

Gambling in Sub-Saharan Africa

Energy Security through the Prism
of Sino-African Relations

Bas Percival, Benjamin Valk and Lucia van Geuns

Clingendael International Energy Programme



Nederlands Instituut voor Internationale Betrekkingen
Netherlands Institute of International Relations
Clingendael

Gambling in Sub-Saharan Africa

Energy Security through the
Prism of Sino-African Relations

Clingendael Energy Paper

July 2009

Clingendael International Energy Programme

CIEP is affiliated to the Netherlands Institute of International Relations 'Clingendael'. CIEP acts as an independent forum for governments, non-governmental organizations, the private sector, media, politicians and all others interested in changes and developments in the energy sector.

CIEP organizes lectures, seminars, conferences and roundtable discussions. In addition CIEP members of staff lecture in a variety of courses and training programmes. CIEP's research, training and activities focus on three themes:

- regulation of energy markets (oil, gas, electricity) in the European Union;
- the international economic and geopolitical aspects of oil and gas markets, particularly with respect to the European Union security of supply;
- energy and sustainable development.

CIEP is endorsed by BP, the Dutch Ministry of Economic Affairs, Eneco, Energie Beheer Nederland, Essent, the Dutch Ministry of Foreign Affairs, GasTerra, Nederlandse Gasunie, ING, NAM, NUON, Oranje-Nassau Groep, Port of Rotterdam, RWE, Shell Nederland, Total E&P Nederland, the Dutch Ministry of Housing, Spatial Planning and the Environment, Vopak Oil Europe Middle East, Wintershall, Delta, Electrabel, and Esso Nederland.

CIEP-publications and research results are made available primarily through the CIEP website: www.clingendael.nl/ciep.

Title : Gambling in Sub-Saharan Africa: Energy Security through the Prism of Sino-African relations
Authors : Bas Percival, Benjamin Valk, Lucia van Geuns
Copyright : 2009 Clingendael International Energy Programme
Photo Cover : Earth at Large
Number : 2009/1
Published by : Clingendael International Energy Programme, April 2009
Printed by : Jurriaans Lindenbaum Grafimedia, b.v.
Address: : Clingendael 7, 2597 VH The Hague, The Netherlands
P.O. Box 93080, 2509 AB The Hague, The Netherlands
Telephone : +31 70 374 66 16
Telefax: +31 70 374 66 88
E-mail : ciep@clingendael.nl

TABLE OF CONTENTS

List of Abbreviations.....	iii
Abstract.....	v
1. Introduction.....	1
1.1. Africa’s positioning in the global oil market.....	2
1.2. Internationally Competitive	3
1.3. Why China?	5
1.4. Why Security?.....	5
2. Sub-Saharan Africa and its hydrocarbon resources	7
2.1. The Big Three	8
2.1.1. Nigeria.....	8
2.1.2. Angola.....	9
2.1.3. Sudan	10
2.2. The Rest of the Pack.....	11
Conclusion	13
3. The Bonga Attack: Nigeria as an African Case-study.....	15
Section 1: Intrastate Security Concerns.....	15
3.1.1. The Bonga Attack.....	15
3.1.2. Militia Groups: Movement for the Emancipation of the Niger Delta.....	17
3.1.3. Bunkering	19
3.1.4. Militia Clashes, Interethnic Violence, and Militia Rivalry	21
Section 2: Interstate Security Considerations	23
3.2.1 Border Issues	23
3.2.2 Piracy.....	24
Conclusion	25
4. China-Africa Ties	29
Section 1: Historical Relations	29
Section 2: In Pursuit of African Riches.....	32
4.2.1 General Trade.....	32

4.2.2. Trade Partners.....	34
4.2.3. Trade Deals	36
Section 3: Addicted to Oil.....	39
4.3.1. China’s African Oil Expedition.....	39
4.3.2 China’s African Oil Deals.....	41
4.3.3 Not That Significant?.....	43
5. Security.....	45
Section 1: Backlash	45
5.1.1. Soft Backlash	45
5.1.2. Dire Security Threats.....	47
5.1.3. A Victim of Regional Complexities	50
Conclusion	52
6. Concluding Remarks	55
References.....	59
Appendix 1: List of Chinese Oil Ventures in African Countries.....	71
Appendix 2: African Oil and Gas Reserves/Production	79
Appendix 3: List of Incidents Involving Chinese Workers.....	81

LIST OF ABBREVIATIONS

AFRICOM	United States Africa Command
bcm	billion cubic meters
b/d	Barrels per Day
BP	British Petroleum
CDB	China Development Bank
CHEC	China Harbour Engineering Company
CNOOC	China National Offshore Oil Corporation
CNPC	China National Petroleum Company
EIA	Energy Information Agency
FDI	Foreign Direct Investment
FPSO	Floating Production Storage and Offloading
ICBC	Industrial and Commercial Bank of China
IEA	International Energy Agency
IMF	International Monetary Fund
IOC	International Oil Company
LNG	Liquefied Natural Gas
MEND	Movement for the Emancipation of the Niger Delta
MW	MegaWatt
NGO	Non Governmental Organisation
NOC	National Oil Company
NPDC	Nigerian Petroleum Development Company
OECD	Organisation for Economic Co-operation and Development
OML	Oil Mining Lease
OPEC	Organisation for Petroleum Exporting Countries
SPDC	Shell Petroleum Development Company
UN	United Nations
UK	United Kingdom
US	United States
WB	World Bank

ABSTRACT

In a world where global demand for oil is predicted to outstrip supply, where the pace of reserve replacements is not keeping up with production and consumption growth, and finds of new oil fields are increasingly rare, the fight is on to secure what's left. The fact that National Oil Companies (NOCs) now manage roughly 80 percent of the world's oil supply – compared to the 1970s, when the International Oil Companies (IOCs) controlled 85 percent of the world's oil reserves – only makes the competition all the more intense. This has turned the eyes of the Western oil companies to the African continent; one of the last arenas in which they can operate with relative freedom. With Africa currently producing 12 percent of the world's oil and holding 9.5 percent of the world's proven recoverable oil reserves, it is little wonder that there is such heightened interest.

However, the Americans, Canadians and Europeans are not the only ones eager to expand their presence in the African oil industry. South Korea, Japan, India, Russia, and, most impressively, China are also out to secure their share. Total trade between Africa and China amounted to approximately \$73 billion in 2007, compared to a total of \$4.8 billion in 1998 (a remarkable 1,277% increase), with oil accounting for 80% of this trade, demonstrating just how successful China has been in its endeavour.

But not all is as rosy as the trade figures would have one believe. Africa is a continent plagued by conflict, making the cost of doing business there one of the highest in the world. Infrastructure is sorely lacking, as is a reliable, functioning legal framework in many countries, with the added stress for business that corruption is often endemic and pervasive. Those who are serious about doing business in Africa have to contend with the notion that security cannot be taken for granted and a substantial amount of the budget needs to be set aside to this end. Increasing scrutiny by Non Governmental Organizations (NGOs) places an additional 'burden' on firms operating in remote areas.

The Chinese, unaccustomed to operating in such an environment, are beginning to face a number of the same hurdles that other foreign oil companies encounter in their quest to secure reserves, ranging from "soft" issues such as accusations of environmental damage and support of state terrorism, to outright (terrorist) attacks targeting Chinese firms or citizens. In two particularly bloody attacks, 14 Chinese oil workers were killed (9 in the attack in Ethiopia in April 2007 and 5 in the October 2008 attack in Sudan).

This paper analyzes energy security through the prism of Sino-African relations, finding 23 cases of direct security incidents involving Chinese oil companies in Africa since 2005. Chinese firms are learning the hard way that there is a pertinent need to foster sober risk-assessment and security-management skills, as nobody – not even the Chinese who bank on their policy of "non-interference" to create goodwill – is immune to security risks.

1. INTRODUCTION

Africa joined the 'oil game' when its first oil wells started production in Egypt around 1910, quickly attracting foreign interest. China entered the African market relatively late, but has at present firmly established itself in Africa and is determined to supply its economic growth with African resources. China seems to have balanced the determinants for a successful entry into resource rich Africa at a time when the United States¹ and Europe's relationship with the continent have cooled down.

The West's cold shoulder partly stems from the fact that the conflict ridden continent has a myriad of problems to be solved – corruption, ethnic/civil strife, border issues, inter-state wars, transparency, human rights violations – to name but a few. In attempting to tackle these problems, the West, under the United States' leadership (and the banner of the United Nations, International Monetary Fund, and World Bank) has dropped the ball, and China – hungry for resources – has decided to run with it. Lacking a colonial legacy, China has been able to step into Africa with a 'blank slate', thereby garnering legitimacy and leading many commentators to believe that China would be extremely successful in Africa.

Africa and oil prices have a single adjective in common: volatile. The energy market that we live in today is increasingly typified by the volatility of oil and gas prices. In 2008 alone, the price of oil has fluctuated between \$148 a barrel and a low of \$35 a barrel at the end of that year. At the start of 2008, the instability in major oil-producing countries, the threat of terrorism, a decrease in OPEC spare capacity, high demand growth and an uncertain investment climate all have a hand in explaining these fluctuations, and a historic run to the upper price range. However, the current financial crisis and the destruction of liquidity in the financial markets and banking sector has influenced the real economy and by extension the energy industry. Recessions in various OECD countries and a dramatic economic slowdown in China have drastically influenced the demand for oil, putting downward pressure on prices, inevitably affecting the investment decision of oil and gas producers and creating even more uncertainty. What the long term repercussions are of the abovementioned factors are as yet unclear; however, what is clear is that price volatility and uncertainty will remain in an industry that keeps national economies running.

For major consuming and import dependent countries, these fluctuations have become a real priority in their national security thinking. The inevitable result of this situation is that said countries have started to change their perceptions on possible challenges and competition in the quest to supply themselves with secure and accessible oil and gas. Accusing glances, mistrust, bilateral deals and selfish interest characterize these attempts at securing energy. The United States wants to wean itself of its 'addiction' to foreign oil coming from the Middle East, while Europe wants to diversify away from Russian gas, leading both to turn their attention on Africa. Meanwhile, China, as mentioned above, is increasingly seeing Africa as an ideal arena in which to secure much needed energy resources. To secure their respective energy supplies, states have to

¹ In this paper the United States will also intermittently be referred to as the US or America.

decide what tactic they want to use to hedge against volatility in the market and impact on their energy security. The two options available to a state are that of state intervention or market economics, in which China clearly favours the former. State backed enterprises in Africa have become the *sine quo non* of Chinese energy security.

Inevitably, the “scramble” for African oil leads to increased risk-exposure², which is never far removed when operating in Africa. The US, with its giants ExxonMobil and Chevron, and Europe, sporting the likes of Royal/Dutch Shell, Total, BP and Eni, are relatively accustomed to such security threats and the unrelenting accusations of colonial-style abuse – also an inexorable part of doing business in Africa. China, on the other hand, is not quite as accustomed to the scrutiny of (Non-) Governmental Organizations and the necessity to guard against direct attacks on their operations outside of the Middle Kingdom. This paper will highlight the perils of operating in the African oil industry, with a specific focus on China-Africa relations and security threats involving the Chinese. Despite the very real threats facing foreign oil companies, there are no signs pointing in the direction of slowing activity growth. The questions that arise are: Why has Africa become so popular with the worlds oil companies despite the continuing challenges and risks; and has China managed to mitigate these risks better than the rest?

1.1. AFRICA’S POSITIONING IN THE GLOBAL OIL MARKET

According to the BP Statistical Review of World Energy, Africa produces 12 percent of the world’s oil. From the 10.3 million b/d that Africa produces, some notable countries provide the bulk of this production. Nigeria produces the most at 18 percent, or 2.4 million b/d³, with Angola, Algeria and Libya coming in not far behind. In addition, Africa also holds 9.5 percent of the worlds proven recoverable oil reserves. In short, Africa is a substantial contributor to the world oil market, and this role is projected to grow in importance. Jim Musselman, the head of Triton Energy stated clearly Africa’s importance when talking about Equatorial Guinea: “We’ve found in excess of 500 million barrels of oil here, and we expect that to grow to at least 1 billion—and that’s not to say what we won’t find more. This is one of the hottest spots in the world right now.”⁴ For the small independent oil companies, like Trion Energy, this is especially true.

For IOC’s, a structural problem is found in resource nationalism. Although reports of the inevitable demise of the IOCs are undoubtedly exaggerated, an unavoidable fact is that IOC access to reserves has fallen from 85 percent (of the world’s total) in the 1970s to around 7 percent in 2007.⁵ Some individual African countries are important singular suppliers to the oil market as stated above, and since Africa is one of the few places where IOC’s are free to roam, it has increased in importance for both IOC’s and heavily

² The risk referred to here is that of physical risk (kidnapping etc.), economic / investment risk and political risk.

³ BP, *BP Statistical Review of World Energy 2008*, July 2008, p. 8

⁴ Silverstein, Ken, “U.S. Oil Politics in the ‘Kuwait of Africa’”, *The Nation*, April 4, 2002. Accessible at: <http://www.thenation.com/doc/20020422/silverstein>

⁵ “Reports of IOC’s Demise Greatly Exaggerated”, *Petroleum Intelligence Weekly*, Vol. XLVII, No. 8, 2008.

oil dependent countries. The latter's concerns are natural, due to the fact that an increasing bulk of the world's oil is coming from a dwindling number of countries, most of which are in countries perceived as being politically unstable. This has had an effect on various heavily dependent countries and has resulted in them trying to diversify away from the Middle East, with Africa as a linchpin for diversification.

1.2. INTERNATIONALLY COMPETITIVE

Internationally, the increased importance of African oil has had a noticeable effect on oil importing countries. The United States, which acquires 21 percent of its imported oil from Africa, has made some fundamental decisions to ensure the continued flow of oil from Africa.⁶ It has set up a regional command, called AFRICOM, patrolling the Horn of Africa and the Gulf of Guinea, mitigating threats from risks such as piracy. This policy is not as radical as one might think, since, for example, Nigeria is America's fifth largest supplier of crude oil at 8.4 percent.⁷ As one can deduce, the continued flow of African oil is of paramount importance, especially considering that Africa supplies the US with more oil than the Persian Gulf; an area where America's energy insecurity is tackled head on. Africa's potential and huge oil reserves, especially in Sub-Saharan Western Africa, are easily accessible by sea, and thus those sea lanes need protection. AFRICOM reflects America's priorities in the realms of oil and counter-terrorism, with a presaging look at the future, most likely typified by increased resource nationalism in Russia and South America, and instability in the Middle East.

The significance of African oil does not only extend to the US; 15 percent of total oil consumption in Europe's 27 member states originated from Nigeria, Angola, Libya and Algeria. Although most of Europe's oil imports originated from North Africa, Angola and Nigeria together accounted for 4 percent of total foreign oil imports; a substantial percentage.⁸ What is of critical importance, though, is that most of West Africa's oil is very sweet, light, and low in sulphur. The so called premium oils are very easily refined, and a favourite of European refineries. Algerian oil, which accounts for 3 percent of EU 27 imports, and which is also 'sweet', is actually increasing in importance due to the challenges in the Niger Delta, analyzed in later chapters.⁹

However, Europe is not alone in their search for oil on the continent. Besides, the US, Europe needs to compete with countries such as Japan, South Korea and China in making sure that reliable oil finds its way to European markets. Even countries as far-ranging as Thailand are seeking to make huge investments in the African energy sector, with a consortium of Thai companies setting aside \$2 billion to be invested in

⁶ EIA, "Energy in Brief: How dependent are we on foreign oil", *Energy Information Administration*. July 2008. Accessible at: http://tonto.eia.doe.gov/energy_in_brief/foreign_oil_dependence.cfm

⁷ Ibid

⁸ IEA, *IEA Energy Policies Review: The European Union*. 2008, p. 64

⁹ Porter, Geoffrey. D., "Islamist Terrorist and Energy Sector Security in Algeria", *The Jamestown Foundation*. June 27, 2007. Accessible at: http://www.jamestown.org/news_details.php?news_id=254#: supply disruptions in the Niger Delta have actually increased the importance of Algerian production because traders are increasingly turning to Algerian Saharan blend (45° API and 0.1% sulfur) as a more reliable alternative to Nigerian Bonny Light (37° API and less than 0.1% sulfur).

constructing a power plant of up to 1,000 MW, a petrochemical plant and a fertilizer plant, with the priority of the consortium being the export of Liquefied Natural Gas from Nigeria to Thailand.¹⁰ Russia too has recently made serious overtures to the Nigerian government in its efforts to expand its African projects. The Ogoniland oil fields which Shell pulled out of in the 1990s have remained capped for a long time, and the Nigerian government has stated it will award them to another company. Due to the sizeable gas reserves these hold fields (up to 10 trillion cubic meters)¹¹, Gazprom has shown considerable interest in acquiring these fields. This has not gone unnoticed by the European Union; the Russia-Ukraine gas pricing conflict and the Russo-Georgian conflict are still very fresh in the European Union's mind. In typical expedient thinking befitting these types of crises, the EU has decided to provide financial backing to the planned trans-Saharan pipeline designed to pump gas directly to Europe.¹² In an effort to diversify gas imports away from Russia, the EU had originally been "slow to back the trans-Saharan pipeline"; however, the Georgia conflict has focused minds within the Union.¹³ In essence, the EU has been reminded that in the game of energy-acquisition, if one blinks, one loses out.

India too has had its energy acquisition goals re-orientated toward Africa. In 2005, India offered up to \$1 billion in development grants to build power projects, railways, refineries and even sport stadiums in oil rich African countries. The lines of credit are of a typical bilateral, government-to-government, nature: infrastructure projects in exchange for oil exploration rights.¹⁴ These investment figures are not staggering when you consider the fact that India is the world's fastest-growing economy after China, and its demand for oil is estimated to rise by 62 percent over five years to 4.8 million barrels a day.¹⁵ To satisfy this demand, India has no choice but to "acquire assets overseas...there is no other way" according to some commentators. In the competitive world of energy acquisition, India is more than aware that "China has slowly and steadily spread across most of Africa and is sitting on huge resources. For fuel security, you have to take control of supplies."¹⁶ This comment is indicative of the highly competitive nature of resource acquisition, and the realization by countries like America and India, together with large importing blocks such as the European 27, that China might just be a step ahead of the rest.

¹⁰ "Nigeria calls for closer cooperation with Thailand", *Alexander's Gas and Oil Connections*, July 21, 2008. Accessible at: <http://www.gasandoil.com/goc/company/cna83456.htm>

¹¹ "Gazprom, China oil firms eye Nigeria's Ogoniland", *The China Post*, June 17, 2008. Accessible at: <http://www.chinapost.com.tw/business/africa/2008/06/17/161419/Gazprom-China.htm>

¹² Green, Matthew, "Brussels takes on Gazprom in Nigeria", *Financial Times*, September 17, 2008. Accessible at: <http://www.ft.com/cms/s/0/6d233ec2-841f-11dd-bf00-000077b07658.html>

¹³ Ibid

¹⁴ "India primes Africa's oil pumps with \$1bn", *Times Online*, November 24, 2005. Accessible at: <http://business.timesonline.co.uk/tol/business/markets/africa/article596081.ece>

¹⁵ Goswami, Manash, "India Turns to Angola After Losing in Energy Auctions", *Bloomberg*, March 31, 2008. Accessible at: <http://www.bloomberg.com/apps/news?pid=20601091&refer=india&sid=ab178yTNFXa4>

¹⁶ Ibid.

1.3. WHY CHINA?

For a number of years now one can track the increasing exposure that Chinese interests in Africa get from the media. China is, if the media is to be believed outright, offering loans left and right, building critical infrastructure, providing military hardware and advisors to Africa without any ‘strings attached’. This ‘silent partner’ that China seems to be is receiving criticism for not taking responsibility in getting some African nations to e.g. clean up its human rights record before shipping aid.

China, with its massively expanding economy, needs an equally expanding supply of raw materials to sustain its economic growth. Although it has a massive domestic resource base, increasingly China needs to look outside of its borders to find the resources it needs. Arguably then, China’s interests in Africa are overwhelmingly economic. The resource-hungry Chinese are certainly not sitting still in making sure they acquire the resources needed to sustain their economy. Africa’s oil and mineral deposits are very enticing to any country in need of raw materials; however, for China, Africa has also provided a growing market for cheap Chinese textile goods.¹⁷ From 2000 to 2007, China’s trade with Africa increased by \$62.4 billion; from \$10.6 billion in 2000 to about \$73 billion in 2007.¹⁸ This, in effect, has the hallmark of a semi *quid pro quo* partnership, and was perceived as such in the first years of increased Sino-African relations. However, with the continuing expansion of Chinese interests in Africa, the glass pane of Chinese relationships with Africa has been showing cracks. Not all the recipient countries’ populations are seeing the benefits of the Chinese inroads. Although bilateral agreements might be concluded at a governmental level, the local populations are not always as happy as might be expected. The schools, infrastructure, and money that China contributes are surely welcome; however, for some groups the Chinese have proven to be little better than their Western counterparts; and this is where friction is found. This will be illustrated through the much less publicized failures in Chinese economic diplomacy in Africa.

1.4. WHY SECURITY?

The paradoxical nature of the world’s search for ‘other oil’, referring to non-Middle Eastern oil, is that most of the world’s oil reserves are in ‘unstable’ countries. Thus, when the US, or other countries, state that they want to make sure that the Gulf States do not gain undue leverage over their existence by, e.g. turning off the taps and halting the flow of oil into their economy, they talk of diversification with the intention of accessing more reliable supplies. This situation is paradoxical because even if “The Middle East

¹⁷ McLeary, Paul, “A different kind of Great Game”, *Foreign Policy*, March 2007. Accessible at: http://www.foreignpolicy.com/story/cms.php?story_id=3744

¹⁸ Hanson, Stephanie, “China, Africa, and Oil”, *Council on Foreign Relations*, June 6, 2008. Accessible at: http://www.cfr.org/publication/9557/china_africa_and_oil.html.

presents a number of problems,...most West African regimes are neither stable nor democratic”, as stated by Terry Karl.¹⁹

Although Africa might be gaining importance in the world of oil, it is also one of the world’s most difficult places to do business. The actual business risks to investors include “arbitrary or non-existent legal codes, high transaction costs, shoddy infrastructure, and pervasive corruption.”²⁰ However, the Chinese investors seem not to mind these obstacles as much as their Western counterparts, and navigate these challenges well. The real crux of the problem, wherein China has little influence to give, is the political risk associated with investment in Africa. Coups, ethnic strife, resource battles, frequent and unstable transfers of power, these are but a few of the risks found in African countries. In the energy sector, these risks are multiplied as projects in this sector have large initial capital costs and longer time spans; and the stealing of oil becomes a lucrative business by itself.

As will be shown, security risks are a fact that has to be accepted when doing business in Africa. The IOC’s have a long history in countries such as Cameroon, Nigeria, and Gabon, a history fraught with clashes and friction with host governments and local populations. Our case-study, Nigeria, will illustrate the multitude of risks inherent in doing business in the energy sector, highlighted by the attack on the Bonga facility. The attack underscored an important development in the offshore Nigerian oil industry, previously thought impervious to attack, and will serve as a starting point in the analysis of security threats in Africa’s oil industry. Furthermore, it will provide various instances of security risks, acting as a lens through which to view Chinese involvement in the energy sector, and to examine if China does indeed have to navigate, and is exposed to, the same risks. With such capital intensive investment as found in the oil industry, a secure investment climate is crucial. For any given five-year period, the chance of civil war in an African country varies from less than 1 percent in countries without resource wealth to nearly 25 percent in countries with such resources.²¹ This illustrates the importance of risk, and the importance of understanding it; do the Chinese?

¹⁹ Terry Karl is professor of political science at Stanford University and author of *The Paradox of Plenty: Oil Booms and Petro-States*.

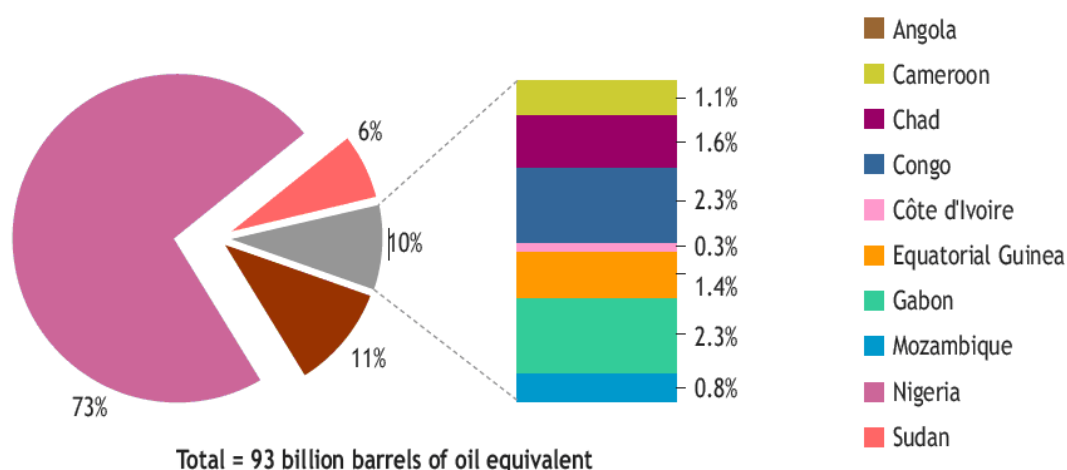
²⁰ Cohen, Ariel and Rafal Alasa, “Africa’s Oil and Gas Sector: Implications for U.S. Policy”, *The Heritage Foundation*, Background Paper NO 2052, July 12, 2007. Accessible at: <http://www.heritage.org/research/africa/bg2052.cfm>

²¹ “Paradox of Plenty”, *The Economist*, December 20, 2005.

2. SUB-SAHARAN AFRICA AND ITS HYDROCARBON RESOURCES

To adequately ‘set the scene’ for Sub-Saharan African hydrocarbon wealth and its importance and potential to the world oil market, a closer examination of the individual countries that make up the most important exporters of hydrocarbons²² is warranted. Sub-Saharan Africa’s main oil producers are Nigeria, Angola, Sudan and Gabon. Although in the African continent Algeria, Libya, and Egypt are also important exporters of hydrocarbons, the scope of the study limits itself to Sub-Saharan Africa. The smaller countries – in terms of hydrocarbon exports – that will be examined are Chad, Equatorial Guinea, Cameroon, Cote d’Ivoire and Mozambique. These smaller countries might export small quantities individually, but together represent quite a substantial growth potential, as demonstrated by recent finds such as that of Tullow Oil in Ghana. Sub-Saharan Africa’s producers vary wildly in their oil and gas reserves and production capacity. However, together they represent 4.3 percent of total world oil reserves, 7 percent of total world oil production and around 5 percent of global gas trade.²³ These figures warrant a closer examination of the Sub-Saharan African oil industry, the potential it represents and, later, the risks it entails.

Figure 1: Proven oil and gas reserves in assessed sub-Saharan African countries, end-2007



Source: IEA World Energy Outlook 2008

²² Although this study is focussed on oil and oil-exporting countries, an overview of the overall hydrocarbon resources is necessary to show potential of growth and the possible future importance to world energy markets. However, oil will remain the focus of this report.

²³ BP Statistical Review of World Energy 2008 and IEA’s World Energy Outlook 2008.

