption and lack of transparency have made the amount that is actually paid even smaller (Global Witness 2009). Civil servants in Guit Town have not been paid salaries for several months due to lack of payments of oil-revenues from GoNU. Unaccountable and unpredictable flow of revenues make it more difficult to plan and provide social services to the citizens, as well as it provides a fertile environment for corruption.

The development projects were of rather small scale. However, it is limited how rapid improvements a war-torn area as Unity State can experience. Unity State is lacking infrastructure, stable institutions, knowledgeable and educated civil servants and other things essential for providing basic needs for its inhabitants. One step needs to be taken at time, and in Unity State several steps have already been taken. The positive development must not be ignored because of the challenges that still exist.

Research objective two, research question two, found that the negative consequences of oil-extraction have decreased since the end of the war. However, oil extraction has still a negative impact on the lives of the people living in proximity of the oil extraction sites. Contaminated water poses the main problem, but people also suffer from smoke that emanates from the oil-extraction sites as well as from irresponsible road-construction. Oil also has a destabilizing effect on the peace in Sudan as it poses a factor over which the war could break out again.

The contamination of the water has been verified by the German human rights group Sign of Hope. Mid November 2009 they released an alarming report, which showed that the chemicals found in the drinking water were the same that had been detected in the contaminated water coming from the oil fields' central processing facilities. The report is based on 50 water-samples taken from all major human settlements in proximity to oil-operation areas of Mala Main Field and Thar Jath during four field trips between February 2008 and November 2009. The samples underwent scientific analysis based on WHO drinking water standards. Samples from the central processing facilities and samples of mud pits showed an identical mineral distribution as the contaminated water wells did. It is estimated that up to 300,000 southerners are affected by this, living in an area of 4,000 square kilometres. In some villages the water is no longer drinkable. It causes diarrhoea, dehydration and leads, if not treated, to death (VA News 2009, ECOS 2009b, ECOS 2009c). All the five villages visited along with Guit Town are among the affected areas.

A major cause for the contamination of drinking water is that the mud pits at the more than 30 oil-boreholes in the area have not been fully lined with plastic sheets. As a consequence salts and chemicals of the drilling process are seeping into the ground and diffuse into the water aquifer. If the situation is not taken care of the concentration of contamination will keep on increasing steadily. These mud pits contained high levels of salts, potassium chloride, boron, lead, barium, strontium, nickel, cadmium and iron. If oil spills into the Sudd Swamp, a vulnerable tropical wetland covering 30,000 square kilometres, the consequences can be catastrophic, both for the people depending on the Nile and for the whole Sudd ecosystem (VA News 2009, ECOS 2009b, ECOS 2009c).

WNPOC does not accept these accusations and calls them baseless and unjustified. WNPOC underlines its policy of strict adherence to international health, security and environment standards while carrying out its operations. The company strictly emphasizes on zero pollution in sensitive ecological areas. They claim that the ground water in the Sudd basin is naturally high in salinity. Their own tests show a lower level of salinity than indicated in the tests conducted by Sign of Hope. They also claim the tests from Sign of Hope were taken too far away from oil operation areas. Further they claim the soil in the area to be permeability, thus virtually eliminating the possibility of migration of pollution. They also claim to fill and cover the mud pits according to international standards and practices. WNPOC regards these factors as evidence that proves WNPOC is not causing the alleged contamination (WNPOC 2009c).

Lack of knowledge of the causes of the experienced illnesses made the respondents sometimes blame the oil-company for causing other diseases they are not to be blamed for. In some occasions they might be right, in others wrong. Diseases such as measles, cholera, malaria and meningitis are among common diseases (Doctors Without Borders 2009), and stand in no connection to oil production. The CD department also underlined this, and claimed the inhabitants are blaming the oil-company for their traditional diseases.

The CPA demands that oil-production shall be conducted in an environment friendly way, and WNPOC also claimed to follow these standards. The contamination of water clearly contradicts this, and is the only thing that has aggravated since signing of the CPA. Water is the most important of all needs and the foundation for life. Contaminated water is an extremely serious threat to the lives of the people. Therefore the negative consequences of oil-extraction in the area weighed more than the positive outcomes. WNPOC's medical supply didn't cover diseases caused by their own contamination. Oil is still a curse for the local communities, rather than a blessing. Only few people

in the oil business as well as government officials are profiting from the oil. The majority of Sudan's poor citizens do not benefit from it (Fatal Transactions and ECOS 2008).

