

WATER RESOURCES IN THE SUDAN NORTH-SOUTH PEACE PROCESS: PAST EXPERIENCE AND FUTURE TRENDS

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1. Introduction

On 9 January 2005, the Government of the Republic of the Sudan and the Sudan People's Liberation Movement/Sudan People's Liberation Army (SPLM/SPLA or SPLM/A) signed, after lengthy and complex negotiations, the Comprehensive Peace Agreement (CPA).¹ The negotiations process that led to the conclusion of the CPA started in 2002, and lasted for close to three years. During those years a series of separate protocols and agreements were incrementally and painstakingly negotiated, and gradually agreed upon. They were later consolidated and signed as the CPA.

The conclusion of the CPA is, no doubt, a watershed and a defining moment in the history of the Sudan. It brought to an end a devastating civil war that started in August 1955, a few months before the Sudan became independent in January 1956, and it put in place radical political structures for the division of power and wealth between the two parts of the country. More importantly, and indeed significantly, the CPA recognized, for the first time, the right of the people of

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¹ For the full text of the CPA, *see*: (<http://www.sudanarchive.net/cgi-bin/sudan?a=q&fqc=and&fqf=TX&fqv=CPA&txq=CPA>).

Southern Sudan to self-determination. Although an earlier agreement to end the civil war was concluded in 1972 in Addis Ababa, Ethiopia, that agreement granted the South limited regional autonomy only.² Implementation of the agreement faced a number of difficulties, as well as major and successive breaches by the government in Khartoum, which led to its final collapse in 1983. The SPLM/A was established that year and led the renewed civil war, and thereafter the negotiations process that culminated in the conclusion of the CPA in 2005.

The CPA, as its name indicates, is a fairly wide-ranging agreement. It consists of a Chapeau, six separate protocols and agreements, and two annexure, and spans over close to 250 pages. It even includes a table of contents and more than five pages of a list of abbreviations. The CPA was signed by the then First Vice President of the Republic of the Sudan, and the Chairman of the SPLM/A. It was witnessed by envoys of thirteen countries and organizations including the then presidents of Kenya and Uganda, and representatives of Egypt, Italy, the Netherlands, Norway, the United Kingdom, the United States of America, as well as the African Union, the European Union, the Inter-Governmental Authority on Development (IGAD),³ the Arab League, and the United Nations. This wide range of participation in the process testifies to the importance the world community has ascribed to the CPA, and to the peaceful resolution of the conflict in the Sudan. It should also be added that the main undertakings under the different protocols and agreements of the CPA have been duly reflected in the Interim National Constitution of the Republic of the Sudan

² For the full text of “The Addis Ababa Agreement on the Problem of Southern Sudan” *see*: (<http://www.splamilitary.net/documents/THE%20ADDIS%20ABABA%20AGREEMENT.pdf>). The Agreement was concluded on 12 March 1972, between the Government of the Democratic Republic of the Sudan, and the Southern Sudan Liberation Movement.

³ IGAD is a regional organization consisting of the East African countries of Djibouti, Eritrea, Ethiopia, Kenya, Somalia, Sudan and Uganda. The vision of IGAD is to achieve peace, prosperity and regional integration in the IGAD region. For more details about IGAD, *see*: (<http://www.igad.org/>).

(the Interim Constitution) that was adopted on 6 July 2005, six months after conclusion of the CPA.⁴

This article will briefly review the main aspects of each of the different protocols and agreements under the CPA, discuss how water resources have been addressed by the CPA, and analyze the reasons for that. The article will then examine the past experience with the management and development of the Nile waters in Southern Sudan, and identify future trends.

2. Protocols and Agreements under the CPA

As indicated earlier, the CPA consists of the Chapeau, six protocols and agreements, and two annexure, one on the implementation modalities of the ceasefire, and the other on the implementation modalities of the other five agreements.

The Chapeau of the CPA recorded the long and continuous negotiations process that went on between May 2002 and December 2004 in Karen, Machakos, Nairobi, Nakuru, Nanyuki and Naivasha,⁵ all in Kenya, under the auspices of both the IGAD Peace Process and the Government of Kenya.⁶ It indicated that the conflict in the Sudan was the longest running conflict in Africa, and that it has caused tragic loss of life, destroyed the infrastructure of the country, eroded its economic resources and caused suffering to the people of the Sudan. It confirmed that peace, stability and development are aspirations shared by all the people of the Sudan. The Chapeau underscored that the successful implementation of the CPA would provide a model for good governance, and would help make unity attractive. It stressed the

⁴ For a copy of the Interim National Constitution of the Republic of the Sudan 2005 see: (http://www.mpil.de/shared/data/pdf/inc_official_electronic_version.pdf).

⁵ Aside from the Machakos Protocol, the remaining five main agreements of the CPA were concluded at Naivasha, although the negotiations might have been carried out at another location. That is why the CPA is usually referred to as the "Naivasha Agreement."

⁶ Kenya played a major role in the negotiations process. It appointed General Lazaro Sumbeiywo as a mediator under the IGAD Peace Process. For a description of the negotiations process in each of these venues and the role of General Sumbeiywo, see Waihenya W., *The Mediator – Gen. Lazaro Sumbeiywo and the Southern Sudan Peace Process* (Kenway Publications 2006).

need for full adherence to the letter and spirit of the CPA to guarantee lasting peace, security for all, and justice and equality in the Sudan.

The first agreement under the CPA was concluded on 20 July 2002, and is entitled “The Machakos Protocol.” The Protocol started by stating in Paragraph 1.1 that

“The unity of the Sudan, based on the free will of its people democratic governance, accountability, equality, respect, and justice for all citizens of the Sudan is and shall be the priority of the Parties and that it is possible to redress the grievances of the people of South Sudan and to meet their aspirations within such a framework.”

Yet, paragraph 1.3 hastened to aver “that the people of South Sudan have the right to self-determination, *inter alia*, through a referendum to determine their future status.” The Protocol went further and indicated that at the end of the six year interim period,⁷

“there shall be an internationally-monitored referendum, organized jointly by the Government of the Sudan and the SPLM/A, for the people of the South Sudan to confirm: the unity of the Sudan by voting to adopt the system of government established under the CPA, or to vote for secession.”⁸

The conclusion of this Protocol was a remarkable breakthrough, and its adoption paved the way for the continuation of the negotiations process and the conclusion of the subsequent agreements. A separate part on “Southern Sudan Right to Self-Determination,” reflecting this Protocol, is included in the Interim Constitution. In addition, the Interim Constitution requires the National Legislature to issue the Southern Sudan Referendum Act by the beginning of the third year of the interim period, and to subsequently establish the Southern Sudan Referendum Commission.⁹ Furthermore, it states that the referendum

⁷ According to Article 226 of the Interim Constitution, the interim period would start on 9 July 2005. The period falling between the signature of the CPA and the beginning of the interim period (i.e. between January and July 2005) is called “the pre-interim period.” Adoption of the Interim Constitution was the main task accomplished during the pre-interim period.

⁸ See paragraph 2.5 of the Machakos Protocol.

⁹ See Part Sixteen, Article 220 of the Interim Constitution. Article 221 deals with the establishment of an independent Assessment and Evaluation Commission to monitor implementation of the CPA during the interim period.

shall take place six months before the end of the six year interim period; that is by January 2011.¹⁰ As a result, the Protocol has set in motion an extensive national debate over the unity of the country or secession of Southern Sudan; a debate that would dominate the entire interim period of six years.

