

Fields of Control: Oil and (In)security in Sudan and South Sudan

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List of abbreviations

CNPC	China National Petroleum Corporation
CPA	Comprehensive Peace Agreement
GNPOC	Greater Nile Petroleum Operating Company
GoRSS	Government of the Republic of South Sudan
GoS	Government of Sudan
GPOC	Greater Pioneer Operating Company
IGAD	Intergovernmental Authority on Development
JEM	Justice and Equality Movement
NCP	National Congress Party
NGO	Non-governmental organization
NISS	National Intelligence and Security Services
ONGC	Oil and Natural Gas Corporation
SAF	Sudan Armed Forces
SPC	Sudanese Petroleum Corporation
SPLA	Sudan People’s Liberation Army
SPLM	Sudan People’s Liberation Movement
SPLM–N	Sudan People’s Liberation Movement–North
TFA	Transitional financial arrangement
UNMISS	United Nations Mission in the Republic of South Sudan

I. Introduction and key findings

Oil and security in Sudan and South Sudan are, in the words of one former oil minister, ‘two faces of the same coin’.¹ At the international, regional, national, state, and community levels, it is possible to trace how oil exploration, extraction, and exploitation have contributed to insecurity, both directly and indirectly. More rarely, these activities have temporarily improved security, often through patronage or subornation. At the same time, security levels have an impact on oil production, as fighting provokes shutdowns or, more subtly, deters future investment.

This Working Paper reviews the historical linkages between oil and security in Sudan and South Sudan, and provides an overview of the key actors in the sector. After considering the security impact of the political and economic dimensions of oil production, it examines the more direct relationship between oil and violence, assessing the current situation within and between the two states as well as at the local community level as of mid-2015. It then identifies the similarities and differences between the Sudanese and South Sudanese oil ministries’ approaches to human security, and the impact of the current civil conflict.

The key conclusions are:

- The oil–conflict nexus is widely acknowledged as a global phenomenon, yet in Sudan and South Sudan, it has been intensified by an accident of history and geography: the location of most of the oilfields along the volatile former colonial border between the two countries.
- Under recent peace agreements, the Sudanese and South Sudanese governments have to some extent harnessed the oil industry to promote security between the two countries, based on the common interest established by South Sudan’s possession of most of the oil and Sudan’s control of the export infrastructure. At a subnational level, however, oil, patronage, insecurity, and civil conflict remain closely bound together.

- Barring major new discoveries in the future, oil production in Sudan and South Sudan has probably already peaked. The economic and political adjustments to declining revenue, some of which have already begun, could further boost insecurity in both countries.
- The oilfields have been an important prize in the civil conflict that broke out in South Sudan in December 2013. While the rebels have not captured the oilfields, their activities have significantly diminished the government's cash flow. The violence was initially exacerbated by oil-linked community discontent in Unity and Upper Nile states. The ongoing fighting has also further contributed to environmental degradation and poor community relations in the oil areas.
- There are rumblings of ongoing community discontent in Sudan, particularly among Missiriya groups, which have been responsible for pervasive low-level insecurity that has been hindering oil operations. The government has made partial efforts to address this, and has thus far succeeded in limiting the unrest, but not in eliminating the underlying causes.
- Since late 2013, relations between Sudan and South Sudan have been unusually cooperative, based on a common interest in keeping the oil flowing. This rapprochement remains vulnerable, however, not only to potential economic pressures and new disputes when the oil agreement expires at the end of 2016, but also to cross-border aspects of ongoing civil strife in both countries, combined with local tensions.
- Sudan's poor management of the oil sector has led to corruption, over-centralization, and environmental degradation, causing serious grievances among the local communities. This dynamic has to some extent been mirrored in the new state of South Sudan. While Sudan's efforts at improvement remain largely nominal, South Sudan has managed to put in place strong legislation in line with international best practices. There has been no effective implementation, however, and the prospect of progress receded when the civil conflict began.

The bulk of the research for this paper was carried out in January–April 2014, with further work conducted in April and October 2015. Given the lack of transparency in much of the oil sector in Sudan and South Sudan, this research

is based on cross-referencing of the widest possible range of sources. These include not only official publications and unpublished internal reports, but also interviews with policy-makers, advisers, and officials. Due to poor security conditions, the author was not able to visit the oil areas and interview community members directly; however, she drew on secondary sources to ensure that their voices informed the analysis. 📖

II. Historical background

'The history of oil in Sudan is linked to violence,' a member of the Justice and Peace Commission of the Catholic Diocese of Malakal concluded at a conference held in Juba in 2012 (Cordaid and Justice Africa, 2012). In late 2015, Malakal, a state capital that had previously been home to 250,000 people, was a ghost town, having changed hands 12 times in less than two years as South Sudanese rebels sought to control this 'gateway' to the oilfields in Upper Nile (BBC, 2015; Radio Tamazuj, 2015b; *Sudan Tribune*, 2014i).² The association between oil and conflict is widely acknowledged as a global phenomenon (Ross, 2013). In Sudan and South Sudan, this nexus has been intensified by accidents of history and geography.

During the colonial period, Sudan was ruled by the British under the Anglo-Egyptian Condominium. It was not ruled as a single entity, however. In 1930, the civil secretary stated that the administration of the south of the country was to be developed along 'African' rather than 'Arab' lines, and that its future might lie with British East Africa rather than Egypt and the north (Johnson, 2007, p. 11). This entrenched separation, which built on pre-colonial foundations, became a key political reality in the post-colonial period, with power concentrated in the north and southern leaders seeking various degrees of autonomy. As it turned out, the fault line of this division coincided very closely with the most promising areas for oil exploration in the country. As a consequence, the 50 years of intermittent civil war between north and south, which had begun even before formal independence on 1 January 1956, simultaneously hampered and stimulated the development of a Sudanese oil industry.

Although oil exploration on the Red Sea started as early as 1959, the first commercial oil discovery in Sudan was not made until 1979, at Abu Jabra, by the US oil major Chevron (Mohamed, 2007; Sidahmed, 2014b). Other discoveries followed in the Muglad Basin, straddling the north-south border, in the early 1980s (El Tuhami, 2007, p. 657; James, 2011a, p. 55). This early exploration was enabled by the 1972 Addis Ababa Agreement, which had brought an end to the first north-south civil war with the establishment of a Southern Regional

Government, based in Juba. Disagreements over oil with the central government in Khartoum contributed to wider feelings of marginalization in Southern Sudan, which ultimately led to the breakdown of the agreement and the outbreak of the second civil war in 1983 (Large and Patey, 2011, p. 179). The central government insisted that the small oil refinery Chevron had agreed to build should be located in the north, rather than in the southern province of Upper Nile, near the larger oilfields. It was also adamant that the proposed export pipeline should go north to Port Sudan, rather than south to the Kenyan port of Mombasa (Johnson, 2007, p. 46). These issues were among the grievances listed by the new southern rebels, the Sudan People's Liberation Movement/Army (SPLM/A), in their 1983 manifesto (Johnson, 2007, pp. 65–66).

Both because of these disputes and in order to deny revenue to the Government of Sudan (GoS) once the war broke out, oil installations became a target. National-level tensions undermined Chevron's initial efforts to promote good relations with local communities in the south, where the company 'heeded the view of our elders' (Moro, 2011, pp. 72–73).³ In February 1984 an attack on Chevron's base camp close to Bentiu, near the Unity state fields, led to the deaths of three oil workers and the suspension of operations. The southern rebels from the largely Nuer Anyanya II group had led the attack, and the SPLM/A disclaimed involvement but also warned Chevron not to restart operations in the context of conflict (Patey, 2014a, p. 38). The Sudanese government committed to protecting the oilfields and, to this end, began to arm some of the Missiriya nomads living in South Kordofan. Depopulation of the Dinka and Nuer communities around Bentiu began. Chevron, however, apparently resisted pressure to resume work in the absence of a settlement with the southern rebels (Patey, 2014a, pp. 42–43).

The lack of hoped-for oil revenue to fill the significant gaps in the government budget (which grew as military spending increased) contributed to central political instability in the 1980s. The country was in deep economic crisis, with high inflation, shortages, and a large external debt burden. This culminated in a military coup by the National Islamic Front in 1989, spearheaded by the current president, Omar al-Bashir. The new regime sought an Islamist national transformation, and was desperate for oil revenue to fund this initiative. It therefore pushed Chevron to relinquish its stake and sought new partners that would be less sensitive to insecurity (al-Jazz, 2007, pp. 671–72).

A small Canadian firm, Arakis, launched operations in the mid-1990s, before being bought out by Canada's larger Talisman in 1998. By that time, it had partnered with two large Asian state oil companies, the China National Petroleum Corporation (CNPC) and Malaysia's Petronas, to form the Greater Nile Petroleum Operating Company (GNPOC), with strong involvement by the Sudanese government. GNPOC stepped up operations in the Unity and nearby Heglig/Panthou fields, and finally built the Port Sudan pipeline, which began exporting oil in 1999 (Johnson, 2007, p.162; Patey, 2014a, pp. 62–63).

This big exploration and exploitation effort was associated with violence in a number of ways. Militias violently displaced residents of oil areas, including by destroying villages and killing locals.⁴ The war presented a security threat to oil operations as well, even as oil revenue provided funds and motivation for the prosecution of the conflict (Young, 2012, p. 41). That included funds to pay the local militias, which defined themselves both as 'Arab', including some Missiriya groups, and as 'African' brigades, such as ethnic Nuer hailing from the oil development areas of western Upper Nile. These 'oil security' forces were accused of many of the atrocities reported as the South–South fighting intensified.

The Sudan Armed Forces (SAF) used roads, airfields, and other infrastructure that had been built by the oil companies for their business operations. In turn, the acts of 'oil security' forces were an integral part of the conflict, and oilfields remained strategic targets for rebels. As the UN and other observers reported on oil-associated human rights abuses, an international campaign led by Canadian non-governmental organizations (NGOs) forced Talisman to sell its holdings in Sudan (CBC News, 2015). Nevertheless, the oil sector continued to prosper; the stake was bought by India's Oil and Natural Gas Corporation (ONGC) (Patey, 2014a, p. 138). By 2004, oil output was at almost 300,000 barrels per day, and there was significant competition for stakes in a new consortium, led by CNPC and Petronas, which was set to develop promising fields in the Melut Basin in northern Upper Nile (CBOS, 2005; Patey, 2014a, p. 148).

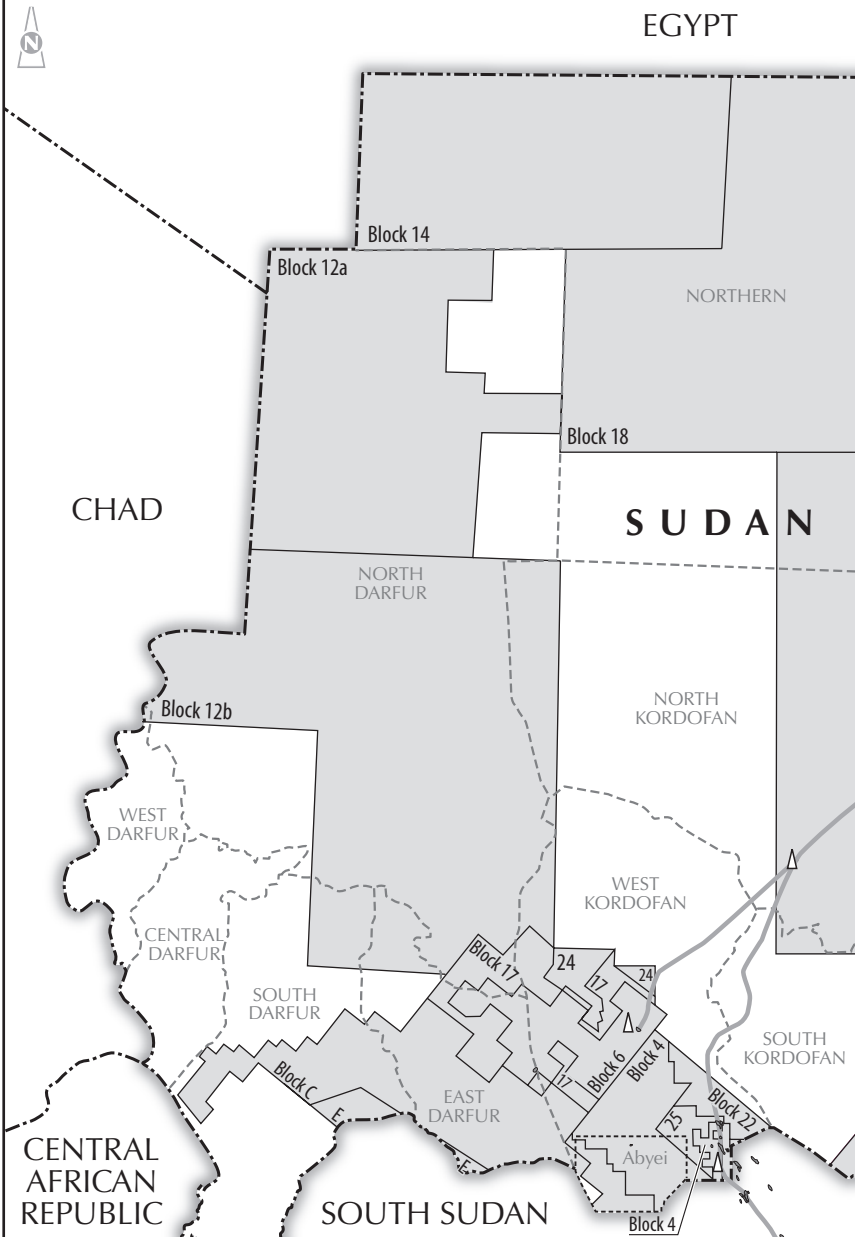
Meanwhile, the SPLA and the GoS, under intense international pressure, made progress at the negotiation table. A key factor was movement towards an agreement on 'wealth sharing', in particular of oil revenue. On 7 January 2004, the two parties signed a wealth sharing protocol, which became a key part of the 2005 Comprehensive Peace Agreement (CPA) (Johnson, 2011, pp. 112–15). By dividing the revenue from oil located in the south of the country fifty-fifty

