Play with Water and You’ll Get Burned

How Scarce Natural Resources May Internationalise Internal Wars: The Case of Sudan, Egypt, and the Nile

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List of Abbreviations and Acronyms

ALF Azania Liberation Front
BCM Billion Cubic Metres
CPA Comprehensive Peace Agreement
ECO NILE Environment and Cooperation in the Nile Basin
ECSC European Coal and Steel Community
EU European Union
GDP Gross Domestic Product
GNU Government of National Unity
GOS Government of the Sudan
IGAD Intergovernmental Authority on Development
IMF International Monetary Fund
JEM Justice and Equality Movement
LFA Land Freedom Army
LRA Lord’s Resistance Army
NATO North Atlantic Treaty Organisation
NCP National Congress Party
NIF National Islamic Front
NUP National Unionist Party
OECD Organisation for Economic Co-Operation and Development
PDP People’s Democratic Party
PKK Kurdish Workers Party
SACDNU Sudan-African Closed Districts National Union
SAF Sudan Armed Forces
SANU Sudan-African National Union
SDF Sudan Defence Forces
SLM/A Sudan Liberation Army/Movement
SPLM/A Sudan People’s Liberation Movement/Army
SSLF Southern Sudan Liberation Front
SSLM Southern Sudan Liberation Movement
SSPG Southern Sudan Provisional Government
UN United Nations
UNCCD United Nations Convention to Combat Desertification
1. Introduction

It is 01:39 hours on 17 May, 1943. Flight Lieutenant D. J. H. Maltby from RAF Squadron 617 successfully bombs the Möhne Dam in the Ruhr Area of Nazi-Germany from a height of only 18 metres flying at a speed of 390 kilometres per hour. Shortly after, battling with heavy fog, Pilot Officer L. G. Knight is the third aircraft to attack the Eder Dam in the same area. He too is successful, and as the Squadron returns to base some 330 million tons of water pours into the Ruhr region.

Maltby and Knight were part of Operation Chastise, today best known as the Dambusters. With no more than six weeks of training, nineteen Avro Lancasters were to bomb three key German dams – the Möhne, the Sorpe, and the Eder. The crew was divided into three waves: the first wave took off in groups of three aircrafts with ten minutes intervals and headed for the Möhne and Eder dams. The second wave of five aircrafts took off at 21:28 hours and headed for the Sorpe Dam, while the last five aircrafts took off three hours later to act as an airbomb reserve. Flying that low over enemy territory represented an enormous risk for the aircraft crews. Of the nineteen Lancasters that took off that day in May, only eleven returned to base.

Despite the loss of eight Lancasters and their crews, Operation Chastise was regarded as a huge success because two of the three targeted dams actually collapsed. The water stored in the Ruhr dams was seen as being so vital to the third Reich that the allies sent their best pilots on an almost impossible mission, sure to kill at least some of them, in an attempt to blow up the dams. The reason behind the unprecedented operation was to flood the Ruhr Valley, reduce power supplies to industrial activities, damage the railway, and reduce domestic water supplies.\(^1\) The operation shows how actors in war single out vital natural resources to either destroy them – as was the case with the Dambusters – or to get control of the resources themselves in order to obtain the benefits associated with them. This thesis will take a closer look at the role of natural resources in war and ask questions such as why they are regarded as vital and how competing claims for access to such important natural resources might affect a peace process.

1.1 The theoretical framework

Natural resources are important from our very survival (food, water, and shelter), to development and acquiring wealth, to power struggles and war making. As a result, countries will go to great lengths to secure uninterrupted access to them. The role of resources in conflict has to a degree always been obvious. ‘Resource wars’ are as old as wars themselves as countries have always sought access to slaves, land, trade routes, minerals and more. However, in the last fifty years, resource issues are more crucial than ever due to an increasing population and a diminishing of the resources themselves. In 1975, Nazli Chourci and Robert North explained how this might lead to outbreaks of international wars in their book Nations in Conflict where they argue that countries which are experiencing high demands for natural resources combined with limited access to the desired natural resources will consequently seek to gain the same resources through trade or conquest. Thomas Homer-Dixon agrees with Chourci and North and concludes that ‘environmental scarcities cause violent disputes.’ He explains it by reminding us that ‘[w]ithin the next fifty years, the planet’s human population will probably pass nine billion, and ... scarcities of renewable resources will increase sharply.’

Natural resources are commonly divided into renewable resources, such as forests, plants, and fresh water, and non-renewable resources, such as minerals, oil, and gas. Few, if any, natural resources are evenly distributed throughout the world and there is a continuous risk of shortages as human activity is taking a high toll on the existing supplies. According to Michael T. Klare, ‘the earth lost nearly one-third of its available natural wealth between 1970 and 1995 as a result of human activity.’ That fact is disturbing in itself, but combined with the knowledge that around fifty per cent of the world’s population depend directly on local natural resources, it becomes alarming. In a world where no one is guaranteed the very basis of their survival, one should not exclude wars arising over access to these crucial resources.

However, arguments have been raised against the increased focus on resources as conflict creating or conflict intensifying. Nils Petter Gleditsch has pointed out that there is a

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lack of empirical study of armed conflict in the past as well as a lack of explicit theorizing for if and why resource scarcities should have a higher violence-generating potential in the future than in the past.\(^6\)

Wenche Hauge and Tanja Ellingsen also question the focus on scarce natural resources as conflict creating, and argue that other factors - in particular economic and political ones - are more important in explaining armed conflict.\(^7\) Homer-Dixon admits that many conflicts take place where environmental factors do not play a part, but goes on to ask whether 'the sources and nature of the conflict [can] be adequately understood without including environmental scarcity as part of its causal story.'\(^8\)

Whether or not access to natural resources is the sole reason for wars in the future, however, is not the concern of this thesis. Nor is it trying to prove in any way that scarce natural resources can create international armed conflicts by themselves. Reasons for war are many and complicated, and to single out one cause in particular as the only important factor is pointless. Rather, this thesis is concerned with how access to natural resources can influence state behaviour in relation to war, specifically how scarce natural resources might internationalise already existing internal wars. Thus, it finds itself partially in the tradition of environmental security, whose main focus is how 'human-induced environmental pressures might seriously affect national and international security.'\(^9\) But, because the aim of this thesis is just as much to show how regional dimensions might be important in relation to scarce natural resources, civil wars, and peace processes, it also belongs to the regional or transnational security tradition. Alan Dupont argues that a new security paradigm has emerged, in which certain non-military actions, such as diseases, non-state actor violence, and large scale people movements, are considered a threat to international security. Water scarcity, along with other forms of environmental threats, is seen as a part of this paradigm.\(^10\)

Fresh water as a vital resource gained global attention in the 1960s when a growing awareness of the natural environment took place.\(^11\) Studies specifically centred on water as a scarce resource started in March 1977 when the United Nations (UN) held a Water

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9 Ibid, 3.
Conference in Mar del Plata. Since then, there have been many studies and conferences on water scarcity. The latest was an international conference in September 2006, held by The Secretariat of the United Nations Convention to Combat Desertification (UNCCD), on ‘Challenges and Opportunities for the Youth in the Drylands.’ It recognised the devastating effects of desertification, such as famine, poverty, and forced migration and was just one of many events staged to mark the 2006 year of Deserts and Desertification. Water was also seen as important enough to be mentioned in the UN Millennium Development Goals, agreed to by the UN Millennium Summit in 2000. According to Goal 7 (Ensure Environmental Sustainability), the world shall ‘reduce by half the proportion of people without sustainable access to safe drinking water.’ Furthermore, the lessons learnt from large-scale conferences are put into life on a daily basis by organisations such as AUSTCARE, Oxfam, and Plan International that all have provision of clean water at the core of their field development work.

Equally, the importance of water is recognised by scholars. Peter H. Gleick has argued that experience suggests, conflicts are more likely to occur on the local and regional level and in developing countries where common property resources may be both more critical to survival and less easily replaced or supplemented.

Water is both critical to survival as well as near impossible to replace. And, as Sandra Postel and Aaron Wolf point out, water, even if it does not directly lead to war, has a history of fuelling regional tensions and straining economic development that in turn create an underlying risk of larger conflicts erupting. However, it is necessary to specify that the argument that will be developed in this thesis is not that shared river basins necessarily equal violent conflict. Rather, the thesis will argue that in regions where certain other premises are present they increase the likelihood of international conflict that may or may not lead to violent disputes. Such other preconditions include unstable governments, a large part of the population being classified as poor, a strong history of violence as a legitimate conflict tool, and a lack of peaceful conflict resolution institutions and norms, be they private, governmental, or international.

15 Sandra L. Postel and Aaron T. Wolf, ‘Dehydrating Conflict,’ Foreign Policy No 126 (September – October 2001): 61.
Much has been written on how to create sustainable peace after the occurrence of civil war. Countries going from civil war to peace have close to a 50 per cent chance of going back to a state of violence\textsuperscript{16} and there is great interest in why some peace agreements work and others fail. Stephen John Stedman et. al. argue that many factors will be unique in each case of implementation, but ‘[f]or peace to prevail in difficult implementation environments, international implementers must provide greater amount of financial resources and more peacekeepers.’\textsuperscript{17} Cousens and Kumar stress the need for a longer time frame of international assistance for a peace process to succeed.\textsuperscript{18} In addition to international commitment for a peace process to succeed, the literature also stresses the need for security guarantees.\textsuperscript{19} The security guarantees set out in the CPA are limited to military and economic threats and overlooks the potential security threat limited amounts of fresh water represents. In Sudan, the important third-party enforcer could have been the regional super-power Egypt. But, as will be argued later, Egypt at this stage seems to have a greater interest in the peace treaty between north and south Sudan not to be implemented and institutional guarantees for continuous access to fresh water for both parties to the agreement (as well as other regional players) are currently missing. The thesis investigates how Egypt’s ambivalence towards the CPA and the lack of water-sharing agreements might influence the peace process between north and south Sudan.

At the outset, a clarification of what is meant by ‘internationalisation of internal conflict’ is necessary. For the purpose of this thesis, the internationalisation of an internal conflict occurs when one or more external states support one or more actors in a civil war that takes place within the borders of a separate sovereign state. The support might consist of money, weapons supplies or actual military presence on the ground and thus does not need to equal international armed conflict, although that is certainly one form of internationalisation. Specifically, this thesis focuses on support coming from countries neighbouring the state experiencing internal conflict and so limits itself to the regional characteristics of internationalisation.

There are two methodological ways of studying the relationship between natural resources and state behaviour in relation to international conflict; quantitative and qualitative.


\textsuperscript{18} Elizabeth M. Cousens and Chetan Kumar (eds.), \textit{Peacebuilding as Politics: Cultivating Peace in Fragile Societies} (London: Lynne Rienner Publishers, 2001).

Quantitative studies rely on factual and statistical evidence to measure, compare, and analyse situations. Qualitative studies, by contrast, rely on evidence that cannot be measured, such as literary and theoretical sources, to analyse a situation and develop an argument. The thesis will use both methods, but with an emphasis on qualitative analysis, in a combined country-specific and regional approach with some comments on similar cases elsewhere. The focus of the study is Sudan and Egypt as the regional country most likely to intervene.

The main sources for background information of the region, in general, and the conflict in Sudan, in particular, are books already written on the subject. For more recent events, the thesis relies on newspaper articles and commentaries written by organisations such as Human Rights Watch and International Crisis Group for information. Because these comments on current affairs as they take place, it is harder to control the accuracy of the sources. However, that is always the case when analysing current affairs and should not be used as an excuse for not trying.

1.2 Sudan, Egypt, and the Nile

On 9 January 2005, the Government of Sudan and the Sudan People’s Liberation Movement/Army (SPLM/A) signed a Comprehensive Peace Agreement (CPA) designed to end the country’s decades long civil war. Sudan gained independence from Britain in 1956 and the north and the south have been fighting ever since (albeit with a ten years exception between 1972 and 1982). The southern region is relatively rich in natural resources such as oil and fresh water. Egypt is particularly interested in gaining access to the latter. The thesis limits itself to the study of fresh water as a catalyst for further internationalising the civil war in Sudan and, in extension of that, serve as a potential spoiler of the current peace process.

The conflict in Sudan has many internationalising factors, the most obvious of which being refugees, oil, and weapons. However, considering every aspect of the conflict is far beyond the scope of this thesis. A limited framework makes a selection necessary and when this thesis chooses to focus on fresh water as an element of internationalisation it does so because the role of the refugees as well as the oil- and weapons industry has received considerable consideration elsewhere. Little new insight on the conflict would be gained by focusing on these factors. By contrast, the complete absence of any mention of water arrangements in the CPA as well as in current analyses of the conflict is generally overlooked, something that is quite puzzling considering the importance the Nile has in the Horn of Africa. Fresh water might not be the most important factor in the conflict, nor the greatest threat to the peace process, but it has undoubtedly had some influence in the past, as well as
representing an obstacle for future peace. Therefore, it deserves greater attention in relation to an internationalisation of the peace process than it has been given so far.

The Nile, more than any river, is surrounded by myths and symbolism. As the longest river in the world, it flows 6800 kilometres through ten countries on its journey from Burundi to the Mediterranean Sea (See Map 1).

Map 1: The Nile

The river’s greatest tragedy and yet greatest achievement is that it both separates and links together its basin states. They are separated by constant competition over the river’s precious water; yet, there is an overwhelming need for cooperation over the same water that inevitably connects the otherwise very different countries together. On the one hand, the need for cooperation could lead to a more peaceful and stable region. On the other hand, the great paradox of the Nile could lead to more unrest and instability within and between the Nile basin states.

Although the focus of this thesis is on the relationship between Egypt and Sudan in relations to the Nile, other basin states too take an interest in Nile management. Ethiopia, although it utilises limited amounts of water from the river, is the source of the majority of the

water when it reaches Aswan and has traditionally opposed Egypt's self declared right to control other basin states' water utilization. In the 1970s, the Nile entered the theatre of global politics when Egypt, after the 1979 peace treaty with Israel, proposed a Peace Canal through the Sinai that would divert Nile water to Israel. The canal was originally funded by a loan of one billion dollars from the Kuwait Economic Development Fund in 1991, but proved to be massively unpopular with other basin states and several Arab countries alike. In the end, 86 of the proposed 242 kilometres were built before all plans of diverting Nile water into Israel were abandoned.22

The primary research question of this thesis is 'how do natural resources serve to internationalise internal wars?' In order to make the main question more manageable, the thesis will also ask several sub-questions: How do countries decide on their national interests? How do national interests in relation to access to natural resources play out in a regional context? How can water be regarded as a natural resource that causes conflict and war? How can these questions be applied to the conflict in Sudan? And specifically, how has Egypt's interest in access to water from the Nile influenced the conflict in Sudan, and how might it influence the implementation of the Comprehensive Peace Agreement? What are the implications for future peacemaking and peacebuilding in Sudan and other contexts?

1.3 Chapter Outline

Chapter two of this thesis investigates what motivates states to act. It examines how access to natural resources as a factor in state behaviour can be placed in international relations theory. It looks at the realist international relation tradition's focus on the desire for power, and compares it with the liberalist belief that it is the internal and external context a state finds itself in that will determine its actions in any given situation. It then explores the Marxist tradition, where economy and class struggle is given greater attention. Finally, the chapter looks at the theory of security complexes and how that ties in with the broader theme of the thesis. The rest of the chapter then explores how shared fresh water can constitute a security complex, and how this can internationalise internal conflicts. Some of the examples used in this chapter will be international armed conflicts rather than internal ones. They are included because they show how the search for secure access to natural resources might influence state behaviour when it comes down to making a decision on whether or not to enter an armed

conflict because they provide good examples of how security complexes play out in regional politics.

Chapter three gives an overview of the history of Sudan from ancient times until the CPA. The chapter aims to give a greater understanding of the complicated patterns and conflicts in the country that is to be the thesis’ main case study. It furthermore explores the complexities of the conflict between north and south Sudan in order to reveal what other factors besides water might influence the outcome of the peace process.

Drawing on chapter three, chapter four examines in greater detail how Egypt and Sudan constitute a regional hydropolitical security complex, and how this has affected the Sudanese conflict. Two areas of conflict will be examined in particular: the construction of Aswan High Dam that began in the late 1950s in Egypt and the planning and attempted construction of Jonglei Canal in south Sudan that in a sense have been going on since the 1890s. Both were born out of Egypt’s desire for greater water reserves, but had major impacts on political events in Sudan.

Looking forward, chapter five examines the effect an independent south Sudan would have on Egypt’s future water supplies and the implications this might have on the implementation of the CPA. It looks at different strategies the international community can undertake to ensure that any shortcomings of the peace agreement itself does not jeopardise the potential for a sustainable peace between north and south Sudan. Lastly, the chapter discusses the need to include regional actors’ interests in civil war settlements of the future.
2. Natural resources, security complexes, and the internationalisation of internal wars

There are two reasons for studying the role of natural resources in war and armed conflict: prevention and resolution. In terms of prevention, if it is acknowledged that the drying up of vital resources could lead to conflict, then more time, money, and energy could be placed into finding substitutes for the contested resources, or in developing practical resource-sharing agreements. In terms of resolution, an increased awareness of the negative human responses that might occur when natural resources become scarce might lead to a greater focus on alternative methods of resolving ‘forgotten’ wars and conflicts. In other words, using new knowledge acquired in preparing for potential wars might help solve current armed conflicts.

This chapter will look at theories concerning how scarce natural resources, in general, might internationalise internal wars, before it looks closer at how water, in particular, might do the same. The main questions will be ‘Why is the relationship between natural resources and armed conflict on the intra- or inter-state level, worthy of study?’ ‘How can natural resources internationalise internal wars?’ And finally, ‘How does these questions relate to fresh water in particular?’ The answer to the first question is found in three important and related reasons.

Firstly, natural resources are essential for sustaining life. Access to fresh water and fertile land are the very basis of human survival, something no human, and thus state, can live without. There is no substitute for fresh drinking water or a piece of land on which to grow food. Securing access to these resources therefore will be a chief concern for individuals and states alike, even if this is not something many in the developed world are conscious about. In poorer parts of the world, however, there is no need for a reminder of the importance of access to food and water. According to the Organisation for Economic Co-Operation and Development (OECD), one person in four in the developing world lives in extreme poverty without access to clean water and sufficient food supplies.23 States need stable access to natural resources in order to secure their continued existence. Few, if any, states are self-sufficient in natural resources and as a consequence, they need external supplies. Stable and

secure access to those supplies will thus become a self-interest of the states in question. In a world where the difference between the 'haves' and the 'have-nots' is obvious and growing, insurgents or marginalised groups within a state, as well as marginalised states themselves, might be increasingly willing to enter long and harsh conflicts to secure their piece of the pie.

The second reason natural resources might cause or intensify wars is their ability to improve the economic situation of people and states. The expansion of the Roman Empire, Europe, and the United States during colonial times were partly driven by the need and desire to acquire more labour power through slaves. Another way resources can benefit the economy is through access to fertile land that in turn produces food to be sold for economic gain, or through the possibility of industrial development that depends on another natural resource: oil. Either way, economic growth is sought after by developed countries in order to provide increasing standards of living for their citizens, as well as by developing countries that want to move closer to the industrialised world and gain access to a minimum of material goods. It is not only at the inter-state level that resources are recognised as a vital asset and interest. Intra-state conflicts can also arise over scarce and valuable natural resources. In Haiti, conflicts between social groups have been intensified due to competition over forest and soil. Similarly, Mexico experienced a brutal civil uprising due to land scarcity. The uprising was in fact so severe that it triggered an economic crisis in its wake.

