

DIRECTORATE-GENERAL FOR EXTERNAL POLICIES
POLICY DEPARTMENT



**THE EFFECTS OF OIL
COMPANIES' ACTIVITIES
ON THE ENVIRONMENT,
HEALTH AND
DEVELOPMENT IN
SUB-SAHARAN AFRICA**

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DIRECTORATE-GENERAL FOR EXTERNAL POLICIES OF THE UNION

DIRECTORATE B

POLICY DEPARTMENT

STUDY

THE EFFECTS OF OIL COMPANIES' ACTIVITIES ON THE ENVIRONMENT, HEALTH AND DEVELOPMENT IN SUB-SAHARAN AFRICA

Abstract

Negative impacts of the oil industry are a major concern in sub-Saharan Africa (SSA), threatening not only the health of local communities, but also the livelihoods they depend on. The following study examines the impacts of the oil industry in sub-Saharan Africa and current measures to mitigate these impacts. It offers possible solutions that could be put forward by different stakeholders, including the EU and the European Parliament in particular, to reduce the negative impacts and enhance the contribution of the oil sector to sustainable development. The study focuses in particular on Nigeria and Angola, sub-Saharan Africa's largest oil producers, but is supplemented by insights from other SSA countries.

Specifically, the study examines a range of impacts, including the environmental, health-related and social effects of oil spills and gas flares; the employment opportunities offered and the wider economic implications of the sector; to what extent the oil industry has contributed to conflict in oil-producing regions, and the extent and consequences of oil theft. It goes on to review current efforts to mitigate some of these impacts through government regulations in oil-producing and importing countries, community engagement, and international standards and initiatives. It also draws on experiences from other natural resources sectors to assess what can be learned with regard to regulating trade in resources from conflict areas or that are illegally sourced. The study concludes with a set of recommendations focusing on regulatory measures, technology solutions, partnership- building and European development assistance.

This study was requested by the European Parliament's Committee on Development.

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ACRONYMS

APESCAB	Associação dos Pescadores de Cabinda/ Association of Cabindan Fishermen
BM&F	Bolsa de Valores, Mercadorias & Futuros de São Paulo
BSE	Brussels Stock Exchange
CABGOC	Cabinda Gulf Oil Company
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CNOOC	China National Offshore Oil Corporation
CNPC	China National Petroleum Corporation
CSE	Copenhagen Stock Exchange
CSR	Corporate Social Responsibility
DPR	Department of Petroleum Resources
DRC	Democratic Republic of Congo
EIA	Environmental Impacts Assessment
EIB	European Investment Bank
EITI	Extractive Industries Transparency Initiative
EP	Equator Principles
FLEGT	Forest Law Enforcement, Governance and Trade
FWB	Frankfurt Stock Exchange
GGFR	Global Gas Flaring Reduction Partnership
GMOU	Global Memorandum of Understanding
GRI	Global Reporting Initiative
IEG	Independent Evaluation Group
IMT	Incident Management Team
IOC	International Oil Company
ISO	International Organization for Standardization
JOA	Joint Operating Agreement
KP	Kimberley Process
LNG	Liquefied Natural Gas
LSE	London Stock Exchange
MICEX	Moscow Inter-bank Currency Exchange
MMCFD	Million Cubic Feet per Day
NDDC	Niger Delta Development Commission
NIOC	National Iranian Oil Company
NNPC	Nigerian National Petroleum Corporation
NOC	National Oil Company
NOSDRA	National Oil Spill Detection and Response Agency
NYSE	New York Stock Exchange
OPEC	Organization of the Petroleum Exporting Countries
PAL	Petroleum Activities Law
PSA	Production Sharing Agreement
PSC	Production Sharing Contract
RDC	Regional Development Council
Sinopec	China Petrochemical Corporation
SPDC	Shell Petroleum Development Company of Nigeria
SSA	sub-Saharan Africa
VPA	voluntary partnership agreement

EXECUTIVE SUMMARY

Key messages

- Negative impacts of the oil industry are a major concern in sub-Saharan Africa (SSA), threatening not only the health of local communities, but also the livelihoods they depend on.
- While oil companies are implementing certain measures to address these impacts, corporate social responsibility activities largely remain piecemeal and short-term, community engagement is inadequate and requirements for accountability and transparency are either insufficient or not enforced.
- In oil-producing countries, the main challenges relate to the lack of political will and capacity to implement and enforce national regulations, highlighting underlying governance challenges that need to be addressed.
- The EU, as a major importer of SSA oil and host of international oil companies, has both the responsibility and the opportunity to promote greater sustainability and equity in the sector, in particular through engagement with 'new' producers.
- Current efforts to promote greater revenue transparency are important but need to go hand in hand with a push for better revenue management and a greater emphasis on preventing trade in oil sourced illegally or from conflict areas.
- There is a need for increased cooperation and coordination to mitigate negative impacts of oil industry activity among all stakeholders. Governments, oil companies, civil society and communities must positively engage and work more closely together.

In 2010, Africa accounted for 13% of global oil production, with sub-Saharan Africa, the focus of this study, contributing 7.25%. Most of the sub-Saharan production takes place in Nigeria and Angola while other African countries produce on a smaller scale or are still in the exploratory phase. In 2010, the EU relied on SSA for around 7% of its oil imports, amounting to 314 million barrels worth \$65 billion. Around 500 oil companies are estimated to operate in the African upstream oil and gas industry, with a recent and growing importance of Asian oil companies, including from China (the world's second largest importer), India, Malaysia, South Korea and the Gulf states.

Oil production in Africa has had significant environmental and social impacts. Oil spills notably pose major direct risks to the environment and human health while also undermining fishing and farming livelihoods. Data on the quantity of oil spilled is highly contested or missing. In Nigeria, worst-case figures put daily average loss of oil at 712 barrels per day, while the lowest official figures put the loss at 93.9 barrels per day. While major oil spills have often been reported over the years, it is the minor oil spills that are collectively a greater danger to the environment and people of the Delta. In Angola no estimates of compilation of oil spills and their source appear to have been compiled.

The issue of money and compensation has come to dominate the oil spills agenda in Nigeria, which means that clean-up has become less of a priority than establishing who is responsible for the spill and how compensation could be maximized. In Angola, compensation is highly politicized. Payments from international oil companies, where they are made, are transferred to the government

for distribution among the affected communities, but in fact little if any of that money reaches communities.

Another major concern is gas flaring, which continues to be a common practice in Africa and contributes dangerously to greenhouse gas emissions, with negative impacts on the health and livelihoods of local communities. It remains particularly problematic in the Niger Delta where much of the production happens onshore, with estimates of the share of gas being flared ranging from 20% to 76% compared with a worldwide average of 4.8%. Communities have reported a number of illnesses associated with the pollution, including gastrointestinal problems, skin diseases, cancers and respiratory ailments.

Ending unnecessary gas flaring in the Niger Delta would be a much easier, if financially costly, win for oil companies than dealing with the oil spills problem, as it simply requires that facilities be upgraded. However, alternatives to flaring have not been implemented, in part owing to disputes between international oil majors and local authorities regarding who should pay the bill. In Angola, plans to capture and market this natural gas for domestic electricity generation and to export most of it in the form of liquefied natural gas have made more progress than in Nigeria.

Oil companies have also been blamed for giving rise to conflicts and social unrest in the areas where they operate as communities vent their anger about limited employment opportunities in the oil industry, inequitable sharing of oil revenues, environmental degradation and threats to local farming and fishing livelihoods. In the previous decade, the way that oil corporations chose to engage with local communities through development projects caused inter-community conflicts in the Delta between communities participating in such projects and those that did not.

Poverty remains widespread, in spite of oil and gas being a high-stakes sector for many African oil producers. The lack of transparency in oil revenues makes it difficult to hold governments to account and to fully understand the potential economic benefit of the sector for national economies. Nigeria has made progress in this regard and has been judged compliant with the Extractive Industries Transparency Initiative, though the tangible benefits this process has had for communities has been called into question. Other African countries are also in the process of joining. Angola has not signed up, however, and is being criticized for significant gaps in the published data.

A number of initiatives are being implemented to mitigate some of these impacts, including government regulations in oil-producing and importing countries, community engagement, and international standards and initiatives. Regarding regulations in oil-producing countries, many feel that implementation and enforcement are the main constraints rather than the regulations themselves. Dealing with environmental and health impacts is also complicated by the strong position of petroleum ministries *vis-à-vis* other government departments. In addition to national laws, oil companies are also subject to joint-venture or production-sharing agreements with the host government, which provide opportunities to impose additional requirements, but also leave the details to the discretion of the government rather than enshrining them in law.