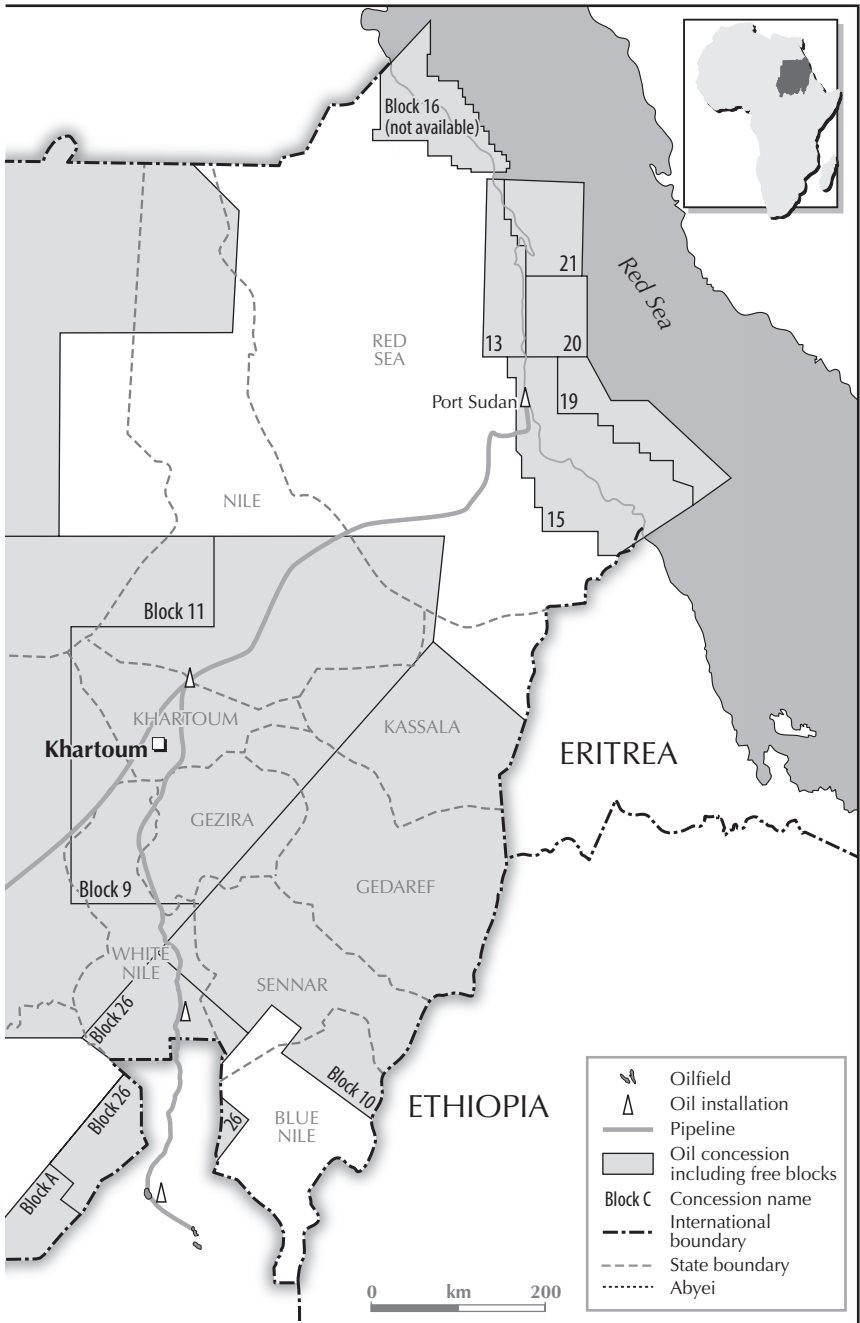
between the GoS and the new semi-autonomous Government of Southern Sudan—once 2 per cent had been allocated to the governments of the oil-producing states themselves—the agreement used oil to bind the uneasy peace together. This is one important reason why the CPA period was relatively stable even though other parts of the agreement were poorly implemented.

To some extent, this new positive reinforcement between oil and security at the national level continued through the six-year Interim Period of the CPA, prior to the agreed referendum on southern secession. There were ongoing quarrels about the transparency of the oil revenue sharing, concession awards, and other issues, and Southern Sudan gained no real control over the oil sector, despite its nominal participation in a joint National Petroleum Commission. Nevertheless, the largely regular transfer of money played a key role in preventing widespread flare-ups of the north–south conflict during that period. However, at the subnational and community levels, oil-related issues continued to feed insecurity. Not only in the south, but also in Darfur and in the east, rebels excluded from the ‘comprehensive’ agreement failed to benefit from oil wealth. And local communities—which never received compensation due them under Clause 4.5 of the CPA wealth sharing protocol—remained vulnerable to expropriation, exclusion, and environmental degradation (ECOS, 2010; 2011).

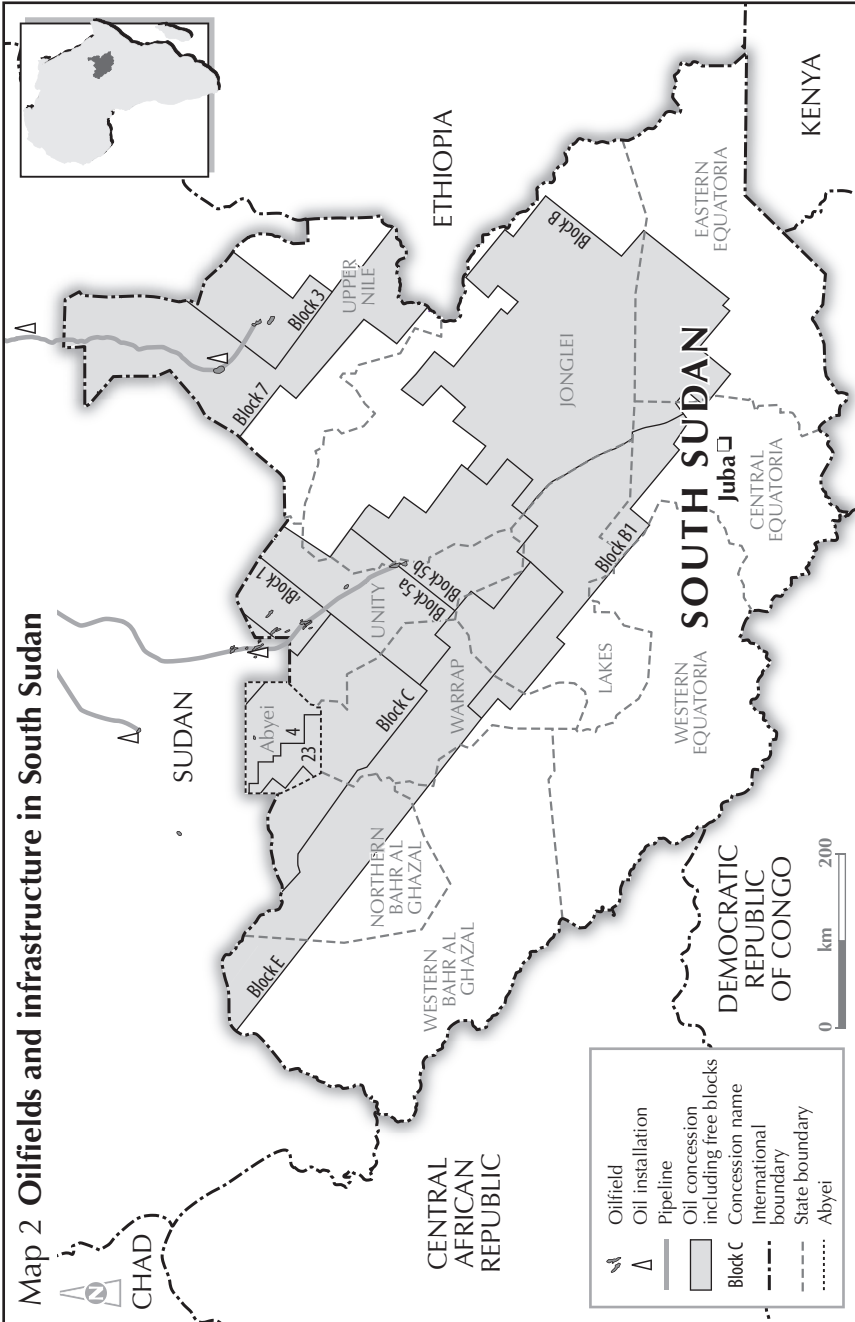
As it became clear that Southern Sudan was highly likely to vote for independence in the January 2011 referendum, international and national attention focused increasingly on the question of how oil and security would support or undermine each other in the new era. In 2006, significant new oilfields had started production, mostly in the Melut Basin in Southern Sudan’s Upper Nile, but also in Sudan’s South Kordofan, north of the notional border. This brought national oil production up to almost 500,000 barrels per day, a level at which it remained for the next few years (MoFNE, 2006–11; see Figure 1). Although all of the Melut oil was in the south, the GoS, with its continued near-exclusive control of the day-to-day operations of the oil industry, insisted on building the processing infrastructure north of the border, with the probable intention of improving its future bargaining position. As a result, an estimated 75 per cent of oil reserves and of ongoing production was geographically located in the south, while the major physical infrastructure was in the north (see Maps 1 and 2). This fact became critical to the north–south security relationship on the eve of secession and thereafter. 📍

Map 1 Oilfields and infrastructure in Sudan





Map 2 Oilfields and infrastructure in South Sudan



III. Key players

The Government of Sudan

The oil industry in Sudan falls under the aegis of the Ministry of Petroleum, as did all oil production in Southern Sudan until July 2011. In terms of day-to-day management, however, the Sudanese Petroleum Corporation (SPC), a fully state-owned arm of the ministry, is responsible for overseeing oil exploration and production, as well as coordinating oil product distribution. In addition, the national oil company, Sudapet, is a partner in each of the consortia operating in the different concession areas. International observers have expressed concerns over a lack of clarity in the division of roles between these three entities. The SPC is an integral part of the ministry and performs many of the functions that would normally be associated with a national oil ministry, but it is subject to significantly less oversight. Neither parliament nor the Ministry of Finance and National Economy formally approves SPC or Sudapet budgets and, while the auditor general reports on their operations, the findings are not made public (IMF, 2010).

As of October 2015, the Sudanese minister of petroleum was Mohamed Zayed Awad, who in the June 2015 reshuffle was promoted from deputy minister. A former senior oil official, he replaced the less technically minded Makkawi Mohamed Awad, a loyal party member who had previously managed Sudan Railways. The appointment of a technocrat seems to have been part of an ongoing attempt to address the ministry's failure to boost oil output, which had been attributed to internal dysfunction reported in 2014. At that time, the most knowledgeable officials had largely been replaced by national security figures, and corruption grew rife as employees made last-ditch attempts to profit from what they may have seen as the last days of a declining industry.⁵

Despite the appointment of a less 'political' minister, the oil and security structures of the government remain closely entwined, as they have been since the industry's inception. Many senior individuals from the national security

state of the National Congress Party (NCP) are also highly influential in the Sudanese oil sector, in both informal and formal capacities. Those who exert an informal influence have a more significant impact, albeit much more difficult to pin down; they reportedly include the president's brothers and the former finance minister, Abdel-Rahim al-Hamdi. Such figures are prominent both as investors in Sudanese companies that win key oil sector contracts, and in determining which foreign companies receive concessions.⁶ On the formal side, the links are also deeply embedded. Notably, a journalist who was recently detained by the security services ended up being interrogated at the Ministry of Petroleum (*Sudan Tribune*, 2014s).

The Government of the Republic of South Sudan

To some extent, the overall structure of petroleum management in South Sudan mirrors that in Sudan. The sector is overseen by the Ministry of Petroleum and Mining, under Minister Stephen Dhieu Dau, who was formerly trade minister but has been established in his current role since late 2011, and the much lower-profile deputy minister, Elizabeth James Bol. The under-secretary is Machar Aciek Ader Nyang, who was appointed in 2011 and who previously worked for the SPC in Khartoum. The state oil company, Nilepet, was set up during the CPA Interim Period in deliberate parallel to Sudapet.⁷ Nilepet's subsidiaries include SIPET, a joint venture with China's Sipake, which is responsible for upstream, midstream, and downstream engineering and maintenance, and Nile Geophysical, which covers seismic data acquisition, processing, and interpretation (Nilepet, n.d.).

Stephen Dhieu retained his ministerial position when President Salva Kiir dismissed many other senior politicians in 2013, although Kiir did remove him, and others, from the Nilepet board in August 2015. As minister, Dhieu remains a powerful figure—most of the oilfields in South Sudan are controlled by militias from his own Padang Dinka group, which answer to him.⁸ His removal from the Nilepet board was generally seen as part of an attempt to consolidate Kiir's own personal control (Nield, 2015). It is worth noting that National Security Director General Akol Kur Kuch was also appointed to the board at the same time, evoking oil–security interlinkages previously seen in Sudan.