Finally, access to certain types of natural resources can be a major advantage for a country in wartime. Modern day warfare demands oil, and lots of it. The dependence on oil in warfare started in 1912 when the British Admiralty made the decision to fuel its combat vessels with oil rather than coal, a swap that made their vessels considerably faster than those of their enemies. Since then, the dependence on oil in large scale combat has only grown, and today everything from tanks to fighter jets to creating the infrastructure needed to win a war, is all based on oil. However, oil is a finite resource. Studies suggest that we can expect petroleum shortages at a significant level by the years 2020-2030 and currently there is no substitute for oil once the wells run dry. This poses a significant problem: states need to be able to defend themselves. Second only to the basic resources needed to feed its own

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26 Ibid, 12.
27 Klare, Resource Wars, 30.
28 Ibid, 19.
29 Although research is done on oil substitutes, at present there is not yet any sustainable and economically viable substitute available for the general public.
population, ensuring further existence is arguably the most important role of any state. The very thought of a world where only a very exclusive group of states has access to oil and thus the ability to perform a large scale attack is a frightening one for all states not members of that group. We might see an outbreak of long lasting violent conflicts to ensure this scenario does not become a reality. Already, examples of oil wars are not hard to uncover. When George Bush (Senior) gave the order to start military action in the Gulf in September 1990, he made no attempt to conceal that the region’s vast oil reserves played an important part in his decision to intervene:

Iraq itself controls some 10 percent of the world’s proven oil reserves. Iraq plus Kuwait controls twice that. An Iraq permitted to swallow Kuwait would have the economic and military power, as well as the arrogance, to intimidate and coerce its neighbours – neighbours who control the lion’s share of the world’s remaining oil reserves. We cannot permit a resource so vital to be dominated by one so ruthless. And we won’t. \(^\text{30}\)

Ensuring the continuous flow of oil from the Persian Gulf into the United States was seen as an important motive for US involvement in the war to oust Iraq from Kuwait, and there is ample evidence to show that oil continues to be a significant factor in US strategic thinking about security and foreign policy today.

Taken together, the factors discussed above outline a trend that cannot be dismissed: natural resources’ ability to sustain life, the positive impact they have on the economy, and the crucial role they play in war-making, all make it probable for armed conflict to arise, or intensify, in countries’ efforts to gain access to them.

It is time now to further explore how the contested natural resources can internationalise already existing intra-state violent conflicts, which is the main focus of the thesis. To shed further light on that topic, the author will rely on literature about state self-interest in general, and Buzan’s concept of security complexes in particular.

### 2.1 Internationalisation

To what extent any war today is a purely internal one is hard to determine. Sandra Postel and Aaron Wolf note that today’s civil wars are ‘spilling over borders and becoming tomorrow’s international wars.’ \(^\text{31}\) Furthermore, the global economy has connected countries on different sides of the world in a way not thought possible a century ago. Thus, a civil war might be a

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\(^{31}\) Postel and Wolf, ‘Dehydrating Conflict’. 61.
‘major international event’ even when no direct international intervention takes place, simply because of the effect it can have on the global economy. 36 of the 165 internal armed conflicts that have occurred since World War II have involved troops from an external state, a majority of which by states neighbouring the state experiencing civil war. The pattern was just as prevalent after as before the end of the Cold War:

While 22 of the 111 internal armed conflicts after the end of the Cold War were internationalized in the traditional sense, as many as 80 involved external actors providing support short of troops, in the form of supplies of weapons, financial assistance, or sanctioned use of a neighbouring state’s territory.

It is thus nothing exceptional about international involvement in internal wars – indeed, it seems to be the norm rather than the exception. Furthermore, third-party involvement does not necessarily occur to create peace in the warring state. Dylan Balch-Lindsay and Andrew J. Enterline argue that third party intervention in a civil war, under the disguise of ending it, can actually prolong the war as third parties try to secure access to the resources of the civil war state. Nevertheless, international wars are relatively rare nowadays. The costs of violent conflict are vast both at the economic and the human levels, and a victory is never guaranteed. This implies that a state will only assume those costs under extreme or specific conditions; otherwise we would see inter-state wars far more often than is the case today. What is it that prompts states to intervene in other states’ internal affairs - be it through monetary support of violent opposition groups within that state, a full scale war, or anything in between?

The central argument is that a state is willing to breach another state’s sovereignty when it sees its national interest, in terms of its security, threatened. National interest is evidently a subjective term and difficult to define. The U.S. National Security Council demonstrated such subjectivity when in 1998 it defined national interests as those ‘of broad, overriding importance to the survival, safety, and vitality of our nation.’ Furthermore, they specified that they would ‘do what [they] must to defend these interests, including - when necessary - using [their] military might unilaterally and decisively.’ The definition above is promulgated by one particular state, and it is not a complete one. The question of how states

34 Ibid: 629.
36 Quoted in Klare, Resource Wars, 29 (my emphasis).
determine what constitutes a threat to their vital interests still remains. Even though this will
to some extent vary from state to state, some general theorising is useful.

If states are willing to intervene in other states’ internal affairs when they see their
own national interest threatened, the crucial question is ‘when does this happen?’ In searching
for an answer to that question, it can be argued that economic factors play an important role;
that the desire for economic gain is what drives international relations, and determines how
states define their national interests. Followers of Marxism argue that politics and economics
are two sides of the same coin. Karl Marx interpreted history as a process of class struggle, a
continuous conflict between the oppressors and the oppressed; the oppressed would
eventually seek to change society either through a revolution or through the destruction of the
opposing classes. For Marx, the struggle is one between the bourgeoisie and the proletariat.
This struggle, or exploitation, has its parallel on the international scene through free trade: ‘it
has made barbarian and semi-barbarian countries dependent on the civilised ones, nations of
peasants on nations of bourgeois, the East on the West.’37 Thus, Marxism sees the structural
struggle between rich and poor nations as the driving force of international politics and the
national interest of any given state will depend on whether it is a ‘barbarian’ or a ‘civilised’
country. The former will seek to destroy the latter, whereas the rich countries will seek to
keep poor countries dependent upon them so as to maintain their privileged economic
position.

A second argument of what constitutes national interest is provided by realist and neo-
realist theorists, who contend that every state seeks ‘power, security, and wealth’38 and thus a
threat to any of these will be a threat to the vital interests of any given state. The notion of a
power-centred world is famously captured by Thucydides in the quote ‘the strong do what
they have power to do and the weak accept what they have to accept.’39 The statement clearly
defines the search for power as the driving force of international relations. The same power
centred view is shared by Kenneth N. Waltz who argues that ‘each state is the final judge of
its own cause’ and might therefore ‘at anytime use force to implement its policies.’ It follows
that `[b]ecause any state may at any time use force: all states must constantly be ready to

37 Karl Marx and Friedrich Engels, ‘The Communist Manifesto’ in George Argyrous and Frank Stilwell,
Economics as a Social Science: Readings in Political Economy (Annandale: Pluto Press Australia Limited, 2003,
Second Edition), 103.
39 Thucydides, ‘The Melian Dialogue’ in Paul R. Viotti and Mark V. Kauppi, International Relations Theory:
Realism, Globalism, and Beyond (Boston: Allyn and Bacon, 1999: Third edition), 101.
either counter force with force or pay the price of weakness.\textsuperscript{40} Again, the ultimate state goal is to acquire power, defined here in terms of military power, so that no other state can overtake that state's sovereignty. As Hans Morgenthau states: 'international politics, like all politics, is a struggle for power.'\textsuperscript{41} Even if the notion that states will ruthlessly search for power is correct, there still remain unanswered questions such as 'what type of power are states searching for?' and 'what will they do with it once they have got it?'

A third approach that attempts to explain what constitutes national interest is found in the idealist or liberalist theories of international relations, where there is a greater emphasis on the states' social context. Andrew Moravcsik argues that states 'pursue particular interpretations and combinations of security, welfare, and sovereignty preferred by powerful domestic groups enfranchised by representative institutions and practices.'\textsuperscript{42} It is thus the interests of powerful groups within a state that define the interests of the state as an actor on the international arena. These domestic actors do not necessarily have increased military power as a goal and are therefore able to act in a way realist theories are unable to explain. As Moravcsik explains '[i]t is not uncommon for states knowingly to surrender sovereignty, compromise security, or reduce aggregate economic welfare.'\textsuperscript{43} The liberalist line of reasoning presents a more nuanced explanation of state behaviour: one where cooperation and interaction takes place through international organisations on both the government and the private level every day. As Martha Finnemore points out,

[u]ltimately, power and wealth are means, not ends. Interests are not just "out there" waiting to be discovered: they are constructed through social interaction.\textsuperscript{44}

The construction of state interest through social interaction provides insight into the thesis' case study, but the importance of power, security, and economics in the international system cannot be overlooked. Therefore, Barry Buzan's concept of security complexes is useful because it combines the importance of power with the notion that states are interdependent and will act accordingly. Buzan argues that the international community is composed of sovereign territorial states whose main concern is national security. He further argues that national security of any given state consists of five sectors: military security, political security, economic security, societal security, and environmental security. The

\textsuperscript{40} Kenneth N. Waltz, 'Explaining War' in Viotti and Kauppi, \textit{International Relations Theory: Realism, Globalism, and Beyond} (Boston: Allyn and Bacon, 1999: Third edition), 135.


\textsuperscript{42} Andrew Moravcsik, 'Taking Preferences Seriously,' in Viotti and Kauppi, \textit{International Relations Theory: Realism, Globalism, and Beyond} (Boston: Allyn and Bacon, 1999: Third edition), 251.

\textsuperscript{43} Ibid.

\textsuperscript{44} Finnemore, \textit{National Interest}, 2.
sectors are all woven together, and states will seek to protect all five.\textsuperscript{45} The realisation that security encompasses more than military and economic protection is supported by other scholars. Alan Dupont and Graeme Pearman claim that,

A new class of non-military threats has emerged over the past few decades which have direct implications for international security. They include the activities of non-state actors, such as terrorists and organised criminal groups, as well as unregulated population movements, infectious diseases and the rapid depletion of the Earth's natural resources.\textsuperscript{46}

After explaining the five sectors of national security, Buzan goes on to argue that a state's security in any of the sectors identified above, happens in a social context of other sovereign territorial states in the same system which sometimes share the same national security concerns. He refers to the phenomenon as a 'security complex.' In Buzan's own words, a security complex is present when there is

a group of states whose primary security concerns link together sufficiently close that their national securities cannot be considered realistically apart from one another.\textsuperscript{47}

The point can be illustrated by a simple figure:

\begin{center}
\textbf{Figure 2.1: Security Complex}
\end{center}

\begin{center}
\includegraphics[width=0.5\textwidth]{security_complex.png}
\end{center}

Furthermore, Buzan argues, 'threats operate more potently over short distances [therefore] security interactions with neighbours will tend to have first priority.'\textsuperscript{48} One could thus talk about 'regional security complexes.'\textsuperscript{49} These complexes could be a large ethnic population divided between two or more bordering states, a shared oil field, a shared lake, or international river basins. It is also possible to have the combination of these and others within one security complex. This thesis will argue that within a security complex, when the actions of one state threaten the national interest, as defined by Buzan, of another state, the

\begin{itemize}
\item \textsuperscript{46} Dupont and Pearman, \textit{Heating up the Planet}: 3.
\item \textsuperscript{47} Buzan, \textit{People, States and Fear}, 190.
\item \textsuperscript{48} Ibid, 190f.
\item \textsuperscript{49} Helena Lindholm, 'Water and the Arab-Israeli Conflict' in Leif Ohlsson (ed.), \textit{Hydropolitics: Conflicts over Water as a Development Constraint} (London: Zed Books, 1995), 58.
\end{itemize}
latter will be willing to interfere in the former's internal affairs, even to the extent of violent conflict, to ensure that its national interests will not suffer.

The rest of this chapter focuses on how the concept of regional security complexes combined with scarce environmental resources, specifically fresh water, may serve as a catalyst for internationalising internal wars. The main question points to several sub-questions: 'why is fresh water important?' 'Is it generally perceived as worth entering an armed conflict to secure access to it?' 'How does a security complex work?' And finally, 'how does a civil war threaten the economic and environmental parts of national security, defined as fresh water supplies, of other countries that are joined together in a security complex?' To answer these questions, part of the following study examines regional security complexes where the affected countries might be politically unstable and historically plagued with internal unrest, but not experiencing a civil war. They are nevertheless included here to provide a more thorough understanding of the dynamics of security complexes.

2.2 Water as a security complex

Water is the basis of human life in the form of drinking water, hydropower production, irrigation, fishing and other types of food production, and navigation. It is brought into a country by rainfall or inflow from upstream countries in a shared river basin⁵⁰ as a supplement to the country's already existing underground water resources. Fresh water has no substitutes and it is extremely unevenly distributed throughout the world. Moreover, and unlike natural resources such as oil, gold, and food, the quantities needed to sustain vital communities make its transportation over great distances impossible. The following section will explore fresh water as a scarce natural resource in order to answer the questions outlined above.

2.2.1 Water as a scarce resource

According to the United Nations Educational Scientific and Cultural Organization (UNESCO) we all need twenty to fifty litres of clean fresh water every day.⁵¹ However, as urbanization grows, so does the need for water as it is required for food production and industrial processes, making the actual amount of water needed 100 litres per person per day.⁵² Considering that seventy per cent of the earth is water, 100 litres per person per day seems

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⁵² Falkenmark, 'Fresh Waters as a Factor in Strategic Policy and Action': 87.
like an attainable amount. However, most of the water covering the earth is salt water and of little use to humans. Only little less than three per cent of the world’s total water supply is fresh water and of that, about two-thirds takes the form of glaciers or is trapped in the polar ice caps. Furthermore, of the remaining one-third much is underground and inaccessible to humans. Consequently, the human population has to share less than one per cent of the world’s total fresh water resources, or around 0.01 per cent of the combined water supplies on earth.\textsuperscript{53} This is still enough fresh water to sustain the entire world’s population, but because it is so unevenly distributed, 1.3 billion people find themselves without access to clean water,\textsuperscript{54} and an estimated 40 000 children die every day from hunger or diseases due to water scarcity or contaminated water.\textsuperscript{55}

Malin Falkenmark has developed a rating system for determining how serious water scarcity may be in any given country. The first category is \textit{water quality problem and dry season problem}: when the population pressure is below 600 persons per one million cubic metres of water per year. There is \textit{water stress} when the population pressure is between 600 and 1000 persons per one million cubic metres of water per year. There is \textit{absolute water scarcity} when the population pressure is above 1000 persons per one million cubic metres of water per year. Finally, Falkenmark describes a fourth category: when there are 2000 persons per one million cubic metres of water per year. This is seen as the maximum population pressure manageable for a modern country and is referred to as a \textit{water barrier}.\textsuperscript{56}

Most river basins carrying fresh water in arid areas are international. In 2002, there were 263 international river basins listed, fifty-nine of them in Africa.\textsuperscript{57} Water, unlike fertile soil or forests, cannot be separated by state borders. The activities within an upstream country inevitably affect the water supply in the downstream country. In the words of Sandra Postel, ‘water not only courses easily across political boundaries, it also gives upstream countries a distinct advantage over downstream neighbours.’\textsuperscript{58} The World Bank has identified eleven countries ‘with annual per capita supplies at or below 1,000 cubic metres, the minimum amount considered necessary for healthy human life.’\textsuperscript{59}

\textsuperscript{53} Klare, \textit{Resource Wars}, 143.
\textsuperscript{54} Peter H. Gleick, ‘Water and Conflict’: 90.
\textsuperscript{55} Joyce Starr, ‘Water Wars,’ \textit{Foreign Policy} Vol 82 (Spring 1991): 17.
\textsuperscript{57} UNESCO, ‘Sharing Water Resources’ (28 March 2006)
\textsuperscript{59} Klare, \textit{Resource Wars}, 145.
However, we must be careful jumping to the conclusion that shared river basins by themselves equal conflict. As Daniel Deudney points out, ‘it seems less likely that conflicts over water will lead to interstate war than that the development of jointly owned water resources will reinforce peace’ due to the amount of money and human resources necessary to develop viable water sharing solutions, as well as the vulnerability of the system once in place. Peter Gleick however, disagrees with Deudney’s rejection of fresh water competition as potentially conflict creating. He argues that conflict is more likely to occur over resources such as water because ‘they are finite, unevenly distributed, and often subject to national or regional control.’ If a primary goal for a state is to maintain its existence as a sovereign state, then threats to its water supplies become a matter of national security. Reality is probably somewhere in between the views of Deudney and Gleick. It is unlikely that a shared river basin will create widespread inter-state cooperation in conflict ridden regions. However, because of the effects violent conflict often will have on the water quality and quantity for all basin states, countries might think twice before entering full-scale war over access to the same fresh water.

The statistics and categories described above are the product of years of research done by scholars. They show how fresh water is indeed an important natural resource; some would even argue it is the most important of them all. But do state leaders and policy makers have the same perception of the ‘blue gold’? Have the same leaders and policy makers expressed any intention of protecting their fresh water resources with all necessary means? It would seem so. The United States’ government intelligence identified, as early as the mid-1980s, ten places in the world where war could break out over shared water resources, among them Jordan, Israel, and Cyprus. Indeed, water is crucial for all states that do not have unlimited supplies. 1, 831 interactions over fresh water have taken place between two or more states over the last fifty years (this includes both cooperative and conflict related interactions). 507 of the interactions were defined as conflictive, and seven included violence. In fact, water can be a problematic issue even in otherwise peaceful areas of the world, let alone the more conflict ridden. In Australia, Minister of Water Resources, Malcolm Turnbull, has suggested to pump water out of northern New South Wales catchments to solve the water

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63 UNESCO, ‘Sharing Water Resources’.
problems of south-eastern Queensland, causing much political furor.\textsuperscript{64} In the more conflict ridden Middle East, former Israeli Prime Minister Yitzhak Rabin famously stated ‘If we solve every other problem in the Middle East but do not satisfactorily resolve the water problem, our region will explode.’\textsuperscript{65} Similarly, King Hussein of Jordan gave a public warning to Israel in May 1990 when he stated, ‘The only issue that will bring Jordan into war is water.’\textsuperscript{66} Although both comments clearly oversimplify the conflict in the Middle East, they do show how much emphasis political leaders in arid areas place on the access to fresh water, and tell us that any complete analysis of conflicts taking place in such areas would be incomplete without taking that into account.

2.2.2 Security complexes as an explanation of the internationalisation of internal wars

Countries that find themselves dependent on water deriving from an international river basin can be said to belong to a security complex, as defined by Buzan, or more specifically a hydropolitical security complex as referred to by Schulz.\textsuperscript{67} This is because the importance of the water provided by the shared river, to the states in question, ties those states together, making the actions of any one state crucial to any other state also sharing the same river. Hydropolitics falls under the category of environmental security, but is also part of economic, political, and societal security as water is crucial for development and modern industries, might have severe effects on the political relationships with neighbouring states or states belonging to the same international river basin, and water shortages or flooding both have great direct impact on the population of the country in question. How, then, can a civil war within a hydropolitical security complex threaten water supplies and, by extension, the national security of other states belonging to the same complex? To answer this question it is necessary to look at how all types of warfare might affect water supplies.

First, all warfare includes usage of weapons that cause severe environmental distress, including the possible destruction of water supplies. Bombs, landmines, and tanks leave a trail of destroyed forests and buried water wells. Environmental destruction in this way becomes a side effect of warfare. Approximately 200 armed conflicts have taken place after World War II, in which around twenty million people have been killed and millions more have been

\textsuperscript{64} Bob Carr, ‘Water on the Brain,’ The Bulletin With Newsweek (17 October 2006): 16-20.
\textsuperscript{65} Quoted in Klarc, Resource Wars, 142.
\textsuperscript{66} John Bulloch and Adel Darwish, Water Wars: Coming Conflicts in the Middle East (London: Victor Gollancz, 1993), 36.
displaced.\textsuperscript{68} In addition to the obvious human suffering and economic damages these wars have caused, the environmental effects have been devastating. For example, after World War II, Tokyo experienced a 90 per cent decrease in its water distribution system as a result of damages from the war.\textsuperscript{69} Furthermore, the actors in a civil war might use methods that in themselves lead to contamination of water resources. For example, the genocide in Rwanda left many rivers and lakes contaminated because dead bodies were dumped in them.\textsuperscript{70} The same tactic was used in the Democratic Republic of Congo between 1996 and 1997 where bodies were disposed of in wells and rivers.\textsuperscript{71} Moreover, wars create refugees and refugee camps that might again cause environmental distress.\textsuperscript{72} Large amounts of people cramped together in a small space take a high toll on the environment surrounding that area, including the water supply that is stretched far beyond its limits to keep the original population as well as the refugees alive. Additionally, the use of nuclear weapons has extreme environmental consequences as seen in the act of the Hiroshima and Nagasaki atomic bombings. Nuclear weapons have the potential to permanently destroy the entire world, let alone water wells or ecosystems in one specific country or region. And even though most countries have agreed not to develop their nuclear weapons industry through the non-proliferation treaty, there is no guarantee that some countries will not breach the agreement in the future - as is seen in early 2006 when the government of Iran (itself a signatory to the non-proliferation treaty) claimed they had been successful in enriching uranium: a major breakthrough on its road towards becoming a nuclear power\textsuperscript{73} - or that terrorist groups will acquire and use nuclear weapons.