Under the banner of 'corporate social responsibility' (CSR), international oil companies invest large amounts of money in community projects, though often with limited sustainable impacts. In response to increasing violence in the Niger Delta, companies are increasingly moving towards engaging local communities in partnerships. However, while the oil companies can play an important role in terms of assisting in development of the region, they run the risk of filling the role of the state in terms of service provision. Critics have also noted that CSR only addresses some of the symptoms of poverty, but ignores underlying development challenges.

While companies are increasingly moving towards community engagement, this change in thinking does not always translate to how they are perceived by host communities. Oil companies often fail to live up to communities' expectations that they would prioritize community issues in decision-making and in negotiations with the government. Community discontent and feeling of neglect by both the oil companies and the government are also rife in Angola. At the same time, civil society

organizations in the Niger Delta have been accused of becoming self-serving in an ongoing cycle of negative impacts and failed corrective or development projects.

International oil companies are also subject to the jurisdictions where they are listed on a stock exchange. One of the most important recent regulatory developments is the 'Lugar-Cardin' Provision in the US Dodd-Frank Act of 2010, which requires all US-listed/registered extractive industry companies to disclose payments to governments. The need to enhance the transparency of the sector was also underlined in a recent G8 communiqué, and the European Commission has announced that it will table legislative proposals in October including the obligation for companies to publish information about their activities.

Two other ongoing regulatory initiatives in the EU are also of relevance to the oil sector. The European Commission is holding consultations on the EU corporate governance framework (COM(2011) 164) paper published in April 2011 to assess the need for improvement of the corporate governance in EU-listed companies. It has also recently held public consultations to gather views on ways to improve the disclosure of non-financial information by enterprises, though no dates for further regulatory actions have been set.

At the global level, international standards and initiatives also affect the oil industry in Africa. Among the most prominent, the EITI sets a global standard for increasing the transparency revenues from oil, gas and mining. A number of initiatives also aim at monitoring and addressing environmental and social impacts of multinational industries, such as the Global Gas Flaring Reduction Partnership, the Global Reporting Initiative, the ISO 26000, UN Global Compact and the OECD Guidelines for Multinational Enterprises. There are also opportunities to influence the behaviour of oil companies through standards and regulations applied to the banks that finance them, including through the Equator Principles, the Principles of Responsible Investment, the European Investment Bank and the Basel Committee on Banking Supervision.

Experiences from other sectors can teach useful lessons for the oil sector. In the mining industry, international and national initiatives have sought to stop trade in minerals that fund conflict. The Kimberley Process, which is a joint government, industry and civil society initiative to prevent trade in conflict diamonds, requires participating states to issue certificates for the import and export of rough diamonds, and to prevent their import and export from non-participants. Most recently, the Dodd-Frank Act 2010 requires companies listed on the US stock exchange to disclose whether they are using conflict minerals that originate from the Democratic Republic of Congo (DRC) or its nine immediate neighbours.

Regulations have also been adopted to prevent trade in illegally sourced natural resources, such as timber, fish and wildlife. Under the EU's Action Plan for Forest Law Enforcement, Governance and Trade (FLEGT), the Union is entering into voluntary partnership agreements with timber producing countries to establish processes that identify legal products and license them for import to the EU. Another recently adopted EU timber regulation prohibits the placing of illegally harvested timber and timber products on the EU market and requires operators to implement due diligence in order to minimize the risk of doing so. Similar provisions are also found in the fisheries sector, although with greater emphasis on enforcement measures.

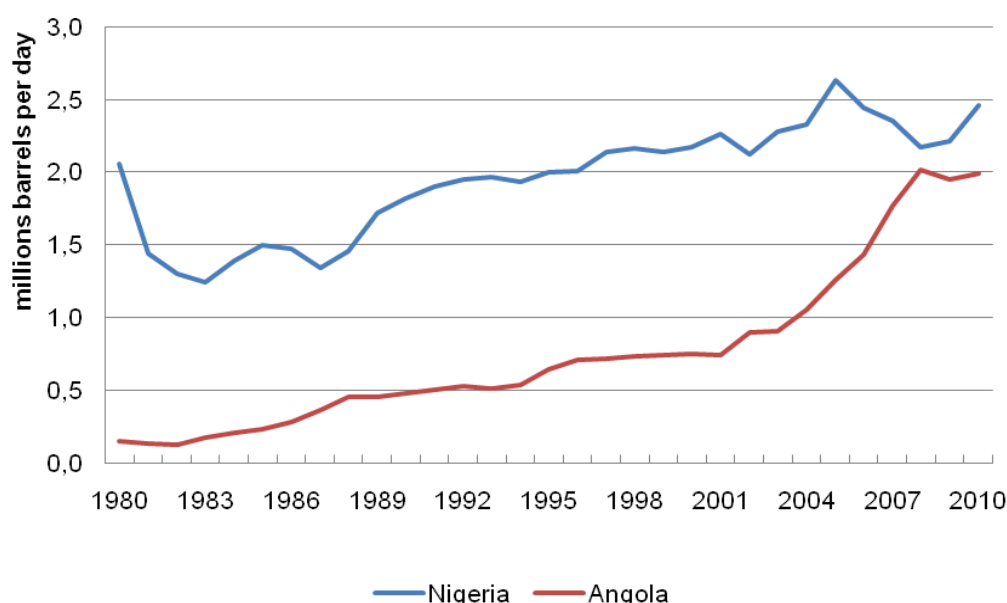
In the US, the main regulatory mechanism to address illegal trade in natural resources is the Lacey Act, which provides US authorities with the means of encouraging the timber industry to exercise 'due care' and preventing imports of illegal timber. The differences between the Lacey Act and the EU timber regulation lie primarily in their coverage of actors in the supply chain and specifications of requirements for compliance. At the international level, the only multilateral agreement to address illegal trade in natural resources is the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), although its scope is mainly confined to species with limited trade.

There are a number of opportunities to influence oil companies' behaviour towards more sustainable practices through regulations in the companies' host countries, promoting technology solutions, targeting EU development assistance, enhancing transparency of oil operations, strengthening producer country measures, and building partnerships between the stakeholders. Different actors will be more suited than others at these various points of intervention. Impact is determined by the capacity and ability of actors as well as their responsiveness and the sustainability of their actions. The governments of African oil-producing countries have a critical role to play, however, in mitigating negative impacts of the oil industry in their countries; without political will and improvements in governance in these countries, external efforts to ensure better environmental and social performance by oil companies will be undermined

1. OVERVIEW

The history of the upstream oil and gas industry in sub-Saharan Africa can be traced back to 1908 when the German firm Nigerian Bitumen Corporation began exploration in Western Nigeria. In the 1950s, oil was discovered in commercial quantities in Nigeria. Since the early 2000s, Angola has also emerged as a significant oil producer (Figure 1). Nigeria and Angola export most of their oil production. Other (smaller) producers in sub-Saharan Africa (in order of 2010 production level) include Sudan, Equatorial Guinea, the Democratic Republic of Congo (DRC), Gabon, South Africa, Chad, Cameroon, Côte d'Ivoire, the Republic of Congo, Mauritania and Ghana (see Annex 1 for 1995–2010 data). Ghana is expected to become a more significant oil producer in the near future after the lucrative Jubilee field began production in late 2010 (operated by the London-based Tullow Oil with Ghanaian and international partners).

Figure 1: Oil production Nigeria and Angola (1980–2010)



Source: EIA (2011a)

In 2010, Africa accounted for 13% of global oil production, of which sub-Saharan Africa (the focus of this study) contributed 7.25% (EIA 2011). The US Energy Information Agency forecasts highest growth potential to 2035 in SSA Organization of the Petroleum Exporting Countries (OPEC) members (Nigeria and Angola) and non-OPEC African producers (EIA 2011b). SSA OPEC members are expected to increase their oil production most in absolute terms, from 4.2 to 5.3 million barrels per day (Table 1). The highest relative expansion in oil production is predicted to occur in non-OPEC African producers with an annual average growth rate of 1.2%, above the global average of 0.8%. In North Africa, expansion is expected to be minor.