The second Agreement was concluded on 25 September 2003, more than a year after the Machakos Protocol, and dealt with Security Arrangements. The Agreement confirmed the existence of two separate and equal armed forces during the interim period: the Sudanese Armed Forces (SAF), and the Sudan People's Liberation Army (SPLA); with both forces considered and treated equally as Sudan's National Armed Forces. It included detailed provisions on an internationally-monitored ceasefire between the two forces which would come into effect upon the signature of the CPA. It is worth adding that a *de facto* ceasefire gradually evolved some months after the conclusion of the Machakos Protocol which the Agreement on Security Arrangements confirmed, elaborated and codified. The Agreement also included detailed provisions on the disengagement, redeployment, and mission and mandate of each of the two forces, and the composition and authority of the joint integrated units established from within the two forces of SAF and SPLA.

On 7 January 2004, a year and half after the Machakos Protocol, and four months after the Agreement on the Security Arrangements, the two parties concluded the third agreement under the CPA on "Wealth Sharing." The main areas addressed under this Agreement are land and natural resources, and oil resources. The Agreement included detailed provisions on the establishment and mandate of a National Land Commission, a Southern Sudan Land Commission, a National Petroleum Commission, a Fiscal and Financial Allocation and Monitoring Commission, and an Oil Revenue Stabilization Account. Other areas addressed under this Agreement included guiding principles for sharing oil revenues and non-oil revenues. The Agreement specified a fixed percentage of the revenue from the oil in Southern Sudan for each of the National Government, the

¹⁰ See Article 222 of the Interim Constitution.

Government of Southern Sudan (GoSS), and the oil producing states in the South.¹¹ The Agreement also dealt with monetary policy, banking, currency and borrowing, and the establishment and operation of the multi-donor trust funds.

It is worth mentioning that the Agreement on Wealth Sharing does not address water resources, despite the detailed provisions on land and natural resources. Water resources are briefly addressed under the fourth agreement on “Power Sharing” concluded on 26 May 2004, as will be discussed in the next part of this chapter. The Power Sharing Agreement laid down in detail basic principles on governance and human rights and fundamental freedoms, including freedom of thought, conscience and religion, and freedom of expression, assembly and association. The Agreement called for a decentralized system of government with significant devolution of powers to Southern Sudan, the states and local level governments, and set forth the structure and institutions of the government at the national and Southern Sudan levels, as well as the state level. The Agreement included four schedules dealing respectively with the National Powers, Powers of the Government of Southern Sudan, Powers of States, and Concurrent Powers.¹²

Two more agreements were concluded on 26 May 2004. The first one dealt with “The Resolution of the Conflict in the Two States of Southern Kordofan and Blue Nile.” Those two states are geographically part of Northern Sudan, but are inhabited by people who identify culturally and ethnically more with Southern Sudan than with the North. The Agreement stated that the diverse cultural heritage and local languages of the population of these states shall be developed and protected. It underscored the need for the development of human resources and infrastructure of the two states, and it set up

¹¹ The Wealth Sharing Agreement stipulates that the revenue from the oil in Southern Sudan would be divided equally between the National Government and the Government of Southern Sudan, after deduction of a certain amount for the Oil Revenue Stabilization Account, and 2% for the oil producing states or regions.

¹² In December 2005, the Government of Southern Sudan adopted “The Interim Constitution of Southern Sudan 2005.” For a copy of this Constitution, *see*: (http://www.chr.up.ac.za/undp/domestic/docs/c_SouthernSudan.pdf).

special local structures, with large powers devolved to them, for achieving these objectives.

The other agreement concluded on 26 May 2004, dealt with “The Resolution of the Abyei Conflict.” This was the third agreement to be concluded on that date, and the sixth one under the CPA. The agreement is also known as the Abyei Protocol. Abyei is an area that was transferred from Southern Sudan to the North. The Protocol sets forth arrangements for delimiting the boundaries of the area, and for a referendum for determining its future, as will be discussed in part VI of this chapter.

On 31 December 2004, two annexure on the implementation modalities of those six agreements were concluded. The first of the two annexure dealt with “Permanent Ceasefire and Security Arrangements Implementation Modalities and Appendices,” and the other with “Implementation Modalities and Global Implementation Matrix and Appendices” for the other five agreements. Each of them laid down detailed provisions on the implementation arrangements, including the timing, executing body/authority, composition of such body, funding sources, and procedures and process. The adoption of these two annexure brought to a successful conclusion the arduous and lengthy negotiations process that spanned for almost three years, and paved the way for the signature of the CPA on 9 January 2005, less than ten days later.

Thus, the CPA has covered, aside from the ceasefire and the right of self-determination for the people of Southern Sudan, wide and extensive areas of governance principles, power, as well as wealth, land and natural resources, and oil; and the structures for managing and sharing them during the interim period. As indicated earlier, the Interim Constitution of the Republic of the Sudan of 2005 was issued to reflect and incorporate the basic undertakings under the CPA, replacing the 1998 Constitution. Indeed Article 225 of the Interim Constitution itself states that

“The Comprehensive Peace Agreement is deemed to have been duly incorporated in this Constitution; any provisions of the Comprehensive Peace Agreement which are not expressly incorporated herein shall be considered as part of this Constitution.”

This Article of the Constitution attests clearly to the comprehensiveness and authority of the CPA, and comes very close to recognizing the supremacy of the CPA over the Interim Constitution.

3. Water Resources under the CPA

As mentioned earlier, it is the Power Sharing Agreement, rather than the Wealth Sharing Agreement, that included provisions on water resources. Paragraph 33 of Schedule A of the Power Sharing Agreement on national powers, which is reiterated as paragraph 33 of Schedule A of the Interim Constitution, places exclusive competency of the National Government on

“Nile Water Commission, the management of the Nile Waters, transboundary waters and disputes arising from the management of interstate waters between Northern states and any dispute between Northern and Southern states.”

Paragraph 9 of Schedule B of the Power Sharing Agreement which is also reiterated as paragraph 9 of Schedule B of the Interim Constitution lists the powers of the Government of Southern Sudan. These powers include the co-ordination of Southern Sudan services or the establishment of minimum standards or uniform norms in a number of areas including provision of water and waste management services. The powers also include, under paragraph 19 of said Schedule, natural resources and forestry, as well as disputes arising from the management of inter-state waters strictly within Southern Sudan.

Accordingly, the CPA and the Interim Constitution have set forth a clear division of responsibilities over water resources between the National Government and the Government of Southern Sudan. All of the issues related to the Nile waters are placed within the exclusive jurisdiction of the National Government. This is notwithstanding the fact that a large part of the Nile falls within Southern Sudan. Indeed, almost all of the important tributaries of the White Nile, including the Sobat River, either originate, or join the river there. These tributaries include Bahr el Arab (also known as the Kiir River), Bahr el Ghazal, Bahr el Zeraf, Lol, Yei, Jur, Tonj, and Naam rivers, in addition to

Bahr el Jebel. The Jur and Bahr el Arab merge to form Bahr el Ghazal, after having been joined by the Lol River. Bahr el Ghazal joins Bahr el Jebel at Lake No, and thereafter the river is called the White Nile. It is subsequently joined by Bahr el Zeraf. The White Nile contributes about 14% of the total flow of the Nile River. Bahr el Jebel itself has its origins in Lake Victoria where, upon exit, it is called Victoria Nile. It becomes Albert Nile after exiting from Lake Albert, and once it crosses into the Sudan it is named Bahr el Jebel.

The Sobat River originates in Ethiopia as the Baro and Okobo rivers. It is joined by the Pibor River which originates within Southern Sudan, and the Sobat River thereafter flows there for large stretches before joining the White Nile. The combined river continues with the name “the White Nile,”¹³ and flows for a considerable distance within Southern Sudan before entering Northern Sudan, and later on merging with the Blue Nile.