Second, actors in wars might \textit{deliberately} target vital natural resources as a war tactic precisely because the natural resources are so vital for their opponent’s survival, thus endangering the continuous stable access to fresh water for all states belonging to a hydropolitical security complex. Gregory Reichberg and Henrik Syse note that in wartime, ‘enemies attack not only the life and limb of the other, but also the natural items that the other


\textsuperscript{69} Ibid, 305.

\textsuperscript{70} Human Rights Watch, ‘Leave None to Tell the Story: Genocide in Rwanda’ (March 1999), \url{http://www.hrw.org/reports/1999/ruanda/}, accessed 22 June 2006.


\textsuperscript{73} \textit{Times Online}, ‘We’ve Started to Enrich Uranium, Iran Tells World’ (12 April 2006), \url{http://www.timesonline.co.uk/article/0,251-2130471,00.html}, accessed 31 October 2006.
... holds dear." Environmental destruction as a tactic of war is nothing new. Already in the year 2400 B.C.E., the ruler of Sumer, an ancient kingdom located in modern day southeastern Iraq, dug a channel to divert water from the Tigris to the Euphrates watershed, making Sumer independent of the water supply from its rival kingdom, Umma. "The resultant rise in groundwater level in the desert soils caused rapid salinization of the border lands, impoverishing Umma, and rendering it impotent as a military power."

In modern times, the most extreme example of a deliberate targeting of natural resources is found in the 1991 Gulf War. During the Iraqi occupation of Kuwait, most of the latter’s oil wells were destroyed by Iraqi troops. The following oil flood led to the formation of hundreds of oil lakes which in turn penetrated the soil. These oil lakes have polluted Kuwaiti groundwater and there is concern that the existing pollution will go deeper into the ground in rainy periods and in turn infiltrate the groundwater aquifer. The war thus had a devastating effect not only on Kuwaiti oil resources, but also on the region’s precious and already scarce water reserves. Similar spiller effects, although not to the same degree, took place during and after the Kosovo conflict in the late 1990s. During the 1999 Kosovo conflict, Serbian forces and militias proved that they too knew the importance of natural resources when they deliberately poisoned wells and used scorched earth tactics to force Kosovar Albanians to flee their homes. The Serbian war tactics combined with the North Atlantic Treaty Organisation (NATO) bombings caused severe environmental damage in former Yugoslavia itself, as well as spiller effects in Romania and Bulgaria. Colombia has experienced intense fighting between paramilitary groups and government forces over narcotics trade, and during fights, rebels have detonated petroleum pipelines, spilling millions of barrels of crude oil into rivers, contaminating drinking and irrigation water, killing fish and other wildlife, contributing to forest fires and oil pollution, sterilizing soil, and harming riverside communities.

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77 Ibid. 329.
80 Austin and Bruch, ‘Introduction,’ 3f.
Again we see that the targeting of natural resources caused damage outside the borders of the conflicted state, as the combat in Colombia has had an impact on water resources in neighbouring Venezuela.\(^{81}\)

Third, not only does a civil war cause instability, but the resolution of one is insecure and unstable. Countries bound together by a shared river, might interact peacefully for years, but a fear that old agreements would be dishonoured or declared invalid should a new faction come to power might be perceived as a threat to that state’s security. This perception could in turn lead that state to intervene in a civil war on the side of its governmental ally to avoid a shift of power in an allied state. The flipside to this argument is that states become involved in a civil war to promote change. If the government in power has been obstructing access to water, support for a rebel faction might be a tempting alternative. This scenario came to life in Lesotho in the 1980s. South Africa had for several years tried to negotiate with Lesotho in order to divert water from the mountains in Lesotho to the dry region of Transvaal, without success. Then, in 1986, the South African government gave substantial support to a successful military coup against the Lesotho government. Although the official reason for the support was Lesotho’s protection of guerrillas of the African National Congress, a water agreement was in place between the new government of Lesotho and its patrons in the South African government within months.\(^{82}\) Concerns about future water supplies can also arise when a civil war has the prospect of ending in a separation of states. Where before there were three states sharing a river, it could now be four, making new agreements necessary. Moreover, negotiations with a weak government in a newly created state are likely to be a difficult task and when a state’s vital interests are at stake, international military actions may result.

Taken together, the environmental side effects, the deliberate targeting of water supplies, and the insecurities connected to the resolution of a civil war constitute a major threat to the continuous water supply for not only the country experiencing a civil war, but also the other countries in the same hydropolitical security complex. Because of the above discussed reasons a civil war within any hydropolitical security complex can be perceived as a threat to the other countries’ national security due to the potential damage a civil war can do to the water quantity and quality of all countries in a shared river basin. As noted by Terje Tvedt,

\(^{81}\) Ibid.

\(^{82}\) Homer-Dixon, *Environment, Scarcity, and Violence*, 140.
rivers tend to disregard man-made frontiers, surface water moves and is a finite resource. Therefore war effects in one part of the basin can and often will have consequences in the rest of the basin.\textsuperscript{83}

Herein lies the potential for internationalisation of internal wars. If the countries in question feel that their national security is threatened by the civil war taking place, they might be more willing to enter a conflict than they otherwise would have been. Moreover, the quality and quantity of their water supplies are already threatened by the civil war taking place in the neighbouring state, so they might also feel that there is less at stake in entering the war already taking place than to remain a passive observer.

The arguments above are summarised in figure 2.2. The ellipses represent acts of civil war and direct consequences of them such as usage of nuclear weapons and large amounts of refugees. The squares show what effects the ellipses might have that are related to an international river and that might cause changes in water quality and quantity for all basin states.

Figure 2.2: Possible effects of civil war on an international river

- Destruction of infrastructure
- Bombings
- Use of nuclear weapons
- Refugees
- Disposing of bodies
- Deliberate poisoning of wells
- Power shifts

- Destruction of dams
  - Artificial flooding and droughts
  - Changes in water quality and quantity for all basin states

- Overuse of water supplies
- Water shortage
- Contamination of drinking water
- Collapse of old agreements
2.3 Hydropolitical security complexes: two examples

The preceding section of this chapter provides a clearer understanding of why countries that are part of a hydropolitical security complex might have a lower threshold for getting involved in a civil war taking place in another state that is part of the same security complex. The rest of this chapter examines how such a hydropolitical security complex might work in practice. The rivers and basin states discussed below differ from the case study – the Nile and its basin states - in that they are not, with the arguable exceptions of Iraq and Israel, experiencing civil wars. Nevertheless, the structural and regional power dynamics do not differ as the regions highlighted in the case studies show a willingness to become involved in the politics of the other basin states. Furthermore, because of the importance of the river basins, there is predominantly conflictive rather than cooperative interactions between the basin states as well as a lack of trust between them that sees minor conflicts escalating rapidly.

2.3.1 The Euphrates and Tigris Rivers

The region most commonly associated with water clashes is the Middle East. Postel notes that although nearly half of the world’s population depends upon shared water resources, ‘[i]t is in the Middle East … water disputes are shaping political landscapes and economic futures most definitely.’\(^{84}\) One example of a hydropolitical security complex found in the Middle East is that between Iraq, Syria, and Turkey. Interactions between the three countries have often been characterised by a focus on their shared water resources. Tensions relating to the Euphrates and Tigris have been visible since the 1950s due to population increases combined with development strategies largely dependent on water in all three countries.\(^{85}\) The result is three countries heavily dependent on the same source of fresh water, making the continuous access to it a large part of national security for all the countries in question, in addition to linking their national security problems together. This linkage became obvious when Turkey in 1983 began the Atatürk Dam project. Turkey is connected to Iraq largely through the Euphrates, and since the river first flows through Turkey, Iraq depends on the former state’s level of water consumption. With the construction of the Atatürk Dam, Turkey gained the possibility of filling up its reserves, and so it did. In January 1990, a massive fill up resulted in a 75 per

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\(^{84}\) Postel, ‘Politics of Water’: 11.

\(^{85}\) Schutz, ‘Turkey, Syria, and Iraq’: 93.
cent drop in Iraq’s water supply, which lasted an entire month. Although Iraq did not invade Turkey as a result of the reduction in its water supplies, the events of January 1990 did demonstrate precisely how vulnerable Iraq’s water reserves are to factors outside of Iraqi borders.

Syria, is currently facing a water shortage, and already gets between 80 and 85 per cent of its water from the Euphrates, which has its origin in Turkey. Meanwhile, Turkey is executing the Great Anatolia Project (in which the Atatürk Dam is the centrepiece), a complex consisting of twenty dams and irrigation systems, which, when completed in 2010, will reduce the flow of the Euphrates within Syria from 32 billion cubic metres to 20 billion cubic metres per annum. Syria is angered by the project, but is not strong enough to challenge Turkey directly, although troops have been mobilised quite regularly, on both sides of the Turko-Syrian border, over water issues. Instead, Syria has allowed the guerrillas of the Kurdish Workers Party (the PKK), who have long been in opposition to the Turkish government, to operate from within its territory. Turkey has interpreted this as Syria trying to gain bargaining power over the Euphrates water. In 1991, Turkey’s president threatened to purposely reduce the flow of the Euphrates into Syria if the latter did not end its support for the PKK. Syria responded by accusing Turkey of using the waters of the river for political gain. Eventually, Turkey’s tactic proved successful as Syria signed an agreement in October 1998, where Damascus recognised PKK as a terrorist organisation and expelled its leader, Ocalan, from its territory.

2.3.2 The Jordan River

Another hydro-political security complex and the most commonly used example of water as a catalyst to international war, is the Jordan River. Shared by Lebanon, Syria, Israel, and Jordan, this river provides the majority of fresh water supplies crucial to several countries in a particularly conflict ridden region, and the competition over the River’s water is seen by some

86 Ibid: 104.
88 Schulz, ‘Turkey, Syria, and Iraq’; 104.
90 Schulz, ‘Turkey, Syria, and Iraq’; 93.
as the ‘principal cause of the 1967 Arab-Israeli war’. The Jordan River provides 60 per cent of Israel’s fresh water usage, and 75 per cent of Jordan’s. ‘At the same time, only 3 per cent of the Jordan basin area - that is, upper Jordan - is situated within the borders of pre-1967 Israel.’ With the post-1967 borders which included the occupation of the West Bank and the Golan Heights, Israel managed to include 10.5 per cent of the basin within its borders. There is thus no doubt that the results of the 1967 war largely benefited Israel’s water supply. But let us now turn to the pre-war events to see if there is any evidence there to say that competition over water also was a cause of the war. However, the background to the war is complicated and only a brief overview will be possible here.

Tensions over water arose between Israel, Jordan, Lebanon, and Syria in the early 1950s when Israel began the construction of a canal in the demilitarised zone it shared with Syria. The canal was part of the Israeli National Water Plan and its purpose was to drain water from the Jordan River to produce hydro electrical power. Jordan answered by announcing it would tap the Yarmuk River, a part of the Jordan River Basin, to irrigate a part of the East Jordan Valley. Several violent clashes followed. The situation was so tense that President Eisenhower sent a special envoy, Eric Johnston, to the area in 1953 in the hope of resolving the conflict before a war broke out. An agreement was indeed reached, but not until late 1955, allocating set amounts of water from the basin to each country. The agreement was never ratified, but is in general still the basis for water talks between the countries in question. However, after the talks ended the countries involved again began pursuing their individual water plans, which were in conflict with each other. President Nasser called for the first Arab Summit in January 1964 and a second in September that same year. It was decided to finance a Headwater Diversion Project in Lebanon and Syria to prevent headwater reaching Israel. It was also decided to support Jordan in building a dam on the Yarmuk as well as creating military plans to defend the constructions. In 1965, the Syrian diversion works was attacked by Israeli tanks, and in July the following year, Israeli aircraft joined an attack that stopped Syrian construction altogether. ‘Border incidents continued between Israel and Syria, which next triggered air battles in July 1966 and April 1967, and finally led to all-out war in June

93 Falkenmark, ‘Fresh Waters as a Factor in Strategic Policy and Action’: 89.
94 Lindholm, ‘Water and the Arab-Israeli Conflict,’ 58.
95 Bulloch and Darwish, Water Wars, 40.
96 The following paragraph will largely be based on Aaron T. Wolf, “Hydrostrategic” Territory in the Jordan Basin: Water, War, and Arab-Israeli Peace negotiations’ in Hussein A. Amery and Aaron T. Wolf, Water in the Middle East: A Geography of Peace (Austin: University of Texas Press, 2000), 63-120.
1967. In short, Israel saw its water access being threatened by the actions of Syria and Jordan and used its military capability to end that threat, making water, if not the only cause of the war, at least a major contributor to it.

Fresh water, then, seems to be a much-desired natural resource. And, when we take the case studies referred to in this chapter into account, there seems to be a willingness for countries belonging to a hydropolitical security complex to interfere in the internal affairs of neighbouring states when their own water supplies are at stake. The rest of this thesis will consider how the theories discussed in this chapter are relevant for the outcome of a peace treaty between north and south Sudan. Can insecurity over Nile water make Egypt interfere in the implementation process and consequently not only destroy a fragile peace but also internationalise the war? The question will be addressed through various sub-questions in following chapters. But first, before discussing the hydropolitical security complex affecting Sudan, the next chapter provides an overview of the history of the Sudan in general, and the conflict between the northern and southern parts of the country in particular.

3. A History of the Sudan

The largest country on the continent of Africa, the Sudan is geographically situated by the Red Sea, bordered by Egypt to the North and Eritrea to the East. It is home to Africa’s longest running civil war – raging since 1983 between the northern and southern parts of the country – during which over two million people have died, and around four and a half million forcibly displaced. Consequently, Sudan is a country that is relatively rich in natural resources but is increasingly subjected to drought, famine, and widespread poverty. The roots of the civil war go far back in time, with a continuous pattern of uneven development and centre-periphery clashes, strongly characterising the country’s history from its early days of independence until present.

3.1 Under various rulers

The territory now known as the Republic of the Sudan has a long and rich history with strong ties to ancient Egypt. Around the seventh century, there were three territories south of the then Byzantine Egypt: the land of the Nobadae, better known as ‘Nubians proper,’ the land of the Makoritae, and the land of the Alodaei, which capital was situated not far from where the capital of Sudan, Khartoum, is located today. All the kingdoms had some connections with Egypt, but the relations did not become formal until 1276 when a Nubian king, for the first time, accepted the Egyptian sultan as his overlord after losing a major military battle. Under Egyptian rule the Christian kingdom of Nubia became Islamised and thus no longer a threat to its northern neighbour. Meanwhile, both the Makoritae and the Alodaei kingdoms collapsed, and the area we today refer to as northern Sudan gradually became populated by Arab tribesmen and traders and with them came the religion of Islam. Through intermarriage and Muslim missionaries, Islam spread even further inland and local Sufi religious leaders became increasingly important. Two Sufi sects in particular were to have great influence on Sudanese society and politics, and indeed still have today. The first is the Mirghani family and its Khatimyya sect that today patronises the National Unionist Party (NUP, previously named the Democratic Unionist Party) and the People’s Democratic Party (PDP). The second is


\[101\] Ibid., 19.

Mahdi family and its Ansar sect that exercises political power through the Umma party. Although usually bitter enemies, these are the major political parties that have found themselves in various governmental alliances during the few years of democratic rule in the Sudan. Foreign occupiers and domestic dictators alike have also realised the necessity of being allied with at least one of the families in order to secure control over the Sudan.

Map 2: the Sudan

Egypt became an Ottoman Province in 1517, but it was not until 1820 that a Turko-Egyptian army set course for Sudan. The north was under Ottoman control by 1821 and used as a base for slave raids into the area now known as south Sudan, which never came under formal Ottoman rule. The Ottomans and Sudanese were both Muslim, but the Ottoman centralised form of Islam was not popular among the Sudanese, who regarded their conquerors as corrupt and alien. This combined with the regime’s attempt to ban slavery in

104 Holt and Daly, A History of the Sudan, 26.
the latter years led to an uprising in the north planned and led by Muhammad Ahmed ibn ‘Abdallah, known as al-Mahdi; the Islamic Messiah. His progress in the north was aided by the appointment of Charles George Gordon as Governor-General of Sudan. Upon his appointment, Gordon dismissed a large number of Egyptian officials and replaced them with European and Sudanese men. The changes served to weaken the administration at a time when al-Mahdi was building his power.\textsuperscript{105} Due to the Ottoman’s oppressive behaviour in the south and their failure to persuade northerners to abandon slavery, the southerners also joined in the Mahdist revolution that eventually overthrew the destabilized Ottoman regime in 1881.\textsuperscript{106}

Once in power, al-Mahdi alienated the south by yet again allowing slave raids into the region with the approval of his closest allies; militant Arab tribes in Southern Kordofan and Darfur. Al-Mahdi died soon after he came to power, but the movement (the Mahdiyya) continued under the leadership of Khalifa ‘Abdallah. Khalifa began a Holy War to spread the true form of Islam to Sudan’s ‘heathens’ and in the end the regime had a horrific impact on the country as a whole.\textsuperscript{107} When the Mahdiyya lost power in 1899, the population had been reduced from seven million people to between two and three million people due to war, famine, and a complete lack of state capacity.\textsuperscript{108}

3.2 Finding its form: The Condominium

A mix of domestic and geopolitical factors led an Anglo-Egyptian army headed by H. H. Kitchener to conquer Sudan in 1898.\textsuperscript{109} In theory, the Condominium was collaboration between Egypt and Britain but in reality this was a British dominated project, which was made even more obvious by the fact that Egypt itself was formally under British rule at the time, and until 1922. Even after Egypt gained independence, Britain was still by far the stronger party in matters concerning the Sudan.\textsuperscript{110} On the ground, the new rulers encountered severe resistance in the north as they were widely perceived as a Christian army of infidels. The British feared a new Mahdist revolution, and in order to avoid such a revolt the British entered an alliance with the Mirghani family and their Khatimyya order as well as supported

\textsuperscript{106} Deng, \textit{War of Visions}, 48f.
\textsuperscript{107} Holt and Daly, \textit{A History of the Sudan}, 88.
\textsuperscript{108} Deng, \textit{War of Visions}, 51.
\textsuperscript{109} For a more detailed discussion on the reasons behind European conquest of the Horn of Africa, see Peter Woodward, \textit{The Horn of Africa: Politics and International Relations} (London: I. B. Tauris & Co. Ltd, 2003), Chapter one.
\textsuperscript{110} Holt and Daly, \textit{A History of the Sudan}: 102.
orthodox Islam and a strictly Islamic identity in the north. The British thus established a local Muslim government, a ban on Christian missionaries operating in the north, as well as an education system based on Islam.

The south saw a different approach from the Condominium rulers; British rule for the first time established law and order, and because of the countless religions, ethnicities, and tribes that inhabited the area, a strict separation between religion and state was imposed. Furthermore, the Condominium rulers found in Christian missionaries a group willing to provide education that was severely lacking to part of their new territory. And so Christianity spread. Most importantly, this was the first time the region today known as south Sudan came under effective state control.

In 1919, an anti-British revolution began in Egypt that was to affect Sudan. Not only did the condominium powers experience deteriorating relations, but the revolution, combined with events taking place in Egypt after it gained independence also triggered the infamous ‘southern policy’ implemented in the 1930s. When Egypt became independent in 1922, she wanted Sudan as part of ‘Greater Egypt’. In fact, she viewed the continuous British occupation of Sudan as an occupation of her own territory and entered an alliance with the Mirghani family to gain more control over Sudan through more informal channels. Britain was now allied with the Khatimyya’s sworn enemy: the Mahdi family and the Ansar sect. In implementing the southern policy, the British hoped to create an African identity in south Sudan, and thus halt Arab, and in particular Egyptian, influences there. Popular support for Egypt in south Sudan might threaten continuous British rule over Sudan altogether.

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112 Deng, War of Visions, 55.
113 Ibid, 80.
The southern policy of the Arab states was to establish the South as an Arab and Islamic state. This was the Gezira scheme. At the same time, for the first time, the Gezira scheme was established by the British to create a national unity between the Northern and Southern parts of the country. As a result, the Gezira contributed to the creation of a national unity between the two parts of the country.

The federation was not joined by the northern Arab states, and the political agreement was signed in 1956. The Egyptian crown colony was nationalized by the Egyptians, but rather as part of the federation of the Egyptian colony but rather an independent state.

Subsequently, the Egyptian crown colony was nationalized by the British, but rather as part of the federation of the Egyptian colony but rather an independent state.