Table 1: African and global crude oil supply and disposition (2008–2035)

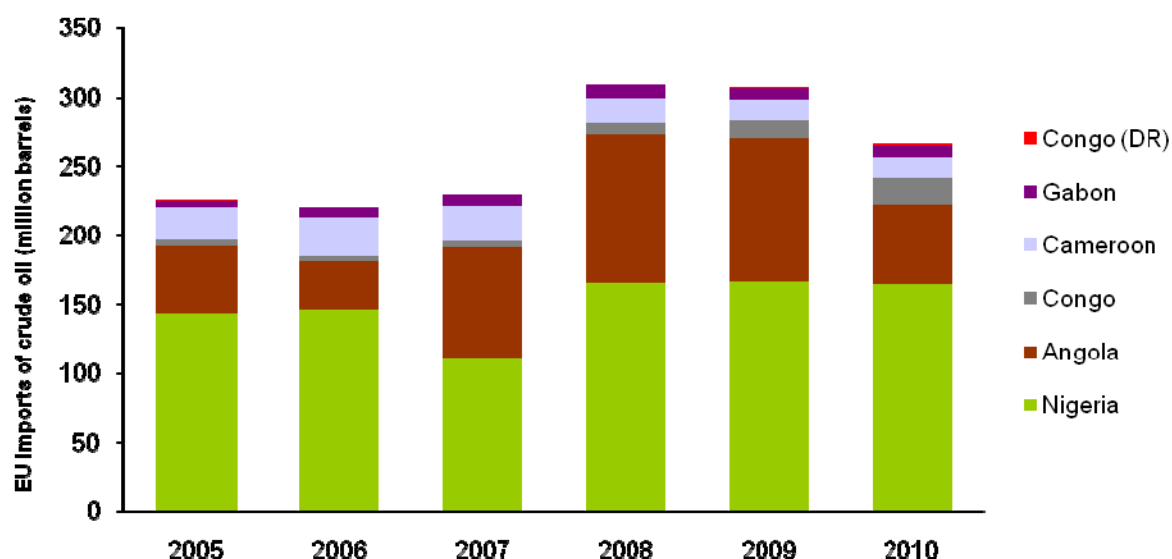
	2008	2009	2015	2020	2025	2030	2035	Annual growth (%) (2009–2035)
OPEC North Africa	4.1	3.9	4.3	4.0	3.8	3.9	4.0	0.10
OPEC SSA	4.2	4.1	5.1	5.2	5.1	5.1	5.3	1.00
Non-OPEC Africa	2.4	2.3	2.7	2.8	2.9	3.0	3.2	1.20
Global production	81.6	79.6	84.2	85.1	87.5	91.5	97.2	0.80

Note: Million barrels per day, unless otherwise stated. Gabon used to be a SSA OPEC member, but terminated its membership in 1995.

Source: EIA (2011b)

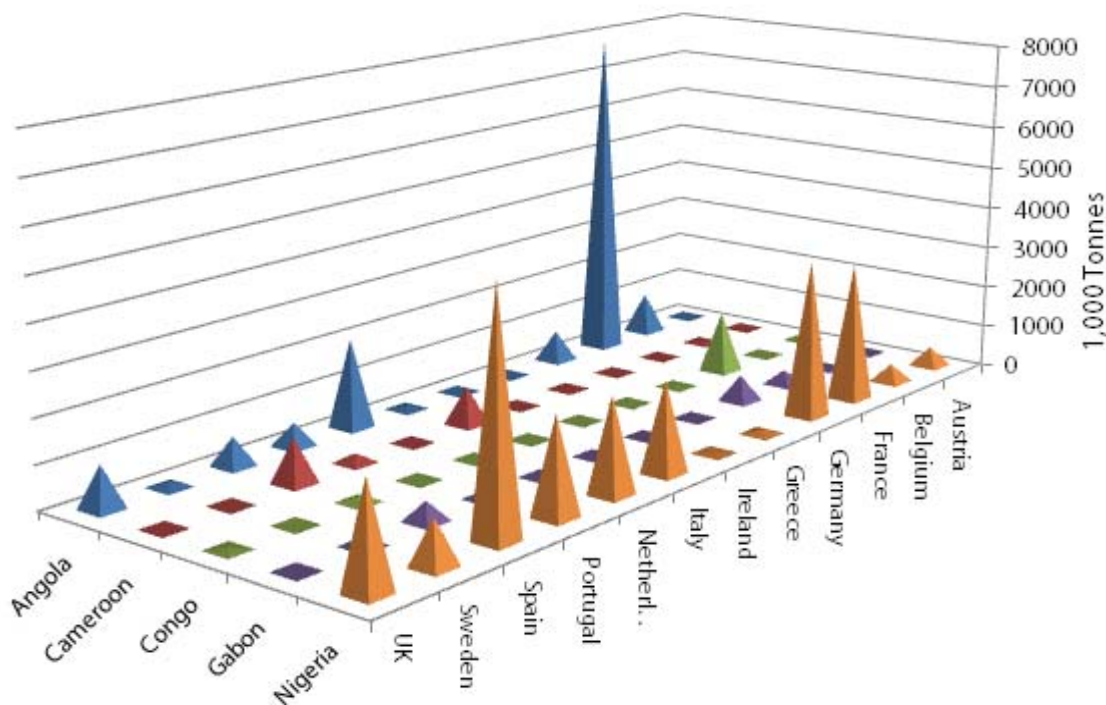
1.1 African oil and its importance for the EU

In 2010, the EU relied on SSA for around 7% of its oil imports, amounting to 314 million barrels worth \$65 billion (EC 2011a; see also **Figure 2**)¹. Nigeria is the largest source of EU oil imports among the SSA countries, accounting for just over half of their imports (IEA 2010; see also **Figure 4**). With the seventh largest gas reserves in the world, the country is also considered a potentially strategically important supplier to Europe if the industry can be developed. Destinations in the EU are diverse and include Spain, Germany, France, the UK, Portugal, the Netherlands and Italy. The EU market is less important for Angola (compared with the US and China), though still sizeable, with France as the main destination.

Figure 3: Oil imports to EU25/27 from selected SSA countries (2005–2010)

Source: EC (2011a)

¹ All \$ amounts refer to US\$.

Figure 4: Exports of crude oil from selected African countries to EU countries (2009)

Source: IEA (2010)

Currently, around 500 oil companies are estimated to operate in the African upstream oil and gas industry. Clarke (2008) categorizes these companies into super-majors, independents, state players and minnows.² Super-majors – or the ‘Big Five’ with market capitalization between \$150 billion and over \$500 billion – include the multinational oil giants ExxonMobil, BP, Shell, Total and Chevron. Among the independents ENI, ConocoPhillips and Repsol-YPF are the largest. Key state players include the China National Petroleum Corporation (CNPC), Saudi Aramco, Brazil’s Petrobras, the National Iranian Oil Company (NIOC) and Malaysia’s Petronas. African national oil companies (NOCs), specifically Nigeria’s Nigerian National Petroleum Corporation (NNPC) and Algeria’s Sonatrach, also increasingly participate in exploration and development beyond their borders.

A notable development in recent years has been the growing importance of Asian oil companies, including from China, India, Malaysia, South Korea and the Gulf states. These companies are increasingly able to compete with the Western companies that dominated oil production from the mid-1940s to the 1970s. China, in particular through its three NOCs – China National Offshore Oil Corporation (CNOOC), the China Petrochemical Corporation (Sinopec) and CNPC – has become the world’s second consumer of crude petroleum in the world after the United States (Vines et al. 2009). To meet its expanding demand China’s preference is for production of resources rather than their purchase, including from areas too ‘politically sensitive’ for Western multinationals (Soares de Oliveira 2007, p. 293). Chinese oil investments are often accompanied by infrastructure deals to garner political support for the investments and to access the oil. Western international oil companies (IOC) remain prevalent in deepwater explorations because of their technological advantage and in complex political environments where they have an historical footprint.

To what extent the oil sector does or could benefit Africa’s development remains disputed. Many commentators allege that the ‘resource curse’ of the oil and gas wealth has only served to enrich governing and business elites while host communities and national economies have seen few if any

² These distinctions are arbitrary at the margins, but broadly based on market capitalization and breadth of portfolio etc.

benefits. Ricardo Soares de Oliveira (2007) in his highly critical account of oil exploration in the West African Gulf of Guinea concludes that the oil states are successful because they are cash-rich, preserved from actual demise and aloof from domestic and external pressures, but have failed because they share the worst elements of the petro-state and the African postcolonial state. Nicholas Shaxson (2007), another ardent critic, dramatizes the 'curse' of oil on African countries, exposing in particular the corrupt trails of oil money leading back to financial centres in the west. Using Angola as an example, Kristin Reed (2009) highlights the 'destructive dynamics associated with oil extraction' for local fishing and farming communities (p. 2).