The Blue Nile and its tributaries, including the Rahad and Dinder rivers, rise in the Ethiopian highlands. Upon their confluence at Khartoum, the White Nile and the Blue Nile form the Nile River.¹⁴ The Nile River is joined after that, still in Northern Sudan, by the Atbara River which also originates in the Ethiopian highlands. The Atbara River is the last tributary to join the Nile which thereafter flows through Northern Sudan and Egypt before emptying into the Mediterranean Sea.

The Sobat River also contributes about 14% of the Nile waters, thus bringing the total flow of the White Nile to about 28% of the total Nile waters. The remaining 72% of the flow of the Nile comes from

¹³ Some of the books and maps consider the White Nile as starting after the confluence with the Sobat River. Others call the entire river from Lake Victoria to Khartoum “the White Nile,” while a third group considers the White Nile as starting after the confluence of Bahr el Ghazal and Bahr el Jebel. The latter approach, which the author subscribes to, comports with most of the literature on the Nile and helps in distinguishing the White Nile with its Equatorial Lakes origin, and the Sobat River that flows from Ethiopia. Yet, the author also subscribes to the use of the name “White Nile” to describe in a generic sense the whole river from Lake Victoria to Khartoum.

¹⁴ For a detailed account of the political geography of the Nile, see Collins R., *The Nile*, Yale University Press, 2002.

the Blue Nile (59%), and the Atbara River (13%).¹⁵ Accordingly, the Ethiopian plateaus are the origin of about 86% of the waters of the Nile, while the Equatorial Lakes contribute about 14% of the total flow of the Nile River.¹⁶ It should be clarified, however, that despite the high contribution of the Blue Nile, its peak flow is largely seasonal, concentrated mostly in the months of June through September. On the other hand, the relatively smaller contribution of the White Nile is mostly steady throughout the year, and accordingly provides the critical water needs of Sudan and Egypt during the low flow period of the Blue Nile. Thus, the two rivers, through their unique flow synergies, actually complement each other, and provide for a perennial river in Sudan and Egypt. It should also be added that the Blue Nile is quite heavy with silt that it carries over from the Ethiopian highlands, whereas the White Nile is almost silt-free.

Egypt and Sudan concluded an Agreement for the full utilization of the Nile waters in November 1959.¹⁷ The Agreement sanctioned the construction of the Aswan High Dam in Egypt, and the Roseiris Dam on the Blue Nile in the Sudan. The Agreement established the total annual flow of the Nile measured at Aswan as 84 Billion Cubic Meters (BCM) and allocated 55.5 BCM to Egypt, and 18.5 BCM to the Sudan. The remaining ten BCM represent the evaporation losses at the large reservoir extending below the Aswan High Dam in southern Egypt and northern Sudan. To ensure technical co-operation in carrying out the necessary studies and research in connection with projects for the Nile control, for increase of its supply and for the continuation of hydrological survey work of the Nile in its upper reaches, the Agreement established the Permanent Joint Technical

¹⁵ For these figures and more details on the Nile, see Waterbury J., *The Nile Basin – National Determinants for Collective Action*, Yale University Press, 2002, p. 128.

¹⁶ Assuming that the total annual Nile flow measured at Aswan is 84 billion cubic meters (BCM) as indicated in the 1959 Agreement between Egypt and Sudan (*see infra* n. 17), the Nile waters flowing from Southern Sudan (the White Nile including the Sobat) would be about 23 BCM, while the Blue Nile flow would be about 61 BCM. The Ethiopian plateau would be the source of about 72.5 BCM, with 11.5 BCM originating from the Equatorial Lakes.

¹⁷ See Agreement between the Republic of Sudan and the United Arab Republic for the Full Utilization of the Nile Waters, signed on 8 November 1959, 453 *U.N.T.S.* 64 (1963).

Committee composed of an equal number of members from both countries.¹⁸

The Agreement included provisions on the water losses in the vast swamps and flood areas known as the Sudd (barrier) extending around Bahr el Jebel and Bahr el Zeraf, and also the Bahr el Ghazal swamps,¹⁹ as well as the marches of the Sobat River (known as the Machar marches), and the need for conservation and use of such waters. Because of these swamps, a large amount of water from these rivers does not reach the main river, and is lost to evaporation and transpiration. The water losses at the Sudd and Bahr el Ghazal swamps are estimated to be in the range of 15 BCM annually, or more than 50% of the entire flow of the White Nile. Additionally, about five BCM are also lost at the Machar marches of the Sobat River. Under the Agreement, the two parties would carry out projects for bypassing these swamps and conveying the water straight to the main river, for the purpose of increasing the flow of the Nile, and making such waters available for their use. The benefits and costs of such projects would be shared equally between the two parties. The Agreement gave Egypt the right to undertake the works by itself if it is determined that it needs such water before the Sudan does. When the Sudan is ready to make use of its share according to the agreed program, the Sudan shall then reimburse Egypt of its share in the cost of such works. Part V of this chapter will discuss in more detail the Jonglei Canal project that was planned to drain part of the Sudd. Thus, the Sudd and other swamps and marches of Southern Sudan have been viewed by Egypt and Northern Sudan as one major source for additional waters for the Nile.

It is worth noting that Paragraph 33 of the Power Sharing Agreement does not make an explicit mention of groundwater shared between the North and the South of the Sudan. Nevertheless, the term “transboundary waters” in that paragraph can be interpreted to mean

¹⁸ As a follow-up to the 1959 Agreement, the two parties signed on 17 January 1960, the “Protocol Concerning the Establishment of the Permanent Joint Technical Committee.” See *U.N.L.S. B/12 (International Rivers)*, p. 143.

¹⁹ Some maps and books on the Nile consider the Bahr el Ghazal swamps as part of the Sudd. This chapter followed the approach that distinguishes between the two swamps based on the source of their waters.

both surface and groundwater. Indeed, a number of groundwater basins fall across the borders between the North and the South, largely fed and replenished by the White Nile and its tributaries. The Upper Nile Basin is one such shared aquifer. However, technical knowledge and data about these basins is, at best, quite limited, and the borders between the North and the South are still to be demarcated. Additionally, there is limited use of groundwater resources by the agro-pastoral communities in the South. It should also be added that grazing and other traditional rights are claimed by some Northern tribes in areas in Southern Sudan, or in areas that may fall there when the borders are finally demarcated. Examples of such rights include those of the Misseriya tribe in and around the Abyei area, as will be discussed in part VI of this chapter. Those grazing and other traditional rights are, in the ultimate analysis, really about water rights.

As discussed earlier, the CPA has paid considerable attention to land and natural resources. It established national and Southern Sudan land commissions, and laid down detailed provisions for resolution of land disputes. The Abyei dispute itself relates, in a general way and on the face of it, to land that was transferred to Northern Sudan, and which has finally been delimited by the PCA, and awaits a referendum by its citizens as to which part of the country the area will be part of. More detailed provisions are included in the CPA on oil resources and revenues, including those of the Abyei area. A National Petroleum Commission is established and specific revenue sharing provisions between the National Government, Government of Southern Sudan, and the oil producing states are included in the CPA. In fact there are even provisions on access to a limited number of representatives of the SPLM to all existing oil contracts.²⁰ Similarly, there are provisions for sharing non-oil revenues.