There was growing discontent in the south as they realised their call for federation had not been heeded. Furthermore, Khartoum sent northern troops to Juba in the Equatoria province, and despatched that soldiers from the Equatoria Corps were to serve in the north. Khartoum had established the Sudan Defence Forces (SDF) as a military system earlier in their rule. In 1950, the SDF was divided into four regions; the Eastern Arab Corps, the Central Arab Corps, the

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The southern policy consisted of creating separate military units, the establishment of English as a lingua franca in the south, and minimizing travel between the northern and southern parts of the country, to name but a few examples. Meanwhile, the Arab and Islamic orientation was kept in north Sudan. Development projects and investments were focused on the north. The best example of a major investment made in the north was the Gezira scheme. For a while, the largest cotton growing scheme in the world, Gezira was established by the British in the 1920s, making cotton Sudan’s major export article, and for the first time involving north Sudan in the world economy. Interestingly, this did not create a national economy for Sudan. Instead, it happened through a network of northern traders. As a result, south Sudan was left out of vital developments and infrastructure and thus Gezira contributed to the creation of an isolated, undereducated, and underdeveloped region in the south in sharp contrast with the Khartoum area.

The southern policy raised the possibility that south Sudan would not join the northern part of the country in a unified state, but rather be a part of the East African colonies. However, when Egyptian-British relations improved in the 1940s it led to the draft treaty of the Sidiqi Bevin Protocol (1946) which set up Sudanese autonomy under the Egyptian crown. This was highly unpopular in the Sudan which did not want to be another colony but rather an independent state, thus the British soon abandoned the plan. Finally, the Juba conference, held in July 1947, decided that south Sudan was to join the north in independence. The south itself was not made part of the independence process, in line with British policies in Sudan all through their rule. The legacy of almost sixty years of condominium rule was a strongly divided country with a developed, Arabised centre and a poor, Christian and animist periphery who had had little contact with each other for about thirty years.

Southern policies did change after the Juba conference. The barriers between south and north were opened allowing more education in the south, but it was too little too late, for independence was to come a lot sooner than anyone envisioned. Leading up to independence, there was growing discontent in the south as they realised their call for federalism had not been heard. Furthermore, Khartoum sent northern troops to Juba in the Equatoria province, and demanded that soldiers from the Equatoria Corps were to serve in the north. Britain had established the Sudan Defence Forces (SDF) as a military system earlier in their rule. In 1950, the SDF was divided into four regions; the Eastern Arab Corps, the Central Arab Corps, the

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115 ibid, 80f.
117 Deng: War of visions, 128.
118 Johnson: Root causes, 25.
Western Arab Corps, and the Equatoria Corps. As their names imply, all but the latter forces consisted of Muslim soldiers from the northern and central parts of Sudan, whereas the Equatoria Corps consisted of only southerners. These southerners were commanded to leave Torit (the Equatoria headquarters) on 18 August 1955, but the soldiers refused and a mutiny started that spread to other southern towns. The British helped Khartoum fly in northern soldiers, which eventually ended the uprising. As a result of the Torit mutiny, the Equatoria Corps was disbanded, southern soldiers could only serve in Muslim units, schools were moved from the south to the north, and a northern military presence was to stay in the south for seventeen consecutive years. The Torit mutiny thus turned out to be the beginning of Sudan’s first civil war, almost five months before Sudan formally gained independence on 1 January 1956.

3.3 Independence

That day the Governor General was replaced by a Supreme Commission; the SDF was renamed the Sudanese Army, and placed under the leadership of General Ibrahim Abboud. Finally, on the 2 February 1956 an all-party government led by Prime Minister Ismail al-Azhari took the place of the Supreme Commission as Sudan’s primary authority. These years of democracy were characterised by endless alliances, factions, party splits, and rapid shift of governments. The main political debate centred on the constitution: should Sudan be a federal or unitary state and was it to be Islamic or secular? All along, the south experienced increased discrimination as when, in 1957, missionary schools in the region were nationalised and later that year the southern claim for federal status was finally rejected. In November 1958, the constitutional debate and political quarrelling came to an end when General Abboud overthrew the Khalil government and dissolved the National Assembly and all political parties, before making himself President with the approval of the leaders of both the Khatimyya and the Ansar sects.

Military rule proved to worsen the situation in the south. In 1960, the Sunday Sabbath was replaced by Muslim Friday. In 1962, Abboud passed the Missionary Societies Act, imposing strict limitations on missionaries in the south, before he finally expelled all foreign

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120 O’Ballance, Sudan, Civil War and Terrorism, 7ff.
121 O’Ballance, Sudan, Civil War and Terrorism, 9.
122 Holt and Daly, A History of the Sudan, 145.
123 Johnson, Root Causes, 30.
124 Deng, War of Visions, 138.
125 O’Ballance, Sudan, Civil War and Terrorism, 12.
missionaries from the south in 1964.\textsuperscript{126} The regime’s tightened control sharpened southern resistance. Many prominent southern leaders had fled to other African countries and in 1962 a group of them in Congo formed the Sudan-African Closed Districts National Union (SACDNU), which changed its name to the Sudan-African National Union (SANU) in 1963 and set up a headquarter in Kampala, Uganda. The same year a fighting force was formed in the south: the Land Freedom Army (LFA), better known as the Anya-Nya. The organisation was weakened by a quarrelling leadership until Colonel Lagu established the Southern Sudan Liberation Movement (SSLM) and united the different factions under his leadership in 1970.\textsuperscript{127}

The increased resistance in the south made the northerners more aware of what was taking place there, prompting student demonstrations in Khartoum. Old political parties were revived and joined the demonstrators. A ‘people’s revolution’ took place in the northern part of Sudan in October 1964 when the protestors forced Abboud to create a new government, albeit with Abboud still holding the title of President. New demonstrations occurred in November, which eventually made Abboud resign, clearing the way for the second round of Sudanese democracy.\textsuperscript{128} For a short time, serious attention was given to the ‘southern problem’. Sundays and Christmas were once again recognised as holidays and a ceasefire negotiated with the Anya-Nya. However, the new regime misunderstood the aim of the southern rebel movement by interpreting it as a protest against the Abboud regime rather than a serious independence struggle. Federal autonomy was offered to SANU who rejected it, now only satisfied with independence.\textsuperscript{129} The relative peace was short lived. On 8 July 1965, a Muslim soldier injured in Juba, triggered what is now known as the Juba and Wau massacres or ‘Black July’. On just one night in Juba alone, around 3000 houses were burned down and about 1000 people killed by government forces.\textsuperscript{130}

3.4 The arrival of a strong leader: Ga’afar al-Nimeiri

International journalists for the first time entered south Sudan in the mid-1960s and could challenge government statements about the rebels and the nature and scale of violence in the region that had become even worse during August 1965. They told the world that the war in south Sudan had caused the administrative control and the little infrastructure that existed

\textsuperscript{126} Deng, \textit{War of Visions}, 138f.
\textsuperscript{127} Ibid, 140f.
\textsuperscript{128} Johnson, \textit{Root Causes}, 32.
\textsuperscript{129} O’Ballance, \textit{Sudan, Civil War and Terrorism}, 27f.
\textsuperscript{130} Deng, \textit{War of Visions}, 142.
there to collapse, and about the atrocities of herds being raided, villages burned, and local leaders exiled or executed.\textsuperscript{131}

Simultaneously, the southern leadership was divided and weak. The SANU split in 1965, the new factions were referred to as ‘outside’ and ‘inside’, the former was later absorbed in the Azania Liberation Front (ALF).\textsuperscript{132} The Southern Sudan Provisional Government (SSPG) was established in August 1967, but changed its name to the Nile Provisional Government in 1969, with the expressed goal of independence for the south. A few other ‘southern governments’ were also formed, all claiming to represent the south as a whole, making it extremely difficult to know who to negotiate with.\textsuperscript{133} The political chaos in both the south and the north eventually led to the ‘Free Officers’ and Communist Party (banned by the National Assembly in November 1965) coup, which made Ga’afar el-Nimeiri president in 1969.\textsuperscript{134}

Nimeiri began his presidency by announcing socialism for the entire country, suspending the constitution, abolishing the National Assembly, and ordering the dissolution of all political parties. He then granted the south autonomy and established the Ministry of Southern Affairs.\textsuperscript{135} A Mahdist uprising was attempted by a conservative part of the Umma party in 1970, but failed. The following year, however, a communist coup removed Nimeiri from power, but a counter-coup reinstated him within days, now vowing to destroy his former allies.\textsuperscript{136}

In 1969, Joseph Lagu had established the Southern Sudan Liberation Front (SSLF) and for the first time created a united military command in the south. The Anya-Nya now had the support of Israel and Uganda, and their improved situation led Nimeiri to pursue harsher policies towards the movement. However, with the increased fighting in 1971 there were secret peace talks that eventually led to the Addis Ababa Agreement in 1972. The agreement formalised the relation between Khartoum and the south: there was to be a joint army, but autonomy for the south.\textsuperscript{137} The southern region finally experienced eleven years of relative peace, from 1972 until 1983.

In the foreign policy arena, Sudan signed a joint defence agreement with Egypt in 1976, and several agreements, including arms supplies, with France the year after. The

\textsuperscript{131} Ibid, 148.
\textsuperscript{132} Holt and Daly, A History of the Sudan, 160.
\textsuperscript{133} Johnson, Root Causes, 321.
\textsuperscript{134} Woodward, The Horn of Africa, 42.
\textsuperscript{135} Johnson, Root Causes, 36.
\textsuperscript{136} Woodward, The Horn of Africa, 43.
\textsuperscript{137} Ibid, 44.
already cool relations with the Soviet Union worsened when Nimeiri expelled all Soviets from Sudan in 1976, prompting Moscow to recall its ambassador.\textsuperscript{138} By now, repeated coup attempts were starting to worry Nimeiri who initiated secret meetings with Sadiq al-Mahdi, suspected of being behind most of them from his exile in London. The talks led to the signing of the National Reconciliation Agreement in London in April 1978. Al-Mahdi and his brother in law, Hassan al-Turabi of the Muslim Brotherhood, were now included in the Nimeiri government, although al-Mahdi soon left and became openly opposed to the regime.\textsuperscript{139}

An economic low for Sudan was reached in 1978 with heavy debt, high imports, high inflation, low devaluation, and torrential rain storms. Somewhat ironically, the 1970s became the decade oil was discovered in the south, but also the decade Khartoum first turned to the International Monetary Fund (IMF) and the World Bank for financial aid. Partly because of the economic situation, student riots broke out in Khartoum in August 1979, which were stopped with Egyptian help.\textsuperscript{140}

Towards the end of the 1970s, Nimeiri became increasingly favourable of an Islamic state with himself as the Imam. Although the idea gained little support, Nimeiri gradually introduced policies making Sudan increasingly Islamic in structure. In September 1983, he created the ‘September laws’ which included the implementation of Shari’a law for the entire country. His decision to go through with the September laws are generally seen as his unitarily abolishment of the Addis Ababa Agreement.\textsuperscript{141} That was certainly how the south interpreted it, and a new military revolt now began in the south when the Sudan People’s Liberation Movement/Army (SPLM/A) was established under John Garang.\textsuperscript{142} The organisation had pursued the goal of national unity and liberation for all Sudan’s regions in a democratic state. The increased fighting in the south combined with the deteriorating economic situation led to a popular uprising known as the intifada. On 6 April 1985, Nimeiri was removed from office by a military coup while he was visiting the United States.\textsuperscript{143} His time in power had been haunted by countless coup-attempts, blessed with eleven years of peace and eventually shocked by Nimeiri’s single-handedly decision to restart the war. His personal reasons for acting the way he did have never been revealed. Whether he planned the September laws from the beginning and the peace treaty was only yet another way of disarming the south, or if he genuinely wanted peace and was forced into a harsher path by

\textsuperscript{138} O’Ballance, Sudan, Civil War and Terrorism, 111.

\textsuperscript{139} Deng, War of Visions, 169.

\textsuperscript{140} Ibid, 176.

\textsuperscript{141} Deng, War of Visions, 171.

\textsuperscript{142} Johnson, Root Causes, 62.

\textsuperscript{143} UN Commission of Inquiry: 18.
people behind the scenes are questions that might never get answered. Most likely none of the suggestions above represent the truth. But Nimeiri did prove that if the political will at the highest level is present, peace is possible. And the years between 1972 and 1983, with all their flaws, are a highlight in Sudan’s otherwise depressing political history.

3.5 Into modern times: Omar al-Bashir

Leading the Transitional Military Council after Nimeiri’s loss of power was the former President’s defence minister and commander-in-chief, Abed Rahman Siwar al-Dahab. Elections were held in 1986, making the ever present Sadiq al-Mahdi Prime Minister. The following years were characterised by drought, desertification, as well as the war in the south. \(^{144}\) On 30 June 1989 a new coup took place in Khartoum, this time by the Muslim Brotherhood, who instated General Omar Hassan al-Bashir as president. \(^{145}\) The regime was heavily influenced by the ideology of Hassan al-Turabi and the National Islamic Front (NIF) \(^{146}\) and soon made Sudan into an Islamic state. Al-Turabi and Bashir later had a falling out and the former was put in detention in May 2001, where he still is today, for allegedly planning a coup d’état. \(^{147}\)

Al-Bashir had only served as president for a few years when the world suddenly turned its attention to south Sudan. In March 1993 famous photographer Kevin Carter flew into the region and captured a picture that was to outrage the western world after it was published in *The New York Times* the same year. The image shows a little girl fallen to the ground, exhausted from hunger and thirst, with a vulture, almost as big as the girl and certainly better fed, lurking behind her. The picture is raw, and makes no attempt to glorify the tragedy it is to be born in south Sudan. It was the quintessential symbol of the conflict: a rich north living off a dying south. Public debates took place, Pulitzer prizes were handed out, and before long the world moved on. Sudan was of no interest until US Embassies in Kenya and Tanzania were bombed on 7 August 1998. Shortly after, on 20 August, American missiles were directed against Afghanistan and Sudan – countries that were accused of harbouring terrorists involved in the embassy attacks. In Khartoum, the El Shifa Pharmaceutical

\(^{144}\) Johnson, *Root Causes*, 84.
\(^{145}\) UN Commission of Inquiry: 18.
\(^{146}\) The NIF is the political party of the Muslim Brotherhood.
\(^{147}\) UN Commission of Inquiry: 19.
Industries factory was attacked, as US officials claimed the factory housed chemical weapons.\footnote{CNN, ‘U.S. Missiles Pond Targets in Afghanistan, Sudan’ (20 August 1998), \url{http://www.cnn.com/US/9808/20/us.strikes.01/}, accessed 31 October 2006.}

Increased international pressure following the attacks of September 11\textsuperscript{th} and accusations that Sudan had become a terrorist state made the government of Sudan (GOS) and SPLM/A initiate peace talks in 2002. The first protocol to be signed was the Machakos Protocol on the 20\textsuperscript{th} of July that same year, establishing a six year interim period for the northern and southern parts of the country, after which the south will hold a referendum deciding on whether to choose secession or continue being a part of Sudan. After the Machakos Protocol was signed, five other protocols followed. Together they make up the Comprehensive Peace Agreement (CPA) which was signed on 9 January, 2005.

Simultaneously with the peace talks between northern and southern parties, the situation drastically deteriorated in the western region of Darfur. The region had been independent until 1916, when the British formally made it part of Sudan.\footnote{Deng, War of Visions, 77ff.} Two rebel groups emerged in 2001 and 2002; the Sudan Liberation Movement/Army (SLM/A) and the Justice and Equality Movement (JEM). They claimed to represent all Darfurians in opposition to the Khartoum Government’s economical and political marginalisation of the region and the exclusion from the peace talks between the government and the southern parties. However, the rebels largely consisted of people from the African tribes of the Fur, Massalit, and Zaghawa.\footnote{UN Commission of Inquiry: 23.} Not much attention was given to the rebels until the SLM/A captured a military airport in the northern city of El Fasher in April 2003. Around 260 rebels killed about 100 government soldiers, captured and destroyed vital military equipment and kidnapped the head of the Sudanese Air Force, while losing only nine men.\footnote{Samantha Power, ‘Dying in Darfur,’ \textit{The New Yorker} (30 August 2004): 61-62.} After the airport raid, the Khartoum government realised they were facing a serious threat, and begun looking at ways of crushing the rebellion. The Sudanese army consisted largely of African Darfurians who were not trusted to fight their own kind. Thus, the government asked the Arab tribal leaders in Darfur to help fight the rebels. And they responded, creating the militias that are known as the \textit{janjaweeds} (evil men on horseback or camel), now responsible for as many as 5000 deaths each month, prompting the United States’ President George W. Bush to refer to Darfur as an ongoing genocide in a speech to the UN General Assembly in September 2004.\footnote{Ibid. and Scott Straus, ‘Darfur and the Genocide Debate,’ \textit{Foreign Affairs} Vol 84, no. 1 (January-February 2005): 125.}
Whereas the rest of the thesis will focus on only one aspect of the conflict in Sudan, that of fresh water, this chapter wanted to highlight the complexity of the many conflicts that has, and continue to, exist in the country. Although water will be seen as a factor internationalising the war and the peace process between north and south Sudan, it is important to be remember that the conflict is in many ways already internationalised. From the early Egyptian interactions with Nubian kingdoms, via the spread of Islam, to the days of the condominium rule: outsiders have always had direct influence on Sudanese politics and wars. In modern times, too, the conflict (or conflicts) in Sudan has many internationalising elements, the most documented of which being the growing oil industry which in 2000 amounted for close to US 450 million dollars,[153] and by 2005 had increased to more than two billion dollars.[154] Human Rights Watch concludes that,

The large-scale exploitation of oil by foreign companies operating in the theatre of war in southern Sudan has increased human rights abuses there and has exacerbated the long-running conflict in Sudan.[155]

China in particular has shown a considerable interest in maintaining friendly relations with the current Khartoum regime in order to extract oil from the oilfields in south Sudan. China has become the world’s second largest consumer of oil, and Sudan is its largest overseas oil project,[156] as Beijing receives ten per cent of its oil from Sudan.[157] In return for oil exports to Beijing, Khartoum has received significant protection from international sanctions and retaliations for its human rights abuses, protection that has proven especially effective due to China’s position in the UN Security Council. But the oil industry has also connected Sudan to another global industry: that of weapons trade. Amnesty International has reported that military aircraft, tanks, artillery, small arms, and training have been exported to Sudan from various countries, but most notably Belarus, China, France, and Russia.[158] Without the revenues derived from its oil export, Sudan would not have been able to buy weapons on the scale it does today - weapons that are in turn used against its own population in the south, the west, and the east. The warfare made possible by the weapons industry again

creates large amounts of refugees (both within Sudan itself as well as into neighbouring countries), risking spillover effects of the war into Sudan’s surrounding countries. The UN Security Council has most recently seen this threat in Darfur where over two million people have been displaced,

members are … seriously concerned over the spillover into neighbouring countries, Chad is one, and the Central African Republic is another.\footnote{United Nations News Service, ‘Security Council backs Annan’s support for UN Sudan envoy, warns of Darfur spillover’ (27 October 2006), \url{http://www.reliefweb.int/rw/rwb.nsf/dbb9008SID/KHIII-6V33FS83OpenDocument}, accessed 31 October 2006.}

Along with refugees, rebel groups too cross state borders and enter into the territories of neighbouring states. ‘Arab gunmen from Darfur have pushed across the desert and entered Chad, stealing cattle, burning crops and killing anyone who resists’\footnote{The New York Times, ‘Refugee Crisis Grows as Darfur War Crosses a Border’ (28 February 2006), \url{http://www.crisisgroup.org/home/index.cfm?id=3998&1=1}, accessed 2 November 2006.} the New York Times reported in February 2006. The result? ‘At least 20,000 Chadians [driven from] their homes, making them refugees in their own country.’\footnote{Ibid.} The city of Birao in the Central African Republic has experienced similar attacks from rebel groups originally operating in Darfur.\footnote{Reuters Foundation, ‘Central African Govt Asks France to Help Repel Rebels’ (31 October 2006).}

Bearing the many complexities of the conflict in mind, it is time now to narrow the focus and look at one complicating factor in particular: that of fresh water and its role in the resolution process. The signing of the CPA did not immediately solve the under laying conflicts in Sudan. Precisely because the conflict itself is so complex, any resolution must be the same, and expected to take time. Sudan is still a deeply divided and troubled country with no democratic traditions or institutions, and with a large proportion of its population living in great poverty and insecurity. It seems evident that not much provocation is needed for the outbreak of violence to occur, making the implementation of an already weak peace agreement, concerning only parts of the conflict affected areas, extremely difficult. Adding to the difficulty is the fact that Egypt has expressed resentment towards the CPA due to the potential of southern independence.\footnote{John Young, ‘Sudan’s Changing Relations With its Neighbors and the Implications for War and Peace’, Speech held at the Bonn International Centre for Conversion Conference ‘Money Makes the War go Round? The EU and Transforming the Economy of War in Sudan’ (Brussels: 12-13 June 2002), \url{http://www.bicc.de/events/sudanws2/young19june02.pdf}, accessed 4 August 2006.} Why that is and how that resentment might affect the implementation process of the peace agreement between north and south Sudan will be discussed in the following chapters.
4. Egypt, Sudan, and the Nile

The Nile is the longest river in the world; it flows for 6800 kilometres over 35 degrees of latitude. To be completely accurate, however, the Nile is in fact not so much a single river as it is a collection of many that join together at different places along Nile’s journey the ten basin countries. The most famous, and also the main, tributaries are the White and the Blue Niles which originate in Burundi and Ethiopia respectively.