Other analysts contend that the lack of positive results from oil production on Africa's development are not due to any such resource curse, but rather are due to the political culture and nature of the state in producing counties. Duncan Clarke (2008), for example, argues that Africa's challenges arise from past patterns of political economy established through European intervention and medieval economic structures entrenched in pre-capitalist rural Africa, resulting in a hybrid economy with contradictory forces that are often unable to coexist with the oil industry.

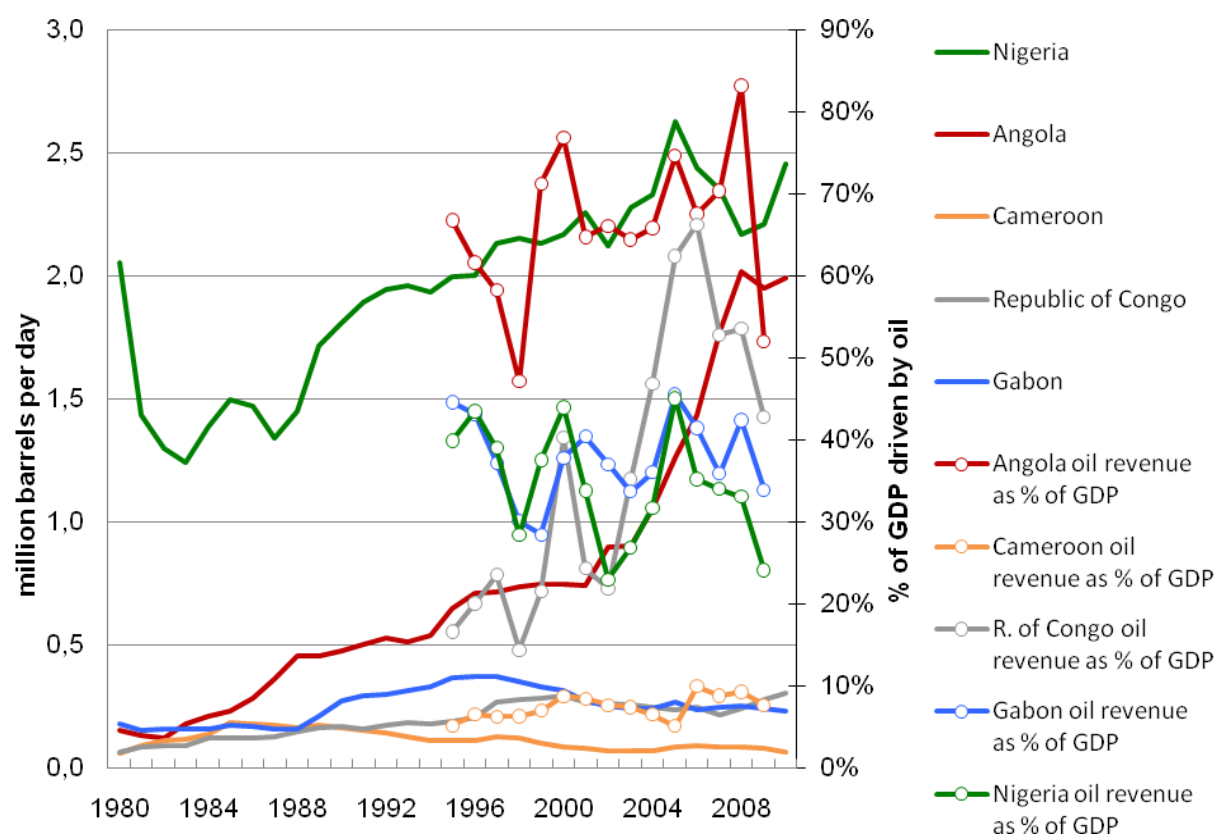
1.2 African oil and its importance for African countries

Oil and gas is a high-stakes sector for many African oil producers. The oil sector is particularly important for the Angola's economy, accounting for around two-thirds of GDP (see Figure 5) and close to 90% of government revenue (OECD/AfDB 2009). Angola's oil reserves are expected to last for 20 years at an output of 2 million bbl/day, although potential oil finds in frontier pre-salt areas could double its reserves. Oil companies commonly retain only around 15% of revenue – a low share by industry standards – while the rest goes to the government of Angola.³

In Nigeria, the government is reliant on oil for more than 80% of its revenue – through a flat-rate 50% tax on profits and a royalty of 0–12% depending on the location – and oil and gas account for over 90% of export earnings (OECD/AfDB 2009).⁴ While oil exports from the Republic of Congo and Gabon are small in comparison with other producers in the region, the sector accounts for a significant share of GDP in both countries (50% and 37% respectively), highlighting the economic importance of the oil industry. In Cameroon and DRC, oil contributes only 6% and 4% respectively to GDP (see Figure 5).

³ Interview held under Chatham House Rule, Nigeria, May 2011

⁴ The sector's contribution to GDP is lower at around 30% (annual average 2007–2009) owing to the sizeable shares of agriculture and retail (among others).

Figure 5: Oil production and % of GDP driven by oil revenue in selected SSA countries

Source: Production data from EIA (2011a). Share of GDP data calculated from UNCTAD export data ('petroleum oils, oils from bitumin. materials, crude') and World Bank current prices GDP.

1.3 Models of cooperation

International oil companies (IOCs) and host governments typically use one of three standard ways to formalize their oil (exploration and production) partnerships. These are concessionary arrangements, production-sharing contracts and risk-service contracts. These are not mutually exclusive and are adaptable.

For the investing IOC the underlying aim is to forge a long-term relationship to produce oil with the least investment and highest profit possible. For the state party capital investments and technical know-how as well as rents are the crucial factors.

Concessionary regimes such as the ones used in the US and UK give IOCs ownership of the resource. As a result IOCs also bear all associated exploration and production costs and risks. The state party collects revenue from taxes and royalties.

Production-sharing agreements (PSAs) mean exactly that – oil production is shared between state party (NOC) and IOC (private investor). Ownership of the resource remains with the state and most (all) cost and risk remains with the investor.

Risk-service contracts differ from PSAs in that profits (cash) are shared between the private investor and state party instead of oil. As with PSAs, in risk-service contracts ownership of the resource remains with the state and risk and cost remain with the investor.

Angola and Nigeria both primarily use the PSA option for partnerships with oil companies. The Nigerian NOC (and mandatory partner for investors) is the Nigerian National Petroleum Corporation (NNPC), and in Angola this role is played by Sonangol.

Social impact considerations are one of the ways IOCs and investors manage risk and may be compulsory in all three contractual regimes.

2. SCOPE AND METHODOLOGY

The following study delves deeper into these debates, **examining the impacts of the oil industry in sub-Saharan Africa and current measures to mitigate these impacts. It offers possible solutions that could be put forward by different stakeholders, including the EU and the European Parliament in particular, to reduce the negative impacts and enhance the contribution of the oil sector to sustainable development.** The study focuses in particular on Nigeria and Angola, sub-Saharan Africa's largest oil producers, but is supplemented by insights from other SSA countries.

Specifically, the study examines a range of impacts, including the environmental, health-related and social effects of oil spills and gas flares; the employment opportunities offered and the wider economic implications of the sector; to what extent the oil industry has contributed to conflict in oil-producing regions, and the extent and consequences of oil theft. It goes on to review current efforts to mitigate some of these impacts through government regulations in oil-producing and importing countries, community engagement, and international standards and initiatives. It also draws on experiences from other natural resources sectors to assess what can be learned with regard to regulating trade in resources from conflict areas or that are illegally sourced. The study concludes with a set of recommendations focusing on regulatory measures, technology solutions, partnership- building and European development assistance.

The study is based on a review of existing literature. In addition, field research was carried out in Nigeria (with a focus on the Niger Delta – see Box 1) and Angola (with a focus on the Northern Province of Cabinda – see Box 2). As (by far) the largest producers in SSA, these two countries provide good opportunities to examine the impact of oil companies over time and draw out lessons for more recent oil producers. The field studies included extensive interviews with government officials, industry, academics and civil society organizations both in the capitals and in the focus regions. In Nigeria, the individual interviews were complemented by a sample survey of 100 people in four communities in Rivers State in the Niger Delta (referred to as the 'Rivers State survey') and a survey of seven civil society groups also in River State.⁵ In Angola, particular emphasis was placed on the impacts of the oil sector on fishing communities in Cabinda.