Foreign investors

The ‘big three’ investors in the petroleum sector in Sudan and South Sudan remain China’s CNPC, Malaysia’s Petronas, and India’s ONGC-Videsh, all of which are state-owned. CNPC is one of the world’s largest oil companies, with interests in 29 countries, while Petronas is operational in 23. In 2011, ONGC

Table 1 **Producing concession blocks**⁹

Country	Block	Consortium	Main fields	Shareholders
South Sudan	1	Greater Pioneer Operating Company (GPOC)	Unity Toma Munga	CNPC International (Nile): 40% Petronas Carigali Nile: 30% ONGC Nile Ganga: 25% Nilepet: 5%
	3 and 7	Dar Petroleum Operating Company	Paloich Adar-Yale Gumri Moleeta	CNPC International (Dar): 41% Petronas Carigali Nile: 40% Nilepet: 8% Sinopec International Petroleum Corp.: 6% Tri-Ocean Exploration & Production: 5%
	5A	Sudd Petroleum Operating Company	Mala Thar Jath	Petronas: 67.875% ONGC: 24.125% Nilepet: 8%
Sudan	2 and 4*	Greater Nile Petroleum Operating Company (GNPOC)	Heglig/Panthou Bamboo Diffra Neem	CNPC International (Nile): 40% Petronas: 30% ONGC: 25% Sudapet: 5%
	6	Petro-Energy	Fula Hadida Sufiyan Shawka	CNPC: 95% Sudapet: 5%
	17	Star Oil	Bursaya	Ansan Wikfs: 66% Sudapet: 34%

Notes:

While efforts have been made to avoid errors and gaps, it should be noted that unpublished licence changes and misreporting are relatively common for oil blocks in Sudan and South Sudan.

* Block 4 contains areas such as Abyei and Heglig/Panthou, which remain under dispute between the two countries; nevertheless, they are currently administered as part of Sudan, which retains all of the oil revenue.

Source: James (2015)

was the world's 21st-largest listed oil firm and had interests in 15 countries, but its investment in Sudan was especially significant, worth USD 2.3 billion (Shankleman, 2011, p. 6).¹⁰ As detailed above, these Asian firms were welcomed by the GoS beginning in the 1990s, when Sudan was a no-go area for the established Western oil majors. They and other, smaller investors, such as Kuwait's Tri-Ocean and Ansan Wikfs of Yemen, have shares in the oil-producing consortia listed in Table 1, with minority stakes allocated to Sudapet and Nilepet.

In Sudan, the three major Asian oil investors are reportedly becoming increasingly disenchanted with government oil policy, as well as with future oil prospects, and ever more reluctant to expand their investments. One senior company official was quoted as saying that the oil minister was 'screwing' them, and that the company was 'no longer interested in Sudan'.¹¹ The government has in the past taken more than its share of the oil, building up significant debts to the companies, and thereby disincentivizing exploration.¹² In South Sudan, investors were daunted by the 2012 shutdown and are now struggling with reduced production because of the conflict in the Greater Upper Nile region. These developments, exacerbated by low international oil prices and high fees for export through Sudan, significantly reduce South Sudan's appeal as an investment prospect.

In addition, as Table 2 shows, a number of consortia have signed exploration- and production-sharing agreements with the two governments but are not yet producing oil. The largest and most promising prospect is held by France's Total, which hung doggedly on to a stake in the massive block B in South Sudan's Jonglei state throughout the second civil war. Despite a recent buy-in move by Exxon Mobil of the United States (which was cancelled in April 2014), however, the consortium has not undertaken any activity, on the grounds of insecurity, nor has it signed an agreement to move forward with Juba, partly owing to the uncertain political and regulatory situation (Bloomberg, 2014c; Todisco, 2015, p. 13; Total, 2014).¹³

Just as problematically, many of the (mostly very small) companies that speculated on Sudan in the latest large bid round, in July 2012, are reportedly experiencing financial problems, which they blame on US sanctions, and which prevent them from moving forward with exploration. Sanctions are a significant problem for the Sudanese oil industry, as they affect the quality of imported

Table 2 **Blocks under exploration**

Country	Block	Consortium/status	Shareholders
South Sudan	5B	Ascom Sudd Operating Company	Ascom (Moldova): 90% Nilepet: 10%
	A (southern part)	Awaiting licensing	Nilepet: 100%
	B1 and B2	Total	Total (France): 32.5% Exxon Mobil (United States): 32.5% (withdrew 2014) Kufpec (Kuwait): 25% Nilepet: 10%
	B3 and E*	Star Petroleum	Star Petroleum (Luxembourg): 75% Nilepet: 20% Hemla (Norway): 5% (E only)
	C (southern part)	Awaiting licensing	Nilepet: 100%
Sudan	3 and 7 (northern part)	Petrodar Operating Company	CNPC: 41% Petronas: 40% Nilepet: 8% Sinopec International Petroleum Corp.: 6% Tri-Ocean Exploration & Production: 5%
	8**	Forever	Forever Investment (China): 90% Sudapet: 10%
	9 and 11	Sudan Energia	STR Projects/Petra Energia (Brazil): 75% Nile Valley Petroleum (Egypt): 5% Sudapet: 20%
	10	International Petroleum	International Petroleum (UK): 80% Sudapet: 20%
	12A	Greater Sahara	Al-Qahtani (Saudi Arabia): 33% Ansan Wikfs (Yemen): 20% Sudapet: 20% Dindir (Sudan/Jordan): 15% Hi Tech Group (Sudan): 7% All Africa Investment (Libya/Benin): 5%
	12B	Awaiting licensing	Sudapet: 100%
	13 (offshore)	Coral Petroleum Operating Company	CNPC: 40% Pertamina (Indonesia): 15% Sudapet: 15% Express Petroleum (Nigeria): 10% Africa Energy: 10% Dindir: 10%

Country	Block	Consortium/status	Shareholders
Sudan	14	Statesman	Statesman Resources (Canada): 37.6% Sirocco Energy (Australia): 37.4% Express Petroleum: 15% Sudapet: 10%
	15 (offshore)**	Red Sea Petroleum Operating Company	Forever Investment: 75% Express Petroleum: 15% Sudapet: 10%
	16 (offshore)	International Petroleum Sudan	International Petroleum Sudan: 100%
	17	Star Oil	Ansan Wikfs: 66% Sudapet: 34%
	18	Sudan Energia	STR Projects/Petra Energia: 90% Sudapet: 10%
	19 (offshore)	Niel	Niel Natural Resources (Luxembourg): 90% Sudapet: 10%
	23 (formerly part of 4)	Somat†	Soma Group (Turkey): n/a Sudapet: n/a
	25	Al-Rawat	Sudapet: 70% Express Petroleum: 15% MISANA (Nigeria): 15%
	26 (formerly part of 7)	Al-Rawat	Sudapet: 70% Express Petroleum: 15% MISANA: 15%
	C (northern part)	Sudan Energia	STR Projects/Petra Energia: 82% Sudapet: 10% Global: 6% Khartoum State: 2%

Notes:

While efforts have been made to avoid errors and gaps, it should be noted that unpublished license changes and misreporting are relatively common for oil blocks in Sudan and South Sudan. Offshore blocks 21 and 22 are comparatively new; Saudi Arabia's Al Fasil Group signed a memorandum of understanding in 2013 regarding investment in the latter (Awadallah, 2013). Further details are not available, however.

* In September 2014, South Sudan announced that the terms for block E were under renegotiation, with the possibility that the concession might be split in two, and/or the Nilepet share increased to as much as 30 per cent (Bloomberg, 2014d); see also Global Witness (2014b). In addition, Sudapet claims a share in part of block E, which lies on the north-south border.

** Forever Investment has reportedly terminated its agreements in blocks 8 and 15, but no new investor has been confirmed, despite discussions with ONGC-Videsh and CNPC (Offshore Technology, 2014).¹⁴

† This deal was announced in April 2013, but the ownership breakdown was not published (Awadallah, 2013).

Source: James (2015)

equipment and the costs of international financing transactions, while also reducing competition for tenders.¹⁵ However, sanctions are also often wrongly blamed for the impact of more fundamental problems, such as poor exploration prospects.

Other domestic actors

In addition to the major government players and the key foreign investors, the oil sector in Sudan and South Sudan has spawned multiple domestic interest groups.

On the technical side, there are various small oil and oil services companies, many with significant links to the governing elite. An example is Hi Tech Group in Sudan, which is reportedly part-owned by a former oil minister and by members of the president's family; the group was named as an object of US sanctions in 2007 (Africa Intelligence, 2007). Such small companies with family or business links to Sudanese regime insiders—including, it is reported, former clients of the NCP-linked Al-Baraka Bank—often have stakes in the exploration consortia.¹⁶ This phenomenon is less marked in South Sudan, where the private sector is less developed.

On the security side, involvement in the oil industry is also strong.¹⁷ The security aspect of operations tends to be managed within the producing consortia by the state oil company partners, Sudapet and Nilepet. In Sudan, the responsibility for guarding the perimeters is largely given to the 'oil police'; while they are officially part of SAF, they often seem to receive orders from the National Intelligence and Security Services (NISS) (USDoS AF/SPG, 2007). The consortia themselves also employ internal security forces, which reportedly include NISS nominees. The presence of armed forces to protect the oil continues to be controversial in disputed and supposedly demilitarized areas. In Abyei, for instance, the oil police at the Diffra field have long been a source of north-south tension and international controversy (Craze, 2013, p. 72).

Although the 2012 Petroleum Act explicitly tasks the South Sudan Police Service and the National Security Service with providing security for the oil sector in South Sudan, a greater role appears to be played by private security companies, many of which employ demobilized SPLA soldiers. These relatively

poorly trained and low-paid guards reflect existing tensions within the country; they were involved, for example, in the political and ethnic violence that left oil workers dead in Bentiu and Thar Jath in the internal conflict that erupted in South Sudan in December 2013.¹⁸ Since then, the ongoing civil conflict has tended to blur the distinctions between private security, pro- and anti-government militias, and the regular armed forces. Locally recruited Dinka militias, organized by the National Security Service, are increasingly prominent in oil security, while the role of the SPLA has been reduced. Examples include a Panaru Dinka militia in Pariang county and, as noted above, a Padang Dinka militia around Paloich field in Upper Nile, which reports to the oil minister, Stephen Dhieu. These militias are reportedly funded by the oil companies, and members are paid almost double the salary of an SPLA soldier.¹⁹

Finally, there are many relevant domestic actors in the oil areas themselves. Most importantly, these include the local communities and their chiefs, as well as traders and service providers. One level up, state government officials from oil-producing states also seek to exercise some oversight, especially in South Sudan, where state governors have been relatively powerful. In addition, localized opposition and rebel forces in both countries have a strong interest in targeting or controlling the oil areas—based on the fact that hampering production directly reduces the amount of money the central government has available for military spending. 🇸🇩

IV. Political and economic dimensions

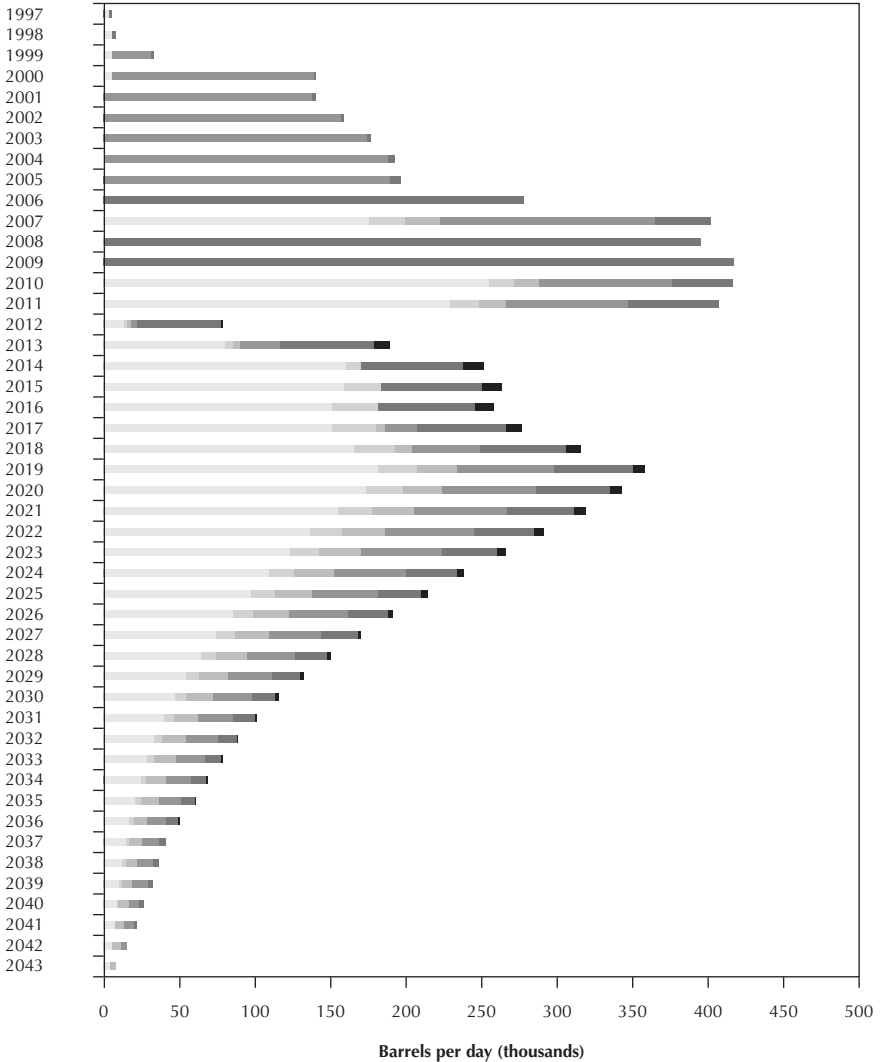
Oil has long been a politically divisive factor in Sudan and South Sudan, and while it has provided a short-term cash bonanza, it has also contributed to the entrenchment of deeper economic structural problems (Large and Patey, 2011, p. 179). As of late 2015, even that bonanza was failing, and the troubled oil sectors in both countries were implicated in a set of internal political and economic problems. In Sudan, the economic deterioration and political discontent since southern secession in July 2011 has been a slow burn. In South Sudan, there have been dramatic crises and recoveries, from the sudden oil shutdown in January 2012 to the political crisis in 2013 and the subsequent armed conflict, which has increased government indebtedness and dashed hopes that oil revenue might contribute to an economic recovery. Regardless of what happens in the immediate political and economic contexts, both countries face the likelihood of an ongoing decline in oil production that will force fundamental political and economic realignments (see Figure 1).