In 1937, it was discovered that Burundi contained the southernmost source of the Nile, a small spring known as Kikizi.\textsuperscript{164} This discovery by a German explorer, came after a long search characterised by myths and more than a touch of rivalry. From Burundi, the river flows through Rwanda before it joins Lake Victoria, long perceived to be the source of the river. After the Nile passes through the equatorial lakes, which include, besides Lake Victoria, Lakes Kyoga and Albert in Uganda and the Democratic Republic of Congo, the river enters south Sudan as Bahr al-Jabal, the Mountain River, and faces its greatest challenge: the Sudd. The Sudd consists of vast areas of swamp with a rate of evaporation so high that by the time the Bahr al-Jabal becomes the White Nile at Lake No, it has lost more than half of its water.\textsuperscript{165}

However, at Lake No Bahr al-Jabal is joined by Bahr al-Ghazal which receives its water from Congo (former Zaire) and the Central African Republic. Before the Nile reaches Malakal, it is joined again by the Sobat River that originates in Ethiopia and with it some of the river’s original force returns. The White Nile then has a considerably less difficult journey into Khartoum where it joins the Blue Nile.

The Blue Nile originates from a little spring in the highlands of Ethiopia by the name of Little Abbai, which joins Lake Tana a little further north.\textsuperscript{166} Compared to the obstacles faced by the White Nile, the Blue Nile has an easy path from Lake Tana to Khartoum. Three hundred and twenty kilometres north of the Sudanese capital and the place where the two Niles unite, the last Nile tributary, the Atbara River, joins the river on its journey through northern Sudan and Egypt\textsuperscript{167} (See map 4)


\textsuperscript{165} Collins, The Nile, 2.

\textsuperscript{166} Ibid, 3.

\textsuperscript{167} Mohamoda, ‘Nile Basin Cooperation’: 7.
From Atbara, now as one river, the Nile now flows without any water being added until it reaches Egypt, Lake Nasser, and the Aswan High Dam. The river parts once again before it pours into the Mediterranean Sea, as Rosetta and Damietta. In all, the river flows through ten countries on its way from the middle of the African continent until it reaches its final destination: Burundi, Democratic Republic of Congo (former Zaire), Egypt, Eritrea, Ethiopia, Kenya, Rwanda, Sudan, Tanzania, and Uganda. Together, the riparian states encompass forty per cent of the total African population and ten per cent of the continent’s land mass.  

4.1 The hydropolitical security complex

Traditionally, the ‘Nile conflict’ is seen as a bipolar static tension between the militarily strong, but water poor country of Egypt, and the water rich but more politically unstable Ethiopia. Of the Nile flow as measured at Aswan, around 85 per cent originates from Ethiopia thus Cairo is understandably concerned about all actions undertaken by the Ethiopian government that might threaten the future water supply in Egypt. However, when Eritrea seceded from Ethiopia in 1993, Egypt did not feel the need to interfere to protect its water supplies. The lack of interest could be explained by the marginal importance Eritrea has in matters of the Nile: only two seasonal streams of the river (the Mereb and Tekeze rivers) are found within its borders and so the treat an independent Eritrea represented to Egypt’s water supplies was minimal. In the latter years, however, it has become increasingly clear that there is a second potential zero-sum conflict in the Nile basin; that between Egypt and her former loyal subordinate: the Sudan.

4.1.1 The emergence of a hydropolitical security complex

Historically, Egypt has considered the Sudan as safely within its sphere of influence. Correspondingly, keeping the Sudan under control has been a major objective for Egypt, as all the Nile’s major tributaries – the White and Blue Niles as well as the Atbara - flow through the Sudan and directly into Egypt. As previously explained, Egypt even claimed sovereignty over Sudan once it was clear that Great Britain would give up its colonial power. Part of the reason Egypt has always been interested in its southern neighbour is the Nile. If

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172 Ibid., 128.
Egypt regards the Sudan as within its sphere of influence and interest, it regards the Nile as its birthright, and claims that it has a 5000 year long existence by the river banks to prove it. In fact, Egypt has not only existed on the banks of the Nile, it has actively utilised the river all through history. In the fifth century B.C.E the Greek historian Herodotus wrote what still appears true today; 'Egypt is the gift of the Nile.'\textsuperscript{173} By the eighth century AD, Arabs in Egypt had already developed a Nilometer to measure and keep records of Nile water from year to year.\textsuperscript{174}

One of Egypt’s most well-known geographers, Sulayman Huzayyin, has developed a substantial argument for why Egypt and the Sudan, or at least northern Sudan, are connected. He argues that the Nile Valley, as represented by Egypt and northern Sudan creates one, integrative geographical unit. The community living within this unit is furthermore a homogenous one with a national personality. In addition, the need for water supply and development of an agricultural system created a need for a strong and stable political government, which Egypt could supply. The historical development of this community was spun around agriculture, Islam, and Arabisation. Moreover, Huzayyin argues, because the unity of Egypt and northern Sudan is a natural given, the artificial boundaries between them are bound to fail eventually and a natural political entity can finally be formed.\textsuperscript{175}

The idea of ‘unity of the Nile Valley’ started as an Egyptian scheme during the times of Muhammed Ali (1769-1849). He conquered Ethiopia to prevent it from building dams on the Blue Nile. But the plans did not stop there; Egypt wanted to conquer the entire Nile basin to secure the continuous flow of Nile water into Cairo. The idea lived on during the reign of Khedive Ismail (1830-1895), although he was forced to make peace with the Ethiopians after suffering military defeats against them in 1875 and 1876.\textsuperscript{176} However, the idea of a unified Nile valley for the benefit of Egypt lived on during colonial times. Egypt herself fell to the British in 1882, but the utilisation of the Nile continued. The perception of Egypt as main beneficiary of the Nile was supported by the colonial powers in general and the United Kingdom in particular. The British recognised immediately after they took control of Cairo that the security of Egypt depended upon control of the Upper Nile.\textsuperscript{177} As a result, during the

\textsuperscript{174} Collins, \textit{Waters of the Nile}, 3.
\textsuperscript{176} Tafesse, \textit{The Nile Question}, 60.
\textsuperscript{177} Collins, \textit{Waters of the Nile}, 36.
In fact, Great Britain conquered the Sudan when it did, partly because of the potential threat to the flow of the Nile a further independent Sudan represented. Up until the late 19th Century, the Mahdist state was not seen as a threat to the flow of the Nile. It was not until the Italians annexed Ethiopia in 1898 that the British began worrying about the consequences to Nile water for Egypt should its neighbouring countries be either occupied by other European countries, or remain independent with hostile local governments in power. Recognising this potential threat to British supremacy in the Horn of Africa, the British Cabinet did not wait long before they authorised General Kitchener to enter and take over Khartoum, as he did in September 1898, clearing the way for a formalisation of Egypt’s right to the Nile.

In May 1929, an agreement between the newly independent Egypt and the British government on behalf of the still colonised Sudan was signed. Although the agreement to a certain extent recognised the Sudanese need for Nile water, it left no doubt that Egypt was the primary beneficiary of the Nile. The agreement allocates 48 billion cubic metres (bcm) annually or 92.3 per cent of utilisable Nile water, to Egypt whereas the Sudan was left with a mere 4 bcm annually, or 7.7 per cent of utilisable flow. The agreement did largely reflected facts on the ground, as Sudan had hardly utilised Nile waters up until then.

It was not until after World War II that the idea of developing Nile waters for use within the Sudan had any credibility. Dams had been constructed before that, but only to benefit Egyptian needs. As previously explained, it was clear that gain for one was loss for another and the very thought of having Egypt on the losing side was alien to the world up until around the 1920s, when the Gezira scheme was begun. As it happened, the development program triggered a small diplomatic crisis between British officials stationed in Egypt and Sudan. Gezira required the construction of the Sennar dam in Sudan, which would be the first Nile project not to benefit Egypt. In fact, it would do the opposite as any water kept in the Sudan would mean less water for Egypt. Egyptian officials accused their Sudanese counterparts of falsifying documents to gain approval for the dam. The quarrel went on for years and involved a great deal of resentment between the parties. Eventually, the conflict would do great damage to the British reputation in Egypt. Regardless, by 1948 it was apparent that the Sudan would need more water than was allocated to it in the 1929

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179 Ibid, 37ff.
180 One bcm of water equals 1 billion tons, or an area of 1 km x 1 km x 1 km filled with water.
181 A detailed description of the disagreement can be found in Collins, *Waters of the Nile*, 119-145.
agreement. A battle that was to last almost ten years began between Cairo and Khartoum, with London now losing interest in its past and present colonies.

At the outset of Sudan’s independence, Egypt tried to make it a part of Egypt proper and thus secure control of Nile flow into Aswan. In the diplomatic scheming that followed, it was stated by a British official that the Sudan would be able to extract as much Nile water as it wanted without any concern for the effect on Egypt. The threat never became reality, but as Gabriel Warburg explains, it nevertheless had an ‘everlasting traumatic impact on Egypt, for it impressed upon its rulers that whoever ruled Khartoum could hold Egypt for ransom.’

What Warburg is essentially describing is the emerging consciousness in Cairo of the Nile as a crucial national interest for both Egypt and the Sudan. Stated differently: a realisation that Egypt and Sudan form a hydropolitical security complex and hence will not be able to pursue their national interests unilaterally. Because Nile water is a finite resource, strongly desired by both capitals, they cannot be indifferent to the other party in any plans involving Nile water. For Egypt, the realisation resulted in a strong desire to control Khartoum.

Inevitably, the perception regarding the necessity of controlling Khartoum, directly or indirectly, led to even more scheming to stop Sudan from gaining its independence and instead to make it a part of Egypt. But Cairo was unsuccessful and as Sudan gained its independence, the latter declared the 1929 agreement invalid as it was signed by Britain on behalf of the Sudan, but never Sudan itself. Once they gained independence, Tanganyika (now Tanzania), Kenya, and Uganda followed the Sudan example, whereas Burundi, Rwanda, and Zaire (now the Democratic Republic of Congo) had never been bound by the 1929-agreement because it was never signed by Belgium and so had no need to dismiss or recognise it. By then, the former hegemony created by the British in the Nile basin was irrevocably gone and the process of renegotiating bilateral agreements was the only path forward.

In the case of Sudan, a struggle with Egypt that lasted three years began at the outset of its independence and a new agreement was not in place until 1959. In the 1959 agreement Egypt made large concessions. It was to utilise 55.5 bcm per annum (an increase of 7.5 bcm),

183 Ibid.
184 The same reasoning was later used by other British colonies after they became independent. When Tanganyika, now Tanzania, became independent in 1961 its government invoked what is now known as the Nyere Doctrine whereby ‘if former colonial countries had no role in the formulation and conclusion of treaties done in the colonial area, and therefore must not be assumed to automatically succeed to those treaties’ (Charles O. Okidi quoted in Collins, Waters of the Nile, 275).
185 Collins, Waters of the Nile, 276.
whereas the Sudan was allocated 18.5 bcm (an increase of 14.5 bcm). Any future development of the Nile that resulted in increased utilisable water was to be shared on a 50-50 basis with respect to both costs and water utilisation.

4.1.2 The modern day hydropolitical security complex

In modern times, Egypt relies heavily on the Nile for her existence. So heavily, in fact, that it has lead more than one researcher or politician to argue that without the Nile there would be no Egypt.\textsuperscript{186} In effect, most of the Egyptian territory is a desert, with only about three per cent of its total land mass being arable land. Out of a total land mass of 995,450 square kilometres, only 34,220 square kilometres are irrigated. Simultaneously, Egypt has a total population of close to 79 million people and a growth rate of 1.75 per cent.\textsuperscript{187} With most of Egypt’s territory being desert, and with hardly any rainfall to rely on, all future agriculture and industrial development in the country, needed to cater for the growing population, must come from the Nile. And so it does: a total of ninety-seven per cent of Egypt’s water comes from the great river and ninety-five per cent of that water originates outside of Egypt.\textsuperscript{188} Already, Egypt imports 45 per cent of its wheat, which poses an enormous security risk. According to Jean Kerisel, Egypt currently uses 51.6 bcm of water annually for agriculture, 4.5 bcm for domestic demands, 4.7 bcm for industrial needs, and 1.8 bcm for navigation.\textsuperscript{189} Taken together, Egypt’s current water usage equals almost 63 bcm annually, which makes it by far the country that utilises most of the Nile water. Already, it is utilising more than its share set out in the 1959-agreement, only possible because of ‘loans’ from the Sudan, which does not yet fully utilise its allocations. Furthermore, Egypt has more than 1000 people per one million cubic metres of water per year.\textsuperscript{190} That places Egypt in the group of countries Falkenmark described as experiencing \textit{absolute water scarcity},\textsuperscript{191} and gives us a better understanding of why Cairo is so protective of Nile water.

Sudan is in a different situation. Plagued by political unrest and civil war since independence, it is far less developed than its northern patron, something that is reflected in

\textsuperscript{188} Gleick, 'Water and Conflict': 86.
\textsuperscript{189} Kerisel, \textit{The Nile and its Masters}, 150.
\textsuperscript{191} See Chapter 2, section 2.2.1 of this thesis.
its water usage. The total land mass within Sudan’s borders equals 2,505,810 square kilometres, of which 6.7 per cent is arable land and only 18,630 square kilometres is currently irrigated (and even that poorly so). It has a population of around 42 million and a population growth rate of 2.55 per cent.\textsuperscript{192} Currently, the Sudan uses less than 18 bcm of Nile water annually. With the rapid population growth and large quantities of un-irrigated arable land, however, the Sudan is likely to increase its water needs considerably over the next few years, especially if it is able to follow through its peace agreements and finally put an end to the years of fighting. The Sudan was once seen as the potential ‘bread basket’ of Africa precisely because of its arable land and areas of great rainfall in the south; but, industries are not developed without a cost and in this case the cost will be water. With a little more than 500 people per one million cubic metres of water per year\textsuperscript{193} Sudan is at present in the borderline between two of Falkenmark’s categories, namely water quality problem and dry season problem and water stress. Because north and south Sudan are counted as one, the statistics present a more optimistic picture than is reality: the south, and the Sudd in particular, enjoys a relatively moist environment, whereas the northern part of the country experiences dryer conditions. Regardless, Sudan’s economic future is in the waters of the Nile just as much as Egypt’s further development depends on the same river.

As we have seen, the Nile is regarded as crucial to both Egypt and Sudan. The former has always been entirely dependent on the Nile for its survival. More than one Egyptian official has been quoted publicly saying the other basin states are holding its national security ransom; Egypt knows that the Nile represents both its life and its potential death. For example, in a paper describing the challenges of Egyptian foreign policy published in 1963, then professor of International Law and International Relations at Cairo University, Boutros Boutros-Ghali, explains how

\textbf{Egyptian foreign policy has been dominated by two challenges: the first has been the physical task of mastering the waters of the Nile; the second has been the moral task of deciding how the Egyptian rulers should use the wealth resulting from the cultivation of the Nile Valley.}\textsuperscript{194}

Furthermore, Boutros-Ghali argues, the importance of the Nile still remains, and he sees only one way forward: ‘Egypt must conquer new territories, must reclaim the deserts and drain the

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swamps to nourish her increasing population. Politicians, too, admit the crucial role the Nile holds: in 1998, Egyptian ambassador to Ethiopia, Marawan Badr, stated that the Nile is 'a national survival obsession.' Moreover, as Egypt's population is growing, plans to develop desert land into cities are slowly taking form. The project is called 'New Valley' and it will, when finished, put 200,000 hectares of desert under irrigated cultivation as well as establish new cities for seven million people. The project will be made possible by building a canal from Lake Nasser to the desert towns that will carry up to five bcm of Nile water annually. The dependence and obsession with the Nile seems to increase in modern times.

Already, the Sudan and Egypt are the two counties in the Nile basin that utilise the most of the African river's water. Their total utilisation adds up to around 90 bcm annually. By contrast, the equatorial states have been torn by civil wars and political instability, which has led to underdevelopment and in turn only minimal utilisation of Nile water. Ethiopia, the country that contributes around 85 per cent of the Nile waters as measured at Aswan, only utilises one per cent, or 0.65 bcm annually of the Nile. Furthermore, even if Ethiopia was to utilise its full potential of Nile water, it would still not amount to much more than four to five billion cubic metres annually. Similarly, the Equatorial states' combined share of Nile water is only 0.05 bcm annually. As it is today, then, it is in effect only the Sudan and Egypt that competes over the waters of the Nile. Furthermore, the 1959 agreement between Egypt and the Sudan is seen as non-negotiable, even by countries not benefited by the agreement. Thus, all negotiation over water is based on what can be extracted from the Nile in addition to what is already divided between the two downstream countries. The notion of the 1959 agreement as a starting point for all future allocation of Nile water is even supported by the international community working in the basin, as shown by statements made by the World Bank which both recognised the 1959 agreement between two out of (then) nine basin states as a 'genuine Nile agreement' as well as made it clear to Khartoum that support from the West depended upon signing the agreement with Egypt. More importantly, perhaps, is the fact that the Sudan has not publicly broken ranks with Egypt over the 1959 agreement since it was first signed, even in times of great tension between the two states. We can almost talk

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195 Ibid.
196 Quoted in Tafesse, The Nile Question, 83.
198 Ibid.
199 Tafesse, The Nile Question, 44.
201 Ibid, 50.
about a 'Pax Nile' between two states that has experienced severe disagreements. The loyalty shown by Sudan - and Egypt too for that matter - is a great example of how important the Nile is for the security of both countries.

Because of the constant tensions with Ethiopia described at the beginning of this chapter, Egypt has focused development plans for the Nile on the White Nile, the Equatorial states and south Sudan where it has seen more potential for achieving its goals of even larger water allocations. Additionally, it is Sudan that has the greatest potential for increasing its utilisation of the Nile and thus in effect poses the greatest threat to future Egyptian utilisation of Nile water. In short, Egypt and Sudan are also the only two countries with an agreement on Nile waters and out of all the Nile basin states they are the two countries utilising the most of the river’s water. Due to these two facts, the author will argue that they do indeed create a hydropolitical security complex, worthy of further study.

4.2 Effects on the conflict in Sudan

As the previous chapter on the history of the Sudan shows, there is no one single cause for the conflict in Sudan. The conflict involves identity issues, security concerns, religion, economics, personal ambitions, centre – periphery issues and more. But it also involves water. Two major water-development schemes in particular, have had an effect on the conflict in Sudan: the Aswan High Dam and the Jonglei Canal. Both projects were pushed by Cairo, but needed the goodwill of Khartoum. And both show how the interests of the major players in a hydropolitical security complex might have severe negative effects upon other players within the same complex and in turn lead to internal conflicts that threaten to become international.