⁵ While the survey provides interesting insights into concerns and priorities of these communities, it is important to note that they do not necessarily reflect experiences across the region.

Box 1: The Niger Delta region

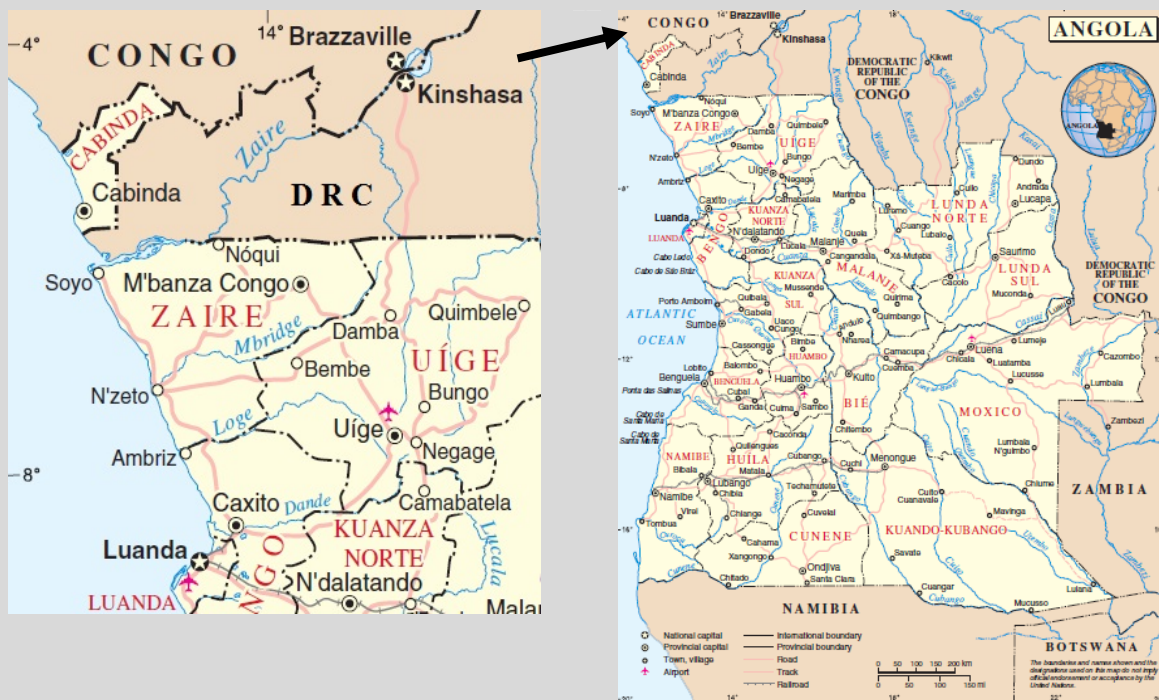
The Niger Delta region (the Delta) officially comprises nine states: the three so-called core states are Delta State, Rivers State and Bayelsa State, and the other six are Cross River, Akwa Ibom, Edo, Imo, Abia and Ondo, with a total of 185 local government areas. The region hosts a population of approximately 30 million, settled in around 13,000 small communities. The delta of the Niger River covers a land area of approximately 75,000 km², making up 12% of Nigeria's landmass. There are around 600 oil fields producing from around 5,000 wells, and although production is focused in limited areas, the region is crisscrossed by approximately 10,000 km of pipelines.



Sources: MoNDA 2009, UNDP 2006

Box 2: Cabinda

Cabinda is a province of Angola situated in the north of the country. It is an exclave, separated from the rest of Angola by the Democratic Republic of the Congo (DRC), which borders the province in the south and the east. In the north, Cabinda borders the Republic of Congo. Oil production, which began in the late 1960s, is the most important economic activity in Cabinda. Other natural resources include timber, coffee, cacao and palm oil.



Source: UN, Department of Field Support Cartographic Section

Much of the evidence of oil industries' impacts on human health and the environment cited here comes from Nigeria, which tends to be the focus of the literature, given the long and established history of the sector and associated problems and proposals for reform. Many of these findings can also be extrapolated to other countries. However, it is also important to stress that it would be misleading and bad practice to extrapolate too many commonalities and gloss over the numerous and important differences among sub-Saharan Africa's 49 states with diverse politics, histories and traditions. In particular when it comes to identifying and implementing solutions, African countries and their politics need to be understood from within their own particular contexts

3. ENVIRONMENTAL AND SOCIAL IMPACTS OF OIL COMPANIES IN AFRICA

Of all sub-Saharan African countries, Nigeria is probably the most infamous for oil production- and oil company-related difficulties. Consequently, much of the literature on the impacts of the oil and gas industry in Africa is focused on the Niger Delta. The environmental and human rights problems and related protests of the early 1990s, which culminated in the death of author and activist Ken Saro-Wiwa in 1995, brought Nigeria and the international oil companies that operate there into international disrepute. Since Nigeria's return to democracy in 1999, the situation in its oil-producing region of the Niger Delta has rapidly evolved and altered, with social protest turning to violent protest, and militancy and criminality on the rise.

It is important to note that there are many layers of interest in the Niger Delta, making it difficult to find objective efforts to diagnose or treat problems. In addition to the interplay of ethnic identity, land tenure issues and competition for resources at the community level, there are also bigger forces at play such as those involved in large-scale oil 'bunkering' (theft), which is a multi-million dollar industry (see section 2.6). Data and research done in the Delta are often therefore treated with suspicion as actors involved in the region are perceived to have some kind of bias or agenda. There is also a lack of statistics regarding health impacts. As Maass (2009) notes, epidemiological studies have not been conducted because of lack of funding and because the research environment in the Delta is so difficult.

In addition to the Niger Delta, the oil industry's environmental and health impacts have also been documented in other SSA countries. As outlined below, consequences attributed to oil spills and gas flaring include the collapse of local fishing and farming, the loss of habitat and biodiversity, acid rain damage and health impacts of air, noise and light pollution (e.g. Reed 2009; Maass 2009; Opukri and Ibaba 2008; Aaron 2006; FMoE et al. 2006). Some of these impacts are also cross-border; for instance, downstream riverine communities in neighbouring countries also rely on the migratory fish from the Niger Delta. In the scoping report for the Niger Delta Natural Resource Damage Assessment and Restoration Project (the 'Niger Delta scoping report'), a team of experts from Nigeria, the UK and the US convened by the Nigerian Conservation Foundation concluded that:

- The damage from oil and gas operations is chronic and cumulative, and has acted synergistically with other sources of environmental stress to result in a severely impaired coastal ecosystem and compromised livelihoods and health of the region's impoverished residents. (FMoE et al. 2006, p. 2).

3.1 Environmental, health and livelihoods impacts of oil spills

3.1.1 Extent of oil spills

Data on the quantity of oil spilled in the Niger Delta – caused by equipment malfunction, sabotage and small-scale theft for local refining – are highly contested. Of the IOCs operating in Nigeria, only the Shell Petroleum Development Company of Nigeria (SPDC) publishes regular reports on the number of spills in its operations.⁶ Disagreements over the causes and extent of oil spills are in part due to the fact that companies may track and report pipeline losses, but these figures do not necessarily correlate to the quantity of oil spilt due to a burgeoning industry in oil theft in Nigeria, estimated at 100,000 barrels per day (Faucon 2009). While impact on the environment and livelihoods is the same regardless of cause of the spillage – though the scale varies – such data are important in establishing the extent of impact due to oil company activity and in remedying the situation.

While major oil spills have often been reported over the years, it is the minor oil spills that are collectively a greater danger to the environment and people of the delta. Worst-case figures put daily average loss of oil at 712 barrels per day, while best official figures put the loss at 93.9 barrels per day (Cragg 2010). The Niger Delta scoping report estimates that between 9 and 13 million barrels of oil have been spilled in the last 50 years, 'representing about 50 times the estimated volume spilled in the Exxon Valdez Oil Spill in Alaska in 1989' (FMoE et al. 2006, p. 1). This figure aggregates spills that may have been due to accidents, waste dumping and sabotage and bombings during the Biafra war.

Another estimate by the National Oil Spill Detection and Response Agency (NOSDRA) reports a total of 9,107 oil spill incidences between 1976 and 2005, resulting in just over 3 million barrels of oil spilled into the environment. Several other organizations have published lists of polluted sites and endangered species in Nigeria, but these are generally not comprehensive (see e.g. FMoE et al. 2006, Appendix 2; Luiselli and Akani 2002; Yo-Essien 2008).