Production projections

Barring major new discoveries in the future, oil production in Sudan and South Sudan has probably already peaked. Although production may recover somewhat if the recent peace agreement that was mediated by the Intergovernmental Authority on Development (IGAD) holds, it will then resume its decline. International analysts expect Sudan's production to fall below 100,000 barrels per day within a decade, and South Sudan's may drop to the same level before 2030. While national oil ministries are more optimistic,²⁰ officials are prone to overestimating the likelihood of major new finds; they also repeatedly underestimate the impact of national and international political risk, which has continually deterred investment in the two countries.²¹ The demand for Sudanese oil is also depressed by its very uneven quality (see Box 1).

Figure 1 Oil production and projections for consortia in Sudan and South Sudan (thousands of barrels/day), 1997–2043

- Star Oil (Sudan) ■ Petro-Energy (Sudan) ■ Greater Nile Petroleum Operating Company (Sudan)
- Greater Pioneer Operating Company (South Sudan) ■ Sudd Petroleum Operating Company (South Sudan)
- Dar Petroleum Operating Company (South Sudan)



Note: data for South Sudan is current as of 22 April 2015; for Sudan, as of 16 February 2014.

Source: unpublished data from Wood Mackenzie, shared with the author in April 2015

Box 1 **Sudanese and South Sudanese oil: the technical constraints**

From concession blocks 1, 2, and 4, Sudan and South Sudan jointly produce Nile Blend (34 API, 0.06% sulphur),²² a quality light crude that trades at only a small discount to the Indonesian benchmark Minas. Oil from 5A is also blended into this stream, although its quality is not as good, meaning that it must be kept to no more than 10–15% of the total. All of this oil is processed at the Heglig/Panthou central processing facility and enters the 1,610-km pipeline to the Bashayer export terminal at Port Sudan. However, part of the stream is diverted and refined in Sudan, at the main Al Jeili refinery near Khartoum and a smaller facility near El Obeid, to generate petroleum products for domestic use.

From blocks 3 and 7, South Sudan produces the heavier Dar Blend (26 API, 0.1% sulphur), which is more problematic in quality. It originally traded at a large discount to the benchmark Dated Brent blend and, although that gap has narrowed sharply in recent years, it still has a 39°C pour point, meaning that the pipeline must be heated and the oil must flow constantly so as not to solidify. The January 2012 shutdown was particularly risky in this respect: if it had not been performed properly, the congealed oil could have destroyed the export pipeline. Dar Blend is processed at the Al Jabalayn central processing facility in Sudan and exported via a separate, 1,505-km pipeline to the Port Sudan marine terminal.

In blocks 6 and 17, Sudan produces the much heavier and highly acidic Fula Blend (20 API, 0.1% sulphur), which is not exported, but processed in a dedicated section of the Al Jeili refinery. Lighter oil was recently found in these blocks, which are now linked to the Nile Blend stream via a tie-in pipeline; they contributed around 35,000 barrels per day in 2013.

Sources: Afaf, Badia, and Hassan (2008); MPM (2012a); author communication with experts in the field, January 2012 and June 2013

Sudan's oil output averaged 120,000 barrels per day in 2014, not far above domestic consumption requirements. Of this volume, less than one-third, or 40,000 barrels per day, was being exported—all by the oil companies, as the government's share goes to domestic refineries. This situation is already presenting a major problem for the country, as the government struggles to fill the 100,000-barrel-per-day Khartoum refinery (which operates inefficiently when significantly below capacity), while the oil companies seek to export their full share of the oil. Sudan became a net oil importer in 2014, with significant long-term fiscal and logistical implications (CBOS, 2014; Platts, 2015a). As the refinery is far inland, and designed for local crude, it may be more efficient to import refined products if an agreement cannot be reached with South Sudan to secure supply for a few extra years.²³

There were plans to boost oil production to 140,000 barrels per day in 2015, on the back of new output at Sufiyian field in block 6. Like all previous forecasts, however, this projection has proved over-optimistic and production remained around 2014 levels (AFP, 2015; *Sudan Tribune*, 2015i). Although enhanced oil recovery technology could have a significant impact in Sudanese fields, investors have little incentive to boost production in the current environment of corruption, political and economic instability, and short-termism (expressed, for example, in the government's habit of taking more than its share of the oil when under economic pressure). A recent Norwegian technical support programme made little progress, apparently because of a lack of follow-up by the Sudanese oil ministry.²⁴ Offshore gas is present in the Red Sea concessions but may be very expensive to exploit.

In South Sudan, the most promising prospect may be block B in Jonglei, which oil companies have long seen as inaccessible because of pervasive insecurity. This area is widely acknowledged to be promising for potential discoveries, but oil industry insiders put the probability of a major find at just 10–20 per cent. Moreover, the main concession holder, France's Total, has shown no desire to move forward with exploration in an unstable environment, preferring to sit on the potential reserves, to Juba's dismay.²⁵ Meanwhile, South Sudan's existing oil production plummeted because of the fighting and hovered around 160,000 barrels per day in 2014 and into 2015, compared with 245,000 barrels per day previously, as blocks 2, 4, and 5A entirely ceased operation; meanwhile, in concession areas 3 and 7, an estimated 80 of 400 wells are shut in.²⁶ While South Sudan has also made plans with CNPC for enhanced oil recovery, any major increase in output seems unlikely in the absence of improved security in the oil areas (Platts, 2015b; *Sudan Tribune*, 2015b).

Political and economic realignments

This overall context of declining oil production is closely linked with political and economic instability, playing out at a number of different levels. At the international level, there have been shifts in the balance of power since the secession, not only between Sudan and South Sudan, but also between the two countries and their main oil investors, particularly China. South Sudan and

China fast developed a positive relationship, with old charges of collusion with Sudan in the civil war apparently forgotten or forgiven (Dziadosz, 2012; Large, 2011).²⁷ China–Sudan relations remain rhetorically close, but the removal of the most senior CNPC representation to Juba signalled a reduced commitment as compared with previous years. India has also responded cautiously to offers of new investment opportunities from Sudan, which has already missed instalment payments due to ONGC (*Sudan Tribune*, 2013c).

In general, the Asian state oil companies maintain a healthy wariness of the two governments, which have shown a readiness, despite all geopolitical imbalances, to take decisions highly prejudicial to their partners' interests. Examples include Juba's oil shutdown in January 2012 (swiftly followed by the expulsion of a CNPC executive) and Khartoum's demands for ownership of the export pipelines and for the payment of prohibitively high fees (USD 19.80 per barrel) by companies operating in Sudan—for use of a pipeline the companies themselves built (*Sudan Tribune*, 2014l; 2014p).²⁸ The investors are not considering withdrawal from either state, however. China, in particular, has been playing a more active, albeit ambiguous, role in efforts to resolve local conflicts since 2012 (Jorgic, 2014; see Box 2). Remarking philosophically that 'oil is in tough places', the foreign oil companies seem prepared to sit out the current disruption.²⁹

In contrast, the big Western oil companies remain effectively excluded from Sudan's oil sector. Their absence is a function of the sanctions regime that reflects the continued dire state of US–Sudanese relations; in 2002, the United States had even threatened to bomb Sudan's oil infrastructure (Patey, 2014a, p. 110). In South Sudan, Western oil majors have shown some interest, to the concern not only of China, but also of Sudanese conspiracy theorists, some of whom saw the CPA as a Western plot to gain control of South Sudanese oil (Li, 2011, p. 10).³⁰ However, the civil war and falling oil prices have prevented any new Western investment.

Regionally, the dynamics are in part driven by speculation about the potential synergy between oil discoveries in South Sudan, Uganda, and Kenya. There has been a resurgence of investor interest in the Rift Valley area in East Africa since 2005 (Anderson and Browne, 2011).³¹ This has raised the prospect that South Sudan might consider using a pipeline through Uganda or the Lake Turkana region to Lamu Port in Kenya (which is being developed under

Box 2 **China in the South Sudan conflict**

China has a long history of involvement in Sudan and South Sudan, as a key oil investor and trading partner. For China, Sudan initially functioned as the gateway to Africa, making it doubly important to remain as apolitical as possible, and to eschew any perceived involvement in successive security crises. Beijing was keen to portray itself, across the continent, as an economic ally without political strings attached. Yet recent developments, and particularly the outbreak of conflict in South Sudan, have put a strain on this balance and forced a change of stance.

China's oil imports from Sudan and South Sudan have not been insignificant—averaging around 5 per cent of the economic giant's total oil imports. In addition, China has invested deeply in the oilfields, as well as in extremely large oil-linked loans, which have not yet been repaid. In 2012, more than 100 Chinese companies, with more than 10,000 Chinese nationals, were operating in the two countries. As a result, a return to peace and resumed oil output has become an important priority (IEA, 2014, pp. 30–31). On the diplomatic side, China has become more involved in supporting the IGAD-mediated peace negotiations in Addis Ababa, partly by maintaining a permanent presence there, while the Chinese special envoy to Africa engages heavily with other partners (Jorgic, 2014).

China has also, for the first time, sent a significant number of combat-ready infantry troops to a UN peacekeeping operation—the UN Mission in the Republic of South Sudan (UNMISS). Partly owing to Chinese pressure, the UNMISS mandate includes the aim to 'deter violence against civilians, including foreign nationals [...] in areas at high risk of conflict including, as appropriate, schools, places of worship, hospitals and the oil installations' (Patey, 2014b; UNMISS, n.d.). In January 2015, 570 Chinese peacekeepers deployed, followed by 130 more in April, although there are suggestions that internal UNMISS decisions have kept them from being deployed directly to Paloich (VOA, 2015).

This new approach is at odds with China's longer-established role as a significant arms supplier to the region. HSBA Issue Brief No. 7 examines the historical nexus between Chinese oil and arms in Sudan, noting how 'in addition to helping finance Khartoum's acquisition of weapons on the international arms market through oil revenues, China has also acted as a major arms seller to Sudan and assisted in the development of domestic arms production with technology transfers and technical assistance' (Small Arms Survey, 2007, pp. 4–5). China's role as arms supplier to the GoS has continued, accounting for some 58 per cent of all of Khartoum's self-reported imports over the period 2001–12, and the GoS has angered Beijing by continuing to retransfer some imported Chinese weapons and ammunition to allied actors in Darfur—in violation of the UN arms embargo on Darfur—and to rebels in South Sudan (Leff and LeBrun, 2014, pp. 24, 105).

Complicating matters even further, the Government of the Republic of South Sudan (GoRSS) has, since independence, secured contracts for large shipments of Chinese arms; in effect, China thus supplies arms to all sides, across Sudan's conflict zones. Following news reports that a Chinese state-owned arms manufacturer, Norinco, shipped USD 38 million worth of small arms and light weapons to the government in Juba in June 2014—as the civil war in South Sudan was raging—China declared a moratorium on arms sales to the new republic (AI, 2014; Bloomberg, 2014e). The peacekeeping role is also in potential tension with the involvement of China and the other oil concession partners in funding local militias to protect the oilfields in South Sudan—again, in line with patterns previously established in Sudan, where the oil consortia were routinely reported to pay for the 'oil police'.

the LAPSSET project),³² or through Ethiopia to Djibouti, rather than sticking with the existing Sudan connection. There has been no progress, reflecting not only the non-existent economic case for a new pipeline, but also the extreme regional sensitivity of the decision between those options. Ethiopia and Uganda, in particular, are both influential neighbours with a military footprint in South Sudan—and there are longstanding tensions between the governments of Sudan and Uganda.