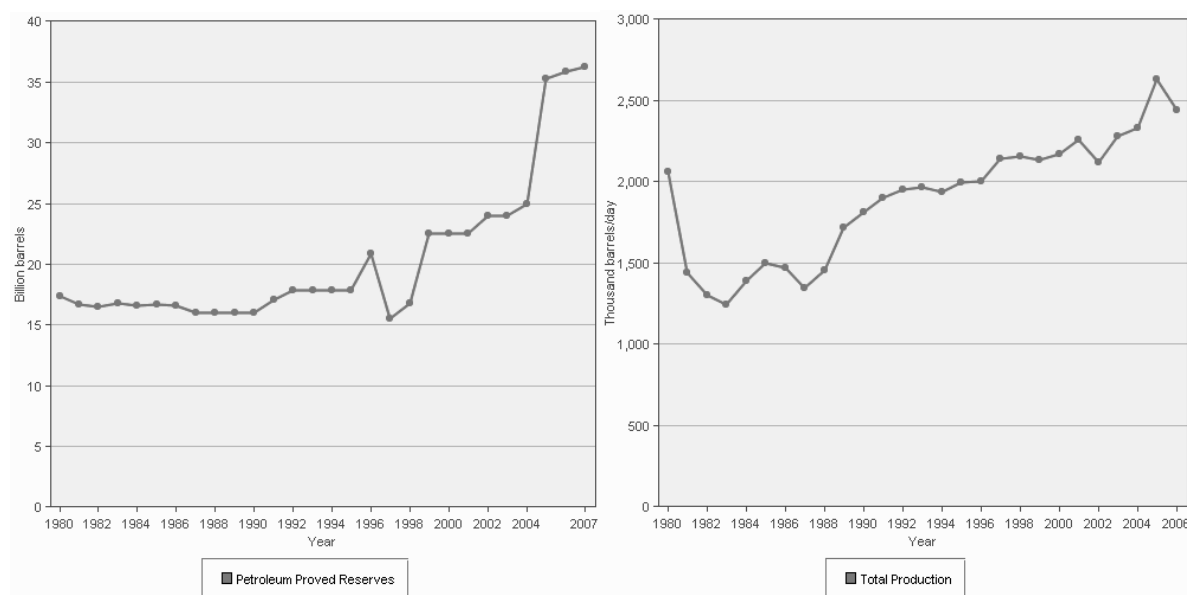
2.1. THE BIG THREE

2.1.1. NIGERIA

Nigeria is endowed with Sub-Saharan Africa's largest reserves of oil and gas. It has 36.2 billion barrels of oil reserves and 5207 billion cubic meters (bcm) of gas reserves. Nigeria has, according to the IEA, around 73 percent of assessed Sub-Saharan African oil and gas reserves (Figure 1). Yet, Nigeria's production capacity and actual production is under constant threat due to political risks, especially in the Niger Delta, where most of Nigeria's oil industry is situated. These risks are compounded by the fact that nearly 65 percent of Nigeria's oil reserves are situated onshore. The resulting oil infrastructure is therefore especially vulnerable to sabotage and attack, as it is easily accessible.

Although Nigeria's share of Sub-Saharan oil reserves is around 61 percent, it is in a constant struggle to keep Angola from overtaking it as Sub-Saharan Africa's top oil producer. Angola has far fewer reserves (see Figure 2), but does not suffer the same production constraints as Nigeria through continuing political turmoil, sabotage and attacks on the export infrastructure. Yet, although Angola has overtaken Nigeria a few times on monthly oil production figures, Nigeria at the end of 2007 remained Sub-Saharan's top producer with 2.36 million b/d.²⁴ Unfortunately for Nigeria's oil producing prospects, this figure is accompanied by a 4.8 percent decline over 2006, whilst Angola's production has grown steadily.

Figure 2: Proven oil reserves of and oil production in Nigeria



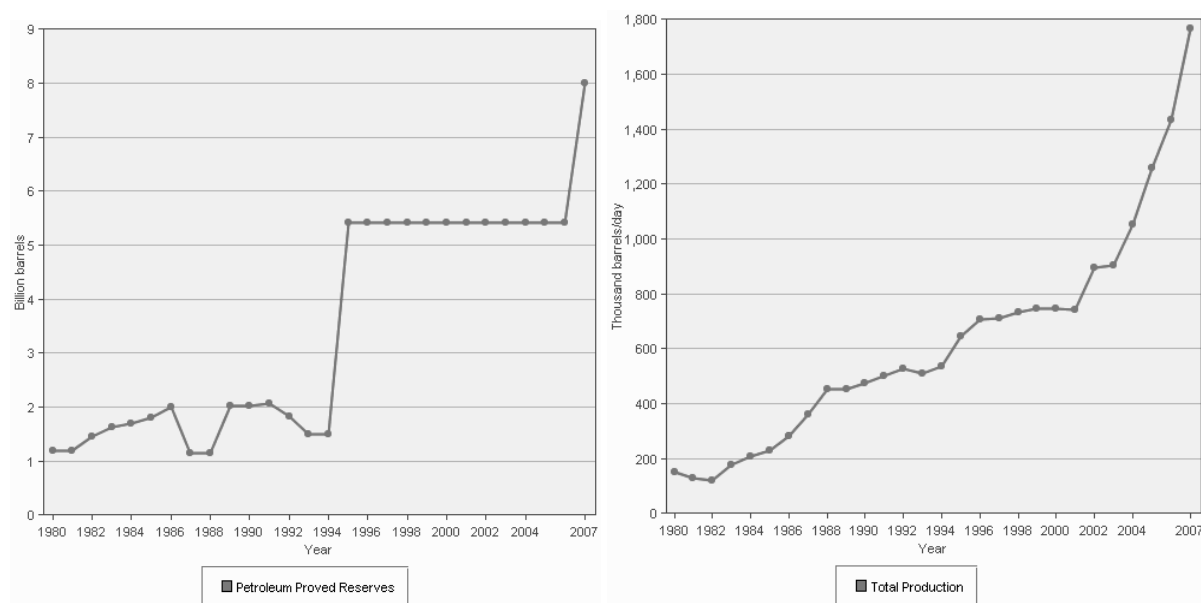
Source: EIA International Energy Data and Analysis for Nigeria

²⁴ BP, *BP Statistical Review of World Energy 2008*, July 2008, p. 8

2.1.2. ANGOLA

Angola, as seen in Figure 15.2 has Sub-Saharan Africa's second largest assessed oil and gas reserves. However, Angola, unlike Nigeria, has a very small amount of gas reserves, amounting to little more than 300 bcm²⁵. It is most definitely the 'rising star' of African oil producers, and has one of the largest production growths with a 20.7 percent increase over 2006. Angola produced 1.7 million b/d of oil in 2007 and held 9 billion barrels of proven oil reserves.²⁶ Due to a protracted civil war, onshore development was non-existent, and subsequent exploration was focused on offshore possibilities. Subsequently, according to the IEA, all of Angola's oil and planned projects are identified as offshore.²⁷ This is not strange in itself, considering the fact that nearly all the large discoveries in recent years off the west coast of Africa have been made in deepwater offshore fields.²⁸ Chinese oil companies are particularly active in Angola, which is also not surprising when considering the fact that Angola supplied 480,000 b/d to China in January 2007, or 22 percent of its total imports. Nevertheless, Angola does not figure in the media spotlight nearly as much as Sudan, the last of the big three Sub-Saharan producers.

Figure 3: Proven oil reserves of and oil production in Angola



Source: EIA International Energy Data and Analysis for Angola

²⁵ EIA, "Angola Energy Data, Statistics and Analysis - Oil, Gas, Electricity, Coal", *Energy Information Administration*, October 2007. Accessible at: <http://www.eia.doe.gov/emeu/cabs/Angola/Full.html>

²⁶ BP, *BP Statistical Review of World Energy 2008*, July 2008, p. 10

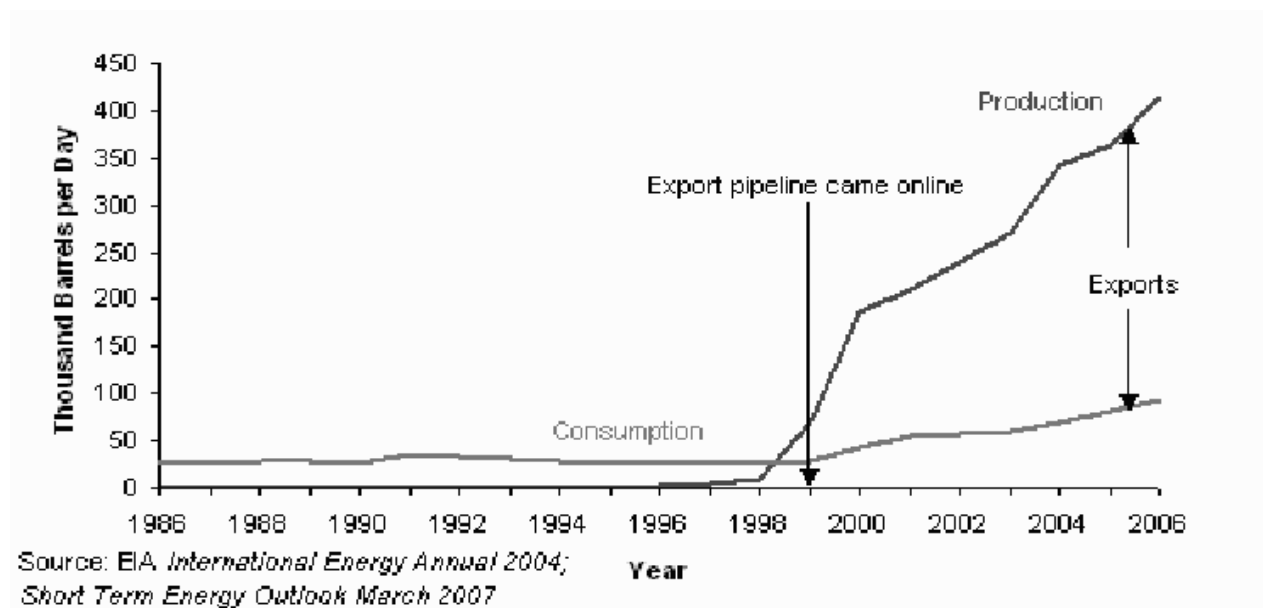
²⁷ IEA, "World Energy Outlook 2008", *International Energy Agency*. 2008, p. 360

²⁸ *Ibid.* p. 359

2.1.3. SUDAN

Sudan is the third largest oil and gas resources holder in Sub-Saharan Africa, with 6 percent of proven oil and gas reserves there. Sudan is endowed with proven oil reserves that amount to 6.6 billion barrels. However, the most impressive figures are noticed when looking at production increases. Sudan has Sub-Saharan Africa's most impressive production growth from 2006 to 2007, with a 38.1 percent increase from 331,000 b/d in 2006 to 457,000 b/d in 2007. Although exploration for oil in Sudan started in the 1950s,²⁹ before the turn of the 21st Century there was hardly any commercial production of oil. The development of Sudan's oil exporting pipeline linking the oil producing fields in the south to Port Sudan on the Red Sea provided an export infrastructure and one can observe a subsequent rise in oil exports (Figure 4). The potential for growth can be seen in its reserve estimates, as they leaped 10-fold to 5 billion barrels between 2006 and 2007 (Figure 5). The infrastructure problem that Sudan had is not unique in Sub-Saharan Africa, as land-locked countries with no access to exporting infrastructure rely upon transiting their oil and gas through other (potentially unstable) countries.

Figure 4: Sudan's Oil Production and Consumption, 1986-2006

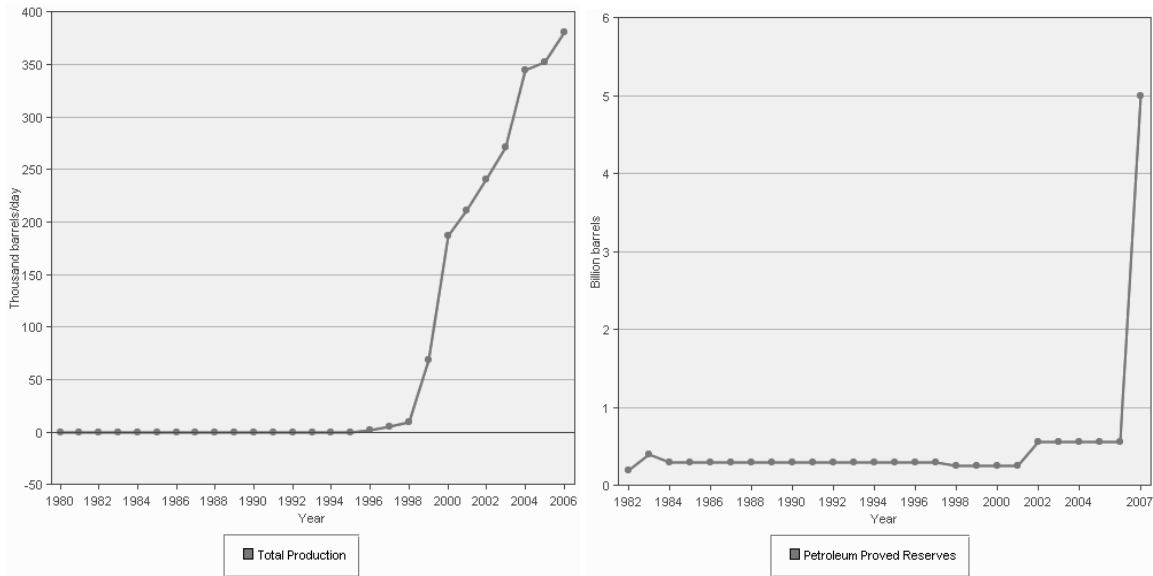


Source: EIA International Energy Data and Analysis for Sudan

Sudan is a very important producer for China. In January 2007, 210,000 b/d of oil were exported from Sudan to China, amounting to 6 percent of total oil imports. This makes Sudan a valuable contributor to China's supply security. Yet, due to the human rights issues in Sudan, including suspected genocides, China has been the unwelcome recipient of international outrage by adopting a 'business as usual' attitude toward Sudan.

²⁹ Switzer, Jason, "Oil and Violence in Sudan", *International Institute for Sustainable Development*, 2002. Available at: http://www.iisd.org/pdf/2002/envsec_oil_violence.pdf

Figure 5: Proven oil reserves and oil production of Sudan



Source: EIA International Energy Data and Analysis for Sudan

2.2. THE REST OF THE PACK

The rest of notable Sub-Saharan African hydrocarbon producers are Chad, Cameroon, Congo, Equatorial Guinea, and Gabon. Although these countries are not nearly as well endowed with oil and natural gas reserves as Nigeria, Angola and Sudan, they do play an important role in Africa's position on the international oil market. This role, as will be reiterated throughout this report, is one of IOC and NOC access to 'new' reserves. In Africa, there are new discoveries made with some regularity, and the continent allows for the small independents and the large IOCs to compete with NOCs on a relatively level playing field. Africa is called the 'new frontier' of oil and gas exploration for a reason. This being said, Africa is not that new of a producer of hydrocarbons, with a number of producing countries already in decline.

Figure 6: Oil Production maturity of assessed sub-Saharan African countries, 2007

<i>New producers</i>	Chad
<i>Steady and rising producers</i>	Sudan
	Angola
	Côte d'Ivoire
	Equatorial Guinea
	Nigeria
<i>Declining producers</i>	Congo
	Gabon
	Cameroon

Source: IEA World Energy Outlook 2008

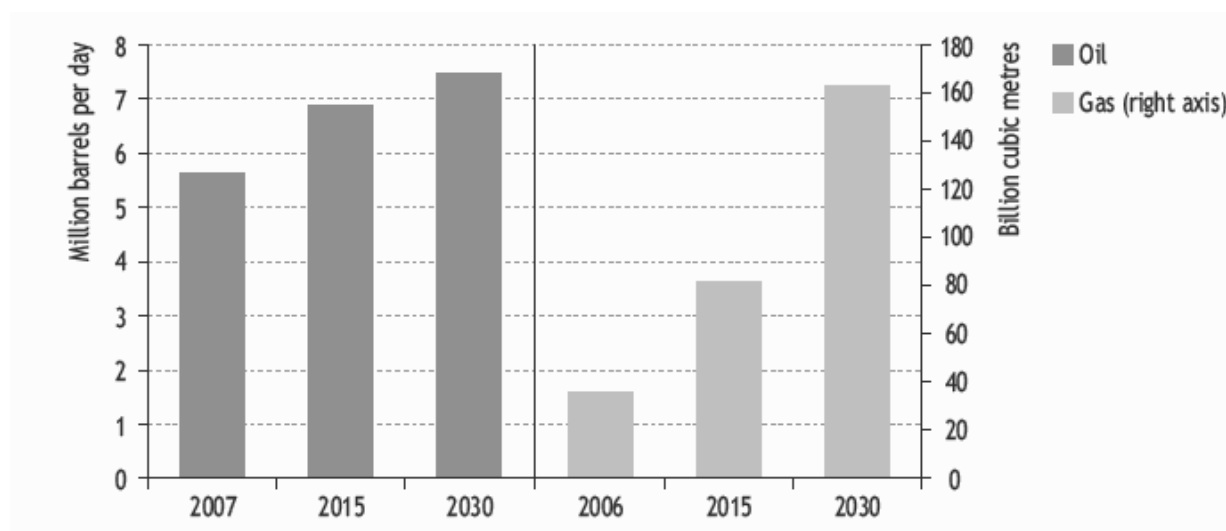
As one can see from Figure 1, the proven oil and gas reserves of the aforementioned countries are minor: Cameroon with 1.1 percent, Chad with 1.6 percent, Congo with 2.3 percent, Gabon with 2.3 percent, and Equatorial Guinea with 1.4 percent. Of these countries, Gabon and Cameroon are classified by the IEA as 'declining producers' (Figure 6), and only Chad is a new producer at the start of its production cycle. However, there is a notable example left out by the IEA of a possible important future supplier of Sub-Saharan hydrocarbons: Ghana. Tullow oil, a small independent oil company, has discovered that the reserves in the Jubilee oilfield are much larger than originally expected. Tullow had first estimated proved recoverable reserves of 0.5bn barrels, but has raised the potential to 1.8bn barrels.³⁰ According to some sources, Jubilee could be producing 120,000 b/d when phase one development has been completed.³¹

What is important to note, and yet not an integral part of this study, is the importance of Africa as a supplier of liquefied natural gas (LNG). African LNG now accounts for more than 27 percent of global LNG trade, and this is projected to grow substantially. The IEA predicts Sub-Saharan African gas production will double from nearly 80 bcm in 2015 to 160 bcm in 2030 (Figure 7: For a complete overview of total African resource holders, please see Appendix 2). However, most of this growth depends on Nigeria and its ability to control the Niger Delta against sabotage and attacks on critical export infrastructure.

³⁰ Petroleum Economist, "Ghana: 'World Class' Jubilee oilfield larger than expected". Accessible at: <http://www.petroleum-economist.com/default.asp?Page=14&PUB=279&SID=716588&ISS=25274>

³¹ Ibid.

Figure 7: Oil and gas production in assessed sub-Saharan African countries



Source: IEA World Energy Outlook 2008

Although Africa has always been an attractive continent for large oil and gas producers, for the IOCs Africa's role will only increase. African countries offer terms and conditions to IOCs intent on exploring and producing their oil and gas reserves that few non-African countries can match in terms of attractiveness. As stated before, most of the major African oil discoveries have been made offshore, and the number of oil companies with financial and technical resources that can handle the challenges that these projects embody is limited. Although there is major competition for IOCs from NOCs across the board in Africa, as long as the host countries continue to offer access and competitive terms, IOCs will continue to invest in Africa.

CONCLUSION

As one can see from the data presented above, Sub-Saharan African countries vary wildly in their natural endowments of oil and gas. Although Nigeria has serious problems maintaining production levels, it still outranks the rest of oil producing countries by quite a margin when referring to reserves. Production capacity of oil is far greater in Nigeria than, for example, in Angola, as Angola has only around $\frac{1}{4}$ of Nigeria's oil reserves. Most of Sub-Saharan production of oil and gas happens in deep waters off the coast of Sub-Saharan Western Africa. A dominant portion of Sub-Saharan African oil is found in these 'offshore' production areas. This is an important issue, for the case-study used in this study to highlight the risks to the oil industry, especially Chinese NOC's, is an attack on an integral part of the offshore value-chain, the Floating Production Storage and Offloading (FPSO) vessel. Offshore oil was traditionally seen as relatively 'safe' oil to produce for the IOC's as it was far removed from the political turmoil of the host countries. This, as will be shown in the next chapter, has ceased to be the case.

Key Messages

- Africa is endowed with hydrocarbon resources amounting to 93 billion barrels of oil equivalent.
- Although Sub-Saharan Africa's producers vary wildly in their oil and gas reserves and production capacity, together they represent 4.3 percent of total world oil reserves, 7 percent of total world oil production and around 5 percent of global gas trade.
- The top three producers of Sub-Saharan Africa are Nigeria, Sudan, and Angola and represent 90 percent of Sub-Saharan hydrocarbon wealth.
- The largest resource holder, Nigeria, has 36.2 billion barrels of oil reserves and 5207 billion cubic meters (bcm) of gas reserves. Yet, it is in a constant struggle with Angola as Sub-Saharan Africa's top producer.
- Nigeria's production capacity is greater than that of any other Sub-Saharan producer; yet, due to political turmoil, sabotage, kidnapping and other attacks, Nigeria's production is in decline, highlighting the significance of political risk.
- Angola is the 'rising star' of African oil producers, and has one of the largest oil production growths with a 20.7 percent increase over 2006.
- Chinese oil companies are very active in Angola; not surprising when considering the fact that Angola supplied 480,000 b/d to China in January 2007, or 22 percent of its total imports.
- Although Sudan is only the third largest oil and gas resource holder in Sub-Saharan Africa, it has Sub-Saharan Africa's most impressive production growth with a 38.1 percent increase from 2006 to 2007.
- The other notable Sub-Saharan African hydrocarbon producers are Chad, Cameroon, Congo, Equatorial Guinea, and Gabon.
- Ghana, not mentioned in the IEA's assessment of 2008, is an important addition to the countries mentioned above.
- Tullow oil has discovered that the reserves estimates in Ghana are much larger than originally expected. Tullow had first estimated its Jubilee oil field with proved recoverable reserves of 0.5bn barrels, but has raised the potential to 1.8bn barrels.
- A large proportion of the sanctioned and planned projects in Sub-Saharan Africa (especially in Angola and Nigeria) are offshore.

3. THE BONGA ATTACK: NIGERIA AS AN AFRICAN CASE-STUDY

SECTION 1: INTRASTATE SECURITY CONCERNS

Why does political stability and security matter in oil production? From a financial viewpoint, this can be explained in the following terms: due to the financial risks involved, oil reserves in politically stable countries have more value, per barrel, than oil in politically unstable countries. Following this logic, it costs less to produce oil when there are fewer risks involved. Thus, as will be shown below, the value of Nigerian oil—as a function of the capital investment that must be risked to produce it—is in steady decline. Nigeria has the potential to be supplying the world oil market with up to 2.5 million b/d of high quality sweet, low in sulphur, crude. Yet, because of the deteriorated security environment, it is struggling to supply 1.8 million b/d. In pure monetary terms it can be summed up as follows: according to calculations of the Shell Petroleum Development Company (SPDC), in 2007 \$4.29 of the average \$6.99 cost to produce a barrel of oil was security related.³²

African oil, as stated before, is of paramount importance in today's energy reality and securing the supply in a supply constricted world. This reality is grounded in a razor thin OPEC spare capacity and a very tight oil market. Various issues contribute to this tight market, but a cause of the market instability can be sourced to African oil, and even more specifically to Nigerian instability. This chapter will examine the attack of Niger Delta militants on Royal Dutch/ Shell's Bonga offshore platform, and will serve as a starting point in analyzing security trends with regard to the Niger Delta, the Sub-Saharan oil industry, and the effect it has on supplying oil to the world market. It will first provide a description of the attack, moving on to provide an analysis of these types of attacks and their impact on Nigerian oil production. Secondly, in Chapter 4, these case-study issues will provide an overview of other security issues in Sub-Saharan Africa, utilizing it as a case-study to draw broad conclusions about the effect these security issues will have on the rest of Sub-Saharan Africa and in particular on the oil producing nations and the oil industry. These issues can be for the most defined as either intra-state or inter-state in nature and will therefore be used as main headings; however, the 'odd one out', *piracy*, can be placed in neither of these categories and will therefore be analyzed separately.

3.1.1. THE BONGA ATTACK

Nigeria's Movement for the Emancipation of the Niger Delta (hereafter MEND) claimed responsibility for the attack carried out on Royal Dutch/ Shell's Bonga Floating, Production, Storage and Offloading (FPSO) vessel on June 19. On the surface of it,

³² Igbikiowubo, Hector, "Shell Nigeria output drops to 412,000 b/d", *Vanguard*, October 14, 2008. Accessible at: <http://www.vanguardngr.com/content/view/19202/43/>

nothing spectacularly new: this attack being one of a plethora of attacks carried out by MEND and other proxy militant groups in Nigeria's Niger Delta region since late 2005. This sustained assault on oil infrastructure by militants such as MEND has, according to some analysis, shut in 265,000 b/d in 2008.³³ However, a broader trend of decline is found when observing Nigeria's oil production since 2006. Due to violence and work stoppages in Nigeria, production levels have dropped by 20 percent since 2006. According to OPEC, in April 2008, Nigeria's oil production reached 1.81 million b/d, down from 2.5 million b/d in 2005.³⁴ This level of shut in is not hard to imagine when considering the scale and variety of 2008 shutdowns, including: Brass River Eni (54,000 bpd), Bonny Light Shell (164,000 bpd), Forcados Shell (160,000), EA Shell (115,000 bpd), Escravos Chevron (120,000 bpd), and Pennington Chevron (50,000 bpd).³⁵ This worsening trend in Nigeria is pointed at as one of the many factors that have contributed to the razor thin spare capacity in the oil market at the moment and an oil price that has come perilously close to the \$150 mark.

The Bonga attack in itself is worthy of analysis due to a number of factors. Although attacks on oil infrastructure and personnel have occurred with such frequency in Nigeria that they are deemed hardly newsworthy (except when a new paradigm occurs such as the kidnapping of a child), every so often an event occurs that seems to change the 'rules of the game'. The most recent of paradigm shifts occurred when MEND decided to single out Bonga as its latest 'prestige' target. The Bonga facility lies 120 kilometers offshore, in deep waters, where MEND had never tread before. The Bonga field was the first of a number of deepwater projects aimed at boosting Nigeria's oil production by allowing multinational oil companies to avoid the deteriorating security environment in the Niger Delta. Facilities such as Bonga were deemed safe from attack, precisely because they were far offshore, out of range from MEND's capabilities; MEND proved that such illusions are costly. The Bonga attack shut in an additional 200,000 b/d from Nigeria's already failing attempts to boost its production through deepwater projects. The message from MEND to the industry was clear: "The location for today's attack was deliberately chosen to remove any notion that off-shore oil exploration is far from our reach. The oil companies and their collaborators do not have any place to hide in conducting their nefarious activities."³⁶ They had proven this once before, when MEND overran an oil rig some 64 kilometers offshore in 2006, which some news sources labeled 'unprecedented'.³⁷ The attack described above serves as a case-study and

³³ Izundu, Uchenna, "Competition Reshaping African deal structures", *Oil and Gas Journal*, May 26, 2008. p. 21

³⁴ Gentile, Carmen, "Analysis: Nigeria attack cripples Chevron", June 26, 2008. Accessible at: http://www.upi.com/Energy_Resources/2008/06/26/Analysis_Nigeria_attack_cripples_Chevron/UPI-70261214491239/

³⁵ Daly, John, C.K., "Nigeria's navy struggles with attacks on offshore oil facilities", *Jamestown Terrorism Monitor*, Vol. 5, Issue 14 (July 10, 2008). Accessible at: <http://www.jamestown.org/terrorism/news/article.php?articleid=2374294>

³⁶ Igbikiowubo, Hector, Emma Amaize, Samuel Oyandogha and Jimitota Onoyume, "Nigeria: MEND attacks Shell's Bonga Offshore Platform", *Vanguard*, June 20, 2008. Accessible at: <http://allafrica.com/stories/200806200089.html>

³⁷ "Nigerian kidnapers free eight foreign oil workers", *Peoples Daily*, June 5, 2006. Accessible at: http://english.peopledaily.com.cn/200606/05/eng20060605_271120.html

introduction toward the analysis and examination of the various factors that influence the security situation to the detriment of the Nigerian oil industry.