With all these details on oil, land and natural resources, it may seem surprising that the CPA did not address water resources with similar provisions. Indeed, as mentioned earlier, the only provisions addressing the Nile waters have vested responsibility on these issues exclusively on the National Government. This is notwithstanding the

²⁰ See paragraph 4.1 of the Wealth Sharing Agreement.

size of the Nile Basin in Southern Sudan, and the fact that the only thought-about projects for augmenting the waters of the Nile, starting with the Jonglei Canal project, fall mostly in Southern Sudan. Actually, the Jonglei Canal project itself was one of the first targets of the military activities of the SPLA following its establishment in 1983, as will be discussed later in this chapter. The specific allocations of the oil revenue and the establishment of the National Petroleum Commission have uncovered and highlighted the absence of similar specific water allocation from the Sudan's share for Southern Sudan. They have also highlighted the absence of representation of the Southern Sudan in the Permanent Joint Technical Committee established by Egypt and the Sudan under the 1959 Nile Waters Agreement. As discussed above, this Committee is entrusted, *inter alia*, with the Nile projects, including projects affecting the swamps of Southern Sudan. Thus, the entire responsibilities for the Nile waters have been vested by the Power Sharing Agreement of the CPA on the National Government despite the large number of tributaries of the Nile flowing in Southern Sudan, and despite the fact that the projects involving augmentation of its flow fall there.

4. Southern Sudan and the Hydro-politics of the Nile Basin

Given the size of the Nile Basin in Southern Sudan and the fact that most of the projects that would augment the flow of the Nile fall there, questions were raised as to why the SPLM decided not to have an explicit and active role in the sharing and management of the Nile water resources with the National Government during the interim period, as happened with oil, land and other natural resources. Similarly, questions were raised as to why the SPLM did not demand representation in the Nile Permanent Technical Joint Committee, or at least a say in its proposed projects in Southern Sudan. In my view there are two main reasons for this decision.

The first and main reason relates to the controversies and disagreements which surround the Nile Basin. The 1959 Agreement, as discussed earlier, is a bilateral agreement which allocated the entire flow of the Nile waters at Aswan to Egypt and Sudan, thus effectively

excluding all the other eight Nile riparians.²¹ This Agreement has been vehemently opposed and criticized by those riparians. Egypt and Sudan continuously stress their historic and existing uses and rights, and aver that those uses and rights are protected under international law, and are not negotiable. The other riparians, on the other hand, assert their claims to an equitable and reasonable share of the Nile waters, and also invoke international law to support their claims. They emphasize that almost the entire flow of the Nile originates within their territories and that they are entitled to use part of that flow. Colonial era treaties, particularly the 1929 Agreement, also create other thorny issues,²² defended and avowed by Egypt, while the other riparians have declared that they are not bound by them because they were not parties to such treaties in the first place. The complexity of the Nile situation manifests itself in the failure, thus far, of the Nile riparians to reach an agreement on an inclusive Cooperative Framework Agreement, more than ten years after the start of the facilitative efforts under the Nile Basin Initiative (NBI) in 1999.²³

The leaders of the Southern Sudan were keenly aware of these acute problems and controversies.²⁴ They must have realized that the right of self-determination which the SPLM/A has gained could be at risk if it were to be jumbled with the Nile politics because of the

²¹ The other eight Nile riparians are Burundi, Democratic Republic of Congo, Eritrea, Ethiopia, Kenya, Rwanda, Tanzania and Uganda.

²² For further discussion of these issues, see Garretson A.H., Hayton R.D. & Olmstead C.J. (eds.), *The Nile Basin*, in *The Law of International Drainage Basins*, Oceana Publications, 1967, p. 270.

²³ The NBI was established by the Nile Council of Ministers of Water Affairs in 1999, bringing together for the first time the ten riparian states. It is guided by a shared vision “to achieve sustainable socio-economic development through equitable utilization of, and benefit from, the common Nile Basin water resources.” For more on those issues, and the failure of the Nile Basin countries, thus far, to reach an agreement on the Nile Cooperative Framework Agreement, see: (http://www.nilebasin.org/index.php?option=com_content&task=view&id=13).

²⁴ As will be discussed in the next part of this chapter, the late Dr. John Garang, the leader of the SPLM/A, wrote his doctorate dissertation on the Jonglei Canal, with a lengthy discussion of the Nile; see *infra* n. 40. One of Garang’s closest advisers, Dr. Mansour Khalid, also wrote his doctorate dissertation on *Le régime international des eaux du Nil* (Thèse, Paris Université, Faculté de droit et des sciences économiques, 1966).

wariness of the other riparians of the emergence of an eleventh riparian for the Nile Basin. They were also aware that Southern Sudan occupies a considerable area of the Basin. As indicated earlier, about 28% of the Nile waters flow from Southern Sudan to Northern Sudan and then to Egypt. As mentioned before, the Jonglei canal, and the other canals that would drain the Sudd, the Bahr el Ghazal swamps, and the Machar marches, and augment the flow of the Nile, all fall in Southern Sudan.

The birth of a new riparian would be seen by some riparians as another complicating factor to the already complex situation within the Nile Basin, and thus may not be welcomed by some of the Nile riparians. The Organization of African Unity (OAU), as well as its successor, the African Union (AU), have both opposed secessionist movements within the Continent, and have repeatedly called for respect and deference to the colonial era boundaries. Injection of international waters in the Southern Sudan intricate debate would have most likely complicated the situation for the SPLM/A with the other Nile riparians. Given these pressing circumstances, it would have been unwise for the SPLM to inject itself in the Nile controversies by demanding a share of the Nile waters, or by asking for representation in one of its institutions. Demanding one or the other could be interpreted by the other riparians as a sign of determination by the Southern Sudan to play a role in the Nile, even before secession. Perhaps because of those concerns, the SPLM decided not only to leave the Nile waters out of its mandate, but to make it explicit in the CPA that the Nile waters fall within the exclusive responsibilities of the National Government. By following this approach, the SPLM has allayed the fears of the other Nile riparians and made it less difficult for them not to oppose self-determination for Southern Sudan.

The second reason relates to the absence of any irrigation projects in Southern Sudan that would require abstraction of the Nile waters. In fact, the large projects that use a good part of Sudan's share of the Nile waters under the 1959 Agreement are all in the North. The Gezira Scheme in central Sudan is the largest user of the Nile waters, averaging annually about 8 BCM, more than 40% of Sudan's share. Other projects include the Rahad Project, the New Halfa Scheme, the Suki Scheme, the White Nile and Blue Nile Pumps Schemes, and the

Kenana Sugar Scheme. Despite the large number and size of these projects, the Sudan has still not used all its share of 18.5 BCM allocated under the 1959 Agreement. Its average use has ranged between 14 and 16 BCM annually. On the other hand, the few agricultural projects in Southern Sudan such as the Nzara (or Anzara) Agro-industrial Project, Tonj Kenaf factory, Melutt and Mongalla Sugar projects, Wau Brewery factory and Malakal Pulp and Paper project were either not completed, or are in need of major rehabilitation.²⁵ Hence, due to the unequal development of the two parts of the country, the water needs of Southern Sudan are currently quite limited. As a result, there has been no need to invoke the second part of paragraph 33 of Schedule A to each of the CPA and the Interim Constitution vesting on the National Government the authority over "... transboundary waters and disputes arising from the management of interstates waters between Northern states and any dispute between Northern and Southern states." It should also be added that, even if the incomplete and non-performing projects in the South were to be completed and/or rehabilitated during the interim period, there could still be available Nile waters from the Sudan's share for these projects. Moreover, the June to October rains help, for the time being, in sustaining the limited subsistence agro-pastoral activities by the local communities in the South during that period.

These are perhaps the reasons as to why the SPLM left responsibility for the Nile waters during the interim period to the National Government. However, if Southern Sudan opts for secession in 2011, then water resources are certain to be one of the areas that would come up for delicate negotiations. With a large part of the Nile Basin flowing within Southern Sudan, and with the projects for augmentation of the Nile flow falling there, the SPLM could be in a relatively good negotiating position.