These regional tensions could increase further if South Sudan were to resume serious consideration of the pipeline project. However, a separate LAPSSET pipeline is unlikely to be economically feasible in the absence of new discoveries; it would be very expensive (USD 4 billion) and the quantity of oil would be insufficient. Recent discoveries by Tullow Oil in Uganda and northern Kenya may result in the building of a pipeline to Lamu, although that investment decision is not due until late 2017. Even if it is constructed, however, Tullow will be unwilling to mix its oil with South Sudan's Dar Blend, which is difficult to transport and worth significantly less.³³ As neighbouring countries, Kenya and Uganda also have a more immediate interest in oil exploitation in South Sudan: oil money has been a major source of export revenue and remittances for both countries since 2005, especially in the boom years up to 2012, as their people and goods flooded over their borders (Salama, 2014).³⁴

At the national level, the GoS has historically controlled oil revenue in a way that entrenched existing patterns of high centralization as well as the marginalization of the peripheries.³⁵ In 2015, the regime remained preoccupied by its ongoing fiscal and balance-of-payments problems that resulted from the sudden loss of oil revenue after the southern secession, and by its own poor management of the adjustment. It has been 'borrowing' oil (not necessarily with permission) from foreign partners, especially CNPC, and paying in promises of future hydrocarbons (*Sudan Tribune*, 2015a).³⁶ There were reports in April 2015 that oil belonging to South Sudan and to the oil companies was being diverted to the new power station at Kosti, although it is unclear to what extent this was the result of a voluntary agreement (Albashir, n.d.).³⁷

Economic pressures in late 2013 forced the GoS to implement a dramatic cut in fuel subsidies, which resulted in an unusual display of popular anger against the regime.³⁸ Fuel shortages continue despite a small boost from falling oil prices

and, as stated above, the country has become a net oil importer. Petroleum export revenue fell by 69 per cent year on year in 2014, to USD 1.25 billion, while petroleum product imports cost USD 1.52 billion (CBOS, 2014; *Sudan Tribune*, 2015d). The situation has been worsened by the reduction of oil output and the economic crisis in South Sudan, which continues to limit the value of transit fees to Khartoum. With fighting continuing in Darfur and the Two Areas, the government has toyed with the idea of a national dialogue to broaden its base, but its rejection of this path before the widely boycotted presidential election in April 2015, and the subsequent government-dominated process, have underlined its unwillingness to yield, or share, real power.

There are also ongoing concerns about corruption, which is particularly pronounced in Sudan's oil sector and has a significant security dimension. The CPA period witnessed repeated claims—by the Southern Sudanese regional government and by international NGOs—that South Sudan was being cheated of its fair share of the oil revenue (Global Witness, 2009; 2011).³⁹ There were promises of and plans for a full oil sector audit but, as bilateral tensions rose in advance of secession, an audit never materialized. In a recent Afrobarometer survey, Sudan ranked poorly even among African oil states in areas such as official impunity and media scrutiny; moreover, the country ranked 173rd out of 175 in Transparency International's latest global Corruption Perceptions Index (Gyimah-Boadi et al., 2013; TI, 2014). These issues feed into the disputes over oil revenue sharing at a subnational level, with almost no oversight of whether state governments and local communities are receiving their due allocation—or of what they might do with it when it is actually transferred. Experts suggest that the allocation has been used as a means of patronage for pro-NCP officials rather than to promote development (Patey, 2014a, p. 193).⁴⁰ The problem of patronage was further exacerbated in 2015, an election year in Sudan.

At the national level in South Sudan, it is a matter of concern that in some respects the new country seems to be becoming a mirror of Sudan, based in part on government control of oil revenue. Patterns of centralized authority, the sidelining of peripheries, poor spending control, patronage instead of development, a militarized state apparatus, oil-fuelled internal conflict, and charges of corruption are clearly visible and familiar.⁴¹ On the economic side, the Juba government took on massive debt obligations during the period of the oil shutdown

and, as several different branches of government (including the army) negotiated these deals, nobody had a full overview of their magnitude, although the sidelined finance minister estimated them at USD 4.5 billion (Radio Tamazuj, 2015e; Sandrai, 2013; *Sudan Tribune*, 2013e).⁴² CNPC and Petronas reportedly brokered some of these loans with the Chinese and Malaysian governments, placing an ongoing burden on government finances; in 2014 alone, repayments worth USD 781 million were made directly from oil revenue (MPM, 2014; *Sudan Tribune*, 2015c).⁴³ South Sudan is consequently in a state of economic crisis: its oil revenues are down because of lower output and depressed international prices, while its military spending is sharply up as a result of the civil conflict.⁴⁴ Since fighting broke out, South Sudan has reportedly spent at least USD 1 billion on weapons (Bloomberg, 2014b).

The World Bank has estimated that, under current circumstances of low international oil prices, combined with fees paid to Sudan and debt repayments, the GoRSS is only receiving around USD 10 per barrel for its oil (Radio Tamazuj, 2015d).⁴⁵ A massive running deficit of well over USD 100 million per month was making it difficult for the country to pay civil service, and even military, salaries in 2015, and a related lack of US dollars was contributing to fuel shortages. The budget deficit reached SSP 4.1 billion (USD 680 million) in the first three quarters of the 2014/15 fiscal year (MoFEP, 2015). As during the 2012 shutdown, various ministries and institutions were seeking new non-transparent loans, without central planning (Deng, 2015; Global Witness, 2014a; *Sudan Tribune*, 2015f). Oil companies have refused requests for new loans, as South Sudan is failing to service those it has already taken (Bariyo, 2014). In March 2015 the parliament approved plans to seek a new USD 500 million loan from Qatar National Bank, to be repaid in oil, despite risks noted by observers (Vickers, 2015). But with external financing in short supply, the Central Bank has been printing money to cover the massive fiscal shortfall, a move that is likely to cause further currency depreciation and spiralling inflation (AP, 2015; MoFEP, 2015). One study has estimated the total costs of the conflict to South Sudan at USD 22–28 billion over five years (Frontier Economics, 2015).

While the economic crisis has probably hindered official efforts to combat oil sector corruption, implementation of planned reforms was already lagging. The year 2012 saw the passing of a petroleum law that is widely admired for

meeting high international standards. It asserts that oil ‘shall be managed in an ethical, efficient, transparent and accountable manner on the basis of environmentally, socially and economically sustainable principles’. A more specific oil revenue management bill, with dedicated transparency provisions, was approved by parliament in August 2013 but is still awaiting presidential signature, creating uncertainty over whether it is in force.⁴⁶ In any case, these laws are generally not implemented—both national and international observers identify a ‘gap’ between formal requirements and actual practice. Funds to stabilize oil revenue and benefit future generations have not yet been established, and there have been problems reconciling crude oil sales and cash receipts (Lasu, 2014).

Calls for a moratorium on oil contracts while the conflict continues have gone largely unheeded.⁴⁷ Indeed, there is a degree of resentment regarding the demands of international watchdogs such as Global Witness, which are seen as ‘making things difficult’.⁴⁸ Oil company employees have also reported receiving demands for cars and other personal benefits from the most senior staff at the ministry.⁴⁹ In the event, South Sudan was in 171st place out of 175 countries in Transparency International’s 2014 Corruption Perceptions Index—not much better than Sudan (TI, 2014).

The subnational political and economic disputes over oil revenue are even more pronounced in South Sudan than in Sudan. The requirement in the petroleum revenue management bill, following South Sudan’s Transitional Constitution, is that 2 per cent of oil revenue should go to the governments of the oil-producing states, and 3 per cent to the local communities. This arrangement stands in contrast to earlier demands from state governors, such as Taban Deng in Unity (now a rebel and Riek Machar’s chief negotiator), for at least 15 per cent (Patey, 2014a, p. 234). However, not even the lower level has been implemented—and for the funds that are transferred, states allegedly have failed to spend the money on development, while the proposed system for allocations to local communities is formidably complicated and difficult to audit (in part because most *payams* have no bank accounts). It is thus open to abuse or later disputes (Akec and Schenkel, 2013; Lasu, 2014).⁵⁰ This constitutional provision also has important implications in the context of the controversial announcement by Salva Kiir, in October 2015, that South Sudan would be divided into 28 rather than ten states (*Sudan Tribune*, 2015j).

In addition, there are disagreements over the involvement of state governments in the management of the oil sector itself. In February 2014, the president used emergency powers to dismiss the oil minister of Upper Nile state, apparently because he ordered a shutdown of oil output in South Sudan's only remaining operational fields as fighting peaked in Malakal—although a presidential spokesman later argued that his mandate had been unconstitutional, as oil was a national responsibility (Radio Tamazuj, 2014a; *Sudan Tribune*, 2014g). While they are certainly not the determining factor, these political tensions over oil contributed to the rise in discontent that enabled the outbreak of violent conflict in Greater Upper Nile in the days following the killings of Nuer in Juba in December 2013. 🗨️

V. The national oil–security nexus in 2015

It is clear, therefore, that issues surrounding oil in Sudan and South Sudan have fostered and exacerbated political and economic conditions that have undermined security, just as the economic and political impacts of insecurity have complicated the extraction and export of oil. But there is also a more direct relationship between oil and conflict, insofar as oilfields themselves are the focus of rebel attack or the justification for government oppression. The messy history of this oil–security nexus in Sudan and South Sudan has been exhaustively chronicled by various observers.⁵¹ The remainder of this paper takes account of the situation through mid-2015 in terms of intra-state dynamics, bilateral relations between the two countries, and localized community tensions.

Sudan

In Sudan, the government may have control over all of the oilfields, but rebel groups and disgruntled local communities still pose significant threats in some areas. In February 2014, the president directed the then oil minister, Makkawi Mohamed Awad, to ‘double efforts to protect oilfields in coordination with oil-producing states’ (*Sudan Tribune*, 2014d). This followed a visit to concession block 6 in South Kordofan, very close to Darfur. These areas used to be subject to intermittent acts of violence orchestrated by Darfur rebels, such as the attack on Abu Jabra in November 2006 (*Sudan Tribune*, 2006). Over the past few years, however, the nature of the Darfur conflict has changed, with much of the fighting being driven by conflict among Arab tribes (many of them formerly allied to the government) for the pasture land left behind by farmers who were displaced in the earlier fighting.⁵² The discovery of significant amounts of gold in Darfur has further fuelled this conflict.⁵³

The turn to attacks on the oilfields is also brought about by resentment among the former pro-government militias over their perceived abandonment by the Khartoum regime. This political dimension exacerbates the ‘normal’ community

discontent among, for example, Missiriya groups that are denied employment by the oil companies.⁵⁴ The installation in 2013 of a deputy oil minister of Missiriya origin may have been an attempt to address these issues.⁵⁵

Security concerns are also heightened in block 4, especially the southern and western parts.⁵⁶ This situation is a product not only of the discontent among Arab tribes, but also of the activities of the Sudan Revolutionary Front, the alliance of the major Darfur rebel groups—the Justice and Equality Movement (JEM) and both factions of the Sudan Liberation Army—and the SPLM–North (SPLM–N) in South Kordofan and Blue Nile. A recent review concludes that attacks on oil installations are not currently a ‘tactical priority’ for the SPLM–N, and when they do occur they are focused on economic disruption rather than capture (Spittaels and Weyns, 2014, p. 24). Nevertheless, oil management seems to have been a significant driver of the conflict in South Kordofan and Blue Nile at an earlier stage; it was a major issue in the run-up to elections there, as reflected by the capture of Chinese oil workers in 2009 (Young, 2012, pp. 248–49).

The overall upshot is that, when an attack on Sudanese oilfields takes place, the perpetrator could be any of a number of possible actors with different objectives. In February 2012, the SPLM–N briefly captured 29 Chinese construction workers in South Kordofan. In June 2013, there was a bomb attack on a pipeline in Abyei linking the Diffra field to the central processing facility of Heglig/Panthou. In April 2014, foreign oil workers were kidnapped in South Kordofan, with one Chinese engineer eventually freed by security services in October (*Sudan Tribune*, 2014r). Although the government blamed JEM in both of the later cases, none of the rebel groups claimed responsibility, leaving a plethora of possible candidates—and emphasizing, once again, the vulnerability of oil exploitation in Sudan’s insecure borderlands (Radio Dabanga, 2014b; *Sudan Tribune*, 2013a).

South Sudan

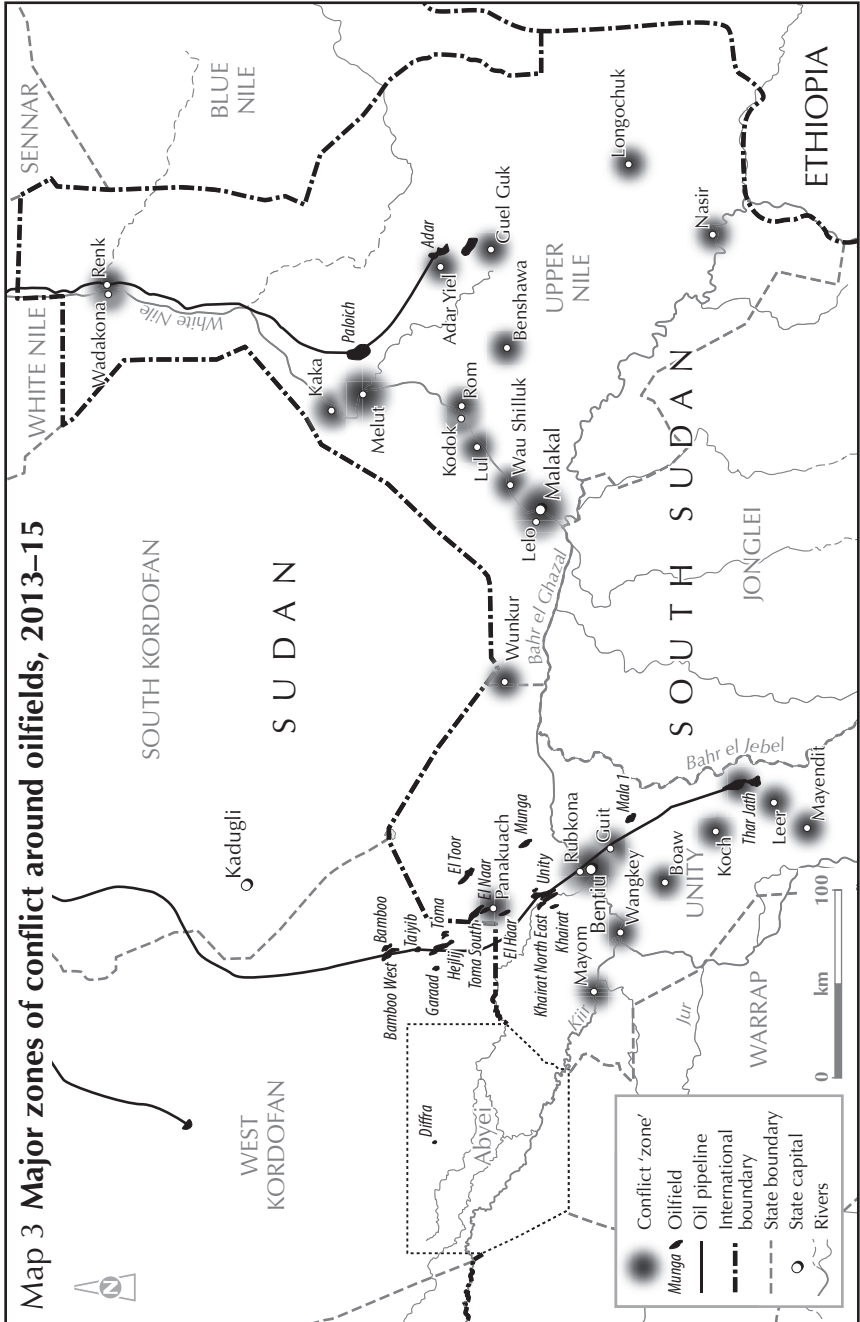
In South Sudan, oil has been an important focus in the political and military conflict between President Salva Kiir (who relies on oil revenue to keep the army and government running) and his former vice president (who can strengthen his military and political position by threatening the oilfields).⁵⁷ Riek Machar’s