3.1.2. MILITIA GROUPS: MOVEMENT FOR THE EMANCIPATION OF THE NIGER DELTA

Militia groups, both self and industry perceived, and as shown above, definitely have an effect on the Nigerian oil industry. This section will focus on the most prolific [in terms of kidnappings and sabotage] of militia groups: MEND. An Ijaw group populated mostly by young, poor, and disillusioned men, MEND serves as a valve releasing their frustrations into a struggle to gain a greater share of the hydrocarbon wealth generated by their region. The MEND spokesperson known as Jomo Gbomo stated clearly what MEND's function is when he stated "The fact that we have influenced the price of oil, no matter how little, and caught the attention of the foreign media indicates we are on the right track". This statement was made in 2006, when oil had hardly pushed above the \$75 mark. Today, with the highest peak in oil price in 2008 nearing \$150 a barrel, MEND's profile has increased tremendously. An attack like that on the Bonga platform sends shockwaves rippling through the oil market, with the slightest hint at disruptions catapulting the price for oil upwards. As stated clearly by energy consultants PFC Energy, 'violence in the Niger Delta is now the greatest challenge to future oil and gas investments and the most likely area where we will see supply disruptions'³⁸. This sentiment was echoed by David L. Goldwyn³⁹ in a testimony before the U.S. Senate Subcommittee on International Economic Policy, Export and Trade Promotion.

3.1.2.1. MEND

According to spokesperson Jomo Gbomo, MEND is 'prepared to fight for the dissolution of this unfortunate union known as Nigeria if that is the price we must pay for freedom'⁴⁰. Likely formed in December of 2005, MEND's first operation was to kidnap four foreign oil workers from Shell's E.A. oilfield off the coast of Delta and Bayelsa States.⁴¹ On that same day (January 10) the group claimed responsibility for a sabotaged pipeline in Bayelsa State, reportedly cutting oil exports by 100,000 barrels per day (bpd).⁴² These two acts established the primary means used ever since by MEND: kidnapping and sabotage. As they stated in an email press release, "our aim is to totally destroy the capacity of the Nigerian government to export oil."⁴³ With these first two attacks, MEND demonstrated their ability to do just that. As to exactly what MEND is, the International Crisis Group gives a broad observation:

³⁸ Farrell, Susan and Michael Rodgers, "Gulf of Guinea Oil and Gas Overview and Outlook", *PFC Energy*, May 2007. Accessible at: <http://www.ita.doc.gov/td/energy/otc%202007%20pfc%20gog.pdf>

³⁹ David L. Goldwyn is a Senior Fellow in the Energy Program at the Centre for Strategic and International Studies (CSIS) and serves on the Council of Foreign Relations (CFR) Task Force on Energy Security and CFR Centre for Preventive Action Task Forces on Angola, Venezuela and Bolivia.

⁴⁰ The identity of 'Jomo Gbomo' is unknown and the name is likely a pseudonym for a variety of actors speaking on behalf of MEND's leadership; "Interview : We Will Soon Stop Nigerian Oil Export — Jomo Gbomo", *SaharaReporters*, March 30, 2007. Accessible at: <http://saharareporters.com/www/interview/detail/?id=47>

⁴¹ "Niger Delta: Serious Security Incidents-2006", *Bergen Risk Solutions*. London: Bergen, 2006, p. 1

⁴² *Ibid.*, pp. 1-2

⁴³ *Ibid.*, p. 2

“MEND increasingly serves as an umbrella organization for a loose affiliation of rebel groups in the Delta. It has not revealed the identity of its leaders or the source of its funds but its actions demonstrate that it is better armed and organized than previous militant groups.”⁴⁴

Since 2005, MEND has carried out this two pronged strategy of sabotage and kidnapping, effectively shutting in up to a quarter of Nigeria’s oil production. Yet, it has also sent warning signals to ‘newcomers’ wanting to join in on the oil Eldorado that is the Niger Delta, in the guise of ‘terror’ tactics such as bombs. These strategies are highlighted below, analyzed with their impact on the oil industry in mind.

3.1.2.2. KIDNAPPINGS

As previously stated, the main aim of MEND is to totally destroy the capacity of the Nigerian government to export oil. Its main tool in doing so is through kidnapping, the hallmark of MEND tactics. MEND’s effectiveness with regard to this tactic has been proven to quite some degree, as is evident in the statistics. As some industry sources have reported, between January 1, 2006 and February 28, 2007 128 foreign workers have been kidnapped in 32 raids by delta militants.⁴⁵ Although MEND has always insisted that kidnappings are undertaken for political reasons—namely to put pressure on the government—it is likely that the release of hostages has more often than not been secured through a transfer of cash. There is no doubt that the business of kidnap and ransom is a lucrative one. The difference between kidnappings in the Delta and that of other parts of the globe is that the hostages are usually returned safely and unharmed, sometimes being lectured extensively on “the poverty and environmental degradation of the delta”⁴⁶ – two of the main grievances of MEND.

3.1.2.3. PIPELINE SABOTAGE

The second tactic that MEND uses in its efforts to stall Nigeria’s oil output is that of sabotage. A recent example of such sabotage tactics, and the effect they have, can be observed through the June 19 (2008) attack on a Chevron pipeline. The attack resulted in a 120,000 b/d shut in (6 percent of Nigeria’s daily output),⁴⁷ and forced Chevron to declare force majeure on onshore oil production.⁴⁸ MEND claimed responsibility for the attack, through proxy groups, or in their words “angry youths who we (MEND) are now empowering with more powerful explosives and new techniques to destroy additional

⁴⁴ International Crisis Group, “The swamps of Insurgency: Nigeria’s Delta Unrest”, *Africa Report No. 115*, August 3, 2006. Accessible at:

<http://www.crisisgroup.org/home/index.cfm?id=4310&CFID=53670738&CFTOKEN=44512460>

⁴⁵ “Niger Delta”, Bergen Risk Solutions, p. 16

⁴⁶ Junger, 2007, p.6

⁴⁷ Richardson, P., and Paul Okolo, “Chevron Halts Nigeria Onshore Oil Output After Attack”, *Bloomberg*, June 21, 2008. Accessible at:

<http://www.bloomberg.com/apps/news?pid=20601087&sid=aQlz1X9kMya4&refer=home>

⁴⁸ Force Majeure is a legal clause allowing oil producers to miss contracted deliveries of oil because of events beyond their control.

pipelines”.⁴⁹ To counter such attacks, and undoubtedly through pressure from the oil industry, the Nigerian military has threatened to sweep the delta with overwhelming force, but that carries the risk of a devastating counter attack by MEND—taking out the Bonny Island Liquefied Natural Gas facility with a shoulder-fired rocket, for example. This threat is not unlikely, considering a recent report that Nigerian soldiers had recovered a surface-to-air missile on a raid in the village of Agge.⁵⁰ An act of sabotage on this scale could drive Shell and the other oil companies from Nigeria for good, completely wiping out the national economy. One major company, Willbros, has already discontinued operations in Nigeria and sold its assets because of the security threat.⁵¹

3.1.2.4. TERROR

A relatively new trend in the continuing saga of security threats within Nigeria is the use of explosives. The increase in scope and intensity of this type of attack signals an exasperation of MEND that the aforementioned dual tactics of kidnap and sabotage are not working. This ‘new tactic’ started in April 2006, when MEND detonated a car bomb at an army barracks in Port Harcourt; a bombing which was, according to MEND, “symbolic rather than strategic”.⁵² However, this clearly changed in the months ahead with the increase of bombings, signaling a new strategy. Three separate incidents in late 2006 in Port Harcourt and Warri highlight this relatively new tactic from MEND. The first attack, in which two car bombs exploded in Port Harcourt, was targeted at a Shell Petroleum Development Company residential area and an Agip compound – a clear message to the oil industry.⁵³ A MEND statement made this brutally clear: “Attacks against oil industry targets will increase, be carried out without warning and with extreme ruthlessness”, reiterating furthermore that they “...still have as our goal, resource control for the Niger Delta”⁵⁴ Two further car bombs were detonated on December 31, one in Port Harcourt and one in Warri, targeting government and petroleum infrastructure; including the Warri Refinery and Petrochemicals Company, destroying pipelines between the refinery and the NPDC Jetty at Iljadla village.⁵⁵ An additional bomb attack in Warri is of particular relevance, especially in regard to the Chinese presence in Nigeria, but will be discussed in more depth in Chapter 3.

3.1.3. BUNKERING

Illegal bunkering refers to the practice of diversion and theft of crude oil from pipelines and tankers and its sale in the underground oil market. Although the volume of oil bunkered has decreased slightly from 2004 (where according to some industry sources

⁴⁹ Richardson, “Chevron Halts Nigeria Onshore Oil Output”.

⁵⁰ “Nigerian soldiers recover missiles in Delta State raids”, *Upstream*, August 8, 2008.

⁵¹ “Willbros is selling Nigeria, Venezuela assets”, *Pipeline and Gas Journal*, October 1, 2006. Accessible at: <http://www.allbusiness.com/agriculture-forestry-fishing-hunting/support-activities/3911056-1.html>

⁵² “Nigerian militant car bomb attack”, *BBC News*, 20 April, 2006. Accessible at: <http://news.bbc.co.uk/2/hi/africa/4925576.stm>

⁵³ Williams, Selina and Spencer Swartz, “Blasts Hit Shell, Agip in Nigeria Port Harcourt”, *Dow Jones Newswires*, December 18, 2006. Accessible at: http://www.rigzone.com/news/article.asp?a_id=39260

⁵⁴ “Niger Delta”, Bergen Risk Solutions, p.25

⁵⁵ *Ibid.*

up to 70,000 bpd were lost to bunkering), it is still prevalent. According to industry giant Shell, and the main player in Nigeria, oil bunkering activities declined to 16,000-24,000 bdp in 2006 from 20,000-40,000 bpd in 2005. Although a positive decrease, this is still an inordinate amount of oil being taken off the oil market daily.⁵⁶ However, the latest reports point at a resurgence in oil theft, which, according to the Financial Times, could be as much as 500,000 b/d.⁵⁷ The reality of daily output lost probably lies significantly under that, but if these numbers are correct, on a particularly bad day, 25 percent of Nigeria's oil exports are illegal. This is an extremely lucrative business, which is estimated to be worth as much as much \$4bn-\$18bn in lost profits to Nigeria (depending on the oil price).⁵⁸

Bunkering is such a big problem for Nigeria that it even influences international relations. In 2003 Nigeria had to resort to closing its borders with Benin in an attempt to reduce the occurrence of oil smuggling.⁵⁹ Naturally, this had very little effect, as the amount of oil bunkered daily at present is much higher than it was in the early 2000s. However, oil bunkering also comes with huge risk factors for the bunkerers. The extreme dangers are evident in incidents such as on May 12, 2006, when 200 people were killed in a pipeline explosion. The Nigerian Red Cross found evidence of bunkering when they "...found that vandals...drilled holes into the pipeline, from where they have been stealing fuel."⁶⁰ Although fraught with risks, the business is simply too lucrative: as a BBC source stated, "This is an industry that makes £30m (\$60m) a day, they'd kill you, me, anyone, in order to protect it."⁶¹

A slightly problematic issue is that some sources are analyzing the Niger Delta insurgency in light of criminal activities such as Oil Bunkering. This is why this report takes bunkering as a separate issue, and not one that is included in the militant group's staple tactics of kidnapping, sabotage, and terror. Although the militant groups undoubtedly are financed primarily by bunkering, it is not a tactic that is meant as an end in itself but rather a means to an end. Without a doubt, though, the lines between militancy and crime are blurred with both gangs and militants making large sums of money from bunkering and abductions. However, due to the lack of proof that militant groups like MEND are actively pursuing bunkering as a financial means to sustain themselves, this issue remains a mostly criminal intrastate practice.

⁵⁶Shell Briefing Notes, "The Operating Environment", *Shell Nigeria*, 2006. Accessible at: http://www.shell.com/static/nigeria/downloads/pdfs/brief_notes/shell_nigeria_operating_environment.pdf

⁵⁷ Green, Matthew, "Nigeria's oil militants take their fight beyond the delta", *Financial Times*, July 1, 2008. Accessible at: <http://www.ft.com/cms/s/0/b23066a6-4799-11dd-93ca-000077b07658.html>

⁵⁸ Ibid.

⁵⁹ Blunt, Elizabeth, "Nigeria shuts Benin border", *BBC News*, August 9, 2003. Accessible at: <http://news.bbc.co.uk/2/hi/africa/3137769.stm>

⁶⁰ "Scores die in Nigeria fuel blast", *BBC News*, May 12, 2006. Accessible at: <http://news.bbc.co.uk/2/hi/africa/4765695.stm>

⁶¹Walker, Andrew, "Blood Oil dripping from Nigeria", *BBC News*, July 27, 2008. Accessible at: <http://news.bbc.co.uk/2/hi/africa/7519302.stm>

3.1.4. MILITIA CLASHES, INTERETHNIC VIOLENCE, AND MILITIA RIVALRY

The problem with analyzing Nigerian violence and the effect it has on the oil industry is that one cannot solely focus on MEND. Arguably, some of the deadliest attacks in Nigeria have not come from MEND, but from other militant groups. One such group, the Niger Delta Vigilante Group (NDVG), has become quite notorious for its bloody tactics. On the 1st of January, 2008, an attack by the NDVG in Port Harcourt, Nigeria's main oil industry hub, killed 13 people. They attacked two police stations, and raided the lobby of a major hotel.⁶² This attack highlights the fact that no one is safe, and contributed to an overwhelming sense of fear from foreigners and civilians, a majority of who work in the oil industry.

Warring gangs in Port Harcourt also contribute to the dismal security climate. As stated, Port Harcourt is an important oil hub, and when instability rises within such a hub, it inevitably affects the oil industry. These instabilities come in various guises, but one of the bloodiest is the rival gang warfare within and around Port Harcourt. These rival gangs periodically clash, as Human Rights Watch observes

“From August 6 to 11, the violence that had wracked parts of Port Harcourt since July reached its peak. Cult members aligned with the Ateke and Soboma factions squared off against one another in pitched battles that plunged much of the city and many of its communities into chaos.”⁶³

The question of ‘ownership’ of important oil towns is also cause for conflict. Warri, the largest town in the oil producing Delta State (although not the capital) is claimed as the homeland by three ethnic groups: the Itsekiri, the Urhobo, and the Ijaw. Ownership of Warri has been debated since well before Nigeria gained independence, and arguably lies at the core of explaining the inter-ethnic violence of the last decade in the Delta State.⁶⁴ The first major outbreak of violence in the Warri area in recent years was in March 1997⁶⁵, with hundreds of people dying on each side, followed by a repeat performance in 2003 when Ijaw and Itsekiri youths took to the streets, with heavy fighting resulting in more than a 100 deaths on both sides.⁶⁶ The impact the clashes have on the oil industry is evident in the fact that when violence first broke out in 1997, 200,000 b/d were shut in.

When one intertwines the rivalry between militia gangs and the bunker trade, a particularly volatile mixture is created, as could be observed on August 19, 2008, when

⁶² “Thirteen dead as militants attack Nigerian oil port”, *The Guardian Online*, January 2, 2008. Accessible at: <http://www.guardian.co.uk/world/2008/jan/02/terrorism.oil>

⁶³ Human Rights Watch, “Politics as War: The Human Rights Impact and Causes of Post-Election Violence in Rivers State, Nigeria”, *Human Rights Watch Publications*, Vol. 20, No. 3 (March 2008). Accessible at: <http://hrw.org/reports/2008/nigeria0308/index.htm>

⁶⁴ Human Rights Watch, “The Warri Crisis: Fueling Violence”, *Human Rights Watch Publications*, Vol. 15, No. 8 (December 2003). Accessible at: <http://www.hrw.org/reports/2003/nigeria1103/index.htm>

⁶⁵ Ojiabor, Favour, “Mayhem in Warri”, *Newswatch*, April 6, 2003. Accessible at: <http://www.worldpress.org/Africa/1083.cfm>

⁶⁶ Ekeinde, Austin, “Nigeria militants kill 3 in battle over oil turf”, *Reuters*, August 19, 2008. Accessible at: <http://www.alertnet.org/thenews/newsdesk/LJ672267.htm>

Nigerian militants killed 3 in a dispute over stolen (bunkered) oil.⁶⁷ The distinction between criminal gangs and militia groups become blurred in these clashes, and the various groups have taken advantage of the deteriorated security environment and stability. The lucrative trade in stolen oil and abductions have distorted the lines between criminality and political struggle, to the detriment of the local communities trying to make an honest living.

In conclusion, some startling developments concerning competition between militia groups have happened. MEND claims moral authority in the Niger Delta, because it specifically targets the energy industry. One such incident happened on August 14, 2008, when MEND rescued two German hostages seized by an armed gang. In an email statement the group reported "(MEND) concluded a successful rescue of the two German hostages and staff of Julius Berger ... from inside the heavily fortified hideout of the group that kidnapped them"⁶⁸ MEND stated that they helped Berger (a German construction company) out to make sure that construction operations would be resumed in the Delta. This is worrying for two reasons; first, the competition for kidnap victims could lead to bloodshed between heavily armed groups making the Niger Delta ever more unsafe; secondly, armed groups could start forcing companies into areas that are increasingly unsafe to operate in, making Nigeria even more unattractive for investment. Investment in the oil industry is of paramount importance; and none more so than in that of Nigeria.

⁶⁸ Fabi, Randy, "Nigeria militants rescue two German hostages", *Reuters*, August 14, 2008. Accessible at: <http://www.alertnet.org/thenews/newsdesk/LE420686.htm>

SECTION 2: INTERSTATE SECURITY CONSIDERATIONS

There are always issues which transcend a country's borders, and this is especially true for Nigeria's oil industry. Although oil bunkering is connected to these issues, it is mostly a 'Nigerian' problem. This is not so for the two issues that will be explained below. Both the Nigerian border issue with Cameroon—although now 'resolved' by the handing over of the disputed area by Nigeria—and Piracy are huge issues of importance for Nigeria. The problem is usually in lost profits, but because Nigeria is a regional hegemon, with the largest population and military in West Africa it will act like a hegemonic power. It will react to challenges to its hegemonic power status, and the recent Cameroon issue highlights this. With two neighbors, Equatorial Guinea and Sao Tome and Principe, finding extensive oil and gas reserves, coupled with the handing over of an oil rich peninsula (Bakassi), it might try to reassert itself. Instability in this region, with its huge potential for additional oil and gas for the global market, would have an impact on both prices and investment.

3.2.1 BORDER ISSUES

Border disputes are very common on the African continent, even more so when those borders are in resource rich areas. Disputed areas such as the Bakassi Peninsula between Cameroon and Nigeria have the potential for conflict, and periodically flair up in violence. This was the case on July 24, 2008, when a Nigerian militant group calling itself the Niger Delta Defence and Security Council (NDDSC) attacked a Cameroonian security patrol, resulting in 10 Nigerian militants and one Cameroonian soldiers' death.⁶⁹ The Bakassi Peninsula is thought to be very rich in offshore oil and natural gas deposits, and thus strategically important to both countries; however, on October 10th, 2002, the International Court of Justice ruled that the Bakassi Peninsula did indeed belong to Cameroon, and that the Peninsula should be handed over by August 14, 2008.⁷⁰ The latest clash was preceded by various incidents, including one in November 2007 (21 Cameroonian soldiers killed), June 2008 (6 Cameroonians killed: 5 soldiers and a local administrator), and July 13 (3 Cameroonian soldiers injured).⁷¹ Nigeria has long been suspected of destabilizing the southern peninsula through proxy militant groups such as the NDDSC in order to draw out the dispute beyond the deadline. Although Nigerian President Umaru Yar'Adua has said the long awaited handover would take place, the Nigerian parliament had delayed the ratification because of the violence, legal skirmishes and political disputes. However, on August 14th, the official handover took place, and, according to a spokesperson for the Nigerian president "This handing

⁶⁹In this clash, 10 Nigerian militants and one Cameroonian soldier died: Musa, Tansa, "Cameroon says kills 10 gunmen in disputed Bakassi", *Reuters*, July 24, 2008. Accessible at: <http://www.reuters.com/article/latestCrisis/idUSL24633348>

⁷⁰ United Nations, "Bakassi Peninsula: Recourse to the law to prevent conflict", *10 Stories the world should hear more about*. Accessible at: <http://www.un.org/events/tenstories/06/story.asp?storyID=900>

⁷¹ Mbachu, Dulue, "Nigeria: Tension over Bakassi Peninsula", *ISN Security Watch*, July 21, 2008. Accessible at: <http://www.isn.ethz.ch/isn/Current-Affairs/Security-Watch/Detail/?id=88601&lng=en>

over process, as painful as it is for everyone including the president, is a commitment we have made to the international community and we have a responsibility to keep it."⁷²

The Bakassi Peninsula's transfer opens up the way for Cameroon to redraw the two countries' maritime boundaries in lieu with the law of the sea. Although Cameroon is now free to explore the surrounding waters, the territorial dispute has prevented exploration in the region for more than 6 years, highlighting the fact that inter state disputes and violence impacts the oil industry heavily. Yet, one must not forget that Nigeria is West Africa's hegemonic power, and will remain so for the foreseeable future. It has no problem interfering in its neighbors affairs when it deems necessary. It did so in 2003, when Nigeria helped restore Sao Tome and Principe's President after an attempted coup (and secured a greater share in the two countries' joint venture), and might do so again.

3.2.2 PIRACY

Additionally, the risk of piracy is something one should take into account when observing instability and disruptions in oil supply. Although the hijacking of an oil super tanker is extremely hard at best, the frequency with which piracy attacks occur on the African coast is worrying. Although, according to the ICC International Maritime Bureau, instances of piracy are decreasing worldwide, attacks on the Western coast of Africa have increased.⁷³ As a result, the African coast has now "surpassed Asian shipping lanes as the most dangerous in the world".⁷⁴ From January to June alone, according to the ICC International Maritime Bureau, there were 18 incidences of Piracy in Nigerian waters. This added risk for shipping companies, left relatively alone in the Niger Delta, is leading to a drop in oil shipments because the shipping companies deem the risks to ships, cargo and crew too great. This not only influences oil prices, but especially the shipment of the coveted light sweet crude found in Nigeria.

A possible response for this 'added risk' of piracy could come from the recent British announcement to send military officers to train Nigerian troops in the Niger Delta; a cooperation that will most likely focus on maritime security in a bid to protect Nigeria's offshore energy sector. This is important because it will provide a measure of security for the tankers and as a deterrent to pirates and oil bunkerers. The reason for this pledge, in the words of Prime Minister Gordon Brown, is economic: "The price of oil requires us to look round the world where sources of production can be found. One of the areas where we can make the greatest progress most quickly is the Niger Delta."⁷⁵

⁷² Akpan, Ani, "Nigeria to leave oil-rich Bakassi", *International Herald Tribune*, August 14, 2008. Accessible at: <http://www.iht.com/articles/reuters/2008/08/14/africa/OUKWD-UK-NIGERIA-CAMEROON-BAKASSI.php>

⁷³ Up to date piracy reports can be seen at <http://www.icc-ccs.org/extra/display.php>

⁷⁴ Leinwand, Donna, "U.S. targets Somali pirates", *USA Today*, July 20, 2008. Accessible at: http://www.usatoday.com/news/world/2008-07-20-pirates_N.htm

⁷⁵ Barker, Alex, "UK offers Nigeria help to train security forces", *Financial Times*, July 16, 2008. Accessible at: <http://www.ft.com/cms/s/0/5f37c5e4-5378-11dd-8dd2-000077b07658.html>

Additionally, America has pledged its support to help stop the violence in the Gulf of Guinea. Under the banner of the 'war on terror', the U.S. has decided that the Gulf of Guinea needs to be patrolled and safeguarded. This is not an unfounded worry for the U.S., considering the fact that Nigeria is the fifth largest exporter of crude oil to the U.S. Between June '07 and June '08, Nigerian crude supplied to the US grew by 5.9%, and if this trend continues it is set to take over Venezuela as America's fourth largest supplier.⁷⁶

CONCLUSION

The Niger Delta, albeit rich in oil and gas, is a challenging environment for any company, National or International. As Shell has highlighted in their Sustainability report of 2007, there are many challenges in working in an African country, especially one like Nigeria:

"In 2007, the security situation in the Delta remained serious. Forty-seven staff and contractors were kidnapped by militants...Tragically, two others were killed in assaults and a third died as a result of a fire caused by criminals stealing oil from a pipeline. Onshore, most facilities in the Western Delta remained closed down because of security threats, while operations in the East continued throughout the year under challenging circumstances, limiting our ability to access these facilities to do routine maintenance or repair damage from sabotage."⁷⁷

Although not a general trend for Sub-Saharan Africa, investment in the oil industry in Nigeria is mostly being made in off shore projects. In courting possible Asian investors, the main problem for Nigeria is that companies such as CNOOC have no substantial offshore experience compared to that of the large IOC's such as Shell. This has the possibility of exposing the Chinese (and other) NOC's to attacks that the IOC's have tried to avoid by moving their operations offshore. An example of an NOC making overtures in taking over what used to be the sole playing field of large IOC's is in Ogoniland, belonging to Shell.⁷⁸ Although abandoned in 1993, Ogoniland can be arguably pointed at as the birthplace of the corporate social responsibility movement after massive protests from the Movement of the Survival of the Ogoni People and later the execution of the internationally known poet Ken Saro-Wiwa by the Nigerian government.⁷⁹

With Gazprom and a Chinese oil company vying for the Ogoniland oilfields, those NOC's will have to ensure they physically secure their interests without getting embroiled in a public relations disaster that could end in international condemnation, as Shell experienced in the 1990s. Committing itself to transparency obligations and a corporate code of conduct led Shell to rebuild some of its damaged reputation, eventually leading to a global corporate responsibility standard when several other multinationals

⁷⁶ PIW August 25th

⁷⁷Royal Dutch Shell, "The Shell Sustainability Report 2007", *Shell*, 2007. p. 25

⁷⁸ Amanze-Nwachuku, Chika and Davidson Iriekpen, "Nigeria: Russian, Chinese Oil Firms Jostle for Ogoni", *This Day*, June 16, 2008. Accessible at: <http://allafrica.com/stories/200806160005.html>

followed suit. On the other hand, Russian—and to a lesser degree—Chinese companies do not have a long history of managing public relations debacles. If a Chinese or Russian company is to undertake operations in Ogoniland or elsewhere in Nigeria, it has to manage its security in such a way that it can defend itself physically from militants whilst drawing minimal criticism from NGOs.

The importance of highlighting and exploring these issues in the context of Chinese-African oil relations is the simple fact that the Chinese will have to navigate the exact same challenges. Although the Chinese NOC's will be less influenced by security implications in their risk assessments, they will still have to adapt their strategies. The next Chapter covers the wide scope of China-Africa relations, which will be followed in Chapter 4 by an analysis of the type of security situations as witnessed in Nigeria, analyzing them in the context of Chinese involvement in the African continent.

⁷⁹ MOSOP complained that Shell left a trail of pollution and did not reinvest any of its profits into the area for social and economic development.