4.2.1 The construction of a modern day pyramid

Egypt has always been wary of the effect good and bad years of Nile water have on the country. Too much causes flooding and destruction, whereas too little causes drought and famine. The idea of being able to regulate how much water that enters Egypt in flood years, and having the capability of storing water for dry years, has always been a tempting one. So, the first Aswan dam was built in 1902, out of a fear of flooding.\footnote{Robert O. Collins, ‘Negotiation and Exploitation of the Nile Waters at the End of the Millennium,’ Water International Vol 31, no. 1 (March 2006), 121.} The dam was small, however, and not at all suitable for a President of Nasser’s calibre by the time he came to power in the 1950s. Although Egypt officially became an independent hereditary monarchy
an 15 March 1922,\textsuperscript{205} British troops remained stationed in Egypt until the ‘Committee of Free Officers’ took power in 1952. Two years later, the young Colonel Gamal Abd al-Nasser was instated as president of the Republic.\textsuperscript{206}

Nasser was a man of vision. He knew his history, especially that of the Nile, and dreamt of a dam that not only would see the end of occasional flooding of his homeland, but one that could also store vast amounts of water for the dry years. To fund his dream, Nasser sought financial support from the West. As history would have it, the West turned out to be less interested in Nasser’s dream and more concerned about the unstable Egyptian economy and the flow of Czech weapons into the country.\textsuperscript{207} It was the Cold War after all, with strict divisions determining with whom one would cooperate. ‘I take the canal’\textsuperscript{208} was Nasser’s prompt response, referring to the strategically important Suez Canal. By taking the canal, he could not only get revenge on the West for refusing him to fund his dam, but also raise funds by collecting fees, previously paid to foreign companies, from ships that sailed through Suez. Thus, the now infamous Suez War begun. In their desperation to regain control of the Canal, Britain turned to France for help. France found an answer in the Israelis who for quite some time had been troubled by Palestinian guerrilla bases on the Israeli-Egyptian border. So in the fall of 1956, the three countries invaded Sinai – officially to end the terrorist attacks on Israeli soil. However, no one was fooled by the badly disguised effort to occupy the Suez Canal and the result is now well known: Britain, France, and Israel to some extent were forced by President Eisenhower and the United Nations to walk an international walk of shame out of the land of the Pharaohs,\textsuperscript{209} while Nasser became an Egyptian, and indeed Arab, hero if not a modern Pharaoh himself. Not even Nasser’s defeat against Israel in the Six-day War seemed to have a lasting effect on the president’s popularity. If only he could have his modern day pyramid to make the effect complete!

The solution came when the Soviet Union in 1958 granted Nasser the funds the West so promptly had refused him two years earlier. The construction of a monumental dam that enabled Lake Nasser to store 170 bcm of water\textsuperscript{210} began. And Nasser did indeed get his pyramid. The result of Soviet aid was,

\begin{thebibliography}{99}
\bibitem{206} Kerisel, \textit{The Nile and its Masters}, 120.
\bibitem{207} Waterbury, \textit{The Nile Basin}, 66.
\bibitem{208} As quoted in Kerisel, \textit{The Nile and its Masters}, 120.
\bibitem{209} H.D.S. Greenway, ‘50 Years Ago, Peace Was Also Near,’ \textit{Boston Globe} (15 August 2006): A11.
\bibitem{210} Collins, ‘Negotiation and Exploitation of the Nile Waters,’ 121.
\end{thebibliography}
a mountain of rock and sand laid across the river, nearly a kilometre thick at the base, a 10 m high and seventeen times the volume of the Great Pyramid.\textsuperscript{211}

A project of this scale comes with greater costs than the strictly financial ones needed for construction. The ingenious part of Nasser's plan, seen from an Egyptian perspective, was that the human costs were largely passed on to the Sudan.

Behind the Aswan High Dam the Nile would swell for 500 kilometres upstream, including a crucial 150 kilometres in the Sudan, to make room for the giant Lake Nasser. The swelling meant that a large part of the ancient Nubia would be flooded.\textsuperscript{212} The effects on the population and territory of the Sudan were known before the construction of the dam begun. Egypt and Sudan had been negotiating this issue since the latter gained its independence. Talks did not advance until the Nasser-friendly General Abboud came to power in the Sudan. And with the signing of the 1959 agreement, Egypt was allowed to flood Nubia and make an estimated 50,000\textsuperscript{213} to 80,000\textsuperscript{214} Nubians homeless in the process. As compensation for its troubles, the Sudan was allocated 18.5 bcm of Nile water annually as well as permission to build the Roseires dam on the Blue Nile.\textsuperscript{215}

The Nubians, the affected and silenced party to the agreement, had lived in Nubia for 5000 years and could not understand why they had to suffer for Egypt to get more water. Even more confusing, and frustrating, were all the foreigners who rushed into Nubia, not to help the Nubians or save their homes, but to save the Nubian temples and artefacts.\textsuperscript{216} It was not only Nubian homes that would be lost in the flooding, but also 17 ancient temples, housing invaluable treasures. At this stage, the West had realised its previous mistake of dismissing Nasser, and took part in the rescue operation of Nubian treasures that would otherwise have been lost. Before the Nubians were properly resettled, however, violent riots emerged. The Sudanese army was promptly sent in and ended the riots and all the 80,000 Nubians were forcibly moved to concrete shacks in Khashm al-Gibra. The town was located a long way from their original homeland in the northern Sudan, by the Atbara and close to the Ethiopian border. The treatment of the Nubians served to damage Abboud's authority and did play a part in the many factors leading to the Sudanese President's fall from power in 1964.\textsuperscript{217}

\textsuperscript{211} Kerisel, \textit{The Nile and its Masters}, 122.
\textsuperscript{212} Ibid. 123.
\textsuperscript{213} Hultin, 'The Nile,' 32.
\textsuperscript{214} Kerisel, \textit{The Nile and its Masters}, 133.
\textsuperscript{215} For a more detailed description of the events leading up to the construction of the Aswan High Dam as well as the immediate aftermath see Terje Tvedt, \textit{The River Nile in the Age of the British: Political Ecology and the Quest for Economic Power} (London: I.B. Tauris & Co Ltd, 2004), 260-299.
\textsuperscript{216} Kerisel, \textit{The Nile and its Masters}, 134.
\textsuperscript{217} Collins, \textit{Waters of the Nile}, 272f.
Egypt’s desire for more Nile water indirectly led to a regime change in Khartoum. The effects of the rather abstract hydropolitical security complex became apparent in real life events.

4.2.2 The project of the century

Although it has been discussed that the Aswan High Dam had some impact on the conflict, or rather conflicts, in the Sudan, it is dwarfed by the impact the Jonglei Canal has had on the same conflict. As mentioned in the introduction of this chapter, the greatest obstacle of the White Nile is the Sudd located in south Sudan. Egypt has always had a strong interest in reducing water loss in the Sudd, not least because of the historic hostility it has had with Ethiopia that has prevented any development for Egyptian gain on the Blue Nile. The Sudd is a vast area of swampland. Its name is derived from the Arabic word Sudd which means barrier or obstacle. It was given to the area by European and Arab merchants who struggled to pass through the swampland in the nineteenth century.\(^{218}\) The total area of the Sudd flood-plain can never be measured due to the constant changes in the area (see table 4.1). Robert O. Collins identifies four zones of the Sudd. Firstly there is the Duk Ridge where Nilotes live in permanent villages, also throughout the rainy season. Then there is the ‘cotton soils’ which is the immediate wetlands of the clays. Next is the Toik which is a Dinka word that means ‘land which is seasonally flooded.’ The Toik is the area of the Sudd that holds the great cattle camps of the Nilotic peoples from February to May. Finally, there is the ‘permanent swamp’ that, as the name indicates, is continuously flooded.\(^{219}\)

In 1952, the permanent swamp was measured to be 2,700 square kilometres while the seasonally flooded grassland was measured at 10,400 square kilometres. In 1980 the numbers had risen to 16,200 and 13,600 respectively (See Table 4.1). Unfortunately, due to the war, more recent data is not available.

| Table 4.1: The Changing size of the Sudd flood-plain\(^{220}\) |
|----------------|----------------|----------------|
|                | 1952           | 1980           | Increase      |
| Permanent Swamp| 2,700 km\(^2\) | 16,200 km\(^2\) | 13,500 km\(^2\) |
| Seasonally flooded grassland | 10,400 km\(^2\) | 13,600 km\(^2\) | 3,200 km\(^2\) |
| Total          | 13,100 km\(^2\) | 29,800 km\(^2\) | 16,700 km\(^2\) |

The increase, in particular of the permanent swamp is important for how much water is lost in the Sudd annually. It is evaporation, and not vegetation, that is the main cause of water

\(^{218}\) Ibid., 66.
\(^{219}\) Ibid., Chapter three.
\(^{220}\) Collins, Waters of the Nile, 90.
loss in the swamps. During the last fifty years the rate of evaporation has been relatively constant: 179 millimetres per month, or 2150 millimetres per year. Thus, the amount of water lost in the Sudd depends on how much land is flooded. The mean annual loss over the past 75 years has been twenty per cent, or one fifth, of the total mean annual flow of the Nile as measured at Aswan.\textsuperscript{221} The mere thought of gaining access to all this liquid gold is enough to give both Cairo and Khartoum starry eyes.

There has not been a lack of plans and attempts from Egypt and north Sudan to lead the waters into their capitals. The idea of creating a canal through the hostile Sudd to avoid great water loss for Khartoum and Cairo is an old one. Jonglei is often referred to as the 'project of the century.'\textsuperscript{222} Planning of the canal has indeed been going on since the 1890s. The first official and substantial plan to lead water through a canal so that it could benefit Egypt was presented in a report published in 1904. The author was Sir William Garstin, a British engineer and hydrologist sent to the Sudan in February of 1899 to report on the Nile. The canal was named the 'Garstin Cut' and was supposed to carry 28 bcm of water annually.\textsuperscript{223} 70 years of various official plans for a Jonglei Canal followed, all showing remarkable little concern for the people living in the area through which the canal would pass. But, as Terje Tvedt puts it,

the project survived the rise and fall of British colonialism, the birth of an independent Sudan and Egypt, 17 years of civil war in the Sudan from 1955 to 1972 ... While regimes have come and gone, the project idea has laid steadfast.\textsuperscript{224}

Tvedt's observation at the outset of the second civil war is only strengthened today: twenty six years and one war later.

Jonglei would perhaps still be on the drawing board had it not been for Ga'afar el-Nimeiri who in the early 1970s, with astonishing speed and determination, negotiated and signed a peace treaty with the south. Although the treaty gave substantial autonomy to the southern region, Nimeiri ensured that Khartoum remained in control of 'overall economic planning' in south Sudan.\textsuperscript{225} With that phrase, Jonglei saw its revival. Years of civil war in the south had prevented any construction or practical work on the long awaited canal, but hydrological projects were considered economic planning and with the newfound peace it was time to get to work. While the ink was still wet on the Addis Ababa agreement Nimeiri began

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\textsuperscript{221} Ibid, 97ff. \textsuperscript{222} Tvedt, Konflikten i Sudan, 7. \textsuperscript{223} Collins, Waters of the Nile, 101. \textsuperscript{224} Tvedt, Konflikten i Sudan, 7, my translation. \textsuperscript{225} Collins, Waters of the Nile, 308.
\end{flushright}
negotiations with Cairo. In July 1974, Egyptian and Sudanese ministers signed an agreement for the joint construction of the Jonglei Canal.

Map 5: The Sudd

Map from Collins, *The Nile*, 73
A French firm was hired to do the job with the German produced Bucketwheel, a necessary piece of equipment for any form of construction in such a challenging environment as the Sudd. Meanwhile Egypt and Sudan agreed to split the bill for the works. The canal agreed upon in 1974 was to be a 280 kilometres straight line from Sobat to Jonglei and would increase the flow of water at Aswan by 3.8 bcm annually. However, in 1980 the line of the canal was shifted eastward to avoid a large concentration of people living in the Kongor area. Simultaneously, the canal was extended to Bor, which made it 360 kilometres long. In the end, the Jonglei Canal that was to be constructed was pretty similar to the proposal that sparked all the years of planning a canal, namely the Garstin Cut.

While all the planning, negotiating, and eventually constructing took place in north Sudan and Egypt, the people of the south Sudan were left as mere spectators. Those who were to feel the consequences of the canal the most were never given a voice in the various processes which led to the first engineer arriving in Sudd in 1974. In fact, the first time the Nilotic peoples were even mentioned in any of the numerous official reports published on the subject was as late as 1946, 42 years after the Garstin report. That year the first interim report of the Sudan Jonglei Committee was published. In addition to practical comments on the canal itself, the report also commented on the potential damage of the canal to the native peoples and their way of living. Sadly, the report is an exception in the history of the canal, for Jonglei has an aspect not much talked about in the hand-shaking events where it is discussed between Cairo and Khartoum.

The people in the south of Sudan live according to the movements of the river. There are two distinct periods in the Sudd: the ‘timely’ and the ‘untimely.’ During the timely period, which lasts from January to July, there is a dry season, and the Nilotes spend it moving their cattle. During the untimely period, there is flooding, which make the Nilotes move to higher ground where they can cultivate and settle their herds. The Jonglei Canal will essentially be the end of the Sudd seasons: in leading the water through a canal the water level will stay the same all year around, and consequently have a major impact on the close to 700,000 people living in the Sudd. Jonglei, as it was when construction began under Nimeiri, has a few bridges for crossing, but how do you build appropriate crossings for entire cattle herds? Free movement of people and cattle will be impossible. And how do you explain to people that have lived their lives according to how the waters of the Nile shift that these shifts will no

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227 Collins, Waters of the Nile, 311-315.
228 Ibid, 205.
229 Collins, Waters of the Nile, 213f.
Map 6: The Jonglei Canal

Elevation of the Canal terminated at mile 168 by the Sudan People's Liberation Army, 10 February, 1984

longer occur? The impact the canal is bound to have on the Nilotic peoples is not properly researched, but it is safe to say that it will be substantial. At worst, the canal could destroy an entire culture.\(^{231}\)

In addition, there are the environmental consequences to consider. As Collins points out, the Sudd – besides stealing a substantial amount of Nile water – can also be seen as a large ‘natural reservoir.’ It will absorb water only to gradually release it back into the river, minus what is lost in evaporation and what is absorbed by vegetation. It is thus the much hated Sudd that is the real cause of the constancy of the White Nile supply during all seasons. However, Collins also stresses that even though the Sudd acts as a reservoir, it is by no means a conserving mechanism. Of all the water given to it at Mongalla, the Sudd only returns half.\(^{232}\) What will be the environmental consequences of the canal? Due to a lack of research a definite answer cannot be given. What we do know is that the Sudd swamps harbours ‘millions of migratory birds each year,’ and that the Jonglei Canal will severely disrupt this unique habitat.\(^{233}\) Furthermore, we have seen the disastrous consequences of other marshes that have been drained.

In the 1990s, Iraqi leader Saddam Hussein deliberately drained the Mesopotamian marshes in southern Iraq as retaliation for an uprising against his regime by the marsh people. Additionally, dams in Turkey and Syria reduced the flow of the rivers Tigris and Euphrates into the same area. In 2000, it was estimated that the area that once spanned about 8000 square miles were reduced by 90 per cent. Experts feared that the wetlands would be vanished completely by 2008.\(^{234}\) The marsh Arabs, known as the Ma’adan, were similar to the Nilotic people in the Sudd in that they lived in the wetlands according to the seasons of the marshes, by a culture that had remained virtually unchanged for the approximately 5000 years they had been living there.\(^{235}\) Before the marshes were drained, around 500 000 Marsh Arabs lived in the area, in 2004 only around 80 000 remained.\(^{236}\) Although attempts have been made to


\(^{232}\) ibid. 99ff.


\(^{236}\) CNN, ‘Scientists Fight to Save Iraq’s Marshes.’
restore the wetlands after Saddam Hussein was removed from power in 2003, only parts of
the marshes can be successfully restored.\textsuperscript{237} Meanwhile, both the Marsh Arabs themselves and
the wildlife in the area are paying the price. Before the drainage, around sixty per cent of fish
consumed in Iraq was from the marshes. Today, the number is halved.\textsuperscript{238} Moreover,

Many rare species such as the African darter along with other types of birds, fish and
mammals, are either threatened or gone. Date palm trees, once abundant in the
marshes, were cut down. Much of the land was bombed, burned or drained, while
some waterways were poisoned.\textsuperscript{239}

There is no reason to believe the consequences would be any less significant should the Sudd
be drained through the completion of the Jonglei Canal. And in the area of environmental
preservation and sustainable development, is destroying such a unique ecosystem something
that can be justified?

The southerners themselves certainly do not think so. Nor do they particularly want
the canal in their territory. Their resentment became apparent shortly after the first
construction workers arrived in the Sudd. A violent riot erupted in Juba in 1974 and the cause
of the riot was Jonglei.\textsuperscript{240} A fear of environmental consequences and Arab dominance through
both the construction of the canal as well as the canal itself, lead the masses to the streets.
Within days, government soldiers were sent into the riot and quickly crushed resistance.
Nimeir promised that Jonglei would not simply be an engineering project, but rather a social
and economic development scheme for south Sudan. Promises of schools, hospitals, and
modernisation were made and for a brief time the resentment and violence came to a halt.\textsuperscript{241}

But, as so often the case in south Sudan, promises failed to materialise. As the construction
work kept going at notable speed, signs of the promised benefits were just as notably absent.
Consequently, the Jonglei Canal came to be the very symbol of what the southerners had been
fighting for so long: Arab intervention, northern domination, underdevelopment, and above
all, exploitation.\textsuperscript{242}

Enter John Garang and a new decade. Garang had earned his Ph.D. at Iowa State
University in 1981, precisely on the subject of socioeconomic development of the Jonglei
area.\textsuperscript{243} When he returned to Sudan, he assembled southern resistance under SPLM/A. In
1984, the organisation attacked the Jonglei construction sites and kidnapped French workers demanding that all further development of Jonglei must come to a halt, arguing that the canal would drain the Sudd, turn the area into a desert, kill local livestock, and destroy the ecological equilibrium.\textsuperscript{244} Cairo officials had to ponder if they should invade this troublesome country to their south, and if so, on whose side: Khartoum who already had working agreements with Cairo or rebels in the south to ensure control should the country fall apart and the south gain independence. Better the devil you know they concluded and continued supporting Nimeiri. In the end, all plans of invasion were aborted.\textsuperscript{245}

Today, the French company is still waiting to return and finish the job they started and Cairo is still waiting for the canal to add water to Aswan. In fact, they have launched Jonglei II, an even grander second canal to be built in the Sudd, during the time they spent waiting for the second civil war to come to an end. And the promised Jonglei canal is a 267 metres long ditch with the Bucketwheel at the end, a hazard for local people and wildlife alike. The future of the Sudd, Jonglei, and the people of south Sudan is uncertain at best. Will Egypt give up on Jonglei and leave the region alone regardless of the result of the 2011 referendum? Or will we slowly see the collapse of the core-principle of the CPA (that of a potentially independent south Sudan) due to the blue gold that is to be found in the Sudd? These are some of the questions addressed in the following chapter.

\textsuperscript{244} Kerisel, \textit{The Nile and its Masters}, 157.
\textsuperscript{245} Bulloch and Darwish, \textit{Water Wars}, 118.
5. Ready for Round Two?

Chapter four argued that Egypt and Sudan form a hydropolitical security complex due to their mutual dependence on the river Nile. The question then becomes ‘how might the presence of a theoretical security complex affect domestic policy in real life scenarios?’ Or more specifically, ‘how might Egypt’s interest in access to water from the Nile influence the implementation of the CPA?’ And lastly, ‘What are the implications for future peacemaking and peacebuilding in Sudan and other contexts? First, however, a closer look at the CPA and its implementation process is in order.

5.1 The Comprehensive Peace Agreement (CPA)

When the Comprehensive Peace Agreement (CPA) was signed in January 2005 it brought together six protocols negotiated over three years. The first protocol - Chapter I of the Agreement - is the Machakos Protocol, dated 20 July 2002. Machakos establishes the unity of Sudan as a priority of the parties (the Government of the Sudan and the Sudan People’s Liberation Movement/Army), but nevertheless recognises that ‘the people of south Sudan have the right to self-determination.’ In more practical terms, the protocol defines a pre-interim period of six months, to establish a ceasefire and an interim period of six years, to build institutions and agreements set out in the agreement. After the end of the interim period there shall be an internationally monitored referendum where southerners will be allowed to vote for either unity or secession. Additionally, Machakos provides a legal framework, the principle of equality before the law, launches religious freedom, and calls for a democratic government.

Chapter II of the CPA consists of the Protocol of Power Sharing, dated 26 May 2004. In short, it reaffirms the principles agreed upon in the Machakos Protocol and determines the implementation of those same principles. Essential to the agreement is,

a decentralised system of government with significant devolution of powers, having regard to the National, Southern Sudan, State, and Local levels of government.

Furthermore, Chapter II sets out the framework for the transitional national government and the national security service that provides equal representation and opportunities for north and south. Interestingly, the protocol also separates between what will fall under the powers of the

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247 CPA, Chapter II: Protocol on Power Sharing, Article 1.5.1.1.
national government and what will be determined by the government of south Sudan. The Protocol specifies that,

Nile Water Commission, the management of Nile Waters, transboundary waters and disputes arising from the management of interstate waters between Northern states and any dispute between Northern and Southern states fall under the powers of the national government alone. The federal Minister of Irrigation and Water Resources, Kamal Ali Mohamed, is from the National Congress Party (NCP) – the same party President Bashir belongs to – and is not likely to have south Sudan’s interests in mind when he makes decisions regarding the Nile. As long as the south remains part of a unified Sudan, control over Nile water will stay in Khartoum.