largely ethnic Nuer power base is located near the Thar Jath oilfield in Unity state, which was a site of some of the initial fighting when the 4th Division of the SPLA, commanded by Maj. Gen. James Koang, mutinied in December 2013 (see Map 3). There was fatal violence among local oil workers and security staff in both Thar Jath and Pariang county in the north of the state (*Sudan Tribune*, 2013f).⁵⁸ On 19–22 December, the operator of the Unity oilfields, Greater Pioneer Operating Company (GPOC), was forced to shut down production (which had only restarted in early 2013, after the last interruption) and evacuate the area. The Sudd Petroleum Operating Company in block 5A also had to implement a full shutdown, and remains in a rebel-held area. While the government retook the Unity and Toma South fields in March 2014, security and access issues, as well as the significant damage done to the export pipeline by the emergency shutdown, prevented any restart of production (HSBA, n.d.a). The government has made repeated statements regarding plans to restart output, especially at the time of its renewed offensive in Bentiu in April 2015, but no concrete progress has been made (*Sudan Tribune*, 2015g). In March 2015, GPOC was reportedly laying off most of its staff, suggesting little immediate optimism.⁵⁹

While South Sudan's more productive oilfields, in Upper Nile, remain in partial operation, notably at Paloich, output is significantly lower than capacity. The coming on stream of South Sudan's planned small new refineries, especially the 50,000-barrel-per-day facility at Thiangrial in Upper Nile, which had been due in early 2014, has also been delayed indefinitely (Radio Tamazuj, 2014b).⁶⁰ Oil areas have come under repeated threat: in February 2014, heavy fighting in the state capital, Malakal, prompted the operator to withdraw non-essential staff from the Adar-Yale and Gumri fields, in cooperation with the state authorities—a decision later condemned and reversed by the central government (Manson and Blas, 2014; Odera, 2014; *Sudan Tribune*, 2014f). Although Malakal is 140 km from the main oil installations, it is a gateway to them, and it was again affected by fighting in April 2015, this time as a result of a dispute between the SPLA and a pro-government militia. The Adar-Yale fields were identified as a key military target (HSBA, n.d.b).

Thus petroleum remains a significant issue in the ongoing conflict. As one observer concluded, 'Riek Machar wants to shut down the oil, if he can't take it over.'⁶¹ Privately, Machar, like the government, initially assured the companies

Map 3 Major zones of conflict around oilfields, 2013–15



that the oil would be protected, and his negotiators claimed that they made a deliberate decision to avoid shutdown in the interests of third parties (*Sudan Tribune*, 2014e).⁶² In December 2013, Machar proposed a plan for an escrow account to collect revenues from rebel-controlled oilfields; however, this announcement gained little momentum (*Sudan Tribune*, 2013g). It therefore seems clear that the military priority of the rebels is to prevent the government benefiting from the oil to pay army salaries, since they cannot exploit it themselves.⁶³ At the very least, they hope to prevent the restart of output at any of the wells that are currently shut in.

Despite their established role in the conflict, oil and oil revenue are addressed in a limited set of clauses in the IGAD-mediated peace agreement of 17 August 2015 (IGAD, 2015). The transitional government is tasked with ensuring ‘prudent, transparent and accountable management of national wealth and resources’ (IGAD, 2015, ch. I, art. 2.1.7). Chapter IV of the agreement concerns ‘Resource, Economic and Financial Management Arrangements’, but many of the provisions are relatively vague. In particular, power sharing is not complemented by any specifics on oil revenue sharing. The agreement states that ‘the framework for sharing wealth from the extraction of natural resources should balance the needs of service delivery and reconstruction of the producing States’ (ch. IV, art. 4.1.8)—which could be understood in any number of ways. ‘Local communities’—not always an unproblematic concept—are to be given priority in employment and participate in decision making (art. 4.1.6), but only ‘through their respective States’ (art. 4.1.11)—a clause that could in fact prove disempowering.

The provisions on transparency and accountability are in line with good practice, but their implementation seems very likely to slip. There is a commitment to implement the 2012 Petroleum Revenue Management Act within three months (IGAD, 2015, ch. IV, art. 4.1.1), but this timeframe could potentially be undermined by the last-minute inclusion of that Act among the 11 that the transitional government is committed to review (art. 3.1.10). An oil sector audit is to be performed; unofficial oil revenue accounts are to be closed; all loans secured against oil are to be identified and recorded; oil sector employment is to be reviewed on merit; non-performing oil service companies are to have their contracts terminated; marketing sales are to be competitive. But there is no indication of how all these ambitious aims are to be achieved simultaneously—

in a post-conflict country with a radical lack of technical capacity and a limited number of embedded institutions. The agreement seems to rely quite heavily on a soon-to-be-empowered ‘National Petroleum and Gas Commission’, but vague language—such as that it shall ‘play a key role in’ contracting (art. 4.1.8) or that the transitional government shall ‘review and transform’ it (art. 4.1.13.14)—is unlikely to help. The commitment to one single petroleum revenue account at the Central Bank is a positive move, but only if the equally ambitious provisions on increased spending transparency (art. 6) actually work. 🗑️

VI. Relations between Sudan and South Sudan

Historically, the north–south conflict has always been the main prism through which to view issues of oil and security in Sudan and South Sudan. It is a notable feature of the new situation since 2013, however, that—at least temporarily—bilateral relations between the two countries became one of the less problematic areas. The oil produced in South Sudan was exported through Sudan, the agreed financial payments were made from Juba to Khartoum, and there was significant cooperation at both the political and technical levels. In October 2013, the two oil ministries looked at a joint work programme; in January 2014, Sudan’s offer to provide oil security forces for South Sudanese fields was seen as a rhetorical goodwill gesture rather than the veiled threat it would have been only a few months previously (Jemal, 2013; *Sudan Tribune*, 2014c).⁶⁴ While developments in 2015—including South Sudan’s request for lower transit fees because of falling oil prices, payment arrears, Sudan’s oil requirement for the Kosti power station, and further mutual allegations of support for each other’s rebels—have brought the status quo under pressure, it still remains in place, locking the two governments together for mutual financial benefit.

Oil and secession

Secession dramatically and rapidly changed the oil landscape. When it became clear, in early 2011, that South Sudan would secede, negotiations on how to divide or co-manage the oil sector began between the two governments, mediated by the African Union High-Level Implementation Panel on Sudan and South Sudan, supported by a Norwegian technical team.⁶⁵ Initial positions were far apart. Sudan, facing a potential 25 per cent drop in government income and 75 per cent fall in export earnings, and knowing that Juba relied on the oil revenue even more heavily but had no other viable export route in the short term and limited technical capacity, argued for a high degree of continuity with the CPA era. This included, maximally, joint management of the cross-border oil

concession areas, and a continuation (or very gradual phase-out) of the 50 per cent oil revenue sharing. Southern Sudan, which had never trusted the CPA revenue sharing model, wanted a complete and immediate separation, including full ownership of all oil resources in the south, division of the GNPOC concession in blocks 1, 2, and 4 (with a conception of where the border would be that differed considerably from Sudan's), and pipeline fees to be paid to Sudan at 'international rates'—the most-cited example being USD 0.41 per barrel for the Chad–Cameroon pipeline.

As negotiations continued in Ethiopia in the first half of 2011, Sudan agreed on a complete separation based on a territorial division of assets, and separate marketing, but continued to seek a package of fees worth at least USD 8 billion over five years in order to address its fiscal and balance-of-payments gaps. These charges amounted to around USD 32–36 per barrel. South Sudan stuck to its line regarding international-level fees but was prepared to offer some conditional 'transitional financial assistance'—a term Sudan found offensive, particularly in view of its development aid connotations. Later this was modified to a 'transitional financial arrangement' (TFA) to secure mutual economic and political viability, and the linkage to the oil sector became less direct. Nevertheless, the gap between the parties remained far too large, equating to several billion US dollars once the demands for the payment of alleged debts, many of them oil-related, were included. As a result, despite several last-ditch attempts, the moment of secession passed on 9 July 2011, without an oil agreement.

Even so, neither country wanted to be responsible for disrupting the status quo, so presidents Bashir and Kiir agreed that oil production and export would continue as usual, with back payments for transit fees to be made by South Sudan once an agreement was reached. Negotiations began over a more satisfactory interim arrangement, but none was agreed, as the parties feared to set a precedent for future transit fees. By the end of the year, the economy of Sudan, which had been sending in regular invoices based on the USD 36-per-barrel figure, began to feel the loss of oil revenue, and the government moved to take payment in kind, loading its own tankers at Port Sudan with southern oil.

In response, in January 2012, the GoRSS made the radical decision to shut down the pipeline—asserting its sovereignty at a huge cost to its own finances, which were 98 per cent dependent on oil revenue, and at the risk of giving

Sudan 'a weapon they never thought of'.⁶⁶ Emergency negotiations failed to avert the shutdown, and relations deteriorated sharply, reaching a nadir in April 2012 when rising cross-border tensions led the SPLA to attack the Heglig oil-field—claimed by South Sudan under the name of Panthou, but within the current administrative borders of Sudan (see Box 3). JEM fighters from Darfur also

Box 3 **Oil and borders**

The April 2012 Heglig/Panthou incident is just one example of the extreme sensitivity of the oil–security nexus in the context of Sudan–South Sudan cross-border relations. The location of the oilfields near the border renders disputes over the actual demarcation line even more intractable than they would otherwise be. Oil activities have also left a legacy of displacement that complicates the border dispute between Sudan and South Sudan, which is characterized by multiple and complex land claims. Access to land and water is the primary and most emotive driver for the border disputes at the local level, yet tensions can become particularly intractable when they are exacerbated by a national-level desire for oil income.

Oil is a dynamic in the complex of issues related to Abyei, for example, which was at one point defined as including significant oil reserves, including the Heglig/Panthou field. By the time the Permanent Court of Arbitration at the Hague set the borders of Abyei as excluding most of the oil (except for a small field at Diffra) in 2009, relations between the northern Missiriya and southern Ngok Dinka groups, both of which use and claim historical links to the area, had deteriorated significantly. Abyei also remains important as a staging post for the larger volumes of oil coming from Neem field in South Kordofan. There are similar dynamics, now with much more at stake, between the Missiriya groups and the Rueng Dinka in the Heglig/Panthou area.⁶⁷ Along with other border disputes and claims, the question of Heglig/Panthou remains a major unresolved issue between Sudan and South Sudan, subject to a stalled negotiation process—and the oil is likely to make it one of the most difficult to resolve. The internal South Sudan conflict has deferred this issue, with Sudan able to continue oil extraction in the disputed areas without challenge. Yet, in the longer term, there is potential for further insecurity on the ground, as significant numbers of SAF and SPLA forces are stationed close by and communities are growing impatient (Craze, 2014, p. 39).

In addition, commitments to demilitarize the border clash with the oil industry's demands for protection; the 'oil police' reporting to the Sudanese security services at the Diffra oil-field, in Abyei, for example, have long been controversial, not least because they operate in violation of UN Security Council resolutions (Craze, 2014, p. 43). Official CPA-era decisions to include representatives of Southern Sudan's security services and Joint Integrated Units were not implemented, despite heavy external pressure. Even with the UN Interim Security Force for Abyei now responsible for maintaining security, Sudan maintains a military presence in violation of a 2011 agreement to demilitarize the area (UN News Centre, 2014).

participated, and Sudan bombed oilfields in Unity state in response (Spittaels and Weyns, 2014, p. 22). By the time South Sudanese forces withdrew, under heavy international pressure, the facilities had suffered significant damage, and production was stopped for more than a month, exacerbating Sudan's economic crisis, as South Sudan also began to feel the pinch.

The increased international attention following the capture of Heglig/Panthou, along with the ongoing economic deterioration in both countries, raised the pressure on Sudan and South Sudan. They finally agreed on the major principles for an oil deal on 3 August 2012, which enabled them to sign a package of agreements in September. This deal kept the transit fee relatively low, at USD 1 per barrel, and processing fees and transportation tariffs (which had previously been paid directly to the companies) close to commercial rates. The addition was a TFA of USD 3.028 billion from South Sudan to Sudan, payable over three and a half years, transferred at a rate of USD 15 per barrel on oil shipped out of Port Sudan.