GoNU does not monitor the environmental performance of the oil industry despite the requirements put down in the CPA regarding this issue and the fact that most companies in Sudan apply very low, if any, environmental standards (Fatal Transactions and ECOS 2008, see chapter 6.3). WNPOC is no exception from this negative trend. GoNU has not taken any action after the alarming report from Sign of Hope and this indicates that GoNU does not care about the well-being of the inhabitants in Unity State. GoSS are lacking the social, technical and environmental standards for carrying out such monitoring s (Fatal Transactions and ECOS 2008).

The road construction that claimed the lives of two children clearly lack the security guidelines that WNPOC claims to take serious, making this construction work unwarrantable and unjustifiable. One can also consider it an accident because the mother should have looked after her child, but death-traps in vicinity of villages and playing children are by no means to be called safe and responsible. The victims should be paid a compensation showing that the company is taking the local communities serious. This also counts for the owners of cattle that also have been victims to the irresponsible road construction. Future road construction must be ensured properly.

Human rights are often not taken into serious consideration by WNPOC and other companies from the east. The companies in Sudan do not ascribe great importance to human rights. Commercial profit tends to weigh more to them than the rights of individuals. This way of thinking is also shared by the Sudanese government. The arrest warrant from ICC against al-Bashir for crimes against humanity and war crimes in Darfur illustrates this. This common lack of interest in human rights facilitates the cooperation between the central government and the oil-companies; a cooperation that is solely aimed at making profit from oil. Commercial interests have a tendency to weight more than human rights and there are few examples where this is more visibly than the oil-industry in Sudan. This was visible during the war, and is still visible in the current oil-industry.

Sudan has experienced most of the negative effects of resource abundance and oil-dependency, including war, poverty, bad governance and poor economic performance. Oil triggered, financed and motivated the second civil war. In the post-war situation the oil in Sudan might contribute to further instability. As a low-income country, rich in natural resources, with two main ethnic groups and a large population, Sudan has already experienced two civil wars. However, the oil also has

huge potential for changing this trend, provided that oil-revenues are used to promote development and a stable and sustainable peace.

Riek Machar and Paulino Matiep are both Nuer people that claimed autonomy rights for the Nuer area during the war. The Nuer is a culturally distinct group from the rest of South Sudan, bearing most of the costs but getting few of the benefits from oil-extraction today. Although unlikely, it is not impossible that a new secessionist movement could develop in the future if the government of a new independent South Sudan turns out to be weak and unable to establish a nationalistic feeling and solve grievance feelings. The local communities in Block 5A want to avoid war at any cost, but political entrepreneurs could arise and be able to change this, although this is not very likely at the moment. To keep the chances of renewed political turmoil on a low level the guidelines of the CPA regarding the oil-industry must be implemented, and it must be assured that the local communities in the area benefit from the oil instead of suffering from the negative consequences of oil production. Development and fair distribution of oil-revenues is very important for escaping the conflict trap and entering a positive circle of development and peace.

Good governance and democracy is essential for stable and sustainable peace. Democratic governments tend to solve grievance feelings better and can provide security for its citizens. They usually perform better economically and invest in social capital such as health and education and in a diversified economy for moving away from natural resource dependency and lower the risk of experiencing the resource curse. Democratic governments create more satisfaction and are more legitimate. All these factors decrease the risk of war. Both GoNU and GoSS are governments highly depending on oil-revenues. Natural resource dependent governments tend to perform worse, and GoNU and GoSS are no exceptions. They are both corrupt and struggle with low accountability (Norad 2008). This, together with the depressing statistic of poor and post-conflict countries' risk of resuming war is alarming. The development of good governance in Sudan is therefore essential for achieving a stable and sustainable peace.

Elections were held in Sudan 11-13 of April. They were the first step towards democracy and good governance. SPLM withdrew from the elections in North Sudan (except Southern Kordofan and Blue Nile), followed by most of the minor parties as it appeared that the elections would not be held in a just and transparent way. Al-Bashir remained the only realistic candidate. The elections were criticised by e.g. the US, the UK, Norway and EU for not living up to international standards (VG 2010), but who can expect so in a war-torn country where most inhabitants are illiterate and are voting for first time? 60 percent participation shows the interest among the inhabitants for the

political situation (Aftenposten 2010). The election results are postponed for indefinite time due to the complicated process of counting the votes (VG 2010). Al-Bashir is expected to win with clear margins and Salva Kiir is expected to stay president of GoSS and the vice president of GoNU. Despite some irregularities the elections were the first and very important steps towards democracy. They also paved the way to the referendum in 2011.