²⁵ For a discussion of the problems affecting those projects, see Yongo-Bure B., *Economic Development of Southern Sudan*, Chapters 3 and 4 (University Press of America, 2007).

5. The Jonglei Canal Project

Describing the Sudd of Southern Sudan, Alan Moorehead wrote: “There is no more formidable swamp in the world than the Sudd. The Nile loses itself in a vast sea of papyrus ferns and rotting vegetation... This region is neither land nor water. Year by year, the current keeps bringing down more floating vegetation and packs it into solid chunks perhaps twenty feet thick and strong enough for an elephant to walk on. But then this debris breaks away in islands and forms again in another place, and this is repeated in a thousand indistinguishable patterns and goes on forever.”²⁶

The Sudd area varies in size between 30,000 to 40,000 square kilometers, and could extend to double that size during the wet season, making it one of the largest wetlands in the world. As discussed earlier, large quantities of water in the Sudd are lost to evaporation and transpiration. Furthermore, and as a result of these thick and huge vegetations over vastly spreading swamps, navigation through the Sudd area has been quite difficult. The explorers of the White Nile during the second half of the nineteenth century suffered enormously when passing through the Sudd region looking for the sources of the Nile. They left behind detailed accounts about the Sudd which the Anglo-Egyptian colonial administration of the Sudan that established itself in 1898, took note of.²⁷ Consequently, the issue of the Sudd became one of the early concerns of the colonial administration, and one of the components for maximizing the flow of the Nile for expanding cotton production in Egypt to meet the growing needs of the textile industry in Lancashire.²⁸ Hence, the search commenced

²⁶ See Moorehead A., *The White Nile*, Harper Collins, 2000, pp. 88-89.

²⁷ See, by way of example, Sir Baker S.W., *The Albert N'yanza Great Basin of the Nile And Explorations of the Nile Sources*, The Narrative Press, 2002, pp. 47-49. Samuel Baker passed through the Sudd in the 1860s.

²⁸ See Tvedt T., *The River Nile in the Age of the British – Political Ecology and the Quest for Economic Power*, I.B. Tauris, 2004, p. 21. Note in particular the author's statement that “British banks supported increased cotton exports in order to buttress Egypt's ability to repay its debts. In 1882 Egypt's foreign debt had risen to £100 million, and annual debt service to £5 million, of which a large proportion went to Britain. The Lancashire textile industry wished to

immediately after the conquest of the Sudan for the best ways to bypass those swamps and deliver the water to the White Nile without diminution of its quantity, for augmenting the flow of the Nile.

In 1904, less than six years after the conquest of the Sudan, Sir William Garstin, the Under-Secretary of State for Public Works in Egypt, completed and published his famous, voluminous and influential report on the Basin of the Upper Nile.²⁹ The report included a thorough investigation of the White Nile and its tributaries. With regard to the Sudd, Garstin recommended excavating an entirely new channel of about 340 kilometers, being the shortest and most direct route, to bring down the water from the upper Nile (Bahr el Jebel) at Bor, directly to the junction of the White Nile with the Sobat River, thus bypassing the Sudd. This proposal, which came to be known as “the Garstin Cut,” continued to dominate the discussion on the Sudd. Indeed, the proposal became the genesis of what is now known as the Jonglei Canal project. The Canal would start from the Jonglei village, not far from Bor, and would extend for about 360 kilometers to the confluence of the White Nile and the Sobat River, following more or less the same route suggested by Garstin.³⁰

The proposal for this canal was considered again in the 1920s, but was shelved following the deterioration in relations between Britain and Egypt as a result of the assassination of the Governor General of Sudan, Sir Lee Stack, in Cairo in 1924.³¹ Studies of this proposal were revived in the mid-1930s, and again in 1946 when the colonial administration in the Sudan established the Jonglei Investigation Team. The Team issued a series of studies culminating in its 1953 report.³² But by that time the attention of Egypt had shifted mainly to the Aswan High Dam, and the Jonglei Canal project took a back seat.

reduce its dependence on American cotton by increasing supplies of cheaper cotton from Egypt.”

²⁹ See Sir Garstin W., *Report Upon the Basin of the Upper Nile with Proposals for Improvement of the River*, Cairo National Printing Department, 1904.

³⁰ Jonglei is now a state within Southern Sudan, and the canal would fall entirely within this state.

³¹ See Gaitskell A., *Gezira – A Story of Development in the Sudan*, Faber and Faber, 1959, p. 113.

³² See Howell P., Lock M. & Cobb S. (ed.), *The Jonglei Canal – Impact and Opportunity*, Cambridge University Press, 1988, pp. 37-42.

As discussed earlier, the 1959 Nile Waters Agreement between Egypt and Sudan included detailed provisions on projects for preserving the waters of the swamps of Southern Sudan. However, it was only in 1974 that Egypt and Sudan took the decision to start construction of the Jonglei Canal, following the conclusion in 1972 of the Addis Ababa Agreement that ended the war for awhile in the South. The new design of the project was based on the earlier designs that were derived from the Garstin proposal. The project consisted of construction of a 360-kilometer canal for conveyance of water from Bahr el Jebel at Jonglei village, to the junction of the White Nile with the Sobat River, and eventually to Northern Sudan and Egypt. The project included some development components for the project area as well. Those components consisted of plans for large-scale sugar growing and processing, as well as linking of the area by all-year river and road traffic and bridges, in addition to education and health services. It is worth noting in this connection that under the 1959 Nile Waters Agreement Egypt agreed to the payment of 15 million Egyptian pounds to the Sudan as full compensation for the damage to Sudanese property resulting from the storage of water behind the Aswan High Dam, and inundation of Sudanese territory.³³ However, the Agreement did not include any reference for compensation to the local people who may be adversely affected by the works in the swamps of Southern Sudan.

The National Council for the Development of the Jonglei Canal Area was established in 1974, with the Jonglei Executive Organ as its implementing entity. Nonetheless, the Permanent Joint Technical Committee established under the 1959 Nile Waters Agreement continued to have the overall supervisory responsibilities over the project. The total cost of the project was estimated as \$260 million. When completed, the Jonglei Canal was expected to add close to five BCM to the flow of the White Nile. The cost and benefits were to be

³³ As a result of the inundation of their homes by the Aswan High Dam, more than 50,000 Nubian Sudanese living in the border town of Wadi Halfa and the surrounding villages had to be relocated to a new set of villages in Northeastern Sudan close to the Atbara River called New Halfa. For the story of the uprooting and resettlement of those people see Dafalla H., *The Nubian Exodus*, C. Hurst and Company, London, 1975.

divided equally between Sudan and Egypt. An equal amount of water is also expected from the Jonglei Canal 2 which would drain a large part of the remaining swamps of the Sudd area of Behr el Jebel and Bahr el Zeraf. The studies also indicate that a similar amount of water can be drained from each of the Bahr el Ghazal swamps, and the Machar marches. The four projects together, if ever implemented, could almost double the flow of the White Nile.³⁴

The contract for the Jonglei Canal was awarded to a French consortium *Compagnie de Constructions Internationales* (CCI) which had excavated a similar project before – the Jhelum-Indus link canal in Pakistan. Its huge excavator was dismantled and brought by land and sea to the proposed canal site where it was re-assembled; an extremely demanding job in terms of labor, time and cost. A number of engineers and technicians mainly from France, Pakistan and Sudan, in addition to local laborers, were employed in the project, and the foreign staff lived in a camp erected in the northern point of the Canal close to the junction of the White Nile and the Sobat River. It was quite ironic that the French returned, eighty years later, as contractors to the same area of the White Nile from which Marchand and his troops were forced out as invaders by Kitchener, at the famous Fashoda incident in 1898.³⁵

The Jonglei Canal project was, however, faced from the start with major opposition in Southern Sudan because it was seen as basically serving the interests and needs of Northern Sudan and Egypt. There were also concerns, voiced by local as well as international groups and

³⁴ For more discussion of those four proposals and the amount of water to be realized, see Waterbury, *supra* n. 15, p. 144.