The Agreement on Wealth Sharing is dated 7 January 2004 and set out in Chapter III of the CPA. A large part of this protocol is devoted to oil revenues and how they will be shared between north and south Sudan. In short, half of net oil revenues derived from oil producing wells in south Sudan shall be given to the Government of South Sudan, whereas the remaining half shall go to the National Government and Northern states.

Chapter IV of the CPA consists of the Protocol on the Resolution of the Conflict in the Abyei Area, dated 26 May 2004. The area is described as a ‘bridge between the north and the south, linking the people of Sudan.’ Importantly, the people of the Abyei area will hold a separate ballot simultaneously with the southern referendum where they will decide on whether to retain a special administrative status as part of the north or become part of Bahr el Ghazaland and so belong to south Sudan.

Another local conflict is dealt with in Chapter V of the CPA, through the Protocol on the Resolution on the Conflict in Southern Kordofan and Blue Nile States, dated 26 May 2004. The agreement recognises that to resolve the greater conflict between the north and the south, there is a pressing need to resolve that in the Southern Kordofan and Blue Nile states. The agreement is thus a smaller version of the CPA as a whole, with the same principles laid out in the first chapters of the CPA repeated again on a smaller scale in Chapter V.

Finally, Chapter VI of the CPA is the Agreement on Security Arrangements, dated 25 September 2003. It stipulates that the future army is to consist of the Sudanese Armed Forces (SAF) as well as the SPLA, but that they are to remain separate during the interim period. However, even though they will remain separate, they are to be treated equally as Sudan’s National Armed Force during the interim period. The security protocol demonstrates that the

248 CPA Chapter II, Article 5 A33.
249 CPA Chapter IV: Resolution of the Conflict in Abyei Area, Article 1.1.1.
lessons learnt from the Addis Ababa agreement - when the south in effect found itself without any defence forces, leaving Nimeiri with a carte blanche to unilaterally abandon the peace agreement and turn the country back into war - have not been forgotten.

5.1.1 Shortcomings of the CPA

The CPA has encountered several criticisms. It ignores the conflict in Eastern Sudan, it represents only the Government and the SPLM/A, who through the current agreement are increasing their powers and most importantly and frequently because of its failure to include Darfur. The CPA negotiations continued even after Darfur turned into an inferno in front of the negotiating parties and it continues to be implemented today, through an ongoing genocide, still without much concern for the people of Darfur. Indeed, as chapter three explained, the exclusion of Darfur from the peace process between north and south Sudan is partly responsible for the subsequent violence that erupted in Darfur. The possibility of a lasting peace in Sudan is dim as long as the atrocities in Darfur are allowed to persist. However, the impact Darfur has on the peace treaty has been given much attention elsewhere and will not be the focus of the following analysis.

While recognising the potential spoiler effect Darfur has of a successful implementation on the CPA, this author would like to point to a different problem: the failure to properly establish a framework for cooperation over the utilisation of Nile water both in the case of a unified and a separated Sudan. Apart from granting the supreme rights over the Nile to the national government in Khartoum during the interim period, the river that is keeping both Sudan and Egypt alive is not found important enough to be a part of the CPA. There is no framework for mutual decision making and revenue sharing as there is with oil. And there is no mention of how to treat the Nile should south Sudan become independent. As discussed in chapter four, the greatest potential for further increase in Nile water flow at Aswan is through the unfinished Jonglei Canal. But the chapter also revealed the hostility shown by the southerners towards the canal when construction last took place. The failure to properly

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250 See Chapter 3, Section 3.4 of this thesis.
253 See Chapter 4 Section 4.2.2 of this thesis.
deal with the Nile and Jonglei might become a serious obstacle to peace in the region, as was the case during Nimeiri’s rule: the last attempt to create a peace pact between north and south.

Granted, Khartoum gets most of its water from Ethiopia and the CPA is an agreement to settle an internal war, so at first glance it might not seem necessary to include Nile water sharing agreements in the CPA, nor to take Egypt’s interests into consideration when the agreement was negotiated. However, negotiated peace settlements have a low success rate, thus negotiators should pay close attention to lessons learnt from previous cases. Of all civil wars that occurred between 1940 and 1990 and entered formal peace negotiations, more than half returned to war. Ignoring strategic natural resources and the interests of powerful regional actors in a peace settlement is at odds with current peace building theory that stresses the need for regional support in any successful peace process.256

Gunnar Sørbo argues that four important sources of failure in peace implementation are (i) groups that do not feel included in the agreement, (ii) lack of sufficient international engagement, (iii) presence of primary products, and (iv) not having proper support from neighbouring states. The chance of failure, Sørbo highlights, increases as one or more of the factors above combine in any one implementation process. In the case of Sudan, Nile water is the primary resource and an independent south Sudan is at odds with the region’s most powerful actor: Egypt. Following Sørbo’s reasoning both should have been included in the CPA. Likewise, Caroline Hartzell argues that those negotiated peace settlements that are most likely to succeed are those that provide ‘institutional guarantees for the security threats antagonists face.’ Security guarantees as fundament for establishing stable peace settlements is also supported by other studies. As argued in chapter two, stable access to fresh water is a security issue. Thus, according to the theory, it should have been included in a peace treaty in order for the treaty to have a greater chance of success.

Overall, the status of the implementation of the CPA already is in trouble for a number of reasons. The agreement was supposed to divide the political power in Sudan between the

NCP as the representatives for the northern region until elections and the SPLM as representatives for the south. In reality, however, 'the NCP continues to have a firm grip on all the details of the state' most importantly through 'a security apparatus that believes it is the NCP.'

Although commissions and committees are established as set out in the agreement, most have never held a meeting and seem to exist only on paper. When looking at Sudan post-CPA,

the picture that emerges is of a pattern of NCP attempts to systematically undermine, delay or simply ignore the elements called for in the CPA that would fundamentally alter the status quo and its grip on power.

During the negotiation process, much work was done personally between then SPLM/A leader, Dr. John Garang and then first Vice-President Ali Osman Taha and they expected to further rely on their amicable personal relationship during the implementation process.

After Garang's death in a helicopter crash on 30 July 2005, shortly after he was sworn in as Vice-President of the Sudan, the peace process suffered a major setback. He was a unifying figure for the southerners, an ability his successor Silva Kiir does not yet seem to possess.

Garang's death also opened up for the NCP to not make the power concessions set out in the CPA as Kiir does not appear to have the same personal relationship with people from the NCP as Garang did.

Finally, for every follower of Sudanese politics, the genocide taking place in Darfur is by itself proof that Sudan is not on its way to peace anytime soon. The genocide that has occurred since mid-2003 has had a destabilising effect on the transitional government. The newly created Government of National Unity (GNU) lacks legitimacy as long as it allows hundreds of thousands of its own population to be killed. Any peace treaty in Darfur will need to include government representation for the population of western Sudan and thus yet another transitional government will need to be created. Furthermore, although south Sudan's government has been given oil revenues, the size of the same revenues is determined by the national Ministry of Energy and Mining and the Ministry of Finance, which are both

259 International Crisis Group, 'Sudan's Uncertain Peace': 2.
260 Ibid.
261 Ibid.
controlled by the NCP.263 A control mechanism ensuring that the south gets it fair share of the oil revenues is missing. Finally, there has been fighting in the south, both between southern groups as well as between southerners and the Ugandan rebel group Lord’s Resistance Army (LRA) that has entered south Sudan to get access to land and food.264 However, at the time of writing, attempts were made to resolve the fighting with the LRA through peace talks in Juba.265

5.2 The effect on Egypt

All the problems the CPA has encountered aside, what would the effects on Egypt be should south Sudan be granted independence? Before we can discuss that question further, an examination of the secession referendum and its likely result should be made. Will the south be allowed to vote for secession in 2011? If so, what is the probable outcome of such a referendum? Observers are uncertain about the answers to these questions.

In trying to answer the first question, some observers point out that the CPA is already subverted. For example, the SPLM gains control over some government ministries as agreed upon; but those ministries are the less powerful ones or split into smaller ministries than originally intended.266 Both strategies achieve the same goal: keeping the power of the country in the hands of the NCP. Observers also note that SPLA soldiers are treated differently than their northern counterparts: irregular salaries are not uncommon among the former guerrilla fighters, whereas the northerners enjoy the economic stability of punctual payments.267 Moreover, there are allegations that the NCP is arming – even creating – some smaller southern based militias to create internal fighting and instability in the south.268 The reason for this is to (i) create the impression that southerners are incapable of governing themselves, and (ii) ‘divide and rule’ the south so no common platform will exist come the


267 Ibid.

2011 referendum. Finally, there is the case of the mid-interim parliamentary elections that under the CPA are scheduled to occur before 2008. The recently approved interim constitution delayed the elections until 2009, which shows a lack of commitment to the CPA and elections in general. The postponement of the parliamentary elections is by some interpreted as a bad sign for commitment to the 2011 referendum.

On the other hand, observers are also pointing to the fact that the will to fight is slowly disappearing among northerners. Post-CPA, the north has been booming, attracting foreign investments like never before. In fact, Sudan is one of the fastest growing economies in Africa: it enjoys low inflation and a GDP growth of eight per cent in 2005 and further 13 per cent growth expected in 2006. With peace also bringing economic benefits to the people of Khartoum – because it is the capital alone that benefits from the economic growth – the violent struggle to stay united with the south seems to have lost its appeal. People want jobs, traffic lights and food rather than economic boycotts, fighting, and political isolation. Moreover, the fact that the mid-interim elections were postponed does not automatically mean that a referendum will not take place. The parliamentary election is a preparation for future unity and may not be desired by either party. The 2011 referendum, however, has an advantage because at least one of the parties currently in power, namely the SPLM, wants it to take place. It is telling that there have been little preparations for the 2009 national election – especially with regards to carrying out a national census needed to determine the number of eligible voters, whereas legislation to establish the Southern Sudan Population Census Council in preparation for the 2011 referendum has reportedly been drafted. It is nevertheless worrying that the NCP does not seem to be fully committed to the CPA. As the International Crisis Group points out, 'the NCP has the capacity to implement but lacks the

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269 Ibid.
273 By contrast, the southern capital of Juba still lacks basic infrastructure such as paved roads and reliable power. Without it even local trade proves difficult, let alone creating a sustainable economy. See Sudan Tribune, 'South Sudan Juba Dreams of Nile Boom-town Status' (4 September 2006), http://www.sudantribune.com/imprimable.php?id_article=17414, accessed 5 September 2006.
274 Sullivan, 'Sudan's Comprehensive Peace Agreement at One Year of Age,' 6.
political will, whereas the SPLM has the commitment but is weak and disorganised. In this respect we should also open up for the possibility of Egypt becoming more than a passive recipient of the CPA. As chapter three of this thesis showed, Egypt has always tried to influence leaders in Khartoum. It already knows that the NCP does not seem to be particularly interested in upholding the CPA and so could be tempted to promise monetary or military support in exchange for the NCP to abandon the agreement altogether.

The answer to the second question, will the south vote for independence given a chance, seems to be less complicated. Taking into account how the region has been treated by its northern neighbour throughout the years and that it is distinctly different from the north in terms of religion, tradition, and self-perception, suggests that a majority will want independence and self-determination. As one southerner explains, 'we tried unity for 50 years, but we failed. Our brothers in the north don’t respect our rights as brothers.' Archbishop Paolino Lukudu Loro agrees,

the northerners looked at us as slaves, they wanted to Arabise us and impose Islam on us who are mainly Christian people. If you are not equal it is very difficult to coexist.

Whether independence is a desirable solution compared to future unity with the north in exchange for real self-determination is a different matter, as the south lacks any real political experience or infrastructure and entire generations are lacking sufficient schooling, indeed many have none at all. That being said, which south that will become independent is another issue altogether. To date, the Abyei protocol is not being properly implemented; in fact the Abyei Boundaries Commission was rejected by the NCP. The rejection not only endangers the peace treaty as a whole, but might also be a step in re-defining the north-south border - a creative way of avoiding to give away strategically important natural resources.

For the rest of this thesis, let us assume, for the sake of argument, that the south will be able to have the referendum in 2011 and that they will vote for secession. How will a successful implementation of the CPA, something a fair and free referendum essentially will be, affect Egypt? Is there a reason for us to worry about Egypt’s reactions? The author would answer yes to the latter question and point out three areas that will affect Egypt: (i) an additional competitor for Nile water, (ii) the future of the Jonglei Canal, and (iii) the 1959 Nile water sharing agreement.

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276 International Crisis Group, ‘Sudan’s Comprehensive Peace Agreement’: i.
278 Ibid.
279 Nhial, ‘Khartoum is dishonouring the CPA’.
Should south Sudan become an independent state in 2011, the Nile basin states will go from eleven countries sharing the river’s water to twelve. Egypt (and to a lesser extent north Sudan) will feel the consequences of the additional competitor more than any other state in the basin. Most of the other basin countries are upstream from south Sudan and Ethiopia and Eritrea do not get any water from the White Nile, so they will not need to adjust their water usage. Egypt, by contrast, utilises more Nile water per annum than the rest of the basin states combined.\(^{280}\) A new state in the basin means another state Egypt has to negotiate with. And negotiating with any newly created state will be difficult until proper political structures are established in that state. Negotiating with a newly created state that sees Egypt as one of its exploiters from the past will be that much more difficult. The people of south Sudan will have a largely animist, Christian and African identity whereas Egypt will still be a largely Arab and Islamic country, which are the traditional ‘enemies’ of south Sudan. This ‘identity gap’ is not beneficial for Egypt should they have to negotiate with south Sudan over future water allocations.

However, attempts to establish diplomatic ties between Cairo and both Khartoum and Juba have already begun. In May 2006, a strategic meeting of the Supreme Committee for the Nile Water was held in Egypt chaired by the Prime Minister and attended by among others minister of defence, minister of irrigation and water resources, and Chief of Intelligence. The meeting discussed the latest Nile river basin developments and the irrigation minister suggested cooperation with Sudan to resume work on the Jonglei Canal.\(^{281}\) It did not take long to act on suggestions made at the meeting. Only three months later, on the 9 August 2006, a Memorandum of Understanding was signed between the Ministry of Irrigation of South Sudan Government and the Egyptian Ministry of Irrigation and Water Resources. The memorandum concerns rehabilitation of stations to measure rainfall in south Sudan.\(^{282}\) However, Cairo made sure to sustain the diplomatic contacts with Khartoum as well. In August 2006, the Sudanese minister of Irrigation and Water Resources met with his Egyptian counterpart while he was at a four day visit in Egypt. In addition to learning about water-management projects from the Egyptians, the meeting was also concerned about fostering bilateral cooperation in developing south Sudan water resources.\(^{283}\)

\(^{280}\) See Chapter 4, Section 4.1.2 of this thesis.
\(^{281}\) *Info – Prod Research* (Middle East), ‘Resuming Work at Jonglei Canal in Sudan’ (2 May 2006).
\(^{283}\) *Info – Prod Research* (Middle East), ‘Egyptian, Sudanese Talks on Developing Water Resources’ (7 August 2006).
Although all attempts at resolving potential disputes in a diplomatic manner are positive, we must look at the diplomatic connection between south Sudan and Egypt with cautious optimism: agreements do tend to be signed without proper intent to implement them in the region in question. Furthermore, rainfall monitoring, albeit a good start, is more scientific than political cooperation. It is not a promise of a diplomatic rather than a military response should there be a dispute over the allocation of Nile water between Cairo and Juba.

Interestingly, however, the memorandum also included reviewing studies on the Jonglei Canal. As would be clear by now, the future of south Sudan is highly relevant for the future of the Jonglei Canal. Granted, around 80 per cent of Nile water in Egypt originates outside of south Sudan. But, as we have seen, the greatest potential for increasing water supplies at Aswan lies in the completion of the Jonglei Canal. Scientific cooperation can have great importance as a basis for future economic and political cooperation that again can lead to regional security. The European Union (EU), for example, begun as the European Coal and Steel Community (ECSC), after World War II, designed to place the war materials of coal and steel under mutual supervision. Through several enlargement processes the organisation shifted into what it is today: a highly political international cooperation somewhere between a European federation and an organisation for international cooperation.

Some regional cooperation frameworks already exist in the Nile basin. Organisations such as the Nile Basin Initiative (NBI) and projects such as the Environment and Cooperation in the Nile Basin (ECONILE) represent a structure future cooperation could be built upon. Established in 1999, the former aims to create 'a regional partnership to facilitate the common pursuit of sustainable development and management of Nile waters' and is based on cooperation on the government level between all basin states except Eritrea. Since its creation, the organisation has enjoyed international support through the United Nations Development Program (UNDP), a support that would be crucial should NBI be used a starting point for the degree of regional cooperation needed to establish viable water sharing agreements in the Nile basin. As a supplement to the political Nile Basin Initiative, ECONILE represents a scientific approach for water developments. Also established in 1999, the project focused on scientific

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284 Eric Reeves, 'Egypt Celebrates Fifty Years of Independence for Sudan, January 3, 2006' (3 January 2006)

285 Pascal Fontaine, Europe in 12 Lessons (European Commission: Directorate-General for Communication, October 2006).

research, and thus was not intended to be a political or negotiating forum.\textsuperscript{287} Three workshops were held, gradually increasing the number of participants. The first one consisted only of two academics each from Egypt, Ethiopia, and Sudan, participating as experts rather than nationals. The third workshop on the other hand, also included at least one person from each country who was also involved in formal negotiations in NBI.\textsuperscript{388}

Both NBI and ECONILE have the potential to foster further cooperation between the basin states. However, Egypt and Sudan have a long way to go before they turn into Africa's answer to the EU. The ECSC was largely driven by political forces: for example, although coal and steel might have been as contested as water is today, there was a substantial amount of political will for the countries involved in the Second World War for the cooperation to take place. Indeed, the proposition of creating the collaboration came from the then French foreign minister Jean Monnet.\textsuperscript{389} And even if Egypt seems interested in cooperation with both Juba and Khartoum while Sudan is still a unified state, if south Sudan votes for and is granted, independence, Egypt will face an entirely new situation as the country harbouring the greatest potential for Nile development projects will be one that traditionally has felt no loyalty towards Egypt.

Another consideration is the hostility shown by the southerners towards the canal due to the severe effects its completion will have on the region and its inhabitants; there does not seem to be much hope of the canal being built in an independent south Sudan. Furthermore, the south has virtually no political experience and will need a long transition period before it is able to execute domestic political power. The canal was partly the reason for the outbreak of the second civil war, proving that there is great controversy connected to its construction. It takes strong governments to make unpopular domestic decisions and any new government in the south would be extremely cautious of approving the completion of Jonglei in fear of losing its position altogether or worse: throw the new state into civil war.

A different concern for Egypt is the 1959 agreement between Egypt and Sudan. As explained, the treaty is the only working agreement on Nile water in the river basin and even in times of great hostility between Cairo and Khartoum the agreement itself has been respected. Should Sudan become two states however, the agreement would most likely have to be renegotiated and have to include, not only a third but also a fourth party: south Sudan and Ethiopia. Ethiopia would welcome the opportunity to be part of renegotiating the 1959

\textsuperscript{287} Simon A. Mason, 'Are We Scorpions?: The Role of Upstream-Downstream Dialogue in Fostering Cooperation in the Nile Basin,' \textit{Mountain Research and Development} Vol 25, no 2 (May 2005): 117.

\textsuperscript{288} Ibid, 118.

\textsuperscript{289} Ibid.
agreement, as they have been trying to declare the agreement invalid for years. With two new states at the negotiating table and northern Sudan already in need of more water than it was originally allocated, the prospect for increased water allocations for Egypt are looking dim. This is a nightmare scenario for Egypt who is mostly concerned about maintaining, indeed increasing, its current water allocations to sustain a growing population.

A good indicator of Egypt's feelings towards an independent south Sudan is their behaviour in the process leading up to the signing of a peace treaty. Egypt was active in the process leading up to the signing of the CPA, but that does not mean that it was generally supportive of the idea of an independent south. Indeed, when it became clear that the Intergovernmental Authority on Development (IGAD, the East African regional organisation) countries were supportive of the southern demands for self-determination, Egypt (together with Libya) responded by launching a different peace initiative that did not include the option of independence or self-determination for the south, but would create a joint, transitional government for a unified Sudan.²⁹⁰ As we now know, the IGAD principle eventually won through, much to Egypt's disappointment.