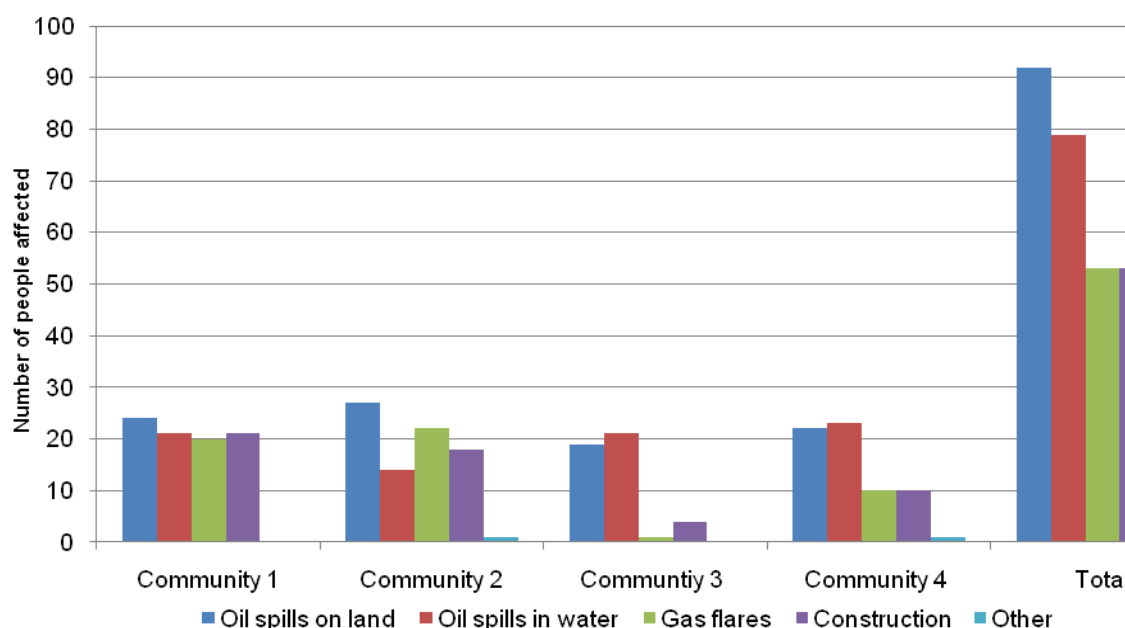
Information on oil spills is difficult to obtain in Angola; there do not appear to be any estimates or compilations. The government and companies do not necessarily report all spills and there are examples where spillages were only reported by chance a month later.⁷ This is in part due to the policy of the Ministry of Environment of only discussing spills over a certain volume (4000 bbl) with the oil majors. Spills below this threshold are at risk of being hushed up. The source of the oil spills is also at times unclear. Chevron in Cabinda often claims that spills reaching Cabindan waters originate in the Republic of Congo or the DRC, but accept that the company is likely to be blamed in any case.

3.1.2 Impacts of oil spills

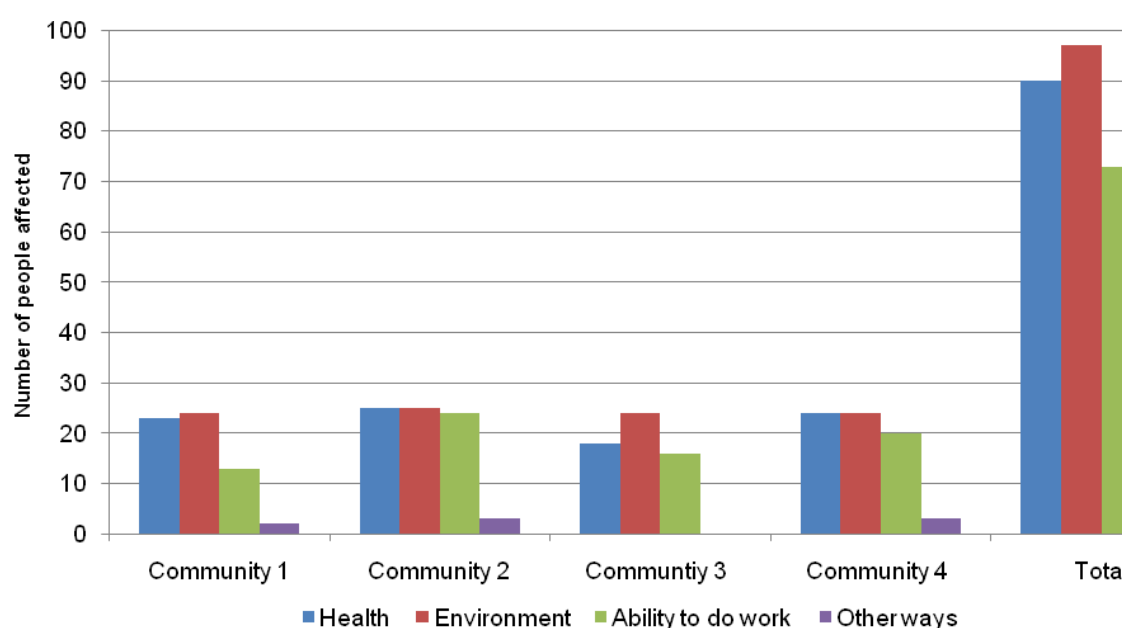
Oil spill spills pose major direct risks to the environment and human health while also undermining livelihoods security in the long term. A survey done in Rivers State in Nigeria indicated that oil spills on land were the most common complaint (Figure 6:). The survey also found that individuals in the communities felt the impacts of oil company activities mostly in the environment, followed closely by health (Figure 7:). While arguably more severe than gas flaring in its immediate negative impacts in the Niger Delta context, oil spills are much more difficult to resolve, as the issue is fraught with the politics of scams, sabotage, theft and genuine grievance.

⁶ www.shell.com.ng/home/content/nga/environment_society/respecting_the_environment/oil_spills/monthly_data.html

⁷ Interview under Chatham House Rule, Angola, April 2011.

Figure 6: Prevalence of incidents related to oil company activity

Note: Findings from a sample survey carried out in four communities with 25 people surveyed per community.

Figure 7: Impacts of company activities and related incidents

Note: Findings from a sample survey carried out in four communities with 25 people surveyed per community.

Pollution resulting from oil spills tends to be more difficult to manage in the Niger Delta environment than in others. The Delta is a low-lying area, where oil spills can spread rapidly through the fresh water swamps, mangrove swamps, lagoon marshes and tidal channels and the complex water flows can make controlling and cleaning spills more difficult. The water-saturated soil enables spilt oil to sink into aquifers (Cragg 2010). As a result, local communities have to deal

with polluted drinking water. Nkwocha (2009) highlights the water deficiency in the delta where around half of people had access to potable water in 2005, below the national average of 54%.

The environmental impacts of the oil industry also have economic ramifications: environmental degradation eliminates sources of income (e.g. fishing and farming), which displaces local populations, which in turn causes the collapse of local economies. According to Clarke (2008), locals argue that in some areas agrarian land will be unusable for 25–30 years in spite of remedial action by oil companies. Oil pollution has rendered much of the delta's agricultural land infertile, so subsistence farming and fishing communities have been denied their principal food sources (SERAC/CESR 1996). This was also confirmed by the Rivers State survey where comments regarding impacts of spills related mostly to the ruin of agricultural land and fishing waters.⁸

The negative impacts on livelihoods are particularly problematic in underdeveloped areas where local communities rely heavily on natural resources for their survival. The Niger Delta region is characterized by few roads, limited access to potable water, an electricity supply that is patchy at best, and poor sanitation and waste management. Given the poor level of development and lack of opportunity in the region, the people of the delta are largely reliant on the environment for subsistence through fishing and farming. Communities that host or are near to oil facilities and pipelines therefore suffer disproportionate economic consequences resulting from oil activity-related pollution.

A similar situation is found among fishing communities in Angola which rely almost exclusively on fishing as a source of livelihood. Fish is a central food item in the Angolan diet (Agostinho et al. 2005). Angolans consume around 16 kg of fish per person per year, twice the African average.⁹ Fish accounts for approximately 9% of the population's protein supply, although this share is likely to be much higher in coastal communities. The field research in Cabinda carried out for this study highlights the negative impacts of the oil industry on local fishing livelihoods that are already threatened by unsustainable and illegal fishing (Box 3).