But the September 2012 agreements were not immediately implemented, due to arguments over sequencing. Sudan wanted concrete border security improvements before it was prepared to allow a restart of the oil flow. Eventually, in March 2013, this problem was solved with an agreement on simultaneous implementation according to a detailed matrix. As a result, oil production in South Sudan was able to restart in April 2013, the oil arrived in Sudan in May, and the first shipments were dispatched from Port Sudan in early July. Even then, the process was not trouble-free. In June President Bashir threatened to block Juba's 'lifeline' if its support to Sudan's SPLM-N rebels did not end (Copnall, 2014, p. 107). This threat remained in place until September 2013, when President Kiir visited Khartoum for a breakthrough summit, which resulted in a significant warming of relations.⁶⁸

The current situation and future prospects

Since that time, Sudan-South Sudan oil sector cooperation has been effectively in place, although somewhat hindered on occasion by the continued official closure of the border. South Sudan for many months paid transit fees as agreed, creating a common economic interest between the two countries (MPM, 2014).⁶⁹

As a result of this, and of the outbreak of internal rebellions, the main security concerns for both governments have been internal rather than bilateral. This cooperation rests on shaky ground, however.

On the economic side, the oil agreement between Sudan and South Sudan was designed for an environment that differs markedly from the current one. As a result of the conflict, South Sudan's oil production is much lower than had been anticipated, and international oil prices have also fallen. This means that the payment of agreed fees to Sudan puts significant pressure on the struggling government in Juba, and payments have indeed fallen behind.⁷⁰ In March 2015, South Sudan requested a reduction in fees, but this does not seem to have been granted by Sudan, which is also struggling economically (Radio Tamazuj, 2015a). Instead, an agreement was signed for South Sudan to supply Sudan's Kosti power station with crude oil in return for electricity imports (Radio Tamazuj, 2015c). The amount was increased from 12,000 barrels per day to 15,000 in May 2015, and Sudan began diverting a further 10,000 barrels per day to the Khartoum refinery in July (Nield, 2015). There are suggestions that Sudan may have made these decisions unilaterally, taking oil in kind in lieu of unpaid fees, but as neither government has spoken publicly, the extent to which this interaction is consensual is unclear.⁷¹

Moreover, even if these tensions subside, there will be further problems when the oil agreement expires at the end of 2016. First, the lower production levels mean that South Sudan may still owe Sudan as much as USD 1 billion of the agreed TFA, which should be transferred, according to the terms, as a lump sum before the end of the year. It is highly unlikely that the government in Juba will have access to such funds. Second, South Sudan will still have no alternative oil export route, meaning that the agreement will have to be renegotiated.⁷² Juba's assumption is that there will be no repeat of the TFA, but if Sudan's economy is still struggling, it is unlikely to be able to resist the temptation to ask for more than a USD 1-per-barrel transit fee.⁷³ South Sudan will be in a weak position and, as in 2011–12, brinkmanship could override the countries' common economic interest in continued oil flow and mutually lucrative cross-border trade.

The second major issue is of both political and military concern: the renewed accusations voiced by each side in 2015 regarding cross-border intervention

and support for the other's rebels.⁷⁴ This has been a longstanding issue, owing to the wartime legacy of personal animosities and equally problematic personal connections spanning the border. These have in the past led to inflammatory moves that do not necessarily reflect official government policy, and could do so again, particularly given the SPLA's use of Sudan Revolutionary Front forces against the SPLM-in-Opposition (*Sudan Tribune*, 2014a). With many oil-aggravated border disputes and community grievances unresolved, there is potential for local fighting to flare up and bring in national-level actors.

In this respect, Abyei and Heglig/Panthou remain key flashpoints. Both are strongly claimed by influential communities on either side of the border, on the basis of historical grazing patterns. Although both disputes are theoretically resolvable at the local level through shared access arrangements, national politicians who have sought to control oil resources have worsened the situation. The fighting in South Sudan has to some extent frozen these and other ongoing border disputes, but at some point they will have to be resolved. Until then, annual dry-season migrations will continue to present a risk of clashes. 🗨️

VII. The local level: oil, human security, and the environment

Given this problematic and multi-level political, economic, and military context, the question remains: what does the oil in Sudan and South Sudan mean for the human security of communities living in the oil areas? The dismal history of oil-related local insecurity and human suffering in the Muglad and Melut basins has already been extensively documented. During Sudan's second civil war and even afterwards, local communities were often disregarded, displaced, killed, denied employment and access to natural resources, made vulnerable to armed groups seeking to attack or protect the oilfields, and exposed to oil-related environmental degradation.⁷⁵ An unpublished UN Mission in Sudan briefing paper of November 2006 begins:

Nearly two years after the signing of the Comprehensive Peace Agreement, Southern Sudanese continue to be driven from their homes and their land by oil development. The helicopter gunships, Antonov bombers and mounted horsemen are no longer the tools of displacement. Instead, a different set of tactics is being employed to ensure the removal of communities seen as being in the way of 'development' (UNMIS, 2006).

In that report and in the subsequent debate, the focus has increasingly been on environmental threats to human security, underscored by multiple sources that paint a consistent picture of neglect. Oil companies have been blamed for building roads that act as dams, causing flooding; performing seismic surveys that affect crops and fish stocks; and contaminating local water supplies, killing people and cattle (UNMIS, 2006). A 2007 assessment by the UN Environment Programme identifies 'widespread and intense dissatisfaction with the oil industry's environmental performance' at the local level. It notes the absence of environmental considerations in project development and management, a lack of scrutiny, an excessive production of water (which communities claimed was discharged untreated), and flaring of gas. It also records anecdotal reports

of damage to pastoral land and dwellings from road building, as well as oilfield chemical dumping (UNEP, 2007, pp. 79, 144). At a workshop held in Khartoum in October 2010, a Norwegian team made presentations highlighting ongoing risks in precisely the same areas (Mehli, 2010). And compensation for the environmental impact of oil extraction remained a major issue of concern in the Sudan–South Sudan secession negotiations in 2011.

Such environmental problems present not only a direct threat to human security, but also a more ‘classic’ security risk, owing to the impact on community relations. This aspect has been inextricably bound up with the broader context of conflict. Acknowledging the challenge, since secession, the governments of both Sudan and South Sudan have separately announced efforts to address the negative impact of oil on the environment and on local community security—with differing degrees of success.

Sudan

In Sudan, there is little evidence of change from previous practice. An academic review in 2013 identified the lack of an adequate environmental legal framework, poor government coordination and oversight, and ‘limited participation of the local community in the decision making process’ as continuing concerns in Sudan’s oil sector (Abdalla, Siti-Nabiha, and Shahbudin, 2013). According to a former environmental adviser at Sudan’s petroleum ministry, Norwegian-funded projects to address environmental issues have not proceeded because the government ‘thought the Norwegians were spies’ and because, at a high level, ‘nobody is giving attention to environmental issues’, being more concerned with production.⁷⁶ In June 2014 the Sudanese oil ministry admitted that oil workers in West Kordofan had accidentally been exposed to radiation (*Sudan Tribune*, 2014n).

Even oil companies were concerned at the lack of scrutiny, noting that standards were not implemented unless the government agreed to push—and pay—for them, which it reportedly was not.⁷⁷ Observers report that community leaders are still completely excluded from the decision-making process, with no access to the ministry.⁷⁸ Although there are certainly efforts by the companies to provide water, roads, and clinics to local areas, their impact is limited by the

government's desire to maintain control of all such initiatives, and to keep the money at the centre.⁷⁹

Since southern secession, many of the remaining oil fields in Sudan are in areas over which the increasingly discontented Missiriya tribe asserts historical claims. As early as 2008–09, research revealed 'profound, pervasive unhappiness in Dar Misseriyya about the impact of the industry on the local economy, and the marginal benefits received from oil extraction, both in terms of labour opportunities and development inputs' (Pantuliano et al., 2009, p. 19). Oil extraction was reported to have led to local conflict over land and large-scale deforestation, as well as water pollution and related cattle deaths. The lack of training to increase youth employment in the oil sector was also highlighted as a key grievance (Pantuliano, 2010, p.14).⁸⁰ Such concerns were at the root of the 2008 Missiriya kidnapping of Chinese oil workers that resulted in four deaths.⁸¹ Although Missiriya communities are formally entitled to 2 per cent of the oil revenue from Abyei, they complain that they are yet to see any of it (Spittaels and Weyns, 2014, p. 47).

Consequently, low-level insecurity persists, as evidenced by delays in the recent construction of a pipeline in block 6, which took seven months to complete, rather than the three months that had been anticipated.⁸² In March 2014 there were protests at the Baleela oilfield in West Kordofan, driven by local complaints about the lack of employment prospects and resulting in four deaths; the following month, oil workers were kidnapped at the Kanar field in South Kordofan (Reuters, 2014; *Sudan Tribune*, 2014h). The government has made some efforts to address this problem. In 2013 a prominent Missiriya, Obeidallah Mohammed Obeidallah, was selected as a deputy minister at the oil ministry. More recently, additional oil police were trained for deployment to protect oil installations across the country (*Sudan Vision*, 2015).⁸³ But the situation is likely to remain volatile.

South Sudan

In South Sudan, the community disruption caused by oil exploration was much deeper, owing to widespread displacement. Even in the CPA era, the oil ministry in Khartoum retained overall responsibility for the sector, and there were continued reports of abuses, including difficulties faced by returnees (Moro,

2011). Secession was at last meant to herald a sea change in the management of the oil industry as regards environmental control and community relations. South Sudan's new oil-related legislation is strong, and well in line with international best practice in these areas, according to both legal advisers and NGO activists (Global Witness, 2012; Savage, 2013).⁸⁴ It is very general, however. There were efforts to expand on these with appropriate regulations, but in this respect the government did not 'hit the ground running'.⁸⁵ Efforts to require the companies to adopt up-to-date and comprehensive management systems have made little progress (MPM, 2013).⁸⁶

In early 2014, both advisers to the government and oil company representatives remained broadly positive, noting an improvement compared with the former attitude of the GoS. As one international adviser noted, 'In the last ten months the ministry has really been emphasizing health and safety and environmental responsibility.'⁸⁷ Officials did seem to be seeking to provide proper oversight of investors, despite being hampered by a lack of capacity—'they don't understand the details'.⁸⁸ Oil companies felt there were better communications at the local level than under the Khartoum government, though more could be done; they were even using locally owned corporate social responsibility projects to ward off inappropriate requests from the central government.⁸⁹ However, they tend to see community security and conflict-sensitivity issues as the exclusive province of the central government, and thus they avoid becoming involved (Ives and Buchner, 2011; MPM, 2012b, p. 23).

Even so, the legacy of Khartoum's way of doing things had not completely dissipated, in part owing to a lack of government capacity. Widespread local oil-related problems, especially with respect to contaminated water, are still being reported.⁹⁰ The nearby communities are legally allocated 3 per cent of net government oil revenue, but they have yet to receive any, given the national fiscal constraints; the allocation procedures are also worryingly ambiguous (Savage, 2013).⁹¹ A substantial degree of continuity is perceived on the ground, with communities still deeply concerned about compensation, labour rights, land use patterns, and environmental issues.⁹² Their grievances have been compounded by the repeated failures to address them—during the civil war, under the CPA, and amid the corruption scandals and crises of a newly independent South Sudan. At a conference in late 2012, an official from Upper Nile state explained:

The oil came to the area and they displaced landowners. Those days everybody understood that laws were not there; we had to swallow our pride and live with consequences. We thought that now there is a government who will help us and things will change. Unfortunately, many of the things have not change[d] yet due to the lack of political will [. . .]. The feeling of my community is we are being oppressed. We left our land, and nobody cares. And if you try to raise your voice, Juba will call you. You will get a call from a big fish. He will threaten you to step down (Cordaid and Justice Africa, 2012, p. 19).⁹³

There are strong anecdotal reports that such feelings of exclusion in the oil areas contributed to the civil conflict in South Sudan. For instance, in early December 2013, an inspection team of the Ministry of Petroleum and Mining found that local community members in Thar Jath and Malakal were so angry that they were ‘talking about rioting’.⁹⁴ It seems that the return of internally displaced persons from the north led to the re-establishment of settlements in ancestral areas that are now within oil safety perimeters, and relocation efforts were not well managed.⁹⁵ As a result, this sensitive area is now home to a large constituency of dissatisfied individuals, some of whom seem to have supported the rebels.

In addition, the conflict itself has shattered hopes of progress in both environmental good practice and community relations. The government has neither the attention nor the budget to prioritize these issues. A study undertaken in 2015 shows that the environmental provisions in the Petroleum Act have clearly not been implemented, highlighting problems including a lack of transparency over pollution (Tiitmamer, 2015). Moreover, in certain respects, the fighting has made things worse. In 2014, the government allegedly forced GPOC to terminate the contracts of Nuer employees on the basis of their ethnicity (*Sudan Tribune*, 2014q). Leakage from the damaged oil wells at Thar Jath has contaminated groundwater, which could affect up to half a million people; researchers have linked the problems to early poor practices by the oil company, as well as the impact of the fighting (Al Jazeera, 2015). 🗨

VIII. Conclusion

Despite all the geopolitical changes, and the creation of a new country, it seems that oil and (in)security in Sudan and South Sudan continue to be ‘two faces of the same coin’. This can be seen in the contexts of community-level discontent, centre–state relations, national patterns of marginalization and corruption, bilateral relations between the two states, broader regional politics, and even the ongoing international interest in the two resource-rich countries. It is also clear that the relationship has had both positive and negative aspects—although the balance, especially at the local level, has leaned overwhelmingly towards the negative.