Compensation and prioritization of development are important in addressing grievance feelings. None of the citizens have received compensation for wrongdoings during the war. This is generally true in the Sudanese oil-industry (Fatal Transactions and ECOS 2008, see chapter 6.3). One lady reported that her father has received an inadequate compensation for forced removal caused by the construction of the pipe-line. None of the victims of pollution or irresponsible road construction have received any compensation. To deal with grievance is very important for preventing the resumption of war.

My impression was that most of the inhabitants of Unity State were open and positive towards registration for the elections 2010, mainly in order to be able to take part in the referendum in 2011. How the future will develop after the referendum is difficult to predict. The international aid and peace keeping efforts are of great importance for Sudan's future. Sudan will depend on this international support for many years ahead. The priorities of peace building; maintaining security, political development and social and economic development must also be taken serious. This is of utmost importance for the democratization process as well as for the upcoming referendum and the post-referendum situation in 2011.

Oil can be an obstacle for a peaceful referendum. It is questionable whether North Sudan will accept a new independent country which would comprise most of the nation's wealth. Kristiansen (2009) suggests that GoSS could give the oil-reserves in Abyei to the north because it is depleting, as long as the land and its people would belong to the south. By this a potential new conflict could be prevented.

Research objective two, research question three found that the local communities have no power to influence neither the oil-industry nor the development projects financed from oil-revenues, despite the statements in the CPA. Only the commissioner of Guit County had some power to influence the oil-company.

The central government signed the contract with WNPOC prior to the signing of the CPA. According to the CPA, old oil-contracts will not be subject of re-negotiations. If the contracts are considered of having fundamental social and environmental flaws, it is up to Khartoum to decide whether any changes shall be applied. The real power for change lies in Khartoum, and in the oil-company itself. The contamination of drinking water is a fundamental social problem that should be dealt with, but GoNU is so far not doing a satisfying job. It clearly shows a lack of interest in the local communities, the statements of the CPA as well as in human rights. After a possible division of the country, there is hope for improvements in this area if GoSS takes its obligations towards its citizens more seriously and considers the rights and the needs of the local communities in future oil-contract.

Chapter 9: Summary

This thesis has mapped knowledge about the Sudanese oil-industry and the CPA and expectations of potential benefits from the oil-industry among local communities in Block 5A, Sudan. The thesis showed how these communities are affected by the oil-production taking place in the area and the Sudanese oil-industry in general. During the war the people in Block 5A suffered in line with the oil-development. Harassment, military attacks and forced displacement have been experienced by all the respondents. The Comprehensive Peace Agreement (CPA) was signed in 2005, and it states that the local communities shall benefit from the oil-industry. They are supposed to get a share of the oil-revenues from Unity State and GoSS. Environmental considerations are to be taken seriously, and local communities are supposed to participate in the decision making process around the oil-industry. This thesis investigated the actual positive as well as negative impacts of the oil-industry in Block 5A.

The research found that the level of knowledge regarding both the oil-industry and the CPA was low. The expectations of the people regarding potential benefits from the oil-industry were also fairly modest. These two results stand in correlation to each other. When the respondents have a low level of knowledge regarding the value of oil and the rights that the CPA grants them, they naturally have low expectations regarding potential benefits from the oil-industry. Knowledge is important for holding the government and oil-company responsible for their obligations and actions. Furthermore, without knowledge the local communities will never be capable to exert influence on their government and the oil-industry in order to improve their situation.

According to the CPA the negative effects from the oil-industry which persisted during war time are to be replaced with positive development. A slight development has taken place since the CPA. Prior to the CPA none of the respondents accessed public goods such as health services, education and infrastructure. Now most of the respondents enjoy some access. However, the amount and quality of these public goods are not adequate, and this stands in correlation to the problem of bad governance both in GoNU and GoSS. The projects carried out by WNPOC and the local government do not represent the priorities of the local communities. Neither were the local communities able to influence the oil-production or the decision-making process of development projects financed from oil-revenues. The negative

effects of the oil-industry have decreased compared to the pre-CPA period, but they were by far not eliminated. The main problems were the contamination of drinking water, the exposure to smoke coming from the drilling operations as well as irresponsible road construction. Especially the former has to be regarded as extremely serious, since water is a basic need life. The continued contamination of drinking water will undermine every positive development that has been achieved in Unity State so far. For the local communities living in proximity to oil-operation areas in Block 5A, oil was still rather a curse than a blessing.