Box 3: Oil industries' impacts on Cabindan fisheries

Most fishing in Angola's northern province Cabinda is artisanal and has been going on for three generations or more, without any commercial value chains attached. According to the President of the *Associação dos Pescadores de Cabinda* (APESCAB – Association of Cabindan Fishermen representing over 1200 members in the northern province of Cabinda), the whole of the sea space around Cabinda province is negatively affected by oil production. There is little physical space for fishing already and oil production further constrains this.

The fishermen complain that the bay of Cabinda no longer yields fish. Whereas in the 1950s up until the 1990s a nightly trip using about 500m of nets would have filled a fishing boat, now trips of up to five nights' duration and much more netting are required to fill the same boat.

The fishing excursions take the boats as far afield as Soyo – the mouth of the Congo River and further south (up to latitude of 7°, which is 2° south of Cabinda) – and up to Gabon towards the equator. Moving permanently to Soyo to avoid the long transit is not an option because it would mean leaving behind support networks of fellow fishermen and extended family.

These trips represent distances of around 160 km each way. In order to undertake such fishing expeditions, fishermen have to carry up to 350 litres of petrol on board their vessels, and even then not all can go owing to increased cost and risks, and the need for reliable motors. Further

⁸ Results from Chatham House sample survey carried out in Rivers State by Stakeholder Democracy Network on behalf of Chatham House.

⁹ Consumption data (2007) from FAOStat, accessed 19 May 2011.

afield, Cabindan artisanal fishermen also face competition from Luanda-based commercial fishing trawlers. According to some fishermen, this situation has already resulted in overfishing in the areas around Soyo and further south.



Fishing net destroyed by an oil spill
(Source: Photo by the authors)

The fishermen blame oil production for the lack of fish closer to Cabinda. They point to the destruction of underwater habitats and spawning grounds as one of the main reasons. They claim that these underwater reefs and rock structures, which are essential for breeding fish, are destroyed by the use of dispersants that make (spilled) oil that floats on the surface of the sea sink to the sea floor. Fishermen also claim that seismic surveys have a negative impact on fish stocks and are pushing them away. Apart from impacting underwater habitats, oil spills, which they say occur at least once and up to four times a year, also affect fishermen by destroying their nets.

Opportunities for legal recourse are limited. In 2005, for instance, AESCAB launched a court case against the Cabinda Gulf Oil Company (CABGOC) following a major oil spill that prevented fishing in the bay of Cabinda, affecting 1,226 fishermen, all of them members of APESCAB. The court case was initiated after extra-judicial negotiations with CABGOC failed. APESCAB was represented by Inglês Pinto & Associados, a Luanda-based law firm. After six years, the case is still pending with no ruling expected in the foreseeable future, and there have been more spills since. According to the President of APESCAB there is 'injustice in justice'.

Source: Interviews with fishermen in Cabinda, April 2011

3.1.3 Compensation

The issue of money and compensation has so come to dominate the oil spills agenda in Nigeria that clean-up has become less of a priority than establishing who is responsible for the spill and how compensation could be maximized. At times, this has created perverse incentives: some fishermen and farmers have found that it may be more lucrative to allow an oil spill to continue for a number of days before reporting it as they may be likely to make more money from a compensation claim than from their primary economic activities. Similarly, local contractors employed for the clean-up process stand to benefit financially from oil spills.¹⁰ Thus the lack of development and employment opportunities in the Niger Delta has had an indirect impact on the environment in relation to oil spills.

In Angola, the issue of compensation highlights challenging politics of compensation and its distribution. There are conflicting reports regarding compensation payouts in the event of oil spills or accidents, with some fishermen saying that small payouts have been made after two or three years while others are claiming that no payouts at all were made. Official figures of compensation mentioned were around \$80 per day, but it was quickly pointed out that these only exist on paper. Compensation from IOCs is transferred to the government for distribution among the affected communities, but it appears that little if any of that money reaches communities. Recent threats by the government of Angola to sue Chevron for environmental damages in

¹⁰ Interview held under Chatham House Rule, May 2011.

Cabinda are seen by many commentators as a tit-for-tat retaliation for difficulties faced by the Angolan embassy in Washington with regard to access to bank accounts (IPS 2010).

3.2 Health and environmental impacts of gas flaring

3.2.1 Extent of gas flaring

Gas flaring, i.e. the burning of waste gas, continues to be common practice in Africa (see also Table 2). Gas flares in the Niger Delta, visible from space, remain particularly problematic where much of the production happens onshore. The widespread use of the 'open pipe flare' method in Nigeria, which is almost obsolete outside the country, compounds the problem (UNDP 2006). As Clarke (2008) notes, 'Many flares have run 24 hours a day and some have been active for 40 years with over 8 MMCFD [million cubic feet per day] burnt' (p. 94). Emissions from gas flaring include carbon dioxide, methane, sulphur dioxide, nitrogen dioxides, carcinogenic substances such as benz[a]pyrene and dioxin, and unburned fuel components, including benzene, toluene, xylene, and hydrogen sulphide (CJP/ERA 2005).

Table 2: Extent of gas flaring in SSA countries (1995–2010)

	1995	2000	2005	2010
Angola	4.51	5.94	4.72	4.08
Cameroon	1.15	1.19	0.97	0.92
Chad	0.00	0.00	0.09	0.05
Congo	1.08	2.02	1.79	1.88
Côte d'Ivoire	0.06	0.09	0.04	0.09
DRC	0.53	0.43	0.44	0.39
Eq. Guinea	0.61	1.21	1.36	0.39
Ghana	0.00	0.00	0.01	0.02
Gabon	2.15	2.54	2.36	1.68
Nigeria	27.09	27.19	21.25	15.18
South Africa	0.06	0.13	0.14	0.10
Global	154.97	164.90	171.65	133.90

In billion cubic metres

Source: NOAA (2011)

How much of the gas is flared in Nigeria is unclear, with estimates ranging from 20% (according to the Nigerian Department of Petroleum Resources) to 76% (according to UNDP) of produced associated gas, compared with a worldwide average of 4.8% (UNDP 2006). Annual figures tend to vary owing to changing policies and the intensity of militancy which have an impact on oil production levels. The NNPC, for instance, estimates that from 2001 to 2003, 47.37% of gas was flared; the figure gradually declines to 30.81% in 2007 and 27.06% in 2008, but in 2009 the official figure increases again to 27.72% (NNPC 2009). SPDC states that its total flaring dropped by around 65% between 2002 and 2009 (from about 0.6 bcf/d to about 0.2 bcf/d, representing a drop from about 14.4 mtpa to about 5.2 mtpa in CO₂ emissions) – although part of this was due to production losses resulting from militancy.¹¹

Gas flaring also continues in Angola, and the flares may be visible from the coast, although direct health impacts tend to be less severe than in Nigeria since much of it happens offshore. The US Energy Information Administration's Angola country report (updated January 2010) estimates that Angola vented or flared 69% of its gas production in 2008 (EIA 2010).

¹¹ www.shell.com.ng/home/content/nga/environment_society/respecting_the_environment/harnessing_gas

3.2.2 Impacts of gas flaring

Communities have reported a range of illnesses associated with the pollution, including gastrointestinal problems, skin diseases, cancers and respiratory ailments. It is difficult to ascertain how many are specifically caused by the oil and gas industry as these are generally long-term illnesses. A 2001 scientific study of the adverse health effects of gas flaring in Canada lists various cancers, respiratory disease, heart disease, rheumatic disorders and eye problems (Argo 2001). EJP/ERA (2005) warn that gas flaring in Nigeria can cause leukaemia among populations living close to the flares, citing supporting evidence from the US Environmental Protection Agency. They estimate that around 35,000 people live within a 1.3 km radius and 330,000 people within a 5 km radius of a flow station. Another study carried out in southeastern Nigeria showed evidence of acid rain due to gas flaring, which can contaminate waterbodies and soils (Akpan 2003).

In addition to direct health impacts on adjacent communities, gas flaring in Nigeria has also contributed to global greenhouse gas emissions. The NGOs Climate Justice Programme and Environmental Rights Action claim that ‘the flares have contributed more greenhouse gases than all of sub-Saharan Africa combined’ (CJP/ERA 2005, p. 4).