In the 1980s and 1990s, during the second civil war, oil discoveries near the former colonial border between the north and the south of Sudan became an important driver of conflict, resulting in displacement and deaths. Although oil revenue bound the countries together in relative peace for the CPA’s six-year Interim Period, thus laying the groundwork for the delivery of Southern Sudan’s referendum at the end of the period, practices during the CPA era also increased community discontent and entrenched distrust between the two countries. In 2013, after long negotiations, Sudan and South Sudan finally came to an agreement on transit and other fees that gave them, however tenuously and temporarily, a mutual interest in relative cross-border stability. But oil-related issues are still exacerbating internal problems in the two countries.

What about the future? While predictions are difficult to make given the complex political, economic, and security dynamics, many of which are entirely unrelated to the oil sector, at least three unhelpful trends can be discerned.

First, security risks remain high in South Sudan. While the conflict that began in 2013 was driven by multiple ethnic and resource-related dynamics, the ultimate prize at the elite level remains control of a state apparatus that allows access to lavish oil rents—and the fact that these are smaller than they once were will only render the competition fiercer. The IGAD-mediated agreement signed in August 2015 is fragile, and the admirable aspirations it includes for improved

oil management lack robust enforcement mechanisms. It therefore seems certain that the oil areas will remain a central bone of contention, whether politically or militarily.

Second, Sudan is running out of oil and is now a net importer. Repeated efforts to boost production through enhanced oil recovery and new discoveries have been unsuccessful, in part because of the government's failure to provide an attractive investment environment. But Sudan's transition to the post-oil era is unlikely to be smooth. The security and patronage structures that became entrenched during the years of rising oil income will be impossible to sustain. As they erode, the position of the regime founded upon them will also become less certain. However, in the absence of any strong or cohesive national opposition, and following the foundering of the planned inclusive national dialogue process, it is not clear what might replace the existing power arrangements.

Third, the relative stability in bilateral relations may also prove brittle. Although open conflict has been avoided, a low-level proxy war between Sudan and South Sudan has continued throughout the period since the resumption of oil exports in 2013. The oil agreement between Sudan and South Sudan expires at the end of 2016, and negotiations over a new deal could contribute to a resurgence of tensions between the two countries. South Sudan will be in a relatively weak position, given internal political tensions, the lack of any prospect of an alternative pipeline, and the debts it is already accruing. This may embolden Sudan to make demands that will be perceived as more extortionate than ever, presenting a new dilemma for Juba. Existing border disputes and cross-border tensions could flare up to complicate the situation further.

Since the 1990s, disputes exacerbated by oil exploitation in Sudan and South Sudan have been partially resolved or kept in check by the liberal application of oil revenues. As the oil runs out, these will no longer be available as a temporary fix. Only the disputes will remain. 📌

Endnotes

- 1 Author Skype interview with a former oil minister, 24 February 2014.
- 2 Author interview with an oil investor, London, 19 February 2014; author correspondence with a humanitarian aid worker, 3 March 2014.
- 3 The quote is from Chabbany, a Dinka from Malakal. See also Patey (2014a, pp. 35–36).
- 4 See, for example, Cordaid and Justice Africa (2012); ECOS (2006); Grawert and Andra (2013); Rone (2003); Switzer (2002).
- 5 Author Skype interview with Ahmed El-Idrisy, a former environmental consultant at the Ministry of Petroleum, 14 February 2014; author telephone interview with Alsir Sidahmed, a Sudanese writer on oil issues, 12 February 2014; author correspondence with a former senior oil official, 1 March 2014.
- 6 Author interview with a Sudanese oil insider, London, 18 April 2015.
- 7 After secession, the new Government of the Republic of South Sudan announced that Nilepet was taking over Sudapet’s shares in the various oil exploration and production concessions in the south, without compensation. The GoS protested vehemently, arguing that Sudapet, like other investors, should be allowed to keep its stake or be financially compensated. This issue became a major bone of contention in the negotiations. Author observations based on serving as an economic adviser to the African Union High-Level Implementation Panel on Sudan and South Sudan.
- 8 Author correspondence with an expert on South Sudan, October 2015.
- 9 The GoS originally divided the whole country into numbered or lettered concession blocks on which investors were invited to bid in the early years of oil exploration. These were divided by the border after secession in 2011, but South Sudan has largely kept the same numbering system. Sudan has since added new blocks in subsequent bid rounds, as new areas have been demarcated, or parts of existing blocks relinquished.
- 10 See also AFP (2014); Patey (2014a).
- 11 Author Skype interview with Ahmed El-Idrisy, a former environmental consultant at the Ministry of Petroleum, 17 February 2014.
- 12 Author correspondence with a former senior oil official, 1 March 2014.
- 13 Author interview with an anonymous source, London, 19 February 2014.
- 14 Also author correspondence with a former oil official, 1 March 2014.
- 15 Schlumberger, an oilfield services company, was fined USD 232.7 million for violations of US sanctions in Iran and Sudan (Hong, 2015).
- 16 Author interview with a Sudanese oil industry source, London, 18 April 2015.
- 17 Author Skype interview with Ahmed El-Idrisy, a former environmental consultant at the Ministry of Petroleum, 17 February 2014.
- 18 Author Skype interview with Ole Kirkvaag, an international adviser, 14 February 2014.
- 19 Author correspondence with an expert on South Sudan, October 2015.
- 20 See, for example, MPM (2012a); *Sudan Tribune* (2014).

- 21 For details, see James (2011b, p. 79); Li (2011, p. 8).
- 22 API gravity—short for American Petroleum Institute gravity—is a measure of the density of petroleum liquid compared to water; it is used to classify crude oil as light (more than 31.1°), medium (22.3°–31.1°), or heavy (below 22.3°). Sulphur content makes oil more corrosive; high sulphur content (more than 0.5%) is known as ‘sour crude’, as opposed to low-sulphur ‘sweet crude’.
- 23 Author interviews and correspondence with former oil officials, London, 17, 18, and 20 February and 1 March 2014.
- 24 Author Skype interview with Ahmed El-Idrissy, a former environmental consultant at the Ministry of Petroleum, 17 February 2014.
- 25 Author Skype interview with a former oil minister, 24 February 2014, and author interview with an international adviser, London, 19 February 2014.
- 26 Bloomberg (2014a); Business Day (2014); Platts (2014; 2015a); *Sudan Tribune* (2014k); author interview with Ole Kirkvaag, an international adviser, 14 February 2014.
- 27 Author interview with an international adviser, London, 19 February 2014.
- 28 Author interview with an oil investor, London, 19 February 2014; author correspondence with an oil investor, 26 April 2015, and with a former oil official, 18 February 2014.
- 29 Author interview with an oil investor, London, 19 February 2014; author correspondence with a former oil official, 18 February 2014.
- 30 Author interview with an oil investor, London, 19 February 2014.
- 31 Author interview with an oil investor, London, 19 February 2014.
- 32 LAPSET stands for Lamu Port Southern Sudan–Ethiopia Transport.
- 33 Information obtained by the author at a Chatham House event, ‘Infrastructure Development in the Horn of Africa and Community Responses’ on 25 March 2015, under Chatham House Rule.
- 34 Author Skype interview with a former oil minister, 24 February 2014.
- 35 See Patey (2014a, pp. 186–88).
- 36 Author telephone interview with Alsir Sidahmed, 12 February 2014, and author interview with an international oil investor, London, 19 February 2014; author correspondence with a former senior oil official, 18 February 2014.
- 37 Author correspondence with an oil investor, 16 and 26 April 2015.
- 38 See James (2014).
- 39 Some international analysts with access to the data suggest that the key specific charges in these reports, which involve collusion by all of the international oil companies, are misconceived, but that the general arguments hold with respect to the lack of transparency and corruption in areas such as the awarding of contracts.
- 40 Author telephone interview with Alsir Sidahmed, 12 February 2014.
- 41 See also Young (2012, p. 325).
- 42 Author Skype interview with Ole Kirkvaag, an international adviser, 14 February 2014.
- 43 Author interview with an international oil investor, London, 19 February 2014.
- 44 Low oil prices have a disproportionate impact on revenue because consortia retain ‘cost oil’ to cover their expenses, up to a total of 45 per cent (Lasu, 2014), before ‘profit oil’ is split with the government.
- 45 Author correspondence with a South Sudanese oil sector source, 3 March 2015. Global oil prices fell from more than USD 110 per barrel in July 2014 to less than USD 50 per barrel in

January 2015, before recovering to around USD 60 per barrel in subsequent months (BBC, n.d.). See also Blas and Manson (2014); Craze (2014, p. 56); Radio Tamazuj (2013b).

46 See Deng (2015); MPM (n.d.).

47 The calls were largely based on concerns over a deal with Star Petroleum. See Bloomberg (2014d); Global Witness (2014b); *Sudan Tribune* (2014o).

48 Author Skype interviews with Ole Kirkvaag, an international adviser, 14 February 2014, and with a former oil minister, 24 February 2014.

49 Author interview with an international oil investor, London, 19 February 2014.

50 Author Skype interviews with Ole Kirkvaag, an international adviser, 14 February 2014, and with a former oil minister, 24 February 2014.

51 See, for example, Cordaid and Justice Africa (2012); ECOS (2006).

52 Author correspondence with a senior oil official, 1 March 2014.

53 See, for example, Laessing (2013).

54 See, for instance, Radio Dabanga (2011; 2014a).

55 Author Skype interview with Ahmed El-Idrisy, a former environmental consultant at the Ministry of Petroleum, 14 February 2014.

56 Author correspondence with a former senior oil official, 1 March 2014.

57 For a discussion, see Spittaels and Weyns (2014, p. 61).

58 Author Skype interview with Ole Kirkvaag, an international adviser, 14 February 2014. An analysis of the conflict in Unity state is the subject of a forthcoming HSBA Working Paper.

59 Author correspondence with a South Sudanese oil sector source, 3 March 2015. It was not clear whether this downsizing would affect GPOC's commitment to pay the salaries of local militias that protected the oilfields (HSBA, n.d.a).

60 See also Radio Tamazuj (2013a).

61 Author Skype interview with a former oil minister, 24 February 2014.

62 The source quotes Hussein Mar. Author interview with an international investor, London, 19 February 2014.

63 The oil is exploited by foreign partners that are contracted to the government and transported through Sudan, meaning that control of the loading of export tankers lies with the Sudanese government. While there have been reports of collusion and arms shipments to the rebels from elements of the Khartoum regime—in some cases, old allies from the late 1990s—officially, at least, Bashir remains supportive of Salva Kiir's rule. That position makes it very difficult for Sudan to allow the rebels to export oil openly, even if they were able to capture Paloich and somehow keep it operational.

64 See also Sidahmed (2014a); *Sudan Tribune* (2014b).

65 Unless otherwise stated, this section is largely based on the author's personal experience as economic adviser to the African Union High-Level Implementation Panel on Sudan and South Sudan.

66 Author Skype interview with a former oil minister, 24 February 2014, and author interview with an international adviser, London, 19 February 2014.

67 See, for example, Craze (2013, pp. 118–19).

68 See *Sudan Tribune* (2013b).

69 The Government of Sudan in 2014 estimated that it had received USD 830 million, but did not state the exact time period (*Sudan Tribune*, 2014m).

70 About USD 75.0 million and rising was reportedly owed in March 2015; the sum had increased to USD 85.5 million by July (Niield, 2015; author correspondence with an international oil investor, 16 April 2015).

71 Author correspondence with an international oil investor, 16 April 2015.

72 Author interview with an international adviser, London, 19 February 2014.

73 Author Skype interview with a former oil minister, 24 February 2014.

74 See, for instance, *Sudan Tribune* (2015e; 2015h).

75 See, for example, ECOS (2006; 2010); Moro (2011); Patey (2012).

76 Author Skype interview with Ahmed El-Idrisy, a former environmental consultant at the Ministry of Petroleum, 14 February 2014.

77 'We never felt Sudan was really into [environmental concerns],' said one international oil investor. Author interview, London, 19 February 2014.

78 Author Skype interview with Ahmed El-Idrisy, a former environmental consultant at the Ministry of Petroleum, 14 February 2014.

79 Author interview with an international oil investor, London, 19 February 2014.

80 See also Pantuliano et al. (2009).

81 See Patey (2014a, pp. 197–99).

82 Author telephone interview with Alsir Sidahmed, 12 February 2014.

83 Author telephone interview with Alsir Sidahmed, 12 February 2014.

84 Author Skype interview with Ole Kirkvaag, an international adviser, 14 February 2014, and with an international adviser, London, 19 February 2014.

85 Interview with an international adviser, London, 19 February 2014.

86 Author Skype interview with Ole Kirkvaag, an international adviser, 14 February 2014.

87 Author Skype interview with Ole Kirkvaag, an international adviser, 14 February 2014.

88 Author interview with an international oil investor, London, 19 February 2014.

89 Author interview with an international oil investor, London, 19 February 2014.

90 See also *Sudan Tribune* (2013d).

91 Author Skype interview with a former oil minister, 24 February 2014, and author interview with an international adviser, London, 19 February 2014.

92 For thorough summaries, see Cordaid (2014); Pax (2014).

93 See also Cordaid (2014).

94 Author Skype interview with Ole Kirkvaag, an international adviser, 14 February 2014.

95 Author Skype interview with Ole Kirkvaag, an international adviser, 14 February 2014; unpublished Saferworld reports reviewed by the author seem to support this general argument. See also SSNA (2014).

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