Key Messages

- Violence in the Niger Delta region has shut in a large proportion of Nigeria's oil output: according to OPEC, in April 2008, Nigeria's oil production reached 1.81 million b/d, down from 2.5 million b/d in 2005.
- According to the Shell Petroleum Development Company (SPDC), in 2007 \$4.29 of the average \$6.99 cost to produce a barrel of oil was security related.
- Nigeria's militia groups have played a prominent role in the decline of Nigerian production, with MEND the largest and most organized of said groups. A recent attack on the FPSO Bonga vessel has highlighted the increased capabilities and organisation of these groups.
- MEND has relied mainly upon a two-pronged attack of sabotage and kidnapping: with a reported 128 individuals kidnapped between 2006/7.
- The effect of sabotage is slightly harder to report, but the effects are serious nonetheless: a single attack can result in a 120,000 b/d shut in.
- Terror tactics are new to the militia groups, but have been a disturbing development. These tactics include bombings such as the one in Port Harcourt in 2006. MEND iterates that these tactics are symbolic and that they have the capability to effectively use them in more deadly settings.
- Although the theft of oil is not a direct security threat per se, it is a very dangerous tactic and contributes to sabotage and pollution and capital flight: estimated at \$4-18 billion per year (depending on oil price).
- Although MEND is a focal point for most militia groups, interethnic and militia rivalry contribute greatly to the instability in the Niger Delta (and broader) region. Competition for the kidnappings and moral authority have caused clashes between rival militia groups.
- Border issues between Nigeria and Cameroon have contributed to instability in the region. The Bakassi peninsular dispute is arguably perpetuated by the question of access to resources.
- The increased instances of piracy are another worrying development in the Niger Delta. From January to June, 2008, there were already 18 recorded actual or attempted instances of piracy.
- The instability in the region is driving the costs of producing oil up, and depressing the willingness of new investment necessary for (especially) offshore projects. MEND has proven to be indiscriminate in its targets, and has targeted the oil industry in general.
- Nigeria has the ability to produce upwards of 2.5 million barrels a day, but usually hovers around 1.8-2 million b/d. Security threats are a leading cause of the depressed production figures in Nigeria.

4. CHINA-AFRICA TIES

This chapter will provide the background of China-Africa relations in the form of a brief history, followed by a focus on the recent Chinese "scramble" on the continent, pointing out how quickly, firmly and how broadly China is involved in Africa and its oil industry.

SECTION 1: HISTORICAL RELATIONS

China-Africa relations date back to 1956, when China and Egypt first established diplomatic relations. Since that landmark event, China has established diplomatic relations with 49 African countries, bar Burkina Faso, Gambia, Sao Tome and Principe, and Swaziland (due to their relations with Taiwan). The most recent additions to the list of 49 countries are Chad, Liberia, Senegal and Malawi, all of whom left Taiwan's sphere in the last four years to join China (Liberia in October 2003, Senegal in October 2005, Chad in August 2006, and Malawi as recently as December 28, 2007).

Perhaps the most potent symbols of China as a benign and reliable partner for Africa is to be found in their allegiance against Apartheid South Africa and the construction of the Tanzania-Zambia railway (known as Tazara and TanZam), built by some 50,000 Chinese during the 1960s and 1970s for little to no profit.⁸⁰ Many of these workers returned to China, but some remained in Africa. Over the last decade, tens of thousands of Chinese citizens have moved to Africa with Beijing's approval. Whereas the Chinese population in Africa was estimated at 137,000 in 2001,⁸¹ the total number today is thought to total up to 750,000.⁸² By 2006, approximately 74,000 Chinese workers were involved in Chinese projects in Africa on a temporary basis.⁸³ Numbers vary greatly however, with some saying that perhaps as many as 100,000 Chinese workers have spread out across Angola alone, laying railroad tracks, paving new highways and building hotels and homes.⁸⁴ The majority of permanent resident Chinese are thought to live in South Africa, where the estimate for 2004-2006 is between 100,000 and 300,000.

According to Emma Mawdsley, twentieth-century Sino-African relations can be divided into three main periods: the Mao years (1949-1976), the first decade under Deng Xiaoping (1978-1989), and the post-Tiananmen Square years (from 1989 onwards).⁸⁵

⁸⁰ Monson, J., Freedom Railway: The Unexpected Successes of a Cold War Development Project, *Boston Review*, Dec 2004-Jan 2005. Accessible at: <http://bostonreview.net/BR29.6/monson.html>

⁸¹ Sautman, B., & Y. Hairong, Honor and Shame? China's Africa Ties in comparative Context. In Wild, Leni and David Mephram, *The New Sinosphere: China in Africa*, 2006, p. 59.

⁸² Bristow, M., China in Africa: Developing Ties, *BBC News*, November 29, 2007. Accessible at: <http://news.bbc.co.uk/2/hi/africa/7118941.stm>

⁸³ Bates, G., & J. Reilly, J., The Tenuous Hold of China Inc. in Africa, *The Washington Quarterly*, Volume 30, Number 3, p. 37-52, Summer 2007, p. 37.

⁸⁴ Johnson, S., China's African Misadventures; Beijing has Dramatically Outpaced its Rivals in Africa. But at Ground Level, Things Don't Always Look So Rosy, *Newsweek*, Vol. 150, Iss. 23, December 3, 2007, p.46.

⁸⁵ Mawdsley, E., China and Africa: Emerging Challenges to the Geographies of Power, *Geography Compass*, 2007, p. 408.

This paper argues that a fourth period has morphed out of the third, starting around the turn of the 21st Century.

The Bandung Conference in 1955 was the first noteworthy event in Sino-African relations, setting off a string of relationships with African countries. The first period is best characterized as a time of ideology. China sought to encourage PRC-style social revolution in Africa by supporting anti-colonial liberation movements all over the continent through technical assistance, educational scholarships, diplomatic ties and delegations, military equipment, infrastructure development and loans and grants. The Sino-Soviet rift during the early 1960s meant that China became even more selective in Africa, as they began opposing groups considered to be close to the Soviet Union (e.g. they broke off diplomatic relations with Angola).

The second period marked a clear shift away from Mao's ideological policies to a more pragmatic approach, in line with a more general policy-shift under new leader Deng Xiaoping. Securing economic trade links, co-operation and growth now became China's priority in Africa.⁸⁶ Aid declined, as did the number of high level visits, with China focusing its scarce resources on its own modernization, rather than on Africa.

The third period comes on the backdrop of the crackdown on pro-democracy demonstrations in Tiananmen Square. Given the harsh criticism China received from the Western world, they turned to more like-minded governments with which to ally, arguing that Western critiques around human rights and democracy are founded in neo-imperialist arrogance.⁸⁷ This view was very much shared by African governments, with Angola and Namibia, among others, voicing their support of China's crackdown.⁸⁸ High level visits and aid increased dramatically (of the 52 countries receiving Chinese aid in 1990, 24 were African).⁸⁹ Once China's interest in Africa was renewed, economic principles took over, without dropping the political agenda entirely.

Around the turn of century, the fourth period came into fruition as a result. The fourth and current period is best characterized as an all-out attempt by China to engage with Africa on a number of fronts, ranging from politics to direct investment, and trade to international engagement, with the goal being to maximize China's interests while simultaneously allowing for a win-win situation. This fourth period is fuelled by China's immense growth, forcing it to look elsewhere for desperately-needed natural resources and assert itself on the global stage. This is epitomized by China's Forum on China-Africa Cooperation (FOCAC), held for the first time in October 2000 in Beijing and having grown into one of the world's largest Africa-centered forums. Since the first Ministerial Conference of FOCAC, two more Ministerial Conferences have been held; FOCAC II in Addis Ababa, Ethiopia in December 2003 and FOCAC III in Beijing in November 2006. FOCAC IV is scheduled to take place in Cairo, Egypt in 2009. FOCAC III in particular was

⁸⁶ Taylor, I., China's Foreign Policy Towards Africa in the 1990s, *Journal of Modern African Studies*, Volume 36, Number 3, September 1998, p. 43.

⁸⁷ Snow, P., China and Africa: Consensus and Camouflage, In: Robinson, T. W., & D. Shambaugh (eds), *Chinese Foreign Policy: Theory and Practice*, Oxford: University Press, 1994, pp. 283-321.

⁸⁸ Taylor, I., p. 447.

⁸⁹ Mawdsley, E., p. 411.

hugely successful, welcoming delegations from all 48 African nations with which China has diplomatic relations at the time, including 41 heads of state or government and senior officials. From the 2006 conference onwards, FOCAC officially became labeled a summit. In preparation for and as a follow-up to the Ministerial Conferences of FOCAC, China has organized four Senior Officials Meetings of FOCAC: the first one in Beijing right before FOCAC I, the second in Lusaka, Zambia in July 2001, the third right before FOCAC II in Addis Ababa, Ethiopia in 2003, and the fourth in Beijing in August 2005.

SECTION 2: IN PURSUIT OF AFRICAN RICHES

4.2.1 GENERAL TRADE

Africa⁹⁰ is gradually increasing in importance as a trading partner for China, but remains relatively minor. Africa represented 2.6% of China's total export destinations and 3.5% of her source of imports in 2007, together accounting for 3% of China's global trade. In 1998, Africa accounted for a not much smaller share of China's total exports (1.8%), but a mere 1% of China's imports and 1.5% of total trade. The steep rise since the turn of the century is even more evident when looking at the actual value of trade. Total trade between Africa and China amounted to \$66.1 billion in 2007 (\$73 billion when including North African countries)⁹¹, compared to a total of \$4.8 billion in 1998; a massive 1,277% increase. Imports from Africa actually increased nearly twice as rapidly as total trade, jumping from \$1.4 billion in 1998 to \$34.2 billion in 2007, versus \$3.4 billion in exports to China in 1998 and \$32 billion in 2007. Whereas historically China exported more to Africa than they imported, today the situation is reversed. Given that the bulk of imports consist of raw materials, the increasing importance of and reliance on Africa as a feeder for China's growth engine becomes evident. Oil is the single most important Chinese import from Africa, accounting for 80% of African exports to China.⁹²

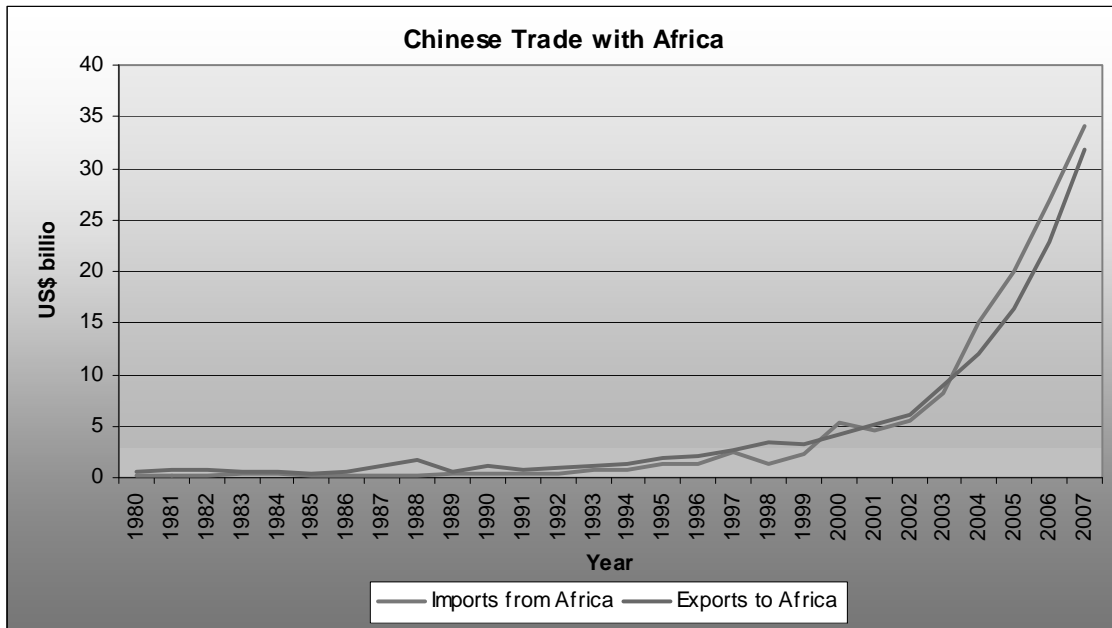
Figure 1 provides a visual overview of China-Africa trade between 1980 and 2007, with the red line representing the value of China's imports from Africa in billions of \$US and the blue line representing the value of China's exports to Africa in billions of \$US. Figure 2 shows Africa as a percent of total Chinese trade, with the red line representing Africa's percentage share of China's total imports and the blue line representing Africa's percentage share of China's total exports.

⁹⁰ All trade figures in Section 3.2.1 General Trade represent China-Sub-Saharan Africa trade, as represented by the IMF. Nevertheless, we refer to the figures as China-Africa trade, given that other than the actual numbers differing, the analogy and conclusions remain the same.

⁹¹ Hanson, Stephanie, "China, Africa, and Oil", *Council on Foreign Relations*, June 6, 2008. Accessible at: http://www.cfr.org/publication/9557/china_africa_and_oil.html.

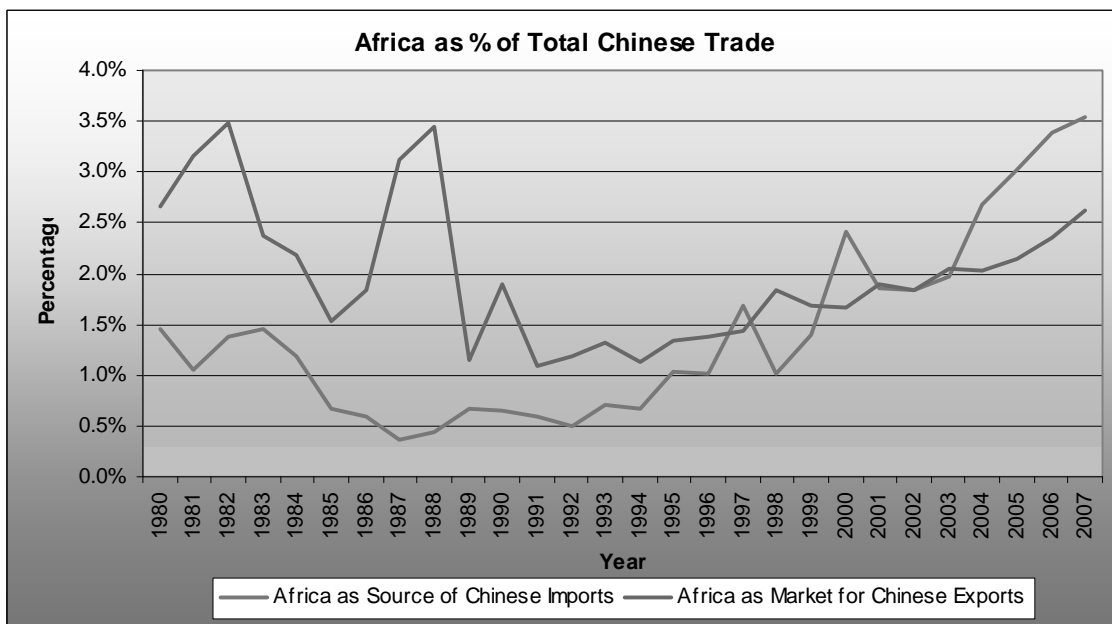
⁹² Foster, V., Butterfield, W., Chen, C., & N. Pushak, "Building Bridges: China's Growing Role as Infrastructure Financier for Africa", *World Bank PPIAF*, No. 5, 2008. Report accessible at: <http://www.ppiaf.org/content/view/438/462/>.

Figure 8: China's Trade with Africa



Source: IMF Direction of Trade Statistics

Figure 9: Africa as a Percent of Total Chinese Trade

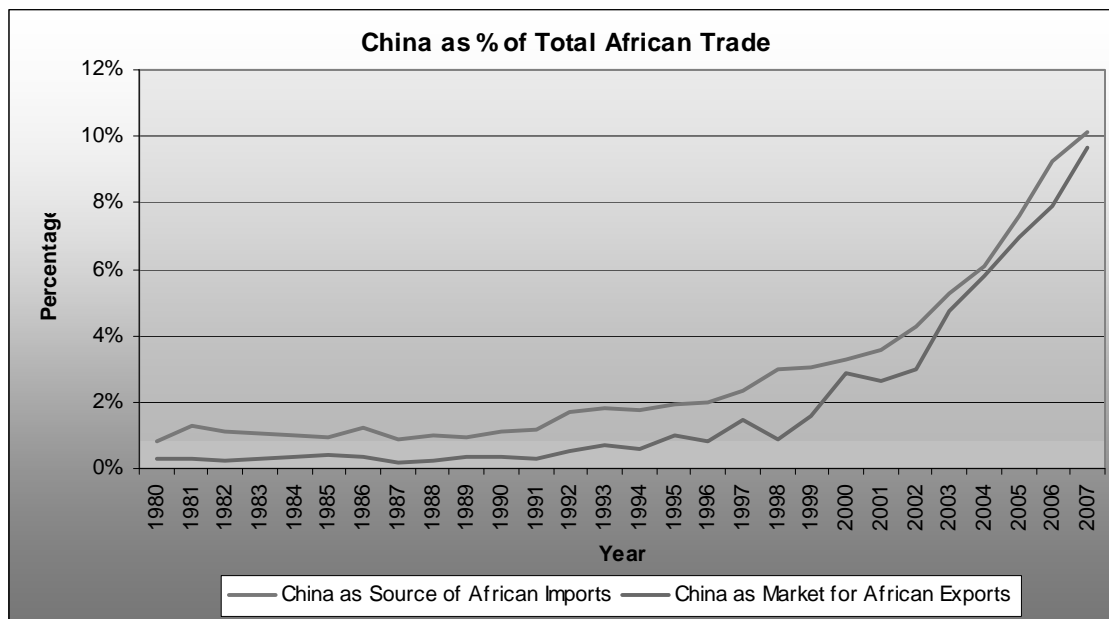


Source: IMF Direction of Trade Statistics

Vice versa, China constitutes a major (the second largest after the USA, overtaking France for the first time) trading partner for Africa, with 9.7% of the continent's exports going to China and 10.1% of her imports originating from there in 2007 (China accounts

for 9.9% of total African trade).⁹³ This is a major increase from just 9 years earlier in 1998, when China accounted for no more than 2% of total African trade. While the increase in China as a source of African imports (from 3% in 1998 to 10.21% in 2007) is impressive, it pales in comparison to the increase in China as a destination for African exports (from 0.9% in 1998 to 9.7% in 2007). The blue line in Figure 3 shows the increasing importance of China as a destination for African exports and the red line highlights the same pattern for China as a source of Africa’s imports.

Figure 10: China as % of Total African Trade



Source: IMF Direction of Trade Statistics

4.2.2. TRADE PARTNERS

China has two major trade partners in Africa⁹⁴; South Africa and Angola. In 2006, after 11 consecutive years of being China’s largest trading partner in Africa, South Africa was surpassed by Angola, with which China had a total trade value of \$11.83 billion versus \$9.87 billion with South Africa (in 2005 trade with South Africa amounted to \$7.27 billion, compared to \$US6.95 billion with Angola). Not surprisingly – as petroleum accounted for over 95% of Angola’s global exports – the bulk of Angolan exports to China are made up of petroleum.⁹⁵ In 2007, South Africa took over the top spot again, with total trade amounting to \$US14.24 billion, compared to total trade of \$US13.09 with Angola. Chinese exports to Angola are negligible from China’s point of view. Trade with South Africa, on the other hand, is more diverse. China imports mainly a variety of

⁹³ IMF Trade Statistics.

⁹⁴ In Section 3.2.2 Trade Partners, all trade figures represent China-Continental Africa trade.

⁹⁵ National Bank of Angola. <http://www.bna.ao>

mineral products from South Africa and exports mostly machinery, electrical equipment and parts thereof, textiles and footwear.⁹⁶

China's combined trade with South Africa and Angola amounted to approximately 42% of overall trade with the continent in 2006. When including the remaining three of China's top 5 African trade partners, the figure rises to 60% of total trade with Africa. Table 1 lists China's top 5 export, import and overall African trade partners in 2006. Interesting to note is that, although China swears by the "one China" policy, as of January 2007, Taiwan's top 5 trade partners in Africa by value were ranked as follows: 1. Angola, 2. South Africa, 3. Republic of Congo, 4. Egypt, 5. Nigeria.⁹⁷ In other words, with the exception of Sudan / Republic of Congo, it is identical to China's top 5.

Table 1: China's Top African Trade Partners in 2006

Imports from	(in millions of \$US)	% of Total African Trade	Exports to	(in millions of \$US)	% of Total African Trade
1) Angola	10,931	38%	1) South Africa	5,769	25%
2) South Africa	4,095	14%	2) Egypt	2,976	13%
3) Republic of Congo	2,785	10%	3) Nigeria	2,856	12%
4) Equatorial Guinea	2,538	9%	4) Algeria	1,952	8%
5) Sudan	1,941	7%	5) Morocco	1,570	7%
Total Top 5	22,290	78%	Total Top 5	15,123	64%
Total Africa	28,550	100%	Total Africa	23,592	100%

⁹⁶ South African Trade Statistics; Department of Trade and Industry South Africa.

⁹⁷ Directorate General of Customs, *Ministry of Finance*, Republic of China. Accessible at: <http://eweb.trade.gov.tw/mp.asp?mp=2>

Total Trade with	(in millions of \$US)	% of Total African Trade
1) Angola	11,825	23%
2) South Africa	9,864	19%
3) Sudan	3,358	6%
4) Egypt	3,193	6%
5) Nigeria	3,134	6%
Total Top 5	31,374	60%
Total Africa	52,142	100%

Source: IMF Direction of Trade Statistics

The numbers in Table 1 would be even higher if we were to use the National Bureau of Statistics of China. According to these often referred to statistics, Chinese trade with Africa actually amounted to a total of \$55.5 billion (\$28.8 billion in African imports and \$26.7 billion in exports to Africa) in 2006, which is slightly higher than the figure of \$52.1 billion (\$28.6 in imports and \$23.6 in exports) provided by the IMF for the same year.⁹⁸

The latest trade figures for 2007 show a very similar ranking, with the only difference in rank order of overall trade being that South Africa and Angola traded places once again. The top 5 recipients of Chinese exports retained the exact same order as in 2006, but the ranking of China's imports from Africa saw Sudan move from fifth to third spot (more than doubling from \$US1.9 billion in 2006 to \$US4.5 billion in 2007): 1. Angola, 2. South Africa, 3. Sudan, 4. Republic of Congo, 5. Equatorial Guinea.

4.2.3. TRADE DEALS

In the largest single loan deal ever signed by China in Africa, the Democratic Republic of Congo and China agreed in September 2007 to a \$5 billion loan to develop infrastructures, mining, bioenergy, forestry and agriculture, in a deal blurring all boundaries between aid and commerce. An additional \$3.5 might still be allocated at a later point in time.⁹⁹ The deal's true value is thought to stand at some \$9.25 billion and pledges 10.62 million of tons of copper and 620,000 tons of cobalt to China in exchange for the hundreds of clinics, hospitals and schools, two hydro-electric dams, 3,300km of

⁹⁸ China Statistical Yearbook 2006, National Bureau of Statistics of China, China Statistics Press, pp. 740-741.

⁹⁹ Bavier, J., China to Lend Congo \$5 Billion in Latest African Foray, *Reuters*, September 18, 2007.

Accessible at:

<http://www.reuters.com/article/worldNews/idUSL1815693720070918?feedType=RSS&feedName=worldNews&rpc=22&sp=true>.

road and 3,000km of railway).¹⁰⁰ According to Victor Kasongo, the deputy minister of mines, the total value of Congo's deals with Export-Import Bank and China Development Bank together could eventually reach UA\$14 billion.¹⁰¹

More famous perhaps than the Democratic Republic of Congo loan and indicative of Chinese methods, are China's loans to Angola. In March 2004, a \$2 billion unconditional soft loan was given to Angola for infrastructure projects by China's export and import bank, Eximbank. Terms specify repayment within 17 years at an interest rate of 1.5% and caused the Angolan government to snub the IMF offer that they saw as carrying too many preconditions.¹⁰² Furthermore, as a direct result of the loan, a last minute decision was made by Angolan state-firm Sonangol to give the rights to oil block 18 to Chinese firm Sinopec, after the state-owned Indian oil company, the Oil and Natural Gas Corporation, thought it had secured a deal with Shell to assume the lease for it.¹⁰³ Since then, a total of \$US8-12 billion in loans have been provided to Angola by China.

As highlighted by the aforementioned Democratic Republic of Congo and Angola deals, the border between private and public firms and government and private sponsored projects is very blurred when it comes to China. Nigeria is the latest market of choice for Chinese loans in exchange for goodies such as oil. During March 2008 talks between Chinese and Nigerian officials (including Umaru Yar'Adua, Nigeria's president) in Beijing, Sinosure (China's export credit guarantee agency) offered export guarantee facilities worth some \$40-50 billion to help fund projects in Nigeria over the next three years, with details of specific schemes yet to be decided. Odein Ajumogobia, Nigeria's petroleum minister, highlighted the possibility of some of the investments being made in return for access to oil blocks.¹⁰⁴ Merely a month later, China agreed to lend Nigeria \$2.5 billion for infrastructure projects in a separate deal. Ajumogobia this time specified in more concrete terms that the offer was linked to talks about gaining energy exploration rights in the country. "They've basically committed to these facilities and we're exploring with them their interest in investing in the upstream," Mr. Ajumogobia told the *Financial Times*. "We're working out the details."¹⁰⁵ This would not be the first example of a tit-for-tat approach in Nigeria, with PetroChina's first significant oil deal in Nigeria in the summer of 2005 securing 30,000 barrels a day for the next five years, in return for China's financing of two badly needed power stations.¹⁰⁶ A similar case is Sudan, where

¹⁰⁰ Wallis, W., Congo Outlines \$9bn China Deal, *Financial Times*, May 10, 2008. Accessible at: http://www.howardwrench.com/archives/2008/05/10/congo_outlines_9bn_china_deal.

¹⁰¹ Mutual Convenience: Congo has Something China Wants, and Vice Versa, *The Economist Special Report: China's Quest for Resources*, March 13, 2008. Accessible at: http://www.economist.com/surveys/displaystory.cfm?story_id=10795773&fsrc=RSS.

¹⁰² Angola: Oil-Backed Loan Will Finance Recovery Projects, *IRIN*, February 21, 2005. Accessible at: <http://www.irinnews.org/report.aspx?reportid=53112>.

¹⁰³ Alden, C., & M. Davies, Chinese Multinational Corporations in Africa, *South African Journal of International Affairs*, 13(1), September 2006.

¹⁰⁴ Green, M., & R. McGregor, China Offers Nigeria \$50bn Credit, *Financial Times*, April 1, 2008. Accessible at: <http://www.ft.com/cms/s/0/7a46f5d4-0013-11dd-825a-000077b07658.html>.

¹⁰⁵ Green, M., China Oils Nigeria Talks With Loan, *Financial Times*, April 21, 2008. Accessible at: <http://www.ft.com/cms/s/0/c4f9e296-0fe8-11dd-8871-0000779fd2ac.html>.