³⁵ A French battalion, under the leadership of Marchand, arrived in the Fashoda area of the White Nile in Southern Sudan in July 1898. Following conquest of the Sudan by the Anglo-Egyptian army in September 1898, Kitchener was ordered to move immediately to Fashoda to confront the French battalion. The incident represented the epic of the scramble for Africa generally, and for the Nile in particular, by the European colonial powers. After a brief encounter, and frenzy communications between London and Paris, the French withdrew from Fashoda, resulting in the White Nile coming under the full control of the British. Fashoda, the village where that incident took place, was subsequently renamed “Kodok;” perhaps as a gesture of conciliation with the French. The ICC camp was erected a few miles south of that village. For a detailed account of the Fashoda incident, see Tvedt, *supra* n. 28, pp. 44-50.

individuals, about the negative impact of the Canal on the ecosystem and ecological integrity of the Sudd, as well as its adverse effects on the livelihood of the local people. Concerns about adverse effects included drinking water, pasture, fisheries and the access to either side of the Canal for the pastoral communities and their herds, as well as for wildlife.³⁶ The opposition was also fuelled by rumors about the impending settlement of two million Egyptian farmers in the Canal area. Students in a number of cities in Southern Sudan rioted against the project, and three people were shot and killed during those riots. The situation gradually quieted, and implementation of the project started in 1978.³⁷

The work proceeded slowly due to difficulties with the soil, weather and the supply of fuel, but it gradually picked up. By November 1983, about 260 kilometers out of the total length of the Canal of 360 kilometers were completed. However, in that month, half a year after its establishment, the SPLM/A attacked the Canal site, bringing the project to a temporary halt, and then to a total halt in February 1984. The dreams of peace and development promised by the Addis Ababa Agreement were shattered, and the hard and costly work on the Jonglei Canal came to an abrupt end. The reality of the renewed devastating civil war, led by the SPLM/A, dawned on the Sudan again. In addition to the Canal project, the SPLM/A was able to halt the oil operations of Chevron, also in the South, as well as the work on the modernization and expansion of the airport at Juba, the capital of Southern Sudan.

As a result of the SPLM/A attack on the Canal site, a dispute ensued between the Government of the Sudan and CCI regarding the obligations of the parties under the contract, and the matter was

³⁶ For a discussion of some of the complaints against the project, see Yongo-Bure, *supra* n. 35, chapter 10.

³⁷ For a description of the developments concerning the Jonglei Canal project, see Collins, *supra* n. 14, pp. 195-212. See also Alier A., *Southern Sudan – Too Many Agreements Dishonored*, pp. 193-214 (Ithaca Press 1990). Abel Alier was the President of the High Executive Council of Southern Sudan when those developments took place. He was a strong supporter of the Jonglei Canal project, and was quoted as saying in response to the protests against the project “If we have to drive our people to paradise with sticks, we will do so for their own good and the good of those who come after us.” See Collins, *supra* n. 14, p. 204.

referred for arbitration before the International Chamber of Commerce in 1988. The arbitration proceedings indicated that the SPLA carried out three attacks on the Jonglei Canal site starting on 16 November 1983, then on 6 February 1984, with the final attack that brought the project to a complete halt on February 10, 1984.³⁸ Since that time the huge excavator sat idle and rusting in the middle of the Sudd swamps about one hundred kilometers north of Jonglei village. The completed portion of the Canal had turned into a large ditch where wildlife could easily get trapped to death, and impeding the movement of people and animals in that region.

The main complaint the SPLM/A had against the project was that the work concentrated on the excavation of the Canal, and all the socio-economic development components of the project – irrigated agriculture, the road, bridges, schools and hospitals – were not even started in 1983, although they were presented as an integral part of the project in 1974.³⁹ In other words, the SPLM/A saw the project as having simply turned into one for conveying the waters of the Sudd to Northern Sudan and Egypt.

As mentioned before, the late Dr. John Garang, leader of the SPLM/A, completed his doctorate dissertation on the Jonglei Canal in 1981. One of the specific objectives of his study was:

“To provide a framework for examining rural development strategies for socio-economic development in the JPA (Jonglei Development Project Area) by focusing on: (a) the goals of socio-economic development in the JPA as they relate to national goals, and (b) the resource potential of the JPA in terms of the area’s contribution to regional and national goals.”⁴⁰

³⁸ See International Council for Commercial Arbitration, *Yearbook of Commercial Arbitration*, Volume XIII, 1988, p. 69 (Kluwer 1988).

³⁹ See Letters from Joseph Oduho, Chairman of the Political and Foreign Affairs Committee of the SPLM, dated 30 November 1983, and 7 December 1983; 54 *Horn of Africa*, Volume 8, No. 1 (1984), p. 52.

⁴⁰ See Garang de Mabior J., *Identifying, Selecting and Implementing Rural Development Strategies for Socio-Economic Development in the Jonglei Project Area, Southern Region, Sudan*, p. 7 (Unpublished Dissertation Submitted to the Graduate Faculty in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy, Iowa State University, Ames, Iowa, 1981).

The thesis argued that the Jonglei Canal project as planned and executed would simply perpetuate poverty and underdevelopment of the inhabitants of the area. Hence, the leader of the SPLM/A himself had thorough knowledge of and major concerns about the project.

It should be observed that the environmental and social standards, particularly for water infrastructure projects, are now far more strict and elaborate than when the project was planned in the early 1970s. Local, regional and international civil society organizations concerned with the environment and ecosystem of the Sudd and the rights of the tribal and local groups there are certain to be keeping a close eye on any plans for the revival of the Jonglei Canal project. To boost the cause of these environmentalists, the Sudd area was officially designated on 1 November 2006 as “Wetlands of International Importance” under the Ramsar Convention on Wetlands, 1971.⁴¹ The Sudd would be the third largest Ramsar site in the world after the Okavango Delta in Botswana, and the Queen Maud Gulf in Canada. Article 4(1) of the Convention obliges each contracting party to promote the conservation of wetlands and waterfowl by establishing nature reserves on wetlands, whether they are included in the List or not, and to provide adequately for their wardening.

Thus far, there has been no official discussion on the possibility of resumption of the work on the Jonglei Canal, or on any other project in the swamp areas of Southern Sudan, despite the attainment of relative peace there. The political developments in Southern Sudan following conclusion of the CPA, the legacy of the Jonglei Canal project, and the apprehensions about the future relations between the two parts of the country, coupled with the environmental concerns and the Nile hydro-politics, are perhaps some of the reasons for the lack of any serious deliberations on such water projects.⁴²

⁴¹ For the Ramsar Convention and Ramsar List of Wetlands of International Importance, *see*: (http://www.ramsar.org/key_sitelist.htm). Article 2(2) of the Convention states that: “wetlands should be selected for the List on account of their international significance in terms of ecology, botany, zoology, limnology or hydrology.” Sudan became a party to the Ramsar Convention on 7 May 2005; *see*: (http://www.ramsar.org/cda/ramsar/display/main/main.jsp?zn=ramsar&cp=1-36-123^23808_4000_0__).