The sudden support Cairo showed for the Khartoum regime seemed impossible only a few years earlier. Egypt had initially been pleased to see Bashir come to power, hoping it would be a similar regime to its own. The support was short-lived as Bashir proved to pursue an aggressive Islamist foreign policy corresponding with the domestic Islamisation of the Sudan. Furthermore, it was widely seen as a 'terrorist haven' and after the attempted assassination of Egyptian President Mubarak, relations between the two countries cooled.²⁹¹ However, after the September 11 terrorist attack, being accused of harbouring terrorists could have severe consequences so by 2002 Bashir had tuned down his aggressive foreign policy and begun to mend the broken relations with Egypt. Cairo realised that events were moving towards a peace agreement in the Sudan and that if it did not get involved, it could face a serious threat to its future share of Nile water.²⁹² It could be questioned whether Egypt is pursuing a policy of favouring a weak government in the Sudan, as weak governments will be easier to control directly or via support of rebel groups in opposition to the government. Nonetheless, Egypt benefits if there is peace within the borders of its giant neighbour, for without it there can be no further construction of the Jonglei Canal. There is thus a torn Egypt

²⁹¹ Ibid.
²⁹² Ibid.
supporting the peace agreement between north and south, while simultaneously, it would seem, hoping that a strong leader will emerge that can take control of both parts of the country and ensure that they stay united, at least on the map and in terms of control over water resources in the South.

5.3 Possible outcomes

How may an independent south Sudan affect Egypt and result in a further internationalised conflict in Sudan? Many have already noted that the conflict in Sudan along with other conflicts in the Horn of Africa, are all, in effect, regional.293 Study the history of the Horn and you might agree. Plagued by internal wars and poverty, the battlefields in one country have always depended upon who has had the support of its neighbours. In particular, we will now focus on Egypt’s possible actions in the Sudan. This is based on the potential that lies in the CPA to make south Sudan independent and thus lessen Egypt’s control over the Nile.294 There are two potential outcomes in 2011: south Sudan will become independent, or they will stay unified with the north, either with some degree of self-determination, or again forced into a union. Egypt again is faced with another two options after the referendum: it can accept the results, or intervene. The four alternatives are combined and summarised in figure 5.1.

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<th>Egypt’s options</th>
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<td>Accept (A)</td>
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<td>A2</td>
<td></td>
</tr>
<tr>
<td>Intervene (I)</td>
<td>I1</td>
<td>I2</td>
<td></td>
</tr>
</tbody>
</table>

Table 5.1: Possible scenarios

Option I2 in which the south remains united with the north and Egypt still intervenes seems highly unlikely. There would be no need for Egyptian intervention if the Egypt-friendly north Sudan remains in control of the Sudd. Old water agreements will remain as they are and there will be no need for Cairo to enter negotiations with another state over Nile water usage. That leaves us with three possible scenarios. Should south Sudan become independent and Egypt accepts the result (scenario A1), many observers would say the optimal result had been achieved. If nothing else, it would be a victory for democracy and diplomacy in a region more

293 See chapter 2, section 2.1 of this thesis for a further discussion on how any conflict can be said to be purely internal.
294 The other internationalising aspects of the conflict have not been forgotten, but discussing all of them in further detail would go far beyond the scope of this thesis.

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acquainted to military behaviour patterns, in that a highly political referendum opposed by a major regional actor is allowed to occur and the referendum is accepted by all parties. Scenario A1 would undoubtedly require close follow-up by the international community to make the alternative a favourable one for potential spoilers. Further foreign investment in the northern part of Sudan during peacetime (as well as the threat of an end to the foreign investment should the war re-erupt) and support for alternative water saving technologies for Egypt are some possible actions the international community could undertake to ensure that the most peaceful scenario wins through come 2011.

Option A2 could be achieved both peacefully and forcefully. For the Sudan to remain a unified state, Bashir could (i) allow the south a referendum and the southerners vote for further unity, or (ii) abandon the CPA and force the south to remain united with the north as Nimeiri did before him. If a unified Sudan really is what Bashir wants – along with the continued foreign investment in Khartoum, he needs to start making unity an attractive option for southerners and in extension of that treat southerners on an equal basis as northerners. A fallback to war would not be a lasting solution and the southerners have proved that they are willing and capable to fight until they get the freedom they desire. As a general rule, occupied people will outlast their occupiers through years of bloody wars. Regardless of how the NCP keeps Sudan a unified state, however, scenario A2 seems to be the optimal result for Egypt. Should northern Sudan succeed in keeping the southern part of its country under its jurisdiction, Egypt would not have to engage in a costly war of its own to avoid any changes in status quo with regards to Nile water allocations. That being said, for the Jonglei Canal to be completed there needs to be relative peace in the south. After all, the revival of the war in 1983 is what stopped the canal from being finished years ago.

Another possibility of scenario A2 is international intervention if Egypt arms northern militias to operate in the south, which ruins the chance of a free referendum in 2011. Egypt has not been afraid of promoting the unity of Sudan, nor expressing that a unified Sudan is their optimal goal. In September 2006, the Egyptian Foreign Minister stated that Egypt is willing to take part in rehabilitating south Sudan in order to maintain Sudan’s stability and unity.\(^{295}\) The likelihood of further Egyptian involvement to ensure that the south stays united with the north will be discussed below.

The worst result for all parties involved would be if scenario II came true. That would be one where the south is allowed an election, chooses to secede and Egypt intervenes to aid

\(^{295}\) *Info – Prod Research* (Middle East), ‘Foreign Minister Discusses Ways of Boosting Peace Achievement With the Southern Sudan Government’ (11 September 2006).
Khartoum and stop the secession, causing the conflict to become international. The scenario is one all actors presumably would like to avoid. However, it is not an unlikely result considering everything previously discussed: Egypt's growing population and water needs, the investments made in the Jonglei Canal, the previous statements made by Egyptian officials stating they will protect their water supplies with all necessary means. Add to that the fact that Sudan and Egypt already find themselves in a hydropolitical security complex – which lowers the threshold for intervention in another state's internal affairs – and the international community is left with a possibility it cannot afford to ignore.

Chapter 2 identified several reasons why a war in one country might be a threat to another country's water supplies and thus prompt them to intervene in the war, causing the war to become international. One of those reasons in particular seems to have validity in the case of Egypt and Sudan. The resolution of a civil war was noted as being uncertain because it raises the possibility of bringing new parties into government – parties that would have an interest in cutting off the water supplies to a downstream country, or at least have no specific interest in keeping old water agreements. This is, as we saw, in the previous chapter and the discussion of the CPA in the present chapter, very much the case in the Sudan. Furthermore, the referendum scheduled for 2011 has a parallel to the process that in 1956 led to the establishment of an independent Sudan instead of one united with Egypt. At that point Egypt also sought control over its southern neighbour. But, as Ashok Swain points out, Sudan has historically never been capable of representing a realistic threat to Egypt; it has not harboured the means to be so, because it has had a weak economy and has been internationally isolated. However, that has changed since the signing of the CPA and increased by the possibility of an independent south Sudan. The economy in Khartoum is growing faster than ever before and international isolation has decreased accordingly. Thus, the possibility of Egypt becoming involved in the process leading up to southern independence both by trying to gain diplomatic goodwill in the south as well as having a backup plan that involves Sudan going back to a state of war cannot be overlooked.

Even if an independent south Sudan only represents a potential threat to Egypt's water supplies (after all, it is not an undisputed fact that a south Sudan government will refuse all further development of the Jonglei canal), that potential threat may be all that is needed for Egypt to act pre-emptively. As Jan Hultin so correctly points out,

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296 Swain, 'Ethiopia, the Sudan, and Egypt': 692f.
297 See section 5.2 of this chapter.
it is not so much what Ethiopian governments - or other riparian governments for that matter - have done with regard to the waters of the Nile, but rather what they might be doing that is the cause of anxiety in Cairo. This potential threat is the basis of a very real fear that dictates much of Egypt's security policy.  

Hultin’s argument is substantiated by statements made by Egyptian officials who have gone far in expressing their desire to protect their water supplies at all costs. After signing the Camp David Accord in 1979 then President Anwar Sadat stated that ‘the only matter that could take Egypt to war again is water.' In 1990, The Egyptian Minister of State for Foreign Affairs, Boutros Boutros-Ghali, confirmed what Sadat had said eleven years earlier when he stated that ‘the next war in our region will be over water and not politics.’ He further added that ‘the national security of Egypt is in the hands of eight other African countries in the Nile Basin.’ He confirmed that the other Basin states have an upper hand when it comes to Egypt’s water supplies and left no doubt about how far Egypt would go should any of the other basin states seek to utilise the advantage. The current Egyptian president, Hosni Mubarak, has also spoken publicly about Egypt’s willingness to protect the Nile. In 1995, Hassan al-Turabi, then leader of the NIF in Sudan, threatened to stop Egypt’s water supply by redirecting the flow of the Nile. Mubarak answered Turabi in an interview with a Cairo newspaper shortly thereafter: ‘[t]hose who play with fire in Khartoum … will push us to confrontation and to defend our rights and lives.’ Four years later, in 1999, Mubarak publicly threatened to bomb Ethiopia if Addis Ababa built any dams on the Nile. It seems that if you are living by the Nile, playing with water will see you get burned.

The statements made by Egyptian officials and scholars do not mean that all the international community can do is sit back and wait for the bombs to fall over Juba in an international war over Nile water. Egypt, Sudan and the Nile do not exist in a vacuum and the hydropolitical security complex is not the only factor guiding Egyptian and Sudanese actions. The decisions made by the two countries will inevitably be influenced by other factors beyond the search for stable water resources. Domestic developments, such as the crisis in Darfur and global events, such as pressure from strategic international actors all play a part in decisions that may or may not lead to intervention. At present, Darfur and foreign oil interests in Sudan are the most pressing challenges facing the CPA and the actors in the region. Guided by

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300 Quoted in Tafesse, The Nile Question, 87.
301 Quoted in Swain, 'The Nile River Dispute': 685
302 Ibid.
substantial oil interests in Sudan. China recently made it clear that the UN Security Council would not send troops to Darfur as long as Khartoum did not ask for it. One of the few supporters of China’s protection of Khartoum’s Darfur policy is Egypt, which although it has expressed substantial concern over the situation in Darfur, also has underlined that UN forces should only be deployed with consent from the Khartoum government. Additionally, the United States has taken a strong stand for UN troops to be deployed in Darfur, thus dividing the Security Council and placing the conflict in a global context. However, considering events in Iraq and a stretched defence budget, the US is unlikely to take any unilateral action in Sudan. Nevertheless, even though there might be more imminent threats to the implementation process than competition over Nile water, there does need to be an awareness of the potential threat this competition represents. That way, incentives for cooperation rather than conflict can be constructed before violent conflict emerges.

The topic of the thesis ties in with broader questions: there seems to be a consensus that civil war settlements have a greater chance of success if regional actors’ interests are taken into account. And yet there is a gap between that theoretical consensus on one hand and the actual practice when peace agreements are being negotiated and implemented on the other. True, any peace negotiation is difficult enough even when only the immediately affected parties take part in the process, and to include a third or fourth party will only add to this. Nevertheless, the point of going through such a negotiating process is to create a viable peace agreement. If, by excluding strategic regional actors, the end result will be a peace agreement that will never be implemented, what is the point of going through the negotiating process in the first place? Especially in unstable regions, such as the Horn of Africa, which have experienced decades of wars and uprising, it is important that important regional players actually have an interest in a civil war settlement in a neighbouring country occurring. John Young points out that,

support by neighbouring countries for one another’s armed dissident’s dates almost from Sudan’s independence and is a critical element in regional relations. That knowledge must be applied to the ongoing peace process. Countries in regions that have gone through decades of inter- and intra-state wars already have a low threshold of supporting armed opposition groups to either see a government shift in neighbouring countries, or the end

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305 Young, ‘Sudan’s Changing Relations’: 1.
of other rebel groups seen as a threat to own interest, and we cannot expect it to be any different in the midst of a peace settlement. More importantly, we cannot afford to ignore this knowledge because it holds the key to a peace agreement’s success or failure in regions where a pattern of regional involvement in internal politics is prevailing.

The author is not suggesting that the interests of regional actors should be given priority over those of the conflicting parties, but if the text of a peace agreement in itself is conflicting with the national interest of a strong regional player the implementation process should include compensations for what the regional actors feel they are losing. Additionally, there should be a more comprehensive definition of security when such national interests are defined. Security threats do arise outside the military sector, and natural resources seem to be a big part of these new conflict patterns and security threats, something that should be reflected in any resolution phase.
6. Conclusion

This thesis focused on how the search for stable water access might have an impact on the implementation of the Comprehensive Peace Agreement in Sudan. Specifically, it argued that because of the possibility of increased water flow at the Aswan High Dam in Egypt, through development projects in south Sudan, Egypt is a potential spoiler for the implementation process. In turn, this risk of further internationalising the conflict – and peace process – between north and south Sudan.

It is clear from the theoretical framework that a state might be willing to interfere in another states’ internal affairs if it sees its national interest threatened. An examination of the different notions on what constitutes national interest concludes that a useful model is found in Barry Buzan’s idea of a multi-sectored definition. The national security of any given state, Buzan argues, consists of military security, political security, economic security, societal security, and environmental security. It is also clear that some countries’ primary security concerns are linked so close together that their national securities cannot be properly separated. The phenomenon was first noted by Buzan and referred to by him as a security complex. Such primary security concerns can consist of a substantial ethnic population divided between two states, a shared oil field, or an international river basin. In other words, in a situation where two separate sovereign states are tied together in a security complex, the threshold for interfering with the other state’s internal affairs is lower due to the substantial effect any actions in one country inevitably will have on the other country also part of the security complex. Due to the threat a civil war, in particular, poses on a shared natural resource, neighbouring countries of a warring state may interfere to protect its future access to the shared resources. In this way, natural resources can be a basis for an internationalisation of an internal war.

A shared river connecting the national securities of two countries is referred to by Michael Schulz as a hydro-political security complex and falls under the political, economic, societal, and environmental security sectors as described by Buzan. Water is the basis human life is built upon. Humans need around 100 litres per person per day to survive which is not a problem in northern parts of the world, but represents a massive challenge in the southern, and often poorer, parts. Around 1.3 billion people find themselves without access to clean water in these regions; it is not hard to understand why the leaders of the affected countries consider access to fresh water a national security concern.
In light of the theoretical conclusion, a detailed description of the history of the Sudan and the conflict between north and south emphasises the complexities of the conflict (or rather conflicts) within Sudan. The conflict has many internationalising factors (most notably refugees, oil, and weapons trade) threatening to shatter the peace agreement between north and south. The interests of external factors go all the way up to the UN Security Council as China, France, and Russia trade oil and weapons with the current Khartoum regime. It has been hard passing resolutions sanctioning the actions of the Bashir-regime due to the protection China in particular has offered Khartoum. A further investigation on whether this protection would continue if Khartoum abandons the CPA would be interesting to follow.

It follows that because the conflict is so complex, any resolution must be so too. South Sudan has hardly known peace and has been left out of any development, whereas the north has become richer and more developed, largely based on resources extracted from the south. This historical pattern of exploitation must be acknowledged and transformed in order for the conflict as a whole to come to a final end.

Focusing now specifically on the role of water, Egypt, and Sudan, a further detailed examination of the history between the two countries shows that the Nile has linked them together both historically and currently. Because of the need for both countries to provide water to growing populations, they form a hydropolitical security complex. Specifically, two water development programs have had an effect on the conflict in Sudan: the Aswan High Dam and the Jonglei Canal. The former led to the flooding of Nubia and the resettlement of between 50,000 to 80,000 Nubians within Sudan. The latter is expected to drain the wetlands of the Sudd, and the resistance among southerners towards the construction of that canal played a great part in the outbreak of the second civil war in Sudan.

The complexity of the relationship between Egypt and Sudan has had an impact on the implementation of the CPA. The former has expressed concern about the potential for an independent south Sudan. Independence would make completion of the planned Jonglei Canal less likely due to the historic resentment towards Egypt within south Sudan. Thus, because competition for Nile water does not exist in a vacuum, and although the CPA faces other and more imminent threats, the international community needs to be aware of the interests and actions of Egypt during those crucial years leading up to the south’s referendum in 2011. Acknowledging Egypt’s needs and interests in any settlement of the internal conflicts of the Sudan would increase the chances of success just as much as not considering Egypt’s interests would decrease it.
The international community should always remember the regional aspect of a peace treaty. If there is a regional resource at stake in a civil war settlement, the interests of other regional actors must be taken into account to ensure that an internal conflict does not turn into an international conflict. Although this thesis concerned itself on only one resource — that of water — and how Egypt’s interest in the water resources stored in south Sudan has the potential to further internationalise the conflict and its settlement in a particular way, other resources present in south Sudan, such as oil, will further complicate implementation process and represent another reason to involve other actors than the warring parties themselves in the peace process in order to create sustainable peace.

6.1 The Road Ahead
Finally, in the light of conclusions previously drawn, several points on the promotion of a non-violent path forward deserve consideration. Although Sudan and Egypt (as well as Ethiopia) are both interested, indeed depend upon, secure access to Nile water does not necessarily mean that war will arise between the countries over that access. If the actors themselves, as well as the international community, acknowledge the dependency and come up with water sharing solutions before the low-intensity conflict turn into a high-intensity conflict, war can be avoided. Ever since 1959, the Nile agreement between Egypt and Sudan has proven stable. That shows that both countries are aware of what is at stake. This awareness should be utilised to promote further cooperation. The worst possible scenario for Khartoum, Cairo and Juba is a war over the Nile, for it most likely will lead to less water for all. The destructive effect an international war in the region would have on all should be kept in mind as the critical reason for avoiding the outbreak of such a war.

As it is too late to include Nile water cooperation in the CPA itself, arrangement should be made outside the framework of the CPA but within already existing regional frameworks. The NBI was born out of a local concern over Nile water preservation and is, over time, more likely to create regional stability than would cooperation between the basin countries forced by actors outside the Nile basin. The NBI has been criticised for not going far enough to achieve its goal in the river basin, as well as dealing only with less controversial issues and avoiding those that will be harder to agree upon.\textsuperscript{306} However, because the organisation was a local initiative, it has local legitimacy that an internationally created organisation would lack. It is this legitimacy combined with a regional interest in preserving

the Nile that must be at the core of any water development programs aimed at preventing water wars from erupting. Furthermore, NBI can hardly be blamed for not starting out with the most controversial topics. It is based in a region that lacks democratic experience, and rather than criticising a regional initiative that is trying to change this pattern, the international community should show its support in order for the more contested topics to be dealt with further down the line.

Complementing political cooperation in the NBI should be initiatives such as ECONILE. Although these might seem like more talk than action, it is important in that it increases scientific cooperation across borders - cooperation that might result in the creation of new knowledge and technologies. Moreover, it allows for an open discussion where the resource itself rather than territorial borders are in focus; a focus that increases the possibility of creative solutions to evolve. Scientific progress can only happen when knowledge is being shared and made public. Such scientific research, therefore, should also enjoy support from the international community, perhaps most importantly international academics also concerned with the same questions in locations outside the Nile basin.

It is not only broad regional cooperation that is needed to prevent water wars in the Horn of Africa. Recognising that Egypt and Sudan are in a special position when it comes to utilisation of Nile water, bilateral relations between the two countries will be crucial leading up to the 2011 referendum. Most importantly, there should be immediate meetings about what to do should the south become independent. The peace agreement between north and south Sudan could be the starting point for renegotiating the existing water agreements in the Nile basin, already viewed as unfair by many of the basin states. Thus, Khartoum and Cairo must decide if the 1959 agreement then will become invalid, moderated, or stay the same should south Sudan become an independent state in five years. Furthermore, Cairo should start working with the southerners on a possible agreement over Jonglei. Included in this, could be creating incentives for the south to build a smaller version of the canal that would be less harmful to the local community and environment. Although not desirable for many living in south Sudan (as well as unrealistic and unethical by many observers), it might be the price they have to pay in order to ensure peace, stability, and even independence, in the future. And, again, the international community must be ready to help in order for the parties to feel that their concerns are taken seriously. Lastly, Cairo must prepare itself for a 'worst case scenario': an independent south Sudan that has no interest in further construction on Jonglei. They should, in short, start looking for alternative water saving strategies and technologies.
That way, the river Nile can act as a stabiliser in the region, rather than a source of future conflict.
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