¹⁰⁶ Walt, Vivienne. "China's Africa Safari." *Fortune*, February 8, 2006. Accessible at: http://money.cnn.com/magazines/fortune/fortune_archive/2006/02/20/8369153/index.htm.

in August 2005 China supplied the government with 220 military trucks, with payment in oil.¹⁰⁷

In another government sponsored boost for business exchange, the China-Africa Development Fund was launched in June 2007 by the China Development Bank (CDB) and will gradually reach a total amount of \$5 billion (portrayed as economic assistance, it will be used to invest exclusively in Chinese enterprises and their projects on the continent). By 2009, China would like to see well-established Chinese companies set up three to five overseas economic and trade cooperation zones in African countries.¹⁰⁸ FDI has been increasing rapidly in recent years, with total approved Chinese FDI flows to Africa in 1995 being \$17.7 million, increasing to \$72.3 million in 2001, \$ 107.4 million in 2003, \$US317 million in 2004 and \$US392 million in 2005, as reported by the National Bureau of Statistics of China. For the first six months of 2007, direct investment by Chinese companies in Africa totalled \$485 million.¹⁰⁹ In terms of actual stock of Chinese FDI in Africa, the number for 2004 is thought to be higher than \$900 million,¹¹⁰ which would represent around 6% of total investments in Africa that year.¹¹¹ In 2005 the number increased to \$1.6 billion and was spread out in 48 African countries.¹¹² Of the total stock of \$37 billion in outbound Chinese FDI by 2006, approximately \$4.5 billion had been invested in Africa, or about 12%.¹¹³ As of mid-2006, the stock of China's FDI to Africa was estimated to be \$1.18 billion.¹¹⁴ Sudan accounts – by a clear margin – for the largest portion of Chinese FDI, due primarily to oil-oriented investment.¹¹⁵ Sudan is where Chinese firms have been most successful, with 13 of the 15 largest foreign companies operating there being Chinese.¹¹⁶

There are no signs of the exponential growth in trade slowing anytime soon. In fact, talk is of ever larger China-Africa deals on a scale even beyond the record breaking purchase by the Industrial and Commercial Bank of China (ICBC) of a 20% stake in South African bank Standard Bank, for a total of \$5.5 billion (it was the largest foreign direct investment in post-apartheid South Africa).¹¹⁷

¹⁰⁷ China's Overseas Investments in Oil and Gas Production, 2006, p. 23.

¹⁰⁸ Beijing Action Plan (2006-2009).

¹⁰⁹ Strides Made in Meeting FOCAC Goals, *New Era*, November 7, 2007. Taken from The Economic and Commercial Counselor's Office of the Embassy of the People's Republic of China in the Republic of Namibia.

Accessible at <http://na2.mofcom.gov.cn/aarticle/chinanews/200711/20071105210471.html>

¹¹⁰ Servant, J. C., China's Trade Safari in Africa, *Le Monde Diplomatique*, May 2005. Accessible at: <http://mondediplo.com/2005/05/11chinafrica>; Broadman, H. G., *Africa's Silk Road: China and India's New Economic Frontier*, World Bank, 2007a, p.97.

¹¹¹ Abraham, T., Reviving an Old Dream of Afro-Asian Cooperation, *YaleGlobal*, May 24, 2005. Accessible at: <http://yaleglobal.yale.edu/display.article?id=5752>

¹¹² Asian Foreign Direct Investment in Africa: Towards a New Era of Cooperation among Developing Countries, *UNCTAD Current Studies on FDI and Development*, No. 3, 2007.

¹¹³ Alden, C., & M. Davies, 2006.

¹¹⁴ Broadman, H. G., 2007a, p.12.

¹¹⁵ Bajpae, C., The Eagle, the Dragon and African Oil, *Asia Times Online*, October 12, 2005.

Accessible at: http://www.atimes.com/atimes/China_Business/GJ12Cb01.html.

¹¹⁶ Servant, J. C., 2005.

¹¹⁷ Burgis, T., China to Extend Africa Acquisitions, *Financial Times*, July 20, 2008. Accessible at: http://www.ft.com/cms/s/0/1f7ab242-5e5c-11dd-b354-000077b07658.html?nclink_check=1.

SECTION 3: ADDICTED TO OIL

Prior to 1993, China had always been a net exporter of oil, but due to rapid growth and demand, China became a net importer that year. Today, China has become the world's third-largest net importer of crude oil and the world's second largest consumer thereof.¹¹⁸ China also became a net coal importer in the first half of 2007 and in May 2008, China's dependence on foreign reserves was highlighted once more, when the country became a net gasoline importer for the first time in its history – doubling imports from April's level – and is likely to remain so at least until August 2008. Diesel imports also rose to more than triple purchases a year earlier.¹¹⁹ The trend is expected to continue long-term, with China's net oil imports set to jump from 3.5 million bpd in 2006 to 13.1 million bpd in 2030, according to the International Energy Agency.¹²⁰ Indeed, according to ExxonMobil, despite biofuels, wind and solar growing rapidly as sources of energy, oil and gas will remain the predominant energy sources, representing close to 60% of overall energy in 2030 – a similar share to today. In fact, oil, gas and coal will together maintain about an 80% share of total energy demand through 2030.¹²¹

4.3.1. CHINA'S AFRICAN OIL EXPEDITION

The majority of China's oil imports come from the Middle East, but this is gradually changing. In fact, in February 2006 Angola surpassed Saudi Arabia for the first time as China's largest source of crude oil imports. This feat was repeated recently with Angola being the top supplier of crude oil to China in the first quarter of 2008, exporting 8.48 million metric tons of crude to China (about 688,000 barrels a day and 55% more than a year earlier), versus Saudi Arabia's 8.18 million tons (a 38% increase).¹²² Africa's growing importance as a source of Chinese oil can be seen in Figure 4 and Table 1, increasing nearly 700% from 118,000 barrels per day in 1997 (accounting for 16% of China's total crude oil imports) to 943,000 barrels per day in 2006 (accounting for 32% of China's total crude oil imports).

¹¹⁸ China Energy Data, Statistics and Analysis - Oil, Gas, Electricity, Coal, *Energy Information Administration*, August 2006. Accessible at: <http://www.eia.doe.gov/emeu/cabs/China/Background.html>.

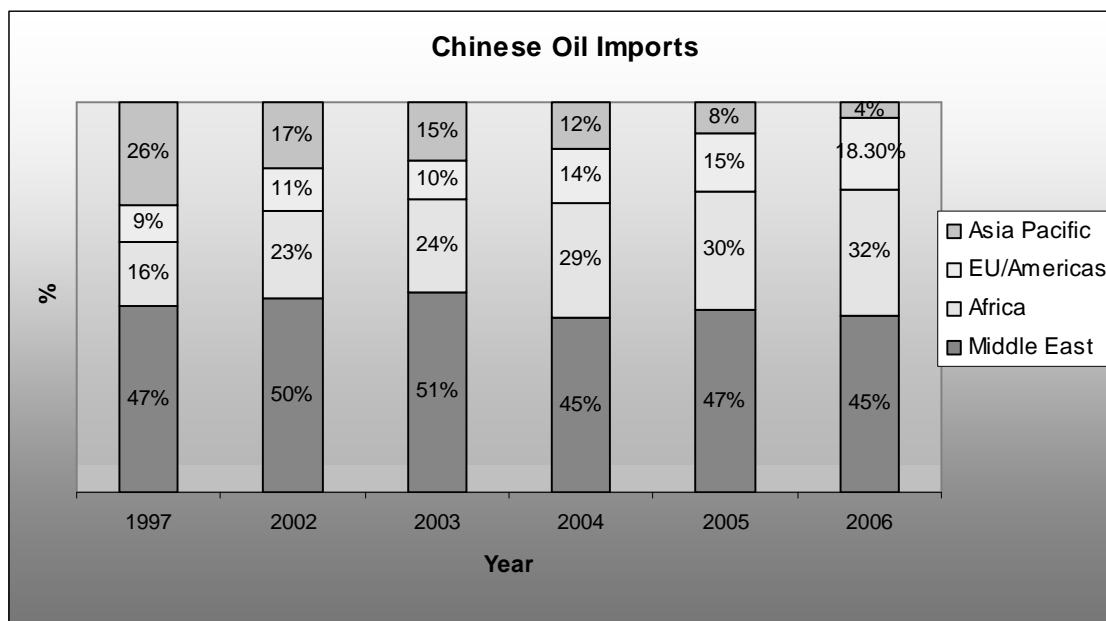
¹¹⁹ Zhu, W., China Becomes Net Gasoline Importer for First Time, *Bloomberg*, June 16, 2008. Accessible at: <http://www.bloomberg.com/apps/news?pid=newsarchive&sid=af29xHpRyYKU>.

¹²⁰ World Energy Outlook 2007: China and India Insights, *International Energy Agency*, 2007.

¹²¹ Tomorrow's Energy: A Perspective on Energy Trends, Greenhouse Gas Emissions and Future Energy Options, *ExxonMobil*, February 2006, p. 3.

¹²² Zhu, W., Angola Overtakes Saudi Arabia as Biggest Oil Supplier to China, *Bloomberg*, April 22, 2008. Accessible at: <http://www.bloomberg.com/apps/news?pid=20601116&sid=aqJ3Wjxs.OWs&refer=africa>.

Figure 11: Chinese Oil Imports



Source: General Administration of Customs, China

Table 2: Chinese Crude Oil Imports (barrels per day), 1997-2006

Country/Region	1997	2002	2003	2004	2005	2006
Middle East	337,000	690,000	929,000	1,120,000	1,204,000	1,330,000
<i>ME % total</i>	47%	50%	51%	45%	47%	45%
Africa	118,000	317,000	445,000	708,000	772,000	943,000
<i>Africa % total</i>	16%	23%	24%	29%	30%	32%
EU/Americas	67,000	148,000	176,000	352,000	380,000	541,000
<i>EU/Am % total</i>	9%	11%	10%	14%	15%	18.3%
Asia Pacific	189,000	238,000	278,000	284,000	194,000	130,000
<i>Asia Pa % total</i>	26%	17%	15%	12%	8%	4%

Source: General Administration of Customs, China

In March 2008, Zhiming Zhao, executive president of China Petroleum and Petro-Chemical Industry Association, said at an energy conference in Cape Town, South Africa that China wanted up to 40 percent of its oil and gas imports to come from Africa in the next 5-10 years.¹²³ Figures released by energy consultant JBC GmbH in March 2008 serve as an indication of the sincerity of these words, as China's West African crude

¹²³ Massalatchi, A., CNPC Niger Deal Extends China Energy Role in Africa, *Reuters*, June 3, 2008. Accessible at: <http://www.reuters.com/article/latestCrisis/idUSPEK164796>.

imports reached 1.2 million barrels a day.¹²⁴ According to research done by Catham House, projected 2013 production of oil from current assets of Chinese oil companies is about 150,000 barrels higher per day in Africa than in Russia and Central Asia, compared to the \$8 billion in oil investments in Africa between 1995 and 2006 and \$13.4 billion in Russia and Central Asia during the same period, providing further evidence of China's increasing focus on Africa as a source of energy.¹²⁵

In 2006, China imported most of its African oil from Angola (57% to be sure), with the Republic of Congo and Equatorial Guinea (both 13%) following in the distance. These figures differ substantially from only five years earlier in 2001, when China imported 37% of its African oil from Sudan, 28% from Angola and 17% from Equatorial Guinea.¹²⁶ Africa constituted 9.7% of the world's proven oil reserves and 12.1% of global oil production in 2006.¹²⁷ Figures 5, 6, 7 and 8 in the appendix provide a breakdown of Africa's top oil and natural gas reserve holders and Africa's top oil and natural gas producers at the end of 2007.

4.3.2 CHINA'S AFRICAN OIL DEALS

In Africa, Chinese national oil companies have signed contracts for equity participation in 14 countries, are investing in over 30 African countries and are eagerly looking to expand further.¹²⁸ Our own research uncovered Chinese oil and gas deals in 23 African countries (this figure excludes energy projects such as hydroelectric dams or electricity, unless built in exchange for access to oil/gas or using oil as collateral).¹²⁹ According to IHS Energy, by 2008 Chinese companies had amassed 56 upstream contracts between them across the continent.¹³⁰ In all, Zhiming Zhao claims China has invested some \$30 billion in Africa's oil and gas industries.¹³¹ With Africa holding substantial gas reserves as well, China might become a player of stature here too in the future, once the figure of 3% of total energy consumption that natural gas accounted for in China in 2004 increases.¹³²

¹²⁴ Subrahmaniyan, N., Sinopec Offers to Sell Crude Oil on Refining Losses, *Bloomberg*, April 10, 2008. Accessible at: <http://www.bloomberg.com/apps/news?pid=newsarchive&sid=apHU.A6J5XIk>.

¹²⁵ Vines, A., China in Africa: A Mixed Blessing? *Current History*, May 2007, p. 214.

¹²⁶ Foster, V., Butterfield, W., Chen, C., & N. Pushak, Building Bridges: China's Growing Role as Infrastructure Financier for Africa, *World Bank PPIAF*, No. 5, 2008. Report accessible at: <http://www.ppiaf.org/content/view/438/462/>.

¹²⁷ Statistical Review of World Energy, *BP*, June 2007.

Accessible at: <http://www.bp.com/productlanding.do?categoryId=6848&contentId=7033471>.

¹²⁸ These 14 countries are: Algeria, Angola, Chad, Equatorial Guinea, Gabon, Ivory Coast, Kenya, Libya, Mauritania, Niger, Nigeria, Sao Tome and Principe, Somalia, and Sudan, according to Downs, E. S., The Fact and Fiction of Sino-African Energy Relations, *China Security*, Volume 3, Number 3, Summer 2007, pp. 42-68.

¹²⁹ See appendix for a breakdown of these 23 countries and the Chinese oil deals there.

¹³⁰ Clark, M., Willing to go where Western Companies Fear to Tread, *Financial Times Report - Africa: Oil & Gas 2008*, January 28, 2008.

¹³¹ Roelf, W., China wants 40 pct of Oil/Gas Imports from Africa, *Reuters*, March 17, 2008. Accessible at: <http://www.reuters.com/article/companyNews/idUSL1727982620080317>.

¹³² China Energy Data, Statistics and Analysis - Oil, Gas, Electricity, Coal, 2006.

China's (oil) deals are not guided by fear. In fact, they tend to have a particular appetite for risk. As if to corroborate this point, China Harbour Engineering Co. (CHEC) signed in July 2008 a memorandum of understanding to build a \$1 billion, 125 km six-lane road in the Niger Delta around Nigeria's main oil hub of Port Harcourt, with officials of CHEC claiming the road-building project would be the largest of its kind in Africa.¹³³ The deal came on the heels of Nigeria's largest construction firm, Julius Berger (a subsidiary of German Bilfinger Berger, but an indigenous Nigerian company) pulling out of the Niger Delta altogether as a direct result of the kidnapping of two of their German construction workers in the region. Perhaps most indicative of China's willingness to brave Africa's most volatile regions in its hunt for natural resources is the production-sharing contract signed by CNOOC and China International Oil and Gas with the Somali interim government in May 2006, giving the Chinese the right to look for oil in Somalia and 49 percent of oil revenues.¹³⁴

The most noteworthy Chinese oil investment in Africa is the more than \$8 billion invested in Sudan's oil sector as of August 2006, with CNPC essentially controlling the Sudanese oil industry.¹³⁵ CNOOC's purchase of a 45% stake in Nigeria's OML 130 field, also known as the Akpo field, for \$2.69 billion in early 2006 (at that time China's largest ever foreign acquisition) also captured the world's attention.¹³⁶ Angola too is a favoured oil partner, where Sinopec, besides owning a 50% interest in Angola's Block 18, formed a joint venture in March 2006 with Angolan state-owned Sonangol by the name of Sonangol-Sinopec International (45% Sonangol, 55% Sinopec) to develop a new 200,000-bpd refinery in Lobito totalling an investment of \$3.5 billion.¹³⁷

The abovementioned deals provide not even a sliver of Chinese oil deals in Africa, however. For a comprehensive list of Chinese oil deals in continental Africa, please see Appendix 1.

¹³³ China Harbour Signs \$1 bln Deal for Nigeria Oil Hub, *Reuters*, July 13, 2008. Accessible at: <http://africa.reuters.com/business/news/usnBAN339668.html>.

¹³⁴ Jopson, B., China Wins Permit to Look for Oil in Somalia, *Financial Times*, July 14, 2007, p. 7.

¹³⁵ China Energy Data, Statistics and Analysis - Oil, Gas, Electricity, Coal, *Energy Information Administration*, August 2006. Accessible at: <http://www.eia.doe.gov/emeu/cabs/China/Background.html>. Sudan Energy Data, Statistics and Analysis - Oil, Gas, Electricity, Coal, *Energy Information Administration*, April 2007. Accessible at: <http://www.eia.doe.gov/emeu/cabs/Sudan/Background.html>. Corkin, L., 2007, p. 20.

¹³⁶ Nigeria Energy Data, Statistics and Analysis - Oil, Gas, Electricity, Coal, *Energy Information Administration*, April 2007. Accessible at: <http://www.eia.doe.gov/emeu/cabs/Nigeria/Background.html>

¹³⁷ Angola Energy Data, Statistics and Analysis - Oil, Gas, Electricity, Coal, *Energy Information Administration*, January 2007. Accessible at: <http://www.eia.doe.gov/emeu/cabs/Angola/Background.html>

4.3.3 NOT THAT SIGNIFICANT?

Strange as it may sound, despite the rapid growth and expansion of China's oil business in Africa, at \$13.5 billion in early 2007, the commercial value of the oil investments in Africa of China's national oil companies was just 8% of the combined commercial value of the international oil companies' investments in African oil and 3% of all companies invested in African oil.¹³⁸ Energy consultants Wood Mackenzie further estimate Chinese groups hold less than 2% of Africa's discovered oil and gas reserves, with Chinese companies increasingly partnering technically superior international peers. Looking at it from this angle does indeed put things in perspective, but then again, CNPC and Sinopec's combined production in Africa easily outdoes that of British major oil firm, BP. Furthermore, there is even talk of foreign oil firms being muscled out by local government in favour of Chinese oil companies.¹³⁹

¹³⁸ Downs, E. S., p. 44.

¹³⁹ One such example is in Chad, where President Idriss Deby ordered US firm ChevronTexaco and Malaysia's Petronas (together responsible for 60% of Chad's production) to quit the country in a row over taxes, with many observers feeling they may have been kicked out to make room for Chinese oil companies (Chad Orders Foreign Oil Firms Out, *BBC News*, August 27, 2006. Accessible at: <http://news.bbc.co.uk/2/hi/africa/5289580.stm>).

Key Messages

- Africa is gradually increasing in importance as a trading partner for China, but remains relatively minor, representing 2.6% of China's total export destination and 3.5% of her source of imports in 2007.
- Oil is the single most important Chinese import from Africa, accounting for 80% of African exports to China.
- China is a major (the second largest after the USA) trading partner for Africa, with 9.7% of the continent's exports going to China and 10.1% of her imports originating from there in 2007.
- China's two main trading partners in Africa are Angola and South Africa, together accounting for approximately 42% of overall trade with the continent in 2006.
- China has signed billions of dollars worth of government sponsored/backed trade deals with countries such as Angola, Nigeria and the Democratic Republic of Congo.
- In February 2006, Angola surpassed Saudi Arabia for the first time as China's largest source of crude oil imports. This feat was repeated recently with Angola being the top supplier of crude oil to China in the first quarter of 2008.
- Africa accounted for 32% of China's oil imports in 2006. Zhiming Zhao, executive president of China Petroleum and Petro-Chemical Industry Association, has said that China wants up to 40% of its oil and gas imports to come from Africa in the next 5-10 years.
- 57% of China's African oil imports in 2006 came from Angola.
- China has oil and gas deals in 23 African countries (excluding energy projects such as hydroelectric dams or electricity, unless built in exchange for access to oil/gas or using oil as collateral).

5. SECURITY

Having examined in Chapter 2 the security issues that firms involved in the Nigerian petroleum industry are exposed to, and having looked at the depth of Chinese involvement in the African continent, the link can now be drawn to China's security risks in Africa.

SECTION 1: BACKLASH

Bearing in mind the countless deals and staggering figures presented earlier, one would be forgiven for believing the Africa-China story is nothing short of a fairytale honeymoon. As is often the case, reality is somewhat removed. Although as of yet relatively limited, China is beginning to face a number of the same hurdles that other foreign oil companies encounter in their quest to secure reserves. These range from "soft" issues such as accusations of environmental damage and support of state terrorism to outright (terrorist) attacks targeting Chinese firms or citizens. Besides direct exposure, Chinese investments are also not immune to indirect threats such as the omnipresent risk of both internal and external political strife and warfare. The more visible the Chinese become, the more likely these varying issues are to escalate.

5.1.1. SOFT BACKLASH

The most well-known cases of international pressure on Chinese conduct in the continent are political, with mainly Western nations decrying China's support of the Khartoum and Harare governments. It has long been argued that China uses her influence as permanent member of the UN Security Council to shield Sudan and Zimbabwe from serious international repercussions and in exchange is able to secure unhindered access to resources such as Sudanese oil and Zimbabwean tobacco and iron. But these tribulations can be found on the ground as well. Between May 29 and June 5, 2008, for instance, workers at Petrodar Operating Co. (a Sudanese oil venture owned for 41% by CNPC) went on strike demanding better pay and working conditions.¹⁴⁰ Earlier, in October 2006, Gabon ordered the Chinese energy firm Sinopec to halt exploration in Loango National Park after it was accused of ruining the environment.¹⁴¹

In projects outside of the oil industry, China has faced a much more substantial backlash, with alleged environmental malpractice by Chinese firms reported in copper mines in Congo and Zambia, as well as titanium sands projects in Kenya, Madagascar, Mozambique, and Tanzania. And in the Republic of Congo Chinese companies have been closed for environmental abuses and more than 600 Chinese working in the country

¹⁴⁰ Maganda, G., Petronas, CNPC Unit Strike in Sudan Ends, Company Official Says, *Bloomberg*, June 5, 2008.

¹⁴¹ Alden, C., China in Africa, *Survival*, 47, no. 3, Autumn 2005, pp. 147-164.

have been expelled for lack of proper documentation.¹⁴² Chinese businesses have also been implicated in ivory smuggling, notably in Sudan and Zimbabwe, and an increasing amount of local workers are dissatisfied with their working conditions at Chinese firms, leading to mine workers at the Chinese-run Chambisi mine in Zambia to riot over poor working conditions (a blast at the copper smelter killed 50 people in 2005), salaries and a failure to pay wages.¹⁴³ Three years after the first protests at the Chambisi mine, some 500 workers began throwing stones at the Chinese managers as they attempted to hold talks, with one manager being admitted to hospital. Police had to come to rescue the Chinese who had taken refuge by locking themselves in their offices.¹⁴⁴ Similarly, but this time it being the Chinese contract laborers who were protesting, two Chinese were killed and four injured in Mongomo, Equatorial Guinea late March 2008, when some 200 striking Chinese construction workers clashed with local Equatorial Guinean security forces in a labor dispute that turned violent.¹⁴⁵ It was the first known case of Chinese workers being killed in labor disputes in Africa.

Both Western complaints and pressure from within are beginning to trickle up to the top echelons of local African governments as well. Take Nigeria. In a June interview with the *Financial Times*, Ojo Maduekwe, Nigeria's foreign minister, alluded to China when discussing the demand for greater transparency. Maduekwe said the government is keen to distance itself from the kinds of deals cut with Asian companies by former President, Olusegun Obasanjo, who sought to swap exploration rights for pledges of investment in big infrastructure projects – "There will be no behind-the-scenes kind of deals." China recently revived its offer of a \$2.5 billion loan made to the previous administration to finance a railway, but Nigeria has sought better terms than the initial proposal. Furthermore, incumbent President Umaru Yar'Adua told the *Financial Times* in an earlier interview in May 2008 that he did not believe relations with China had grown closer during the year he has been in power.¹⁴⁶ Indeed, just six months later, in November 2008, the Nigerian government suspended China Railway Construction Corp's (CRCC) \$8.3 billion contract to modernize the 1,315 railway line between southern Lagos and northern Kano, taking 90 days to redefine the scope of the contract – a contract that accounts for almost 14% of CRCC's outstanding contracts.¹⁴⁷ In Angola too the government is beginning to take a more seditious stance. Talks between state-owned Sonangol and Sinopec in late 2006 to build a new \$3 billion, 240,000 bpd refinery in the Atlantic port city of Lobito collapsed in early 2007, when Sonangol declared it would manage the project on its own. Manuel Vicente, president of Sonangol, was

¹⁴² Mutual Convenience: Congo has Something China Wants, and Vice Versa, *The Economist Special Report: China's Quest for Resources*, March 13, 2008. Accessible at:

http://www.economist.com/surveys/displaystory.cfm?story_id=10795773&fsrc=RSS.

¹⁴³ Bates, G., & J. Reilly, 2007.

¹⁴⁴ Chinese Beaten up in Zambia Mines, *BBC News*, March 4, 2008. Accessible at:

<http://news.bbc.co.uk/2/hi/africa/7277006.stm>.

¹⁴⁵ Fletcher, P., & J. Lawrence, Two Killed as Chinese Workers Riot in Eq. Guinea, *Reuters*, March 31, 2008. Accessible at: <http://uk.reuters.com/article/oilRpt/idUKL316427320080331?sp=true>.

¹⁴⁶ Green, M., Emerging World Powers Vie for Influence, *Financial Times*, June 24, 2008, p. 4.

¹⁴⁷ Dickie, M., Nigeria Suspends \$8bn Rail Contract with China, *Financial Times*, November 5, 2008, p. 19.

quoted in the Angolan media as charging that “we can’t construct a refinery just to make products for China.”¹⁴⁸

In a further sign of potential strain on Angola-China relations, SSI later renounced its stake on the three newly acquired concessions (20% of Block 15, 27.5% of Block 17/06 and 40% of Block 18/06). Until Sonangol decides on who will replace SSI as permanent equity holder in the blocks, China Sonangol International Holding (CSIH – jointly owned by Sonangol and Beiya International Development Ltd.) has taken over in the interim. In an ironic twist, analysts say there is talk of Japan becoming involved in the project in exchange for emergency crude supplies.¹⁴⁹ Indeed, not all Chinese (oil) ventures are a success, with other projects having been dropped or scaled back as well, such as in the Democratic Republic of Congo, Mali, Morocco and Kenya, where CNOOC’s oil exploration in six blocks covering 115,343 sq km has been scaled down, according to IHS Energy. Perhaps most surprisingly, in August 2008 CNOOC decided to relinquish most of its 35% share in OML 141 (formerly OPL 229) to Nigerian firm Emerald Energy Resources Ltd, keeping a nominal 5% stake.¹⁵⁰ No reason was given for CNOOC’s decision, which was particularly peculiar given the \$60 million paid for the stake in 2006, the significant finds in exploration wells Barracuda and Dila in 2007, and the expectation that the field could start production in 2009.

5.1.2. DIRE SECURITY THREATS

It is also becoming clear that China is not immune to the high risk of terrorist activity affecting oil companies and their staff when operating in certain parts of Africa. Kidnappings, sabotage, and terror tactics are the main tools that militant groups use; and are thus the same tools to which the Chinese are exposed. Although the issues presented in Chapter 2 were analyzed through the lens of the Niger Delta’s main militant group MEND, other groups in the continent employ similar tactics, occasionally targeting the Chinese specifically.¹⁵¹

In perhaps the worst attack on a Chinese operation in the continent so far, on April 24, 2007, 74 people, of which 9 Chinese oil workers, were killed in an attack launched by over 200 separatist rebels on an oil site in eastern Ethiopia by the Ogaden National Liberation Front (ONLF), an ethnic Somali group which trains in Eritrea and has links to the Islamic Courts Union.¹⁵² In addition, 7 oil technicians were kidnapped but later returned to China unharmed. The site, in the Ogaden region of Ethiopia, is operated by

¹⁴⁸ Campos, I., & A. Vines, Angola and China: A Pragmatic Partnership, *Center for Strategic & International Studies*, June 4, 2008.

Accessible at: http://www.csis.org/component/option,com_csis_pubs/task/view/id,4510/

¹⁴⁹ Orgill, M., Africa Plans Many Oil Refineries, Only One Likely, *Reuters*, March 6, 2008. Accessible at: <http://www.reuters.com/article/hotStocksNews/idUSL0663958120080306?sp=true>.

¹⁵⁰ Aizhu, C., CNOOC in Surprise Exit of Nigeria Oil Block, *Reuters*, August 18, 2008. Accessible at: <http://www.reuters.com/article/rbssEnergyNews/idUSPEK25462220080818>.

¹⁵¹ Appendix 3 offers a comprehensive look at dire security incidents specifically targeting or involving Chinese in Africa.