⁴² A recent article dated 7 August 2009 cited reservations expressed by the Minister of Irrigation of the Government of Southern Sudan (GoSS) on the Jonglei Canal

6. The Abyei Dispute: Land, Oil or Water?

As discussed in part II of this chapter, the Abyei Protocol concluded on 26 May 2004, dealt with “The Resolution of the Abyei Conflict.”⁴³ The Abyei area is defined under this Protocol “as the area of the nine Ngok Dinka chiefdoms transferred to Kordofan in 1905.” Kordofan is a state in Northern Sudan bordering the state of Bahr el Ghazal in Southern Sudan from which the nine chiefdoms were transferred.⁴⁴ The Protocol placed the Abyei area during the interim period under the Presidency,⁴⁵ and stated that the area would be administered by a local executive council elected by the residents of Abyei. Pending the election of the council, its initial members would be appointed by the Presidency. The residents of the Abyei area would be citizens of both Kordofan and Bahr el Ghazal.

Agreement on the boundaries of those nine chiefdoms has proven quite difficult and challenging for the two parties. This is because, following demarcation of the boundaries, the people of this area, according to the Abyei Protocol, will have the right to choose, through a referendum to be carried out simultaneously with the referendum of Southern Sudan self-determination in 2011, between retaining their special administrative status in Northern Sudan, or becoming part of

project, concerning the political, economic, social and environmental effects. The Minister indicated that the project needs a new feasibility study that should be carried out by his Ministry. *See*: (<http://www.sudantribune.com/spip.php?article32062>).

⁴³ The main principles for the Abyei Protocol were proposed by the then US Special Envoy to the Sudan, Senator John Danforth and his staff, following the impasse on the matter. The proposed principles which were presented to the two parties in March 2004, were accepted by them, and signed as the Abyei Protocol. *See* footnote to the Abyei Protocol, *supra* n. 1, p. 65.

⁴⁴ Kordofan has recently been divided into two states, Northern Kordofan and Southern Kordofan. Similarly, Bahr el Ghazal has been divided into Northern Bahr el Ghazal, Western Bahr el Ghazal, Warrap and Lakes states. The issues regarding the Abyei area now concern the states of Southern Kordofan and Northern Bahr el Ghazal.

⁴⁵ According to Article 51 of the Interim Constitution, the Presidency consists of the President and the two Vice Presidents.

Bahr el Ghazal in Southern Sudan.⁴⁶ If they choose to become part of Bahr el Ghazal, this would mean that the Abyei area could become part of the independent Southern Sudan, if the latter chooses to secede in the referendum. In essence, this could mean that what was part of the Northern state of Kordofan, and now has a special status in the North, could be seceded to the Southern state of Bahr el Ghazal. The discovery of oil resources in and around the Abyei area has no doubt been another complicating factor. The Abyei Protocol included detailed provisions on the sharing of the net-oil revenue from the oil produced in the Abyei area during the interim period.⁴⁷ It should also be added in this connection that in addition to the National Government and the SPLM/A, the dispute also involves the Southern tribe of the Ngok Dinka and the Northern tribe of the Misseriya who share large parts of, and have conflicting claims on, the Abyei area.⁴⁸

Because the two parties were unable from the start of the negotiations to agree on the boundaries of the Abyei area, they decided to include in the Protocol provisions for referring the matter for a decision to the Abyei Boundaries Commission (ABC).⁴⁹ This was finally done in March 2005, and the ABC commenced its work soon after. The five international experts of the ABC (the Experts) issued their Report in July 2005, delimiting the Abyei area in a way close to the claims of the SPLM/A. The Experts' Report placed the legitimate dominant claims of the Ngok Dinka well into Kordofan to the north. It delimited large areas to Abyei in the east, and some areas to the west.⁵⁰ It also established a "shared secondary rights" area

⁴⁶ Most of the provisions of the Abyei Protocol, including the referendum, are reflected and incorporated in Article 183 of the Interim Constitution.

⁴⁷ The Abyei Protocol sets the following percentages for the sharing of the net revenue from the oil produced within the Abyei area: 50% for the National Government, 42% for the Government of Southern Sudan, and 2% for each of Bahr el Ghazal, Kordofan, the Ngok Dinka and the Misseriya.

⁴⁸ For the extent of the claims of each of the Ngok Dinka and the Misseriya, *see infra*, n. 49 & n. 50.

⁴⁹ For composition, description and analysis of the work of the ABC, *see* Petterson D., *Abyei Unresolved: A Threat to the North-South Agreement*, in *Implementing Sudan's Comprehensive Peace Agreement – Prospects and Challenges* (Woodrow Wilson International Center for Scholars – Africa Program, May 2008), pp. 22-23.

⁵⁰ For the Abyei Boundaries Commission Report *see*: (<http://www.sudanarchive.net/cgi-bin/sudan?a=d&d=D11d18>).

for the Ngok Dinka and the Misseriya north of the dominant claims area, and divided it between the two parties. Thus, large areas of Kordofan were delimited as the Abyei area by the Experts' Report.

The Report was accepted by the SPLM. However, it was immediately rejected by the Government of the Sudan who alleged that the Experts had exceeded their mandate. The dispute continued to be a thorny and difficult one for the next three years. It remained without a resolution until July 2008 when the two parties agreed, following major clashes in Abyei city, to refer the dispute to the Permanent Court of Arbitration (PCA).

The Arbitral Tribunal of the PCA was constituted in October 2008,⁵¹ and it issued its Award on 22 July 2009.⁵² It decided that the Experts did not exceed their mandate with regard to the legitimate dominant claims of the Ngok Dinka on the northern boundary, but they exceeded that mandate with regard to the eastern and western boundaries, and with regard to the "shared secondary rights" above the northern boundary. The Award reduced the Abyei area delimited by the Experts substantially on the eastern part, and slightly on the western part. As a result of the reduction in the eastern part, some major oil fields reverted to Northern Sudan.⁵³ On the other hand, the Award has resulted in Bahr el Arab (the Kiir River), which is the main river in the area, together with most of its major tributaries, falling largely within the newly delimited area of Abyei.⁵⁴ The grazing and other traditional rights of the Misseriya and Ngok Dinka north and

⁵¹ The Government of Sudan appointed Judge Awn Al-Khasawneh and Professor Gerhard Hafner. The SPLM appointed Professor Michael Reisman and Judge Stephen Schwebel. The Secretary-General of the PCA appointed Professor Pierre-Marie Duruy as the Presiding Arbitrator.

⁵² For a copy of the Arbitral Tribunal Award *see*: (<http://www.pca-cpa.org/upload/files/Abyei%20Final%20Award.pdf>).

⁵³ The Government of the Sudan announced immediately after the PCA decision that the Government of Southern Sudan (GoSS) would no longer receive any of the revenue from the oil in those fields, now that they are no longer in the Abyei area. The GoSS responded by stating that the GoSS would still claim those oilfields as part of Southern Sudan when the process of delimiting the entire borders between the North and the South commences.

⁵⁴ For the map of the Abyei area as delimited by the PCA Arbitral Tribunal *see*: (<http://www.pca-cpa.org/upload/files/Abyei%20Award%20Appendix%201.pdf>).

south of the Abyei area have been confirmed by both the Experts' Report and the PCA Award. In this connection, the Award stated that:

“The exercise of established traditional rights within or in the vicinity of the Abyei Area, particularly the right (guaranteed by Section 1.1.3 of the Abyei Protocol) of the Misseriya and other nomadic peoples to graze cattle and move across the Abyei Area (as defined in this Award) remains unaffected.”⁵⁵

The Award went further and indicated that under international law traditional rights are not extinguished by boundary delimitations. Thus, the Ngok Dinka and the SPLM/A got land and water, while the Government of the Sudan got most of the oil fields around the area, and the Misseriya got their grazing rights in and around the Abyei area confirmed.