In a wider term the oil is also contributing to the negative effects of natural resource dependency with instability, bad governance and poor economic performance. This contributes to the destabilization of the fragile peace in Sudan. However, one cannot expect rapid improvements in a war-torn country like Sudan. The development that has taken place so far, although still inadequate considering the needs of the people and the existing challenges caused by the oil industry, goes into the right direction.

Oil has huge potential for development in Sudan. Being a fragile post-conflict state, assuring that oil benefits the local communities is essential for achieving a stable and sustainable peace in Sudan. GoNU, GoSS and the oil companies must take this serious and adopt good governance and a proper business policy. If the government as well as the oil companies do not change their behaviour and implement the guidelines of the CPA they endanger the existing fragile stability of the country and the chances of Sudan backsliding into violence might increase. The local communities in Block 5A want to avoid this sinister scenario at any cost.

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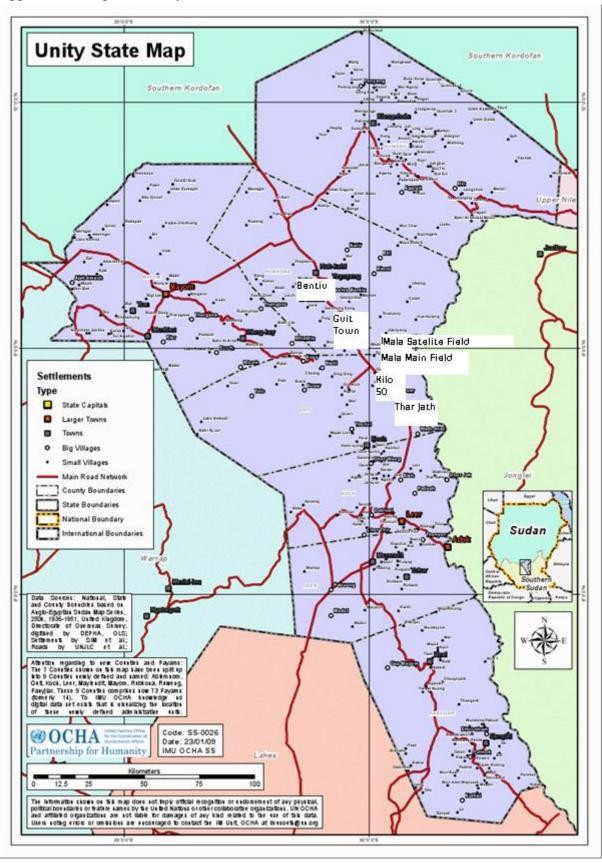
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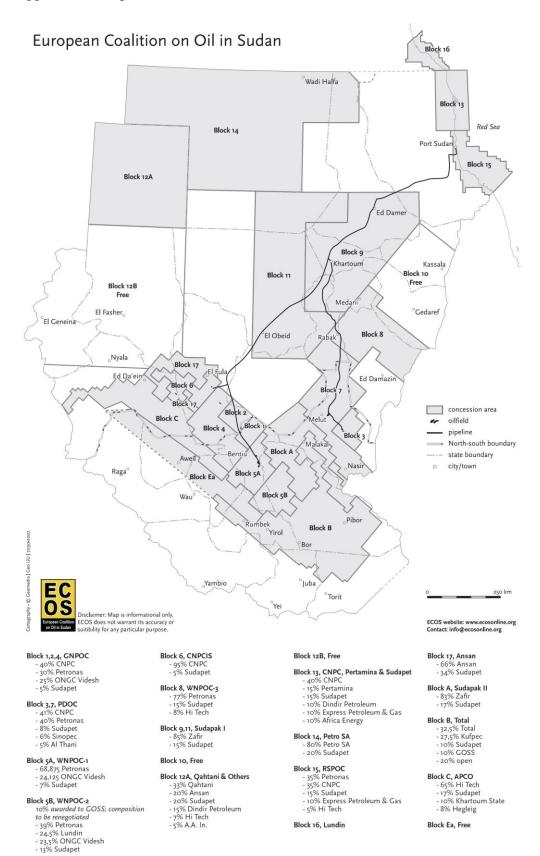
Appendix 1. Map over Sudan (Nations Online 2010)



Appendix 2. Map over Unity State (UNHCR 2010)



Appendix 3. Map over oil blocks and concessions areas in Sudan (ECOS 2009a)



Appendix 4. Ongoing road construction



Appendix 5. Water supply from WNPOC to the village of Willuak



Appendix 6. Makuor Tai, whom lost his son to pollution



Appendix 7. Makueik Pam Kier and my assistant by the hole where her son drowned