¹⁵² Cody, E., China’s Expansion Puts Workers in Harm’s Way: Attack on Ethiopian Oil Field Highlights Political Perils of Pursuing Resources Abroad, *Washington Post*, April 26, 2007, p. A2.

Sinopec subsidiary Zhongyuan Petroleum Exploration Bureau (ZPEB) under a subcontract from Malaysian state company Petronas, which has exploration rights there (since the attack, ZPEB has refused to resume operation in Ogaden).

As highlighted in Chapter 2, Nigeria in particular is proving to be a serious security conundrum for foreign oil investors, and the Chinese are no exception. On January 25, 2007, nine Chinese CNPC oil workers were abducted by the Movement for the Emancipation of the Niger Delta (MEND) near Port Harcourt in Bayelsa. After 11 days of diplomatic efforts, the Chinese were apparently released unconditionally, with no ransom having been paid.¹⁵³ No sooner had the men been released, when two other Chinese oil industry workers were abducted on March 17 in Anambra state (they too were later released).¹⁵⁴ The kidnappings are not constrained to the oil industry, with 5 Chinese employees of the telecommunication's firm Teleken Engineering being taken hostage in Rivers state on January 5, 2007 and released 12 days later.¹⁵⁵ More recently, in early March 2008, three Chinese construction workers employed by the China Civil Engineering Construction Corp. were abducted near Calabar, capital of the oil rich Nigerian state of Cross River. They were freed after three days in captivity.¹⁵⁶

These perils are not restricted to Ethiopia and Nigeria. In Kenya, one Chinese engineer was killed and another injured in an attack against a Chinese stone-materials plant in Mombasa in February 2007,¹⁵⁷ while another Chinese engineer was shot and killed near Merille River a year later, on April 21, 2008, with tribal elders claiming he was targeted because of a feeling that not enough men from the area had been employed by the Chinese.¹⁵⁸

Even in Sudan, as recently as October 18, 2008 nine Chinese employees of CNPC were abducted in an oilfield in the southern Kordofan state.¹⁵⁹ Five of the nine were killed 9 days later, in the second deadliest attack against Chinese in Africa.¹⁶⁰ This followed a similar incident on October 23 2007, forces from the Justice and Equality Movement (JEM) – one of the many rebel groups operating in Darfur, Sudan – attacked the Defra oil field in Kordofan province run by the Greater Nile Petroleum Operating Company (GNPOC) and kidnapped five oil workers, followed by a second attack by the same movement on December 11 on the Hejlj oilfield run by the Great Wall oil company.¹⁶¹ Reacting to Jem's attack, Abdel Aziz el-Nur Ashar, the group's commander, said "This is a

¹⁵³ Chinese Oil Workers Set Free in Nigeria, *Xinhua*, February 5, 2007. Accessible at: http://www.chinadaily.com.cn/china/2007-02/04/content_800717.htm.

¹⁵⁴ China, Ethiopia: Facing the Price of Engaging Africa, *Stratfor*, April 24, 2007. Accessible at: http://www.stratfor.com/products/premium/read_article.php?id=287686&selected=Analyses.

¹⁵⁵ Kidnapped Workers Set Free, *Xinhua*, January 19, 2007. Accessible at: http://english.people.com.cn/200701/19/eng20070119_342721.html.

¹⁵⁶ 3 Kidnapped Chinese Freed in Nigeria, *Voice of Africa Radio*, May 10, 2008. Accessible at: http://www.voiceofafricaradio.com/Newsreel/news_read.php?nid=786.

¹⁵⁷ China, Ethiopia: Facing the Price of Engaging Africa, *Stratfor*, April 24, 2007.

¹⁵⁸ Hull Bryson, C., Chinese Build New Highway to "Lost" Kenya, *Reuters*, August 21, 2008. Accessible at: <http://www.reuters.com/article/worldNews/idUSL809481820080822>.

¹⁵⁹ China Workers Abducted in Sudan, *BBC News*, October 19, 2008. Accessible at: <http://news.bbc.co.uk/2/hi/africa/7678829.stm>.

¹⁶⁰ Green, M., Chinese Oil Workers Killed in Sudan, *FT.com*, October 27, 2008.

¹⁶¹ Jopson, B., Darfur Rebels Claim Sudan Oil Field Attack, *FT.com*, December 11, 2007.

message to China and Chinese oil companies to stop helping the government with their war in Darfur.”¹⁶² Between these two attacks, JEM rebels also attempted to seize Chinese facilities at al-Rahaw in South Kordofan in November 2007, with Ashar once again singling out the Chinese, proclaiming “our attack is another attempt at telling Chinese companies to leave the country...We are implementing our threat of attacks against foreign companies, particularly Chinese ones, and we will continue to attack.”¹⁶³ Although not as capable as JEM, the Sudan Liberation Army/Movement (SLA/M) – a Darfuri rebel group – also singled out Chinese oil facilities as targets for attacks.¹⁶⁴

In language mirroring Ashar’s words, The Nigerian Movement for the Emancipation of the Niger Delta (MEND) put out a statement saying “we wish to warn the Chinese government and its oil companies to steer well clear of the Niger Delta...The Chinese government, by investing in stolen crude (oil), places its citizens in our line of fire.”¹⁶⁵ This statement was put out after a bomb detonated in the Nigeria city of Warri. An important oil hub, the city had experience similar terror tactics; however, this bomb was likely to serve as a reminder that any foreign interference, Chinese or other, was going to be met with resistance. The Chinese leader Hu Jintao has visited Nigeria earlier that week, signing deals to explore Nigerian oilfields in return for a commitment to invest \$4 billion in infrastructure.¹⁶⁶

Like their similarly named movement in neighboring Nigeria, rebels of the Niger Justice Movement (NJM) are seeking more autonomy and a greater share of their northern region's wealth. As a sign of their earnestness, they briefly kidnapped in 2007 an executive of a Chinese uranium company working there. Having already acted on their threat in the mining industry, leaders of the NJM have now warned Chinese oil companies to leave or face attack, accusing China of supplying arms and munitions to the Niger army in exchange for concessions.¹⁶⁷ Somalia is another case in point. Although no threats have been made as of yet singling out the Chinese as targets, Dahir Rayale Kahin, president of the self-proclaimed republic of Somaliland, reacted to the oil agreement signed by CNOOC and Somalia's interim government in 2006 by saying “It's a false agreement...People who do not govern an area cannot sign an agreement.”¹⁶⁸

¹⁶² Jopson, B., & H. Morris, Darfur Rebels Attack Chinese-Backed Oilfield, *FT.com*, October 26, 2007.

¹⁶³ Darfur Rebels Claim Attack on Chinese-run Oilfield, *AFP*, December 11, 2007. Accessible at: <http://afp.google.com/article/ALeqM5j5-NoUxmBcNx2e2-L93XgSUIQ1gQ>.

¹⁶⁴ Faucon, B., Darfur Rebel Group Wants Western Oil Companies to Replace Chinese, *Wall Street Journal*, April 16, 2008. Accessible at: http://www.marketwatch.com/news/story/darfur-rebel-group-wants-western/story.aspx?guid={91EB83EE-2AB6-4545-947C-D06695E7A7BC}&dist=TQP_Mod_mktwN.

¹⁶⁵ Nigerian Militants Claim Bomb Attack, *International Herald Tribune*, April 30, 2006. Accessible at: <http://www.ihf.com/articles/2006/04/30/africa/web.0430nigeria.php>.

¹⁶⁶ Ibid.

¹⁶⁷ Massalatchi, A., CNPC Niger Deal Extends China Energy Role in Africa, *Reuters*, June 3, 2008. Accessible at: <http://www.reuters.com/article/latestCrisis/idUSPEK164796>.

¹⁶⁸ Reerink, J., Somaliland Keen to Host US Base, Hopeful on Oil, *Reuters*, April 9, 2008. Accessible at: <http://www.reuters.com/article/latestCrisis/idUSL09878784>.

5.1.3. A VICTIM OF REGIONAL COMPLEXITIES

When active in an area, it is rarely if ever possible to completely shut yourself out from the environment in which you are operating. Local, regional or even global complexities are bound to affect you one way or another. So too in Africa the Chinese will and, indeed, already have been affected by issues beyond their direct control. One such case recently transpired in Chad. Prospecting by CNPC in the Bongor Basin southeast of N'Djamena was disrupted when expatriate workers fled during heavy fighting in the city in early February 2008, after Chadian rebels believed to be supported by the Sudanese government launched a failed attack against the Chadian government. As a result of the violence, dozens of Chinese expatriate oil workers stayed at a game lodge in Waza National Park across the border in neighboring Cameroon. The 60,000 bpd refinery, a joint venture between CNPC and Chad's state oil company SHT, had been expected to take three years to build and to start operating around 2011 with an initial capacity of 20,000 bpd, but is not set to be delayed.¹⁶⁹

This particular disruption highlights a much greater threat to Chinese oil interests; the inherent instability of the region. With significant interests in Sudan and a determined push to gain a foothold in Chad's oil industry, the persistent tension and unadulterated distrust between the Khartoum government and their N'Djamena counterparts is more likely than not to evolve into border skirmishes at best and full out war at worst. Indeed, following the rebel attack, JEM forces believed to be backed by the Chadian government staged an also failed but unprecedented assault on Khartoum in May 2008. Sudan reacted by severing diplomatic ties with Chad.¹⁷⁰ In return, Chad shut the border and cut all trade between the two countries.¹⁷¹ Despite the rapid escalation, this time the situation has remained relatively quiet since. Nevertheless, it is clear that any form of an outbreak can have a potentially devastating effect on Chinese (oil) interests in the region. With a clear, substantial and increasing stake in both countries, it appears almost certain that the Chinese will become entangled in the political convulsion that entraps Sudan and Chad, with little space to maneuver.

The above logic follows in Ethiopia too; both Eritrea and Somalia have had border disputes with Ethiopia. Eritrean president Issaias Afeworki has requested that China act as a mediator in its border conflict with Ethiopia; ostensibly to ensure that Ethiopia abides by a ruling on their border.¹⁷² However, although China has extensive trade ties with both countries, it cannot afford to get mixed up in local conflicts such as these. By taking sides, even in a mediation-role, it risks losing the perception that it is a neutral—business is business—partner. A similar trend can be found in the conflict between Ethiopia and Somalia; China has oil interests in both countries, with Somalia

¹⁶⁹ Thomson, A., & M. Ngarmbassa, Chad Fighting Hits Oil Prospecting, Not Output, *Reuters*, February 11, 2008. Accessible at: <http://www.reuters.com/article/latestCrisis/idUSL11653282>.

¹⁷⁰ Osman, M., Sudan Severs Relations with Chad, Hunts Rebels after Attack on Capital, *Associated Press*, May 12, 2008. Accessible at: <http://www.newser.com/article/d90jboog2.html>.

¹⁷¹ Chad Closes Border with Sudan, *Voice of Africa Radio*, May 13, 2008. Accessible at: http://www.voiceofafricaradio.com/Newsreel/news_read.php?nid=800.

¹⁷² "Eritrea requests China act as mediator in border conflict with Ethiopia", *Middle East Desk*, July 24, 2008. Accessible at: <http://middleeastdesk.org/article.php?id=1444>

perceived as one of the most unstable countries in the world. This highlights once again China's willingness to brave Africa's most volatile regions in its search for resources.

While the Chinese themselves have been targeted specifically in the Niger Delta, indirect violence and instability is also a major threat to operations in the area. In an unprecedented "turf war" between rival militant factions (fighters loyal to Farah and fighters loyal to Soboma George) belonging to the main militant group, MEND, at least 4 militants died. The fighting occurred on July 29, 2008 in Abonnema, about 14km west of Port Harcourt and also led to 3 deaths in subsequent clashes between security forces and those involved in the "brawl" (2 militants and 1 soldier).¹⁷³ If the militants and criminal gangs will no longer be able to work together but rather begin to struggle among each other for control of the lucrative trade in stolen oil and abductions for ransom, lawlessness will likely deteriorate to the point of business being grounded to a halt. There would be no easy way for the Chinese to escape this.

Certainly the danger also exists that the Chinese will be affected by the bombings and struggles occurring in areas throughout the continent where Chinese (oil) firms operate, such as Algeria, the Democratic Republic of Congo, Somalia and even Mauritania, where Al Qaeda has recently been gaining ground.¹⁷⁴ Even offshore does not provide a safe haven. For example, the increasingly unstable waters off the coast of Somalia are becoming infested by pirates; a threat that has already affected the Chinese directly when a Hong Kong bulk carrier owned by Sinotrans with 24 Chinese crew members on board was hijacked by armed Somali pirates as recently as September 18, 2008.¹⁷⁵ Not to mention the dangers posed by pirates being able to get their hands on T-72 tanks, rifles and heavy weapons, as they did when they hijacked the Ukrainian ship Faina.

Even in places where it is now relatively quiet there can still be fallout from prior warfare. Take Angola, for example. One of the many remnants from the Angolan civil war is the abundance of unexploded landmines scattered around the country. On October 24, 2007 a Chinese laborer for the Chinese telecom giant Huawei was digging a trench for fiber-optic cable near the southern Angolan town of Benguela when one such mine exploded, killing him and injuring 2 co-workers.¹⁷⁶ Certainly these sporadic and untargeted incidents are trivial when compared to the threat of full fledged war or direct and purposeful attacks against the Chinese and/or their installations, but in any case these examples highlight the perils of doing business in Africa.

A lesson to be learned for China could be in the guise of UK Prime Minister Brown's offer to help the Nigerian military in providing extra security in the Niger Delta. This offer resulted in the end of the unilateral ceasefire, and MEND blowing up two oil pipelines belonging to Shell Petroleum Development Company.¹⁷⁷ There is no win-win, only a

¹⁷³ Ekeinde, A., Rival Factions Clash in Nigeria Oil Region; 4 dead, *Reuters*, July 30, 2008. Accessible at: <http://africa.reuters.com/top/news/usnBAN037870.html>.

¹⁷⁴ Mauritania Soldier's Bodies Found, *BBC World*, September 20, 2008.

¹⁷⁵ Somali Pirates Hijack Hong Kong Ship, 24 Chinese Crew Aboard, *Xinhua*, September 18, 2008. Accessible at: http://english.china.com/zh_cn/news/china/11020307/20080919/15096289.html.

¹⁷⁶ Johnson, S., China's African Misadventures, *Newsweek*, December 3, 2007. Accessible at: <http://www.newsweek.com/id/72028/page/1>.

¹⁷⁷ <http://www.afriquenligne.fr/mend-blows-up-shell-pipelines-in-niger-delta-200807289685.html>

lose-lose situation in countries where there is a clear separation between the rule of law of government, and the rule of law of the militants. Support the government, risk reprisals; support the militias and you risk getting sucked into a quagmire of ethnically divided, tribal politics.

CONCLUSION

Africa, home to the world's richest and most varied trove of natural resources has become a continent where China wants to take root. But, as shown above, the Chinese companies, and most prominently their oil companies, have had to deal with exactly the same problems as any international company. The pervasive security threats in the Niger Delta, in which the IOC's are hit hardest, make for a risky investment regardless of the country of origin of the oil company. As *The Economist* magazine rightly points out, "Chinese companies' risk-assessment and security-management skills are failing to keep up."¹⁷⁸ Yet, the Chinese seem undaunted, and push forward in the even riskier onshore developments.¹⁷⁹ As an official from Sinopec stated, "There is no way we will withdraw from Africa due to the fear of risks. This is not a game for us. We will try to improve security in the future, but there is no way we will withdraw".¹⁸⁰

From the established oil fields of Angola and Nigeria, to the new, unproven, development in Ethiopia and Somalia, China will become acutely aware of the regional complexities that Africa has to offer. Border disputes, militia groups, governmental collapse; China will have to navigate the rocky road of African politics just like anyone else. The image they have cultivated of a nation of neutral businessmen is not sustainable in Africa. Estimates from the IEA have forecasted that Chinese oil demand will grow by 5.5% this year. This has led analysts to believe that China's plan to double its 2006 investment levels in Africa by 2010 will be met and probably exceeded.¹⁸¹ One thing is certain: this level of investment is bound to increase China's exposure to and involvement in Africa's complex local/regional politics and events – a development well worth monitoring.

¹⁷⁸ There be Dragons, *The Economist*, November 6, 2008. Accessible at:

http://www.economist.com/world/asia/displaystory.cfm?story_id=12570587.

¹⁷⁹ http://www.upi.com/Energy_Resources/2008/04/17/Analysis_India_China_to_aid_Nigeria_oil/UPI-31481208466832/

¹⁸⁰ <http://www.iht.com/articles/2007/05/02/news/letter.php>

¹⁸¹ *Petroleum Review*, August 2008, volume 62, Number 739 p. 23

Key Messages

- China is beginning to face a number of the same hurdles that other foreign oil companies encounter in their quest to secure reserves, ranging from “soft” issues such as accusations of environmental damage and support of state terrorism to outright (terrorist) attacks targeting Chinese firms or citizens.
- Senior Nigerian, Zambian and Angolan officials are among an increasing group of influential voices questioning China’s increasing influence.
- Local workers in some African countries have rioted against their Chinese employers’ perceived lack of adherence to the most basic of general working conditions.
- Chinese have been involved in at least 23 cases of direct security incidents in Africa since 2005.
- With Chinese interests located in countries such as Chad / Sudan, and Ethiopia / Eritrea – traditional foes – they are bound to be sucked into regional complexities.

6. CONCLUDING REMARKS

In today's world of volatile oil pricing, very little is certain. What *is* certain, however, is that the demand for oil will continue to rise in the long term. The economies of China and India, together with the rest of Asia's developing economies, are going to continue to demand more resources to perpetuate their growth. The OECD countries, on the other hand, are trying to make their economies less dependent on fossil fuels, diversify their energy mixes, and in the end become less import dependent. The European Union has set goals for 2020, where it ideally wants 20 percent less CO₂ emissions, 20 percent of its energy mix coming from renewables, and 20 percent increased energy efficiency. China, on the other hand, will have great difficulty in trying to mitigate possible fallouts of climate change. Its economy will continue to grow and with this growth comes fossil fuels. Although coal still dominates China's energy mix, the steady rise in importance of oil and gas will not arrest.

For much of the Western world, Africa remains the only large continent excluded from the global increase in prosperity. To some, it appears to be a bottomless pit of world aid, plagued by wars and conflicts, and unable to find sustainable solutions to its recurring ethnic clashes. Furthermore, the post-colonial legacy taints even the slightest interference from Western powers. On the one hand, the West knows it needs to 'deal' with Africa in order to access the abundant natural resources which both bless and curse the continent. On the other hand, the West would like nothing better than to ignore the difficulties highlighted above and the burden of dealing with Africa's problems. The problem for the Western world is that Africa is increasingly becoming a *sine qua non* regarding its energy interests. Besides, whether the West likes it or not, it *has* a legacy in Africa and for all their mistakes in dealing with it (especially Europe), it knows Africa as well as anyone could.

China, on the other hand, is a relative newcomer in this aspect. It does not have much of a colonial legacy in Africa, as serious trading and Chinese presence was not initiated until 1956 when China and Egypt first established diplomatic links. Arguably, Africa represented something altogether different to the Chinese than how the West perceived it. China, the emerging superpower and manufacturing giant, saw Africa as a blank slate where it could find allies, gather the resources needed to satisfy its economic hunger and root itself for future generations. However, furthering the blank slate argument, China had much to learn about the continent when it started dealing with it.

As shown in Chapters 2 and 4, Africa is a particularly onerous place to do business in. With the focus of this paper being the African oil industry, the risks discussed were viewed through this as well, but needless to say they would impact any business or industry. Following this argument, China, despite being able to operate from a blank slate perspective regarding Africa, has still found itself faced with the same challenges. Despite not having a colonial legacy, despite not being involved in major corporate social responsibility scandals such as Shell in Ogoniland, and despite being a newcomer, China has struggled. In a world where 'image is everything', China is finding it difficult to cope with the concept of public relations and the importance thereof in their newfound

platform as a major global actor. On this platform, the spotlights shine bright, and the spectators scrutinize your every move.

In approximately half a century, Africa has seen its trade with China rise explosively, with an exponential surge in recent years. As laid out in Chapter 3, total trade between Africa and China amounted to \$73 billion in 2007 compared to a total of \$4.8 billion in 1998. These figures are staggering and represent a massive 1,421% increase. Similarly impressive figures are found in China's oil interests in Africa. Oil is by far the most important African commodity for China, amounting to 80 percent of China's imports from there. In 2008, Zhiming Zhao, executive president of China Petroleum and Petro-Chemical Industry Association, said at an energy conference in Cape Town that China wanted up to 40 percent of its oil and gas imports to come from Africa in the next 5-10 years. It might very well realize this considering the fact that China has contracts for equity participation in 14 countries and are investing in oil and gas in over 30 other. Additionally, Chinese oil companies have 56 upstream contracts between them across the continent.

The figures highlighted above show the deepening of Chinese involvement in Africa. And with such deepening comes additional exposure. China has been involved in a steep learning curve regarding its dealings with Africa, but unfortunately part of this learning curve has involved a number of incidents concerning Chinese interests in Africa. The table in Appendix 3 depicts a total of 23 security incidents between 2005 and 2008 involving Chinese workers and facilities in Africa. These incidents illustrate that no matter where an oil company comes from, whether it has the baggage of colonization or not, there is no immunity to local or regional perils. The simple fact that the enormous amount of wealth that comes with the discovery of fossil fuels will never reach the hands of those that need it most will always fuel discontent, no matter the background of the companies excavating this wealth. China is gradually coming to the conclusion that despite their adherence to the Five Principles of Peaceful Coexistence (Mutual respect for sovereignty and territorial integrity; Mutual non aggression; Non interference in others' internal affairs; Equality and mutual benefit; Peaceful coexistence),¹⁸² attacks on its citizens and interests are inherent to the 'dirty' politics of oil.

Although the importance of Africa in the international energy market has been stressed throughout this paper, the recent turmoil in the banking sector and the financial crisis has added great uncertainties in the global economy in general and in the oil and gas markets specifically. Africa has not escaped this turmoil unscathed, and the potential of new African oil and gas reaching markets has been dimmed because of the credit crunch and the obvious endemic challenges highlighted throughout this paper. For example, Nigeria, in its share of funding of joint projects with the IOC's, is supposed to contribute roughly \$60 billion. According to the Wall Street Journal, it needs to borrow more than \$30 billion, which is difficult at best in the current economic climate.¹⁸³ This, combined with spiralling security related production costs, up to 250% higher in some places, and

¹⁸² "Backgrounder: Five principles of peaceful coexistence", *Xinhuanet*, June 14, 2004. Accessible at: http://news.xinhuanet.com/english/2005-04/08/content_2803638.htm

¹⁸³ Fritsch, Peter, "Africa's Potential to Sate World's Oil Demand Dims", *The Wall Street Journal*, October 22, 2008. Accessible at: <http://online.wsj.com/article/SB122461947159855391.html>

a lowering of the oil price, might result in new projects being delayed or even cancelled. China will also not escape the global economic downturn untouched. Though a decrease in GDP growth will still mean a highly respectable and enviable growth rate, demand might well diminish slightly, leading to a possible (temporary) re-orientation of projections into Africa.

China, like Russia, has a history of command economies and the globalised version we have come to call state capitalism. As shown, Chinese national oil companies have been spearheading the search for raw materials in Sub-Saharan Africa and further abroad. These state owned enterprises, together with sovereign wealth funds, have brought politicians and political bureaucrats into economic decision making on a previously unseen scale. Their involvement, and therefore political drivers, will drive economic decisions more directly and it remains to be seen if this will be detrimental to efficiency, growth, and overall economic health. Africa has an unclear future ahead of it, and the countries where oil and gas revenues provide the bulk of national income, the credit crisis will heavily affect them. This increased instability will increase the risk of political instability, failed statehoods, and the likelihood of war. For the time being, doing business will become increasingly difficult, and the risks of investment will become more prevalent. China will find that its interests in Africa, especially in the sphere of hydrocarbon extraction, are going to have to be met in a progressively more difficult environment. This, however, will not deter them in the way that it might deter the more exposed IOC's who have a responsibility to shareholders and are dictated by financial incentives.

REFERENCES

10 Stories the world should hear more about, "Bakassi Peninsula: Recourse to the law to prevent conflict", *United Nations*. Accessible at:

<http://www.un.org/events/tenstories/06/story.asp?storyID=900>

"3 Kidnapped Chinese Freed in Nigeria", *Voice of Africa Radio*, May 10, 2008.

Accessible at: http://www.voiceofafricaradio.com/Newsreel/news_read.php?nid=786.

Abraham, T., "Reviving an Old Dream of Afro-Asian Cooperation", *YaleGlobal*, May 24, 2005.

Accessible at: <http://yaleglobal.yale.edu/display.article?id=5752>

Aizhu, C., "CNOOC in Surprise Exit of Nigeria Oil Block", *Reuters*, August 18, 2008.

Accessible at:

<http://www.reuters.com/article/rbssEnergyNews/idUSPEK25462220080818>.

Akpan, A., "Nigeria to leave oil-rich Bakassi", *International Herald Tribune*, August 14, 2008.

Accessible at: <http://www.ihf.com/articles/reuters/2008/08/14/africa/OUKWD-UK-NIGERIA-CAMEROON-BAKASSI.php>

Alden, C., "China in Africa", *Survival*, 47, no. 3, Autumn 2005, pp. 147–164.

Alden, C., & M. Davies, "Chinese Multinational Corporations in Africa", *South African Journal of International Affairs*, 13(1), September 2006.

Amanze-Nwachuku, C., and D. Iriekpen, "Nigeria: Russian, Chinese Oil Firms Jostle for Ogoni", *This Day*, June 16, 2008. Accessible at: <http://allafrica.com/stories/200806160005.html>

"Angola: Oil-Backed Loan Will Finance Recovery Projects", *IRIN*, February 21, 2005.

Accessible at: <http://www.irinnews.org/report.aspx?reportid=53112>.

"Asian Foreign Direct Investment in Africa: Towards a New Era of Cooperation Among Developing Countries", *UNCTAD Current Studies on FDI and Development*, No. 3, 2007.

"Backgrounder: Five principles of peaceful coexistence", *Xinhuanet*, June 14, 2004. Accessible at:

http://news.xinhuanet.com/english/2005-04/08/content_2803638.htm

Bai, J., & D. Whiting, "China's Shaanxi to Tap Overseas Oil", *China Mining Association*, April 10, 2008.

Accessible at: <http://uk.reuters.com/article/oilRpt/idUKPEK13613520080410>.

Bajpae, C., "The Eagle, the Dragon and African Oil", *Asia Times Online*, October 12, 2005.

Accessible at: http://www.atimes.com/atimes/China_Business/GJ12Cb01.html.

Barker, A., "UK offers Nigeria help to train security forces", *Financial Times*, July 16, 2008.

Accessible at: <http://www.ft.com/cms/s/0/5f37c5e4-5378-11dd-8dd2-000077b07658.html>

Bates, G., & J. Reilly, J., "The Tenuous Hold of China Inc. in Africa", *The Washington Quarterly*, Volume 30, Number 3, p. 37-52, Summer 2007, p. 37.

Bavier, J., "China to Lend Congo \$5 Billion in Latest African Foray", *Reuters*, September 18, 2007.

Accessible at:

<http://www.reuters.com/article/worldNews/idUSL1815693720070918?feedType=RSS&feedName=worldNews&rpc=22&sp=true>.

Bergin, T., & A. Wheatley, "China Fund Buys Nearly 1 pct of BP", *Reuters*, April 15, 2008.

Accessible at:

<http://www.reuters.com/article/mergersNews/idUSPEK24520620080415?sp=true>.

Blunt, E., "Nigeria shuts Benin border", *BBC News*, August 9, 2003. Accessible at:

<http://news.bbc.co.uk/2/hi/africa/3137769.stm>

BP, *BP Statistical Review of World Energy 2008*, July 2008

Bristow, M., "China in Africa: Developing Ties", *BBC News*, November 29, 2007. Accessible at:

<http://news.bbc.co.uk/2/hi/africa/7118941.stm>

Broadman, H. G., "Africa's Silk Road: China and India's New Economic Frontier", *World Bank*, 2007.