The PCA Award is, without doubt, a balanced and well argued and presented decision. It was accepted by both parties; and the United Nations, IGAD, the European Union and the United States welcomed it. Even the strong and harsh dissenting opinion by one of the arbitrators did not dilute the wide welcome it received, nor affect what was seen as its value and positive contribution to the peace process in the Sudan.⁵⁶

Although the Abyei dispute, on the face of it, is about land, it is really oil and water that are actually the real aspects of the dispute. The grazing rights of the nomad communities in the area are basically about rights to water resources. This point was highlighted by the dissenting opinion of Judge Al-Khasawneh when he asked: who “gave the Experts or the Tribunal the right to reduce the Misseriya to second class citizens in their own land and to create conditions which may deny them access to water.”⁵⁷ With the oil in this area expected to run out soon,⁵⁸ water springs out as the actual, and indeed, the pivotal element of the dispute.

⁵⁵ See Arbitral Tribunal Award, *supra* n. 51, paragraph 770 (e) 2, p. 268.

⁵⁶ Judge Al-Khasawneh dissented and issued a separate dissenting opinion.

⁵⁷ See Paragraph 203 of Judge Al-Khasawneh's dissenting opinion, *supra* n. 51.

⁵⁸ For discussion of oil in the Abyei area, its quantity and likely depletion dates, see International Crisis Group, *Sudan: Breaking the Abyei Deadlock*, available at: (<http://www.crisisgroup.org/home/index.cfm?id=5122>).

7. Conclusion

Since the decolonization process started in Africa more than fifty years ago, the right of self-determination within an independent State materialized in only one case, that of Eritrea. The case and history of Eritrea may be special, warranting the granting and exercise of such a right. The case of the Southern Sudan might have been different had Northern Sudan kept its promises to Southern Sudan of federation and regional autonomy, repeatedly made since 1947,⁵⁹ and actually epitomized in the 1972 Addis Ababa Agreement. The demand for self-determination started evolving following the establishment of the SPLM/A in 1983, and was formalized in the early 1990s,⁶⁰ and a decade later became the cornerstone of the CPA in 2002.⁶¹ Its evolution was a direct result of the failure of the successive governments in Khartoum to honor their agreements with the South.⁶²

⁵⁹ The first North-South meeting to discuss the future relations between the two parts of the country took place in Juba in 1947. For more on the Juba Conference see Wai D., *The Southern Sudan: The Problem of National Integration*, p. 185 (Frank Cass, 1973).

⁶⁰ The SPLM/A meeting held in the town of Torit in Southern Sudan on 6 to 13 September 1991, decided, *inter alia*, that any future negotiations with the North on the relationship between the two parts of the country would be based either on a unitary democratic and secular system, or a confederal system of government, or on the right of self-determination for the people of Southern Sudan. For the minutes of the Torit meeting, see, Abdel Magid Bob, *Southern Sudan – the Debate of Unity and Secession* (in Arabic) Annex 24, p. 358 (University of Khartoum 2009). This was the first time that the options of self-determination and confederation were officially adopted by the SPLM/A.

⁶¹ It is worth noting that the title of each of the agreements under the CPA, except the Machakos Protocol, indicates what that agreement would be dealing with (such as wealth, power, security and Abyei). Instead, that Protocol has been given the title “Machakos Protocol” rather than “Self-Determination” which is what the Protocol is about. The reason for this could be that the parties did not want to over-publicize self-determination and make it a title of the first agreement reached by them, knowing very well the domestic and regional concerns over the issue.

⁶² It should be noted that the implementation of the CPA itself is fraught with challenges and differences between the two parties to the CPA. The Southern Sudan Referendum Act which was supposed to be promulgated in 2007, has not been issued by the time this chapter was completed in September 2009. Nor has the Southern Sudan Referendum Commission been established by that time, see

In addition to the Addis Ababa Agreement, the Jonglei Canal project was another example of such failure.⁶³ The concerns and sentiments of those who opposed the Canal in the 1970s turned out to be true in the 1980s; and what was started by the students' demonstrations in 1974 was picked up by the SPLM/A in 1983. Water proved to be a galvanizing factor in both instances. With 28% of the Nile flow crossing from Southern Sudan into Northern Sudan and thereafter Egypt, there is also an increasing realization of the potential role for Southern Sudan in the hydro-politics of the Nile Basin.

Despite these substantive chapters of history and geography, the CPA included limited provisions on water resources, and those provisions essentially vested exclusive responsibility over the Nile waters on the National Government. In contrast to this, and as discussed earlier, detailed provisions are included in the CPA on the sharing and management of land, natural resources and oil and its revenues.

The decision of the SPLM to vest the responsibilities over the Nile waters on the National Government during the interim period should, however, be viewed within the overall intricate hydro-politics of the Nile Basin, and the current water needs of Southern Sudan. The concerns of some of the Nile riparians about the complications and challenges that would ensue as a result of the possibility of the birth of an eleventh riparian have been, to some extent, allayed through this decision. Additionally, there has been no need on the part of Southern Sudan during the interim period for a share of the Nile waters allocated to the Sudan under the 1959 Agreement. Nor has there been a need for representation of the SPLM in the Permanent Joint Technical Committee since no projects affecting the swamp areas of Southern Sudan are being discussed or planned by the Committee during the interim period.

However, this situation will most likely change in the near future. Southern Sudan will, sooner or later, start preparation and

supra n. 9. Other challenging issues facing implementation of the CPA include agreement on the results of the population census, and demarcation of the north-south borders, *see supra* n. 53.

⁶³ *See generally* Alier A., *Southern Sudan – Too Many Agreements Dishonored*, *supra* n. 37.

implementation of its development plans, particularly after the 2011 referendum. Such plans will by necessity involve water resources – for generation of hydro-power, irrigation, as well as for domestic, livestock and industrial uses. This will, in turn, require a share for Southern Sudan in the Nile waters to meet the requirements of these plans. With the Nile waters fully allocated to Egypt and Sudan, Southern Sudan is bound to look for its share of the Nile waters from the overall allocation of the Sudan.

It is worth mentioning that the exercise and regulation of the grazing and other traditional rights of the border communities in either part of the country, particularly in the South, could pose major challenges. This is because the competing demands of these communities center on limited natural resources, of which water is the critical and ultimate claim. The situation is going to be considerably challenging if Southern Sudan opts for secession in 2011, since movement of people and their herds will, as a result, be across international boundaries. Because it is still largely unmapped and lacking in technical data and information, and because it has remained largely untapped, shared groundwater between Northern and Southern Sudan is unlikely to surface as an issue, at least for some time.

Moreover, it has become abundantly clear since November 1983 that decisions on the Jonglei Canal or any other project affecting the Sudd, the Bahr el Ghazal swamps, or the Machar marches of Southern Sudan have, for all practical purposes, shifted from Khartoum and Cairo, to Juba. This is notwithstanding the 1959 Nile Waters Agreement, the Power Sharing Agreement of the CPA, and the Interim Constitution, and regardless of the outcome of the 2011 Southern Sudan referendum.

It should also be added that, with the increasing assertiveness by some of the Nile riparians of their right to an equitable and reasonable utilization of the Nile waters, the issue of the preservation and use of the waters of the Sudd and the Machar marches of Southern Sudan may even become a wider Nile Basin issue. This is because the question that may be posed by some of the Nile riparian states in this connection is: whose water is it anyway? As mentioned earlier, the origin of Bahr el Jebel is Lake Victoria, and the Sobat River flows from Ethiopia.