Burgis, T., "China to Extend Africa Acquisitions", *Financial Times*, July 20, 2008.

Accessible at:

http://www.ft.com/cms/s/0/1f7ab242-5e5c-11dd-b354-000077b07658.html?nclick_check=1.

"Chad Orders Foreign Oil Firms Out", *BBC News*, August 27, 2006.

Accessible at: <http://news.bbc.co.uk/2/hi/africa/5289580.stm>

"China, Ethiopia: Facing the Price of Engaging Africa", *Stratfor*, April 24, 2007.

China Statistical Yearbook 2006, *National Bureau of Statistics of China*, China Statistics Press.

"China 'Opening up' Congo for Minerals, Bioenergy with Massive \$5 Billion Loan", *Biopact*, September 20, 2007.

Accessible at: <http://biopact.com/2007/09/china-opening-up-congo-for-minerals.html>.

Clark, M., "Willing to go where Western Companies Fear to Tread", *Financial Times Report – Africa: Oil & Gas 2008*, January 28, 2008.

"China Workers Abducted in Sudan", *BBC News*, October 19, 2008.

Accessible at: <http://news.bbc.co.uk/2/hi/africa/7678829.stm>.

"China Firm to Build Oil Pipeline in Libya", *World Tribune*, April 4, 2007.

Accessible at:

<http://www.worldtribune.com/worldtribune/07/front2454195.341666667.html>.

Campos, I., & A. Vines, "Angola and China: A Pragmatic Partnership", *Center for Strategic & International Studies*, June 4, 2008.

Accessible at: http://www.csis.org/component/option,com_csis_pubs/task,view/id,4510/

"Chad Closes Border with Sudan", *Voice of Africa Radio*, May 13, 2008.

Accessible at: http://www.voiceofafricaradio.com/Newsreel/news_read.php?nid=800

“China, Ethiopia: Facing the Price of Engaging Africa”, *Stratfor*, April 24, 2007.

Accessible at:

http://www.stratfor.com/products/premium/read_article.php?id=287686&selected=Analyses.

“China Harbour Signs \$1 bln Deal for Nigeria Oil Hub”, *Reuters*, July 13, 2008.

Accessible at: <http://africa.reuters.com/business/news/usnBAN339668.html>.

“China Sinopec Signs Oil Exploration Pact with Liberia”, *Reuters*, November 2, 2006.

Accessible at

<http://www.uofaweb.ualberta.ca/chinainstitute/nav03.cfm?nav03=52286&nav02=43782&nav01=43092>.

“Chinese Beaten up in Zambia Mines”, *BBC News*, March 4, 2008.

Accessible at: <http://news.bbc.co.uk/2/hi/africa/7277006.stm>.

“Chinese Oil Workers Set Free in Nigeria”, *Xinhua*, February 5, 2007.

Accessible at: http://www.chinadaily.com.cn/china/2007-02/04/content_800717.htm.

Cody, E., “China’s Expansion Puts Workers in Harm’s Way: Attack on Ethiopian Oil Field Highlights Political Perils of Pursuing Resources Abroad”, *Washington Post*, April 26, 2007, p. A2.

Cohen, Ariel and Rafal Alasa, “Africa’s Oil and Gas Sector: Implications for U.S. Policy”, *The Heritage Foundation*, Backgrounder NO 2052, July 12, 2007. Accessible at:

<http://www.heritage.org/research/africa/bg2052.cfm>

“Darfur Rebels Claim Attack on Chinese-run Oilfield”, *AFP*, December 11, 2007.

Accessible at:

<http://afp.google.com/article/ALeqM5j5-NoUxmBcNx2e2-L93XgSUIQ1gQ>.

Downs, E. S., “The Fact and Fiction of Sino-African Energy Relations”, *China Security*, Volume 3, Number 3, Summer 2007, pp. 42-68.

Dickie, M., “Nigeria Suspends \$8bn Rail Contract with China”, *Financial Times*, November 5, 2008, p. 19.

Daly, J. C. K., “Nigeria’s navy struggles with attacks on offshore oil facilities”, *Jamestown Terrorism Monitor*, Vol. 5, Issue 14 (July 10, 2008). Accessible at:

<http://www.jamestown.org/terrorism/news/article.php?articleid=2374294>

EIA, “China Energy Data, Statistics and Analysis - Oil, Gas, Electricity, Coal”, *Energy Information Administration*, August 2006.

Accessible at: <http://www.eia.doe.gov/emeu/cabs/China/Background.html>.

EIA, “Sudan Energy Data, Statistics and Analysis - Oil, Gas, Electricity, Coal”, *Energy Information Administration*, April 2007.

Accessible at: <http://www.eia.doe.gov/emeu/cabs/Sudan/Background.html>.

EIA, "Nigeria Energy Data, Statistics and Analysis - Oil, Gas, Electricity, Coal", *Energy Information Administration*, April 2007.

Accessible at: <http://www.eia.doe.gov/emeu/cabs/Nigeria/Background.html>

EIA, "Angola Energy Data, Statistics and Analysis - Oil, Gas, Electricity, Coal", *Energy Information Administration*, January 2007.

Accessible at: <http://www.eia.doe.gov/emeu/cabs/Angola/Background.html>

EIA, "Algeria Energy Data, Statistics and Analysis - Oil, Gas, Electricity, Coal", *Energy Information Administration*, March 2007.

Accessible at: <http://www.eia.doe.gov/emeu/cabs/Algeria/Background.html>.

Ezigbo, O., "Nigeria-China Sign \$800 million Crude Oil Sale Agreement", *This Day* (Lagos), July 11, 2005.

EIA, "Equatorial Guinea Energy Data, Statistics and Analysis - Oil, Gas, Electricity, Coal", *Energy Information Administration*, October 2007.

Accessible at: http://www.eia.doe.gov/emeu/cabs/Equatorial_Guinea/Background.html.

EIA, "Congo-Brazzaville Energy Data, Statistics and Analysis - Oil, Gas, Electricity, Coal", *Energy Information Administration*, March 2007.

Accessible at: http://www.eia.doe.gov/emeu/cabs/Congo_Brazzaville/Background.html.

EIA, "Angola Energy Data, Statistics and Analysis - Oil, Gas, Electricity, Coal", *Energy Information Administration*, October 2007. Accessible at:

<http://www.eia.doe.gov/emeu/cabs/Angola/Full.html>

Ekeinde, A., "Rival Factions Clash in Nigeria Oil Region; 4 dead", *Reuters*, July 30, 2008.

Accessible at: <http://africa.reuters.com/top/news/usnBAN037870.html>.

EIA, "Energy in Brief: How dependent are we on foreign oil", *Energy Information Administration*. July 2008. Accessible at: http://tonto.eia.doe.gov/energy_in_brief/foreign_oil_dependence.cfm

Ekeinde, A., "Nigeria militants kill 3 in battle over oil turf", *Reuters*, August 19, 2008. Accessible at: <http://www.alertnet.org/thenews/newsdesk/LJ672267.htm>

"Eritrea requests China act as mediator in border conflict with Ethiopia", *Middle East Desk*, July 24, 2008. Accessible at: <http://middleeastdesk.org/article.php?id=1444>

Faucon, B., "Darfur Rebel Group Wants Western Oil Companies to Replace Chinese", *Wall Street Journal*, April 16, 2008. Accessible at: http://www.marketwatch.com/news/story/darfur-rebel-group-wants-western/story.aspx?guid={91EB83EE-2AB6-4545-947C-D06695E7A7BC}&dist=TQP_Mod_mktwN.

Foster, V., Butterfield, W., Chen, C., & N. Pushak, "Building Bridges: China's Growing Role as Infrastructure Financier for Africa", *World Bank PPIAF*, No. 5, 2008.

Report accessible at: <http://www.ppiaf.org/content/view/438/462/>

Fletcher, P., & J. Lawrence, "Two Killed as Chinese Workers Riot in Eq. Guinea", *Reuters*, March 31, 2008.

Accessible at: <http://uk.reuters.com/article/oilRpt/idUKL316427320080331?sp=true>.

Farrell, S. and Michael Rodgers, "Gulf of Guinea Oil and Gas Overview and Outlook", *PFC Energy*, May 2007. Accessible at: <http://www.ita.doc.gov/td/energy/otc%202007%20pfc%20gog.pdf>
Fritsch, Peter, "Africa's Potential to Sate World's Oil Demand Dims", *The Wall Street Journal*, October 22, 2008. Accessible at: <http://online.wsj.com/article/SB122461947159855391.html>

Fabi, R., "Nigeria militants rescue two German hostages", *Reuters*, August 14, 2008. Accessible at: <http://www.alertnet.org/thenews/newsdesk/LE420686.htm>

Green, M., & R. McGregor, "China Offers Nigeria \$50bn Credit", *Financial Times*, April 1, 2008. Accessible at: <http://www.ft.com/cms/s/0/7a46f5d4-0013-11dd-825a-000077b07658.html>.

Green, M., "China Oils Nigeria Talks With Loan", *Financial Times*, April 21, 2008. Accessible at: <http://www.ft.com/cms/s/0/c4f9e296-0fe8-11dd-8871-0000779fd2ac.html>.

Green, M., "Emerging World Powers Vie for Influence", *Financial Times*, June 24, 2008, p. 4.

"Gazprom, China oil firms eye Nigeria's Ogoniland", *The China Post*, June 17, 2008. Accessible at: <http://www.chinapost.com.tw/business/africa/2008/06/17/161419/Gazprom-China.htm>

Green, M., "Brussels takes on Gazprom in Nigeria", *Financial Times*, September 17, 2008. Accessible at: <http://www.ft.com/cms/s/0/6d233ec2-841f-11dd-bf00-000077b07658.html>

Green, M., "Chinese Oil Workers Killed in Sudan", *Financial Times*, October 27, 2008. Accessible at: <http://www.ft.com/cms/s/0/aa0de896-a477-11dd-8104-000077b07658.html>

Green, M., "Nigeria's oil militants take their fight beyond the delta", *Financial Times*, July 1, 2008. Accessible at: <http://www.ft.com/cms/s/0/b23066a6-4799-11dd-93ca-000077b07658.html>

Goswami, M., "India Turns to Angola After Losing in Energy Auctions", *Bloomberg*, March 31, 2008. Accessible at: <http://www.bloomberg.com/apps/news?pid=20601091&refer=india&sid=ab178yTNFXa4>

Gentile, C., "Analysis: Nigeria attack cripples Chevron", *UPI*, June 26, 2008. Accessible at: http://www.upi.com/Energy_Resources/2008/06/26/Analysis_Nigeria_attack_cripples_Chevron/UPI-70261214491239/

Hanson, S., "China, Africa, and Oil", *Council on Foreign Relations*, June 6, 2008. Accessible at: http://www.cfr.org/publication/9557/china_africa_and_oil.html.

Human Rights Watch, "Politics as War: The Human Rights Impact and Causes of Post-Election Violence in Rivers State, Nigeria", *Human Rights Watch Publications*, Vol. 20, No. 3 (March 2008). Accessible at: <http://hrw.org/reports/2008/nigeria0308/index.htm>

Human Rights Watch, "The Warri Crisis: Fueling Violence", *Human Rights Watch Publications*, Vol. 15, No. 8 (December 2003). Accessible at: <http://www.hrw.org/reports/2003/nigeria1103/index.htm>

IEA, "IEA Energy Policies Review: The European Union", *International Energy Agency*, 2008.

IEA, "World Energy Outlook 2007: China and India Insights", *International Energy Agency*. 2007.

IEA, "World Energy Outlook 2008", *International Energy Agency*. 2008

"India primes Africa's oil pumps with \$1bn", *Times Online*, November 24, 2005. Accessible at: <http://business.timesonline.co.uk/tol/business/markets/africa/article596081.ece>

Igbikiowubo, H., "Shell Nigeria output drops to 412,000 b/d", *Vanguard*, October 14, 2008. Accessible at: <http://www.vanguardngr.com/content/view/19202/43/>

Izundu, U., "Competition Reshaping African deal structures", *Oil and Gas Journal*, May 26, 2008.

IMF Direction of Trade Statistics. 2007.

International Crisis Group, "The swamps of Insurgency: Nigeria's Delta Unrest", *Africa Report No. 115*, August 3, 2006. Accessible at: <http://www.crisisgroup.org/home/index.cfm?id=4310&CFID=53670738&CFTOKEN=44512460>

Igbikiowubo, H., Emma Amaize, Samuel Oyandogha and Jimitota Onoyume, "Nigeria: MEND attacks Shell's Bonga Offshore Platform", *Vanguard*, June 20, 2008. Accessible at: <http://allafrica.com/stories/200806200089.html>

"Interview : We Will Soon Stop Nigerian Oil Export —Jomo Gbomo", *SaharaReporters*, March 30, 2007. Accessible at: <http://saharareporters.com/www/interview/detail/?id=47>

Johnson, S., "China's African Misadventures; Beijing has Dramatically Outpaced its Rivals in Africa. But at Ground Level, Things Don't Always Look So Rosy", *Newsweek*, Vol. 150, Iss. 23, December 3, 2007, p.46.

Jopson, B., "Darfur Rebels Claim Sudan Oil Field Attack", *Financial Times*, December 11, 2007.

Jopson, B., & H. Morris, "Darfur Rebels Attack Chinese-Backed Oilfield", *Financial Times*, October 26, 2007.

Jopson, B., "China Wins Permit to Look for Oil in Somalia", *Financial Times*, July 14, 2007, p. 7.

"Kidnapped Workers Set Free", *Xinhua*, January 19, 2007. Accessible at; http://english.people.com.cn/200701/19/eng20070119_342721.html.

Kumagai, T., "Japan's Middle East Crude Oil Imports Dip in July", *Platt's Oilgram News*, Volume 88, Issue 173, p. 2, September 3, 2007.

Lou, Y., "CNPC to Invest \$5 Billion in Niger Oil Block, Build Refinery", *Bloomberg*, June 3, 2008. Accessible at: <http://www.bloomberg.com/apps/news?pid=20601089&sid=aGmPu3lQYvrU&refer=china>.

Lex Column, China and Africa, *Financial Times*, November 1, 2007, pg. 18.

Leinwand, D., "U.S. targets Somali pirates", *USA Today*, July 20, 2008. Accessible at:
http://www.usatoday.com/news/world/2008-07-20-pirates_N.htm

Monson, J., "Freedom Railway: The Unexpected Successes of a Cold War Development Project", *Boston Review*, Dec 2004-Jan 2005.
Accessible at: <http://bostonreview.net/BR29.6/monson.html>

Mawdsley, E., "China and Africa: Emerging Challenges to the Geographies of Power", *Geography Compass*, 2007, p. pp.405-421.

"Mutual Convenience: Congo has Something China Wants, and Vice Versa", *The Economist Special Report: China's Quest for Resources*, March 13, 2008. Accessible at:
http://www.economist.com/surveys/displaystory.cfm?story_id=10795773&fsrc=RSS.

Ministry of Finance, Directorate General of Customs, Republic of China.
Accessible at: <http://eweb.trade.gov.tw/mp.asp?mp=2>

"Mauritania Soldier's Bodies Found", *BBC World*, September 20, 2008. Accessible at:
<http://news.bbc.co.uk/1/hi/world/africa/7627624.stm>

Massalatchi, A., "CNPC Niger Deal Extends China Energy Role in Africa", *Reuters*, June 3, 2008.
Accessible at: <http://www.reuters.com/article/latestCrisis/idUSPEK164796>.

Massalatchi, A., "CNPC Niger Deal Extends China Energy Role in Africa", *Reuters*, June 3, 2008.
Accessible at: <http://www.reuters.com/article/latestCrisis/idUSPEK164796>.

Maganda, G., "Petronas, CNPC Unit Strike in Sudan Ends, Company Official Says", *Bloomberg*, June 5, 2008.

Massalatchi, A., "CNPC Niger Deal Extends China Energy Role in Africa", *Reuters*, June 3, 2008.
Accessible at: <http://www.reuters.com/article/latestCrisis/idUSPEK164796>.

McLeary, P., "A different kind of Great Game", *Foreign Policy*, March 2007. Accessible at:
http://www.foreignpolicy.com/story/cms.php?story_id=3744

Musa, T., "Cameroon says kills 10 gunmen in disputed Bakassi", *Reuters*, July 24, 2008. Accessible at: <http://www.reuters.com/article/latestCrisis/idUSL24633348>

Mbachu, D., "Nigeria: Tension over Bakassi Peninsula", *ISN Security Watch*, July 21, 2008.
Accessible at: <http://www.isn.ethz.ch/isn/Current-Affairs/Security-Watch/Detail/?id=88601&lng=en>

Nakanishi, N., & N. Shuping, "China Builds Plant to Turn Coal Into Barrels of Oil", *Reuters*, June 4, 2008. Accessible at:
<http://www.reuters.com/article/GCA-Oil/idUSSP13361320080604?sp=true>.

National Bank of Angola. Accessible at: <http://www.bna.ao/>.

"Niger Signs Power Deal with China", *BBC News*, July 7, 2008.
Accessible at: <http://news.bbc.co.uk/2/hi/africa/7493283.stm>.

“Nigeria calls for closer cooperation with Thailand”, *Alexander’s Gas and Oil Connections*, July 21, 2008. Accessible at: <http://www.gasandoil.com/goc/company/cna83456.htm>

“Nigerian Militants Claim Bomb Attack”, *International Herald Tribune*, April 30, 2006. Accessible at: <http://www.iht.com/articles/2006/04/30/africa/web.0430nigeria.php>.

“Nigerian kidnappers free eight foreign oil workers”, *Peoples Daily*, June 5, 2006. Accessible at: http://english.peopledaily.com.cn/200606/05/eng20060605_271120.html

National Bank of Angola. Accessible at: <http://www.bna.ao/>.

“Niger Delta: Serious Security Incidents-2006”, *Bergen Risk Solutions*. London: Bergen, 2006.

“Nigerian soldiers recover missiles in Delta State raids”, *Upstream*, August 8, 2008.

“Nigerian militant car bomb attack”, *BBC News*, 20 April, 2006. Accessible at: <http://news.bbc.co.uk/2/hi/africa/4925576.stm>

Ojiabor, F., “Mayhem in Warri”, *Newswatch*, April 6, 2003. Accessible at: <http://www.worldpress.org/Africa/1083.cfm>

OECD Development Database on Aid from DAC Members: DAC Online. Accessible at: http://www.oecd.org/document/33/0,2340,en_2649_34447_36661793_1_1_1_1,00.html.

Osman, M., “Sudan Severs Relations with Chad, Hunts Rebels after Attack on Capital”, *Associated Press*, May 12, 2008. Accessible at: <http://www.newser.com/article/d90jboog2.html>.

Orgill, M., “Africa Plans Many Oil Refineries, Only One Likely”, *Reuters*, March 6, 2008. Accessible at: <http://www.reuters.com/article/hotStocksNews/idUSL0663958120080306?sp=true>.

“Oil Business in Mauritania Growing”, *Afrol News*, June 1, 2008. Accessible at: <http://www.afrol.com/articles/19591>.

Obiorah, N., “From China with Love, Trade and Guns: A Human Rights Perspective on China and Africa”, in Wild, L., & D. Mephram”, *The New Sinosphere: China in Africa*, 2006, pp. 47-53.

“Oil Costs Hit China Trade Surplus”, *BBC News*, June 11, 2008. Accessible at: <http://news.bbc.co.uk/2/hi/business/7447786.stm>.

Petroleum Economist, “Ghana: ‘World Class’ Jubilee oilfield larger than expected”. Accessible at: <http://www.petroleum-economist.com/default.asp?Page=14&PUB=279&SID=716588&ISS=25274>

Porter, G. D., “Islamist Terrorist and Energy Sector Security in Algeria”, *The Jamestown Foundation*. June 27, 2007. Accessible at: http://www.jamestown.org/news_details.php?news_id=254#

Payne, S., “Africa, Oil and Gas Investor's A&D Watch”, February 1, 2007, Vol. 21, Iss. 2.

“Reports of IOC’s Demise Greatly Exaggerated”, *Petroleum Intelligence Weekly*, Vol. XLVII, No. 8, 2008.

Royal Dutch Shell, “The Shell Sustainability Report 2007”, *Shell*, 2007. Accessible at: http://sustainabilityreport.shell.com/2007/servicepages/downloads/files/entire_shell_ssr07.pdf

Richardson, P., and Paul Okolo, “Chevron Halts Nigeria Onshore Oil Output After Attack”, *Bloomberg*, June 21, 2008. Accessible at: <http://www.bloomberg.com/apps/news?pid=20601087&sid=aQlz1X9kMya4&refer=home>

Reerink, J., “Somaliland Keen to Host US Base, Hopeful on Oil”, *Reuters*, April 9, 2008. Accessible at: <http://www.reuters.com/article/latestCrisis/idUSL09878784>.

Roelf, W., “China wants 40 pct of Oil/Gas Imports from Africa”, *Reuters*, March 17, 2008. Accessible at: <http://www.reuters.com/article/companyNews/idUSL1727982620080317>.

Snow, P., “China and Africa: Consensus and Camouflage”, In: Robinson, T. W., & D. Shambaugh (eds), *Chinese Foreign Policy: Theory and Practice*, Oxford: University Press, 1994, pp. 283-321.

Sautman, B., & Y. Hairong, “Honor and Shame? China’s Africa Ties in Comparative Context”. In Wild, Leni and David Mephram, *The New Sinosphere: China in Africa*, pp. 54-61, 2006.

“Strides Made in Meeting FOCAC Goals, New Era”, November 7, 2007. Taken from the Economic and Commercial Counsellor’s Office of the Embassy of the People’s Republic of China in the Republic of Namibia. Accessible at: <http://na2.mofcom.gov.cn/aarticle/chinanews/200711/20071105210471.html>

Servant, J. C., “China’s Trade Safari in Africa”, *Le Monde Diplomatique*, May 2005. Accessible at: <http://mondediplo.com/2005/05/11chinafrica>.

Subrahmaniyan, N., “Sinopec Offers to Sell Crude Oil on Refining Losses”, *Bloomberg*, April 10, 2008. Accessible at: <http://www.bloomberg.com/apps/news?pid=newsarchive&sid=apHU.A6J5XIk>.

“Statistical Review of World Energy”, *BP*, June 2008. Accessible at: <http://www.bp.com/productlanding.do?categoryId=6929&contentId=7044622>

Sylla, I., “Total to Start Oil Drilling in Mauritania”, *Reuters*, March 5, 2008. Accessible at: <http://africa.reuters.com/country/MR/news/usnL05254021.html>.

Silverstein, Ken, “U.S. Oil Politics in the ‘Kuwait of Africa’”, *The Nation*, April 4, 2002. Accessible at: <http://www.thenation.com/doc/20020422/silverstein>

Shell Briefing Notes, “The Operating Environment”, *Shell Nigeria*, 2006. Accessible at: http://www.shell.com/static/nigeria/downloads/pdfs/brief_notes/shell_nigeria_operating_environment.pdf

"Scores die in Nigeria fuel blast", *BBC News*, May 12, 2006. Accessible at:
<http://news.bbc.co.uk/2/hi/africa/4765695.stm>

Somali Pirates Hijack Hong Kong Ship, 24 Chinese Crew Aboard, *Xinhua*, September 18, 2008.
Accessible at:
http://english.china.com/zh_cn/news/china/11020307/20080919/15096289.html.

South African Trade Statistics; Department of Trade and Industry South Africa.

Switzer, Jason, "Oil and Violence in Sudan", *International Institute for Sustainable Development*, 2002. Available at: http://www.iisd.org/pdf/2002/envsec_oil_violence.pdf

Taylor, I., "China's Foreign Policy Towards Africa in the 1990s", *Journal of Modern African Studies*, Volume 36, Number 3, September 1998, pp. 443-460.

"Tomorrow's Energy: A Perspective on Energy Trends, Greenhouse Gas Emissions and Future Energy Options", *ExxonMobil*, February 2006, p. 3.

Thomson, A., & M. Ngarmbassa, "Chad Fighting Hits Oil Prospecting, Not Output", *Reuters*, February 11, 2008.
Accessible at: <http://www.reuters.com/article/latestCrisis/idUSL11653282>.

"There be Dragons", *The Economist*, November 6, 2008. Accessible at:
http://www.economist.com/world/asia/displaystory.cfm?story_id=12570587

Toweh, A., & P. Fletcher, "Liberia Opens 2nd Bid Round for Offshore Oil Blocks", *Reuters*, July 4, 2008. Accessible at;
<http://www.reuters.com/article/rbssEnergyNews/idUSL0419043220080704>.

"Thirteen dead as militants attack Nigerian oil port", *The Guardian Online*, January 2, 2008.
Accessible at: <http://www.guardian.co.uk/world/2008/jan/02/terrorism.oil>

US-China Economic and Security Review Commission, "China's Overseas Investments in Oil and Gas Production", Eurasia Group, 2006. Accessible at:
http://www.uscc.gov/researchpapers/2006/oil_gas.pdf

Vines, A., "China in Africa: A Mixed Blessing?" *Current History*, May 2007.

Walt, Vivienne. "China's Africa Safari." *Fortune*, February 8, 2006. Accessible at:
http://money.cnn.com/magazines/fortune/fortune_archive/2006/02/20/8369153/index.htm.

Whiting, D., & L. Heavens, "China Oilfield Lands \$100 mln Libyan Rig Deal", *Reuters*, December 23, 2007. Accessible at:
<http://www.reuters.com/article/rbssEnergyNews/idUSHKG20017320071223>.

"Willbros is selling Nigeria, Venezuela assets", *Pipeline and Gas Journal*, October 1, 2006.
Accessible at: <http://www.allbusiness.com/agriculture-forestry-fishing-hunting/support-activities/3911056-1.html>

Williams, S., and Spencer Swartz, "Blasts Hit Shell, Agip in Nigeria Port Harcourt", *Dow Jones Newswires*, December 18, 2006. Accessible at:
http://www.rigzone.com/news/article.asp?a_id=39260

Walker, A., "Blood Oil dripping from Nigeria", *BBC News*, July 27, 2008. Accessible at:
<http://news.bbc.co.uk/2/hi/africa/7519302.stm>

Wallis, W., "Congo Outlines \$9bn China Deal", *Financial Times*, May 10, 2008. Accessible at:
http://www.howardwrench.com/archives/2008/05/10/congo_outlines_9bn_china_deal.

Yearbook of China Tourism Statistics, National Tourism Administration, People's Republic of China.

Zhu, W., "Angola Overtakes Saudi Arabia as Biggest Oil Supplier to China", *Bloomberg*, April 22, 2008. Accessible at:
<http://www.bloomberg.com/apps/news?pid=20601116&sid=aqJ3Wjxs.OWs&refer=africa>.

Zhu, W., "China Becomes Net Gasoline Importer for First Time", *Bloomberg*, June 16, 2008. Accessible at:
<http://www.bloomberg.com/apps/news?pid=newsarchive&sid=af29xHpRyYKU>.

APPENDIX 1: LIST OF CHINESE OIL VENTURES IN AFRICAN COUNTRIES

Host Country	Date	Description	Chinese Firm
Algeria	2002	Joined with Algerian state-owned Sonatrach to invest in a project to develop the Zarzaitine oil field	Sinopec
Algeria	2003	PetroChina Exploration & Development Co. (a unit of CNPC) won a contract to construct the Soralchin oil refinery in Adrar. Together with Sonatrach (30% stake), CNPC (70% stake) brought the refinery online in 2007	China National Petroleum Corporation
Algeria	2003	Together with Sonatrach, signed an exploration license for Blocks 112/102 and 350, with CNPC having 75% equity in both blocks	China National Petroleum Corporation
Algeria	2004	Won the tender of Block 438B, with a 100% holding in the project covering seven years of exploration and 25 years of production	China National Petroleum Corporation
Algeria	2005	Signed a contract with Sonatrach for the construction of the Skikda Gas Condensate Refinery	China National Petroleum Corporation
Angola	2003	Acquisition of Block 3	Sinopec
Angola	2004	Acquisition of 50% stake in BP-operated Block 18. Sonangol Sinopec International (SSI – joint venture between Sinopec and Sonangol) created to explore Block	Sinopec
Angola	2004	Repair damaged infrastructure (power, transport, ICT, and water portion) in exchange for 10,000 barrels of oil per day	Sinopec
Angola	2005	Memorandum with Sonangol to jointly study plans for the exploration of Blocks 3/05 and 3/05A. China Sonangol International Holding (CSIH – jointly owned by Sonangol and Beiya International Development Ltd.) to explore Blocks	Sinopec, Beiya International Development
Angola	2006	SSI acquires 20% of Block 15, 27.5% of Block 17/06 and 40% of Block 18/06. Sinopec and Sonangol	Sinopec

Gambling in Sub-Saharan Africa: Energy Security through the Prism of Sino-African Relations

		also agree to study plans for \$3 billion oil refinery in Lobito (Sonaref)		
Angola	2007	Negotiations to build Sonaref refinery collapse and SSI renounces stake in Blocks 15, 17/06 and 18/06. CSIH replaces SSI in the interim	Sinopec, Beiya International Development	
Central African Republic	2007	Concession for oil Block B	China Poly Group Corporation, IAS International Holding Co.	
Chad	2003	Acquisition of 50% stake in Block H, covering the whole or part of seven depositional basins: the Chad Lake, Madiago, Bongor, Doba, Doseo, Salamat and Erdis.	China National Petroleum Corporation	
Chad	2007	Acquires Chad-based EnCana Holdings Ltd. (a subsidiary of Canadian EnCana Corp.), getting the remaining 50% working interest in Block H	China National Petroleum Corporation	
Chad	2007	Agreement with Chad's Société des Hydrocarbures du Tchad (SHT) to have CNPC Services and Engineering Ltd. (a subsidiary CNPC) build the country's first oil refinery	China National Petroleum Corporation	
Congo, Republic of	2001	Contract to build a 120-MW hydroelectric power plant on the Congo River backed by guarantees of crude oil	China National Machinery & Equipment Import & Export Corporation, China International Enterprise Co-operative Corporation	
Congo, Republic of	2005	Concession of Marine XII and Haute Mer B. oil fields	Sinopec	

Gambling in Sub-Saharan Africa: Energy Security through the Prism of Sino-African Relations

Egypt	2006	Contract signed with three Egyptian firms to produce drilling rigs (the first land oil rig plant in the Middle East region)	Sichuan Honghua Petroleum Equipment Co., Ltd
Egypt	2006	Joint Egyptian-Chinese company (Sino-Tharwa) created to deliver three oil rigs by 2007, another seven by 2008 and aims at raising production to 20 rigs by 2010	Sinopec
Equatorial Guinea	2006	Signed a Simplified Purchase Agreement for a 70% stake in Block M in the Rio Muni basin	China National Petroleum Corporation
Equatorial Guinea	2006	Signed a production sharing contract with GEPetrol for exploration of Block S	China National Offshore Oil Corporation
Ethiopia	2004	Zhongyuan Petroleum Exploration Bureau (division of Sinopec) starts oil exploration in Gambella basin	Sinopec
Gabon	2004	Evaluation of Block LT2000, DR200 and GT2000	Sinopec
Gabon	2005	Acquisition of Block G4-188	Sinopec
Gabon	2006	Exploration of Block G4-217	Sinopec
Ivory Coast	2004	27% stake in Block CI-112, with US firm Vanco holding a 27% interest, India's Oil and Natural Gas Corp. (ONGC) 21.15%, Oil India 10.35% and Ivory Coast's state firm Petroci holding a 14.5% stake	Sinopec
Kenya	2006	Through indirect wholly owned subsidiary CNOOC Africa Limited, signed production sharing contracts for Blocks 1, 9, 10A, L2, L3 and L4	China National Offshore Oil Corporation
Kenya	2007	Wins contract to double the capacity of an oil pipeline that runs from Kenya's oil import, storage and refining centre at the port of Mombasa in the east to the country's capital Nairobi in the west, by constructing four pump stations	China National Petroleum Corporation
Liberia	2006	Preliminary exploration deal signed with the National Oil Company of Liberia Shengli	Sinopec

Gambling in Sub-Saharan Africa: Energy Security through the Prism of Sino-African Relations

Liberia	2008	Oilfield Tongtai International Trading Company – a wholly owned subsidiary of Sinopec Shengli Oilfield Company – was involved in Liberia’s second licensing round for offshore oil acreage	Sinopec
Libya	2002	Won the tender for the construction of a 527 km oil and gas pipeline extending from Wafa in western Libya to Mellitah on the coast of the Mediterranean Sea	China National Petroleum Corporation
Libya	2005	China National Oil and Gas Exploration and Development Corporation signed an exploration and production sharing agreement in Block 17-4 with Libyan National Petroleum Company	China National Petroleum Corporation
Libya	2007	Signed a contract for a pipeline in Libya	China National Petroleum Corporation
Libya	2007	Signed a contract with a Libyan drilling company to provide four onshore drill rigs	China Oilfield Services
Madagascar	2007	Sino Union Petroleum & Chemical International’s wholly owned subsidiary, Madagascar Energy International (MEI), won the right to explore oil and gas in Block 3113 for 8 years. In 2008, MEI tied up with Shaanxi Yanchang Petroleum Group to tap the oil blocks, with each side providing 50% of the investment needed to explore the block	Sino Union Petroleum & Chemical International Ltd., Shaanxi Yanchang Petroleum Group
Mali	2004	Exploration rights to 5 Blocks	Sinopec
Mauritania	2004	Exploration rights to Blocks 12 and Ta13&Ta21	China National Petroleum Corporation
Mauritania	2005	CNPC International Mauritania Limited (a subsidiary of CNPC) acquires a 65% stake in Block 20	China National Petroleum Corporation
Morocco	2004	Obtained an offshore oil drilling license in Ras Tafeiney, on the southern Atlantic shore, near Agadir	China National Offshore Oil Corporation
Mozambique	2004	Sub-contract to build 9 oil product storage tanks	China National Petroleum Corporation

Gambling in Sub-Saharan Africa: Energy Security through the Prism of Sino-African Relations

Niger	2003	License for exploration of Block BILMA (100% ownership) and Block Tenere (80% ownership)	China National Petroleum Corporation
Niger	2008	Deal to develop the Agadem oil block, build a refinery and pipeline, drill a minimum of 18 exploration wells, and carry out seismic exploration in the eastern Diffa region	China National Petroleum Corporation
Nigeria	2004	Exploration contract for Oil Mining Leases (OMLs) 64 and 66 in the Chad Basin	Sinopec
Nigeria	2005	Secured 30,000 barrels a day for a year, renewable, in return for the financing of the power stations in Papalanto, Omotosho, and Geregu in the Ogun, Ondo, and Kogi states	China National Petroleum Corporation
Nigeria	2006	Purchase of a 45% working interest in the OML 130 field (also known as the Akpo field)	China National Offshore Oil Corporation
Nigeria	2006	Acquisition of 51% stake in Kaduna refinery	China National Petroleum Corporation
Nigeria	2006	Through CNOOC Africa Limited, won a 35% working interest in Oil Prospecting License (OPL) 229. OPL 229 later became OML 141 and CNOOC reduced its share to 5% in 2008	China National Offshore Oil Corporation
Nigeria	2006	Granted a license for Blocks OPL 471, 721, 732 and 298	China National Petroleum Corporation
Nigeria	2007	4 oil districts granted	China National Offshore Oil Corporation
Nigeria	2007	Exploration in the Northern Western Sokoto Basin	Zhognbo Overseas Construction Engineering Company Limited
Nigeria	2008	\$40-50 billion in facilities offered to Nigeria to help fund projects, with Odein Ajumogobia, Nigeria's petroleum minister, saying the infrastructure investment might be in return for oil blocks. Soon after, the Chinese government offered a separate \$2.5 billion loan in parallel with talks about gaining	Sinosure, Chinese Government

Gambling in Sub-Saharan Africa: Energy Security through the Prism of Sino-African Relations

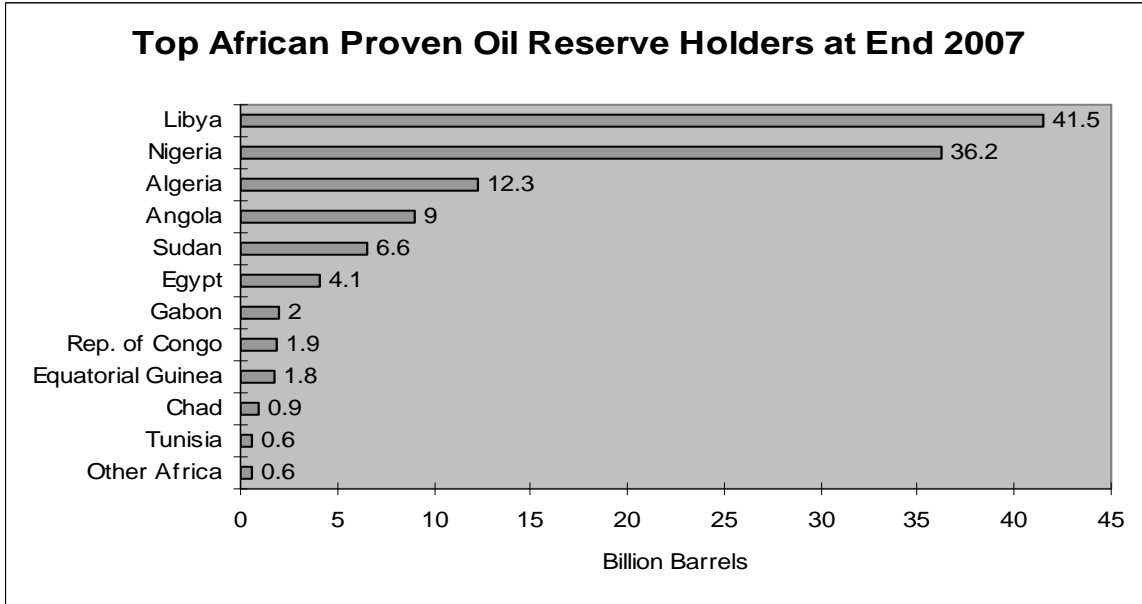
		energy exploration rights	
Nigeria	2008	Signed an agreement to build a six-lane road (the largest such project in Africa) around Nigeria's main oil hub of Port Harcourt in order to improve the oil infrastructure	China Harbour Engineering Co.
Sao Tome and Principe	2007	License for Block 2 in the Sao Tome and Principe-Nigerian Joint Development Zone (JDC)	Sinopec
Sudan	1997	Bought in as the largest stakeholder in the Greater Nile Petroleum Operating Company (GNPOC) and acquired a 40% majority concession in the Heglig and Unity fields (Blocks 1, 2 and 4)	China National Petroleum Corporation
Sudan	1998	Contract with the Sudanese Ministry of Energy and Mining to build the Khartoum Refinery (CNPC has a 50% holding)	China National Petroleum Corporation
Sudan	2000	Petrodar, a consortium of CNPC (41%), Petronas (40%), Sudapet (8%), Gulf Oil Petroleum (6%) and the Al-Thani Corporation (5%) won the tender for Block 3/7	China National Petroleum Corporation
Sudan	2001	Construction of the El-Gaili Power Plant, with oil serving as collateral for the loans	Harbin Power Engineering Company Limited
Sudan	2003	China Petroleum Engineering & Construction Corporation (CNPC's construction arm) signed a contract to construct Sudan's second major pipeline to move oil from the Block 6 Melut Basin fields to the Khartoum refinery and on to Port Sudan in the Red Sea	China National Petroleum Corporation
Sudan	2003	Zhongyuan Petroleum Exploration Bureau began exploration of the Tiki-1 Test Well in 3/7 Oil Area	Sinopec
Sudan	2005	Signed production sharing agreement in Block 15 (35% stake)	China National Petroleum Corporation
Sudan	2006	Significant exploration breakthrough obtained in the Fula sag in Block 6 (acquired a 95% stake in 1996)	China National Petroleum Corporation
Sudan	2007	Acquired a majority 40% stake in Block 13, off the coast of the Red Sea	China National

Gambling in Sub-Saharan Africa: Energy Security through the Prism of Sino-African Relations

			Petroleum Corporation
Tunisia	2004	Acquired the NK exploration block and a 50% holding in the SLK oilfield	China National Petroleum Corporation

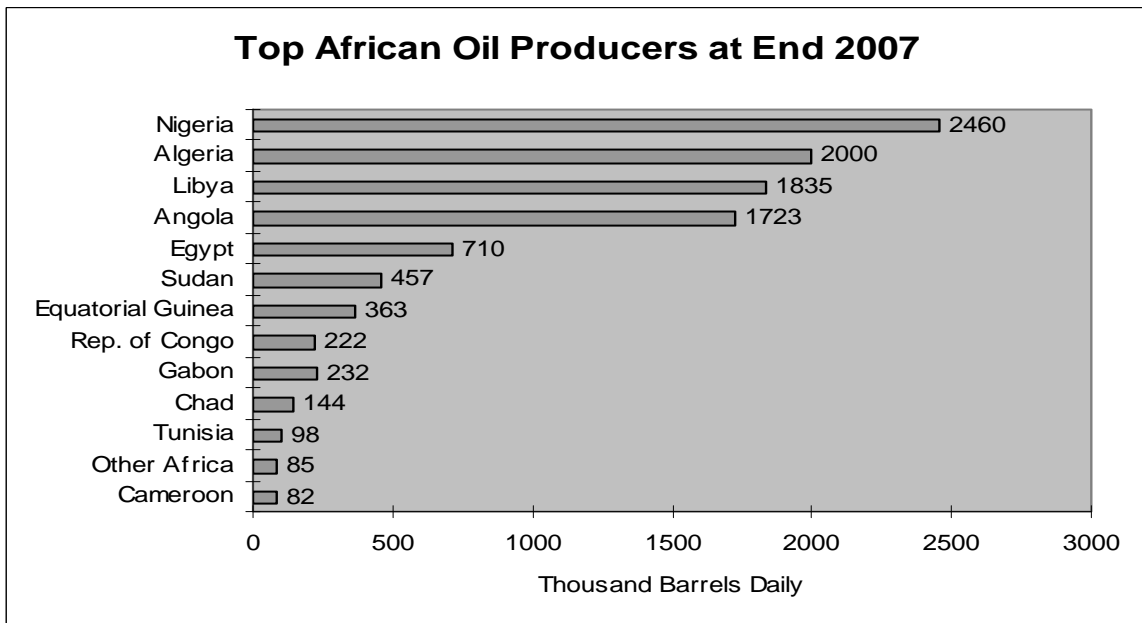
APPENDIX 2: AFRICAN OIL AND GAS RESERVES/PRODUCTION

FIGURE A2-1: TOP AFRICAN PROVEN OIL RESERVE HOLDERS 2007



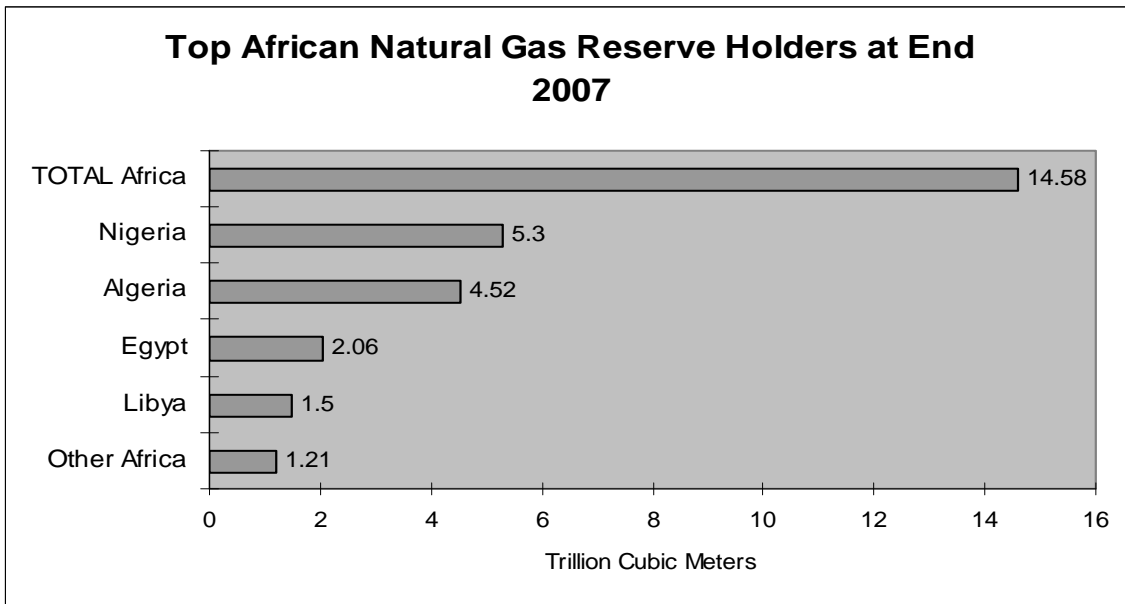
Source: BP Statistical Review of World Energy, June 2008.

FIGURE A2-2: TOP AFRICAN OIL PRODUCERS 2007



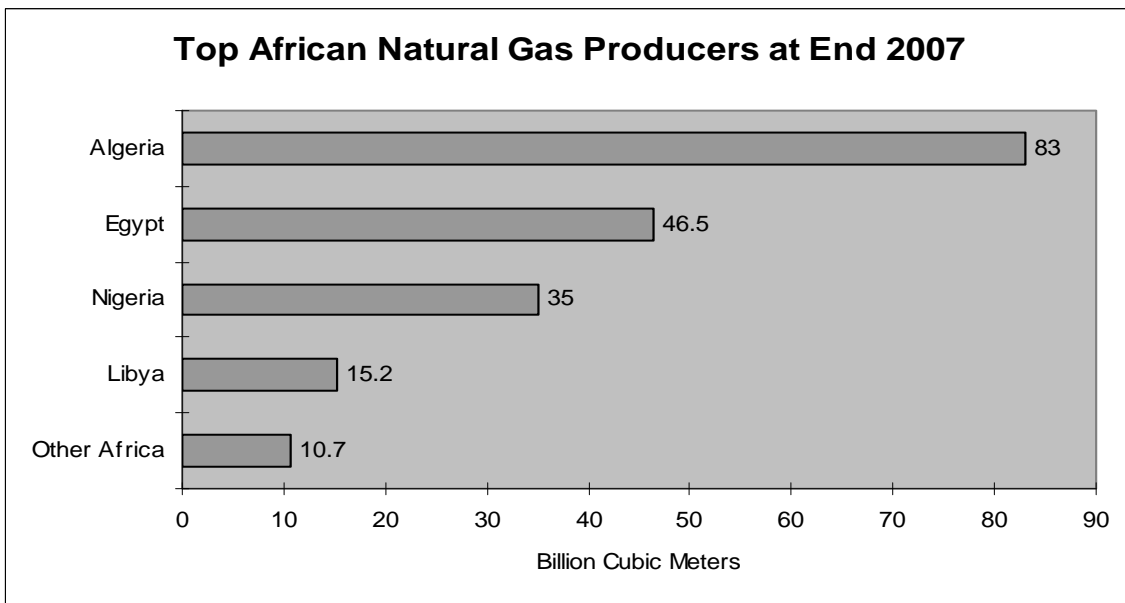
Source: BP Statistical Review of World Energy, June 2008.

FIGURE A2-3: TOP AFRICAN NATURAL GAS RESERVE HOLDERS 2007



Source: BP Statistical Review of World Energy, June 2008.

FIGURE A2-4: TOP AFRICAN NATURAL GAS PRODUCERS 2007



Source: BP Statistical Review of World Energy, June 2008.

APPENDIX 3: LIST OF INCIDENTS INVOLVING CHINESE WORKERS

Country	Incident	Date	Source / Link
Angola	1) 1 Chinese labourer working for the telecom giant Huawei is killed near the southern Angolan town of Benguela when a mine exploded, killing him and injuring 2 co-workers	1) October 14, 2007	1) www.newsweek.com/id/72028/page/1
Chad	1) Prospecting by CNPC in the Bongor Basin is disrupted, with Chinese workers fleeing during heavy fighting after Chadian rebels believed to be supported by the Sudanese government launched a failed attack against the Chadian government	1) February 2008	1) www.reuters.com/article/latestCrisis/idUSL11653282
Equatorial Guinea	1) Some 200 striking Chinese construction workers clash with local Equatorial Guinean security forces in a labor dispute in Mogomo, killing and injuring 4 Chinese workers. Most strikers were immediately repatriated to China	1) March 2008	1) http://uk.reuters.com/article/oilRpt/idUKL316427320080331?sp=true .
Ethiopia	1) Ogaden National Liberation Front (ONFL) attacks oil facility in Abole, operated by Zhongyuan Petroleum Exploration Bureau (subsidiary of Sinopec). 74 workers killed, 9 Chinese. 7 Chinese abducted and later released	1) April 2007	1) www.washingtonpost.com/wp-dyn/content/article/2007/04/24/AR2007042400604.html
Kenya	1) Chinese engineer is killed and another injured in an attack against a Chinese stone-materials plant in Mombasa	1) February 2007	1) China, Ethiopia: Facing the Price of Engaging Africa, Stratfor, April 24, 2007.
	2) 1 Chinese engineer is shot and killed near Merille River, with tribal elders claiming he was targeted because of a feeling that not enough men from the area had been employed by the Chinese	2) April 21, 2008	2) www.reuters.com/article/worldNews/idUSL809481820080822 .
Lesotho	1) Chinese businesses in Maseru targeted in riots by local nationals	1) November 2007	1) www.irinnews.org/report.aspx?ReportID=76405

Gambling in Sub-Saharan Africa: Energy Security through the Prism of Sino-African Relations

Niger	<p>1) Niger Justice Movement (NJM) kidnap an executive of a Chinese uranium and release him 4 days later</p> <p>2) Leaders of the NJM warn Chinese oil companies to leave or face attack, accusing China of supplying arms and munitions to the Niger army in exchange for concessions</p>	<p>1) July 2007</p> <p>2) 2007</p>	<p>1) http://news.bbc.co.uk/2/hi/africa/6280700.stm</p> <p>2) www.reuters.com/article/latestCrisis/idUSPEK164796</p>
Nigeria	<p>1) 5 Chinese employees of the telecommunication's firm Teleken Engineering taken hostage in Rivers state and released 12 days later</p> <p>2) 9 Chinese CNPC oil workers abducted by MEND near Port Harcourt in Bayelsa. After 11 days of diplomatic efforts, the Chinese are released</p> <p>3) 2 Chinese oil industry workers abducted in Anambra state; both are later released</p> <p>4) Governor of Imo State announces that hostage taking in Delta has resulted in loss of potential Chinese investments for the state totalling \$500 million</p> <p>5) 3 Chinese construction workers employed by the China Civil Engineering Construction Corp. abducted near Calabar; are freed after three days in captivity</p>	<p>1) January 5, 2007</p> <p>2) January 25, 2007</p> <p>3) March 17, 2007</p> <p>4) March 2007</p> <p>5) March 2008</p>	<p>1) http://english.people.com.cn/200701/19/eng20070119_342721.html</p> <p>2) www.chinadaily.com.cn/china/2007-02/04/content_800717.htm</p> <p>3) www.chinadaily.com.cn/china/2007-03/21/content_832638.htm</p> <p>4) www.legaloil.com/NewsItem.asp?DocumentIDX=1185694185&Category=news</p> <p>5) www.voiceofafricaradio.com/Newsreel/news_read.php?nid=786</p>
Somalia	<p>1) A Hong Kong bulk carrier owned by Sinotrans with 24 Chinese crew members on board is hijacked by armed Somali pirates</p>	<p>1) September 18, 2008</p>	<p>1) http://english.china.com/zh_cn/news/china/11020307/20080919/15096289.html</p>
Sudan	<p>1) Forces from JEM attack the Defra oil field in Kordofan province, run by the Greater Nile Petroleum Operating Company (GNPOC), kidnapping 5 oil workers</p> <p>2) JEM rebels attempt to seize Chinese facilities at al-Rahaw in South</p>	<p>1) October 23, 2007</p> <p>2) November</p>	<p>1) www.sudantribune.com/spip.php?article25128</p> <p>2) www.jamestown.org/terrorism/news/article2</p>

Gambling in Sub-Saharan Africa: Energy Security through the Prism of Sino-African Relations

	Kordofan	27, 2007	cle.php?articleid=2374369
	3) JEM attacks the Hejlij oilfield, run by the Great Wall oil company	3) December 11, 2007	3)www.sudantribune.com/spip.php?article25128
	4) Sudan Liberation Army/Movement (SLA/M) – a Darfuri rebel group – singles out Chinese oil facilities as targets for attacks	4) 2008	4)www.marketwatch.com/news/story/darfur-rebel-group-wants-western/story.aspx?guid={91EB83EE-2AB6-4545-947C-D06695E7A7BC}&dist=TQP_Mod_mktwN.
	5) Between May 29 and June 5, 2008, workers at Petrodar Operating Co. (a Sudanese oil venture owned for 41% by CNPC) went on strike demanding better pay and working conditions.	5) May 29 – June 5, 2008	5)www.upstreamonline.com/live/article156316.ece
	6) On 18 October, 2008, 9 Chinese workers were kidnapped in the disputed region of Abyei. The workers were employed by CNPC in Heglig, South Kordofan. Five of those hostages were subsequently killed on the 27 th of October.	6) October 18, 2008	6)http://www.platts.com/Oil/News/9500024.xml?src=Oilrsshedlines1 http://news.bbc.co.uk/2/hi/africa/7694106.stm
Zambia	1) Mine workers at the Chinese-run Chambishi mine in Zambia riot over poor working conditions, salaries and a failure to pay wages. after a blast at the copper smelter killed 50 people	1) 2005	1)Bates, G., & J. Reilly, J., The Tenuous Hold of China Inc. in Africa, The Washington Quarterly, Volume 30, Number 3, p. 37-52, Summer 2007

	2) Some 500 workers began throwing stones at the Chinese managers as they attempted to hold talks, with one manager being admitted to hospital. Police had to come to rescue the Chinese who had taken refuge by locking themselves in their offices	2) January 2008	2) http://news.bbc.co.uk/2/hi/africa/7277006.stm .
--	--	-----------------	--

ABOUT THE AUTHORS

Bas Percival holds a BA in Politics and History from University of Warwick and an MLitt. in Security Studies from St. Andrews University. He was a researcher at CIEP between 2008 and 2009 and is currently a PhD candidate in the section of Economics of Infrastructures, Faculty of Technology, Policy, and Management, at the Technical University of Delft. He specialises in African energy infrastructures, political risk, and security studies.

Benjamin Valk holds a BA in Political Science from University College Utrecht, a BSc in International Business Administration and a MScBA in Strategic Management from RSM Erasmus University in the Netherlands, and a MA in International Relations from Waseda University in Tokyo, Japan. Benjamin is currently employed as a Regional Analyst at ExxonMobil and specialises in geopolitical affairs, with a focus on the energy sector and is a visiting researcher at CIEP.

Lucia van Geuns is Deputy Director of CIEP. She holds a Msc in Earth Sciences from Leiden University. Lucia has a strong background in all aspects of exploration and production of oil and gas, including Africa specifically, as a result of a long career with Royal Dutch Shell (1980-2002). She regularly lectures on developments in the international oil market.



Clingendael International Energy Programme