Ending flaring and using the gas for local energy needs could provide important health and economic benefits for local communities. With an estimated 30% of income in the Niger Delta spent on energy,¹² and lack of electricity identified as one of the key causes of economic stagnation across Nigeria, there is a strong case to be made for making gas to power projects at least at a local level commercially viable and quickly achievable. While there have been some successful local gas-to-power projects, oil companies say that capturing the gas for local use is not commercially viable because of artificial local pricing regimes. However, ending gas flares could affect a significant change in communities’ perceptions of oil companies – and thereby improve the operating environment – as the flares are such visible negative markers of the presence of oil companies.

3.2.3 Current efforts to end gas flaring

Ending unnecessary gas flaring in the Niger Delta would be a much easier, if financially costly, win for oil companies than dealing with the oil spills problem, as it simply requires that facilities be upgraded. SPDC reports a 65% drop in gas flaring between 2002 and 2009 after joint venture investment of \$3 billion in associated gas gathering infrastructure. However, part of this decline in gas flaring was a result of lost production due to militancy. Since the amnesty process in the region, production and therefore gas flaring have once again increased. SPDC says that it intends to eliminate 90% of gas flares and keep 10% of associated gas for local use, but that being able to do this is dependent on full joint-venture funding and security.¹³

Oil production in Nigeria began when gas was regarded only as a waste product, and since then alternatives to flaring have not been implemented in part for economic reasons: (1) The low penalty for not re-injecting associated gas makes it more economical for companies to flare than to market or re-inject gas; (2) the low level of domestic industrial development and regional abundance of hydroelectric resources serve as disincentives (Shaxson 2007; Hodges 2004). Also, as noted above, IOCs have blamed funding shortfalls from their joint-venture partners for the lack of progress.

In Nigeria, efforts to address gas flaring are hampered by a lack of political will and disagreements about who should cover the costs. The gas flares-out deadline has been repeatedly delayed, and is now set for December 2012. Oil companies argue that despite a reduction in flaring, the practice

¹² Interview under Chatham House Rule, May 2011.

¹³ Interview, SPDC, Nigeria, May 2011.

continues owing to funding shortfalls from their joint-venture partner, the NNPC, and this has resulted in deadlock over paying the bill for the costly technology.

The Nigerian government is increasingly seeing flaring as a waste of a potentially valuable and useful resource and efforts to deal with the issue have focused on using gas for power through the National Independent Power Project. Special funding for this was first approved in 2004, but there has been little progress since. Lack of infrastructure for gas-to-power and low gas pricing locally remain major constraints. Oil companies argue that plans to turn small amounts of associated gas into fuel to market locally and for rural electrification are not sustainable if prices are to be kept artificially low; it is argued that the cost to install compressors to send the gas to power stations is so high that it would be cheaper to buy generators for communities and provide them with diesel for several years.¹⁴

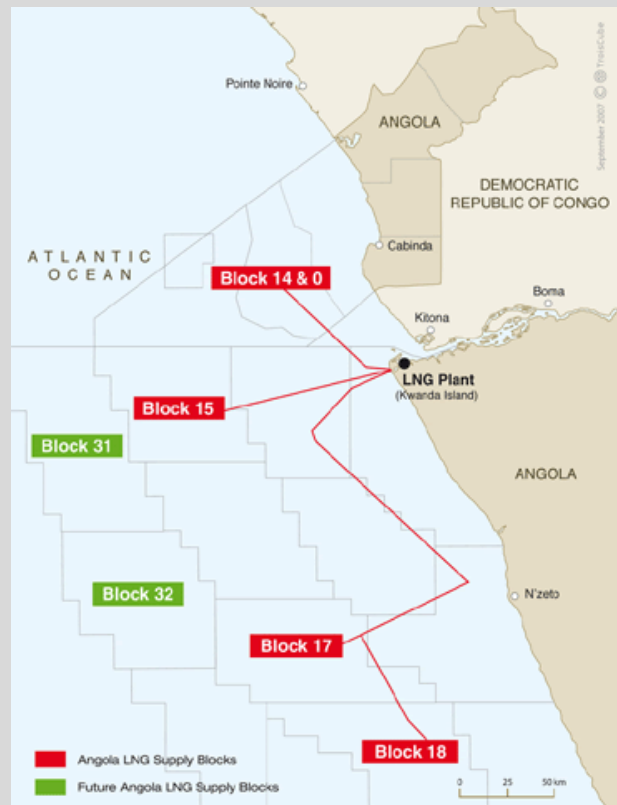
In Angola, plans to capture and market this natural gas for domestic electricity generation and to export most of it in the form of liquefied natural gas (LNG) have made more progress than in Nigeria. To this end, Chevron and Sonangol, together with other shareholders including Total, BP and Eni, are building a five-million-ton LNG plant near Soyo in northern Angola which is set for completion in 2012 (Box 4)

Box 4: Angola LNG plant in Soyo

The Angola LNG plant in Soyo, located in the province of Zaire just south of Cabinda, is considered by the Angolan government to be a development of national importance. It is seen as a large-scale opportunity to commercialize gas from current and future developments as well as gas from fields that have already been discovered in Angola.

The plant is located next to Soyo city, and the partners in the project are: Sonangol (22.8%), Chevron (36.4%), BP (13.6%), Total (13.6%), ENI (13.6%). It is being built at a cost of around \$9 billion and is set to start to deliver by early 2012.

The project will gather associated gas from the following producing blocks: Block 15 (ExxonMobil), Block 17 (Total), Block 18 (BP), Blocks 0 and 14 (Chevron) and future blocks (TBD – ultra-deepwater blocks).



Source: Total Corporate Website, and US EIA.

¹⁴ Interviews under Chatham House Rule, Nigeria, May 2011.

3.3 Conflict and social unrest

Oil companies have also at times been blamed for giving rise to conflicts and social unrest in the areas where they operate. This is particularly apparent in the Niger Delta where violence, oil theft and sabotage of pipelines increased sharply during the mid-1990s and peaking in 2006–07 as militant groups formed and communities vented their anger about limited employment opportunities, inequitable sharing of oil revenues, environmental degradation and threats to local farming and fishing livelihoods (Idemudia 2010). Chevron Texaco is estimated to have lost around \$750 million as a result of community strife (International Herald Tribune, 2004, cited in Idemudia 2010). While there is little unity across 140 ethnic groups in the Delta region, one feeling that is common is that all Niger Delta groups have been disadvantaged as none belong to Nigeria's three major ethnic groups of Hausa-Fulani, Yoruba or Igbo. As far back as 1958, the Willink Commission Report, a study which looked into minority groups' fears of domination in an independent Nigeria, found that the people had problems specific to the region owing to its terrain and therefore it should be regarded as a special area; that the development of the area required special attention by government; and that neglect or oppression of minorities would risk rebellion likely to necessitate a military response from the federal government.

The way in which oil corporations have engaged with local communities through development projects have been a cause of inter-community conflicts in the delta between communities participating in such projects and those that do not. Such tensions are thought to have contributed to the Nembe war in 2005 and the conflict between the Emouha and Ogbakiri communities in Rivers State (Idemudai 2010). In 2004, Shell acknowledged that the company at times fed 'conflict by the way we award contracts, gain access to land, and deal with community representatives', according to Emmanuel Etomi, Shell's community development manager in Nigeria (BBC 2004). Cash payments by oil companies to community leaders to avoid disruption, or to local (usually armed) individuals for security, fostered both conflict and crime, and the increase in hostage-taking, both of foreign oil workers and more recently of prominent Nigerians and their family members, can be seen as stemming in part from this practice.

Since 2004, the steep rise in militant activity in the Niger Delta, followed by the 2010 amnesty, have led to a change in the dynamics and level of conflict in the region. However, the potential for violent conflict remains and oil companies have an inevitable indirect (as well as at times direct) role in this. New ways of engaging with communities through Global Memoranda of Understanding are meant to address some of these issues (see below).

Another prominent example is the Chad Cameroon Pipeline Project, which was planned as a flagship model of financial management for host country development, but has been marred by governance, developmental and environmental failures (**Error! Reference source not found.**). As a 2007 report by the Environmental Defense Fund, the Center for Environment and Development and the Chadian Association for the Promotion and Defense of Human Rights concluded: 'The project appears to have fuelled violence, impoverished people in the oil fields and along the pipeline route, exacerbated the pressures on indigenous peoples and created new environmental problems' (Horta et al. 2007).

Box 5: The Chad–Cameroon Pipeline Project

The ExxonMobil-led development of the Doba field in the South of Chad brought an influx of new wealth to a politically fragmented and fractious state. The impacts on local communities of the 2003-inaugurated project and the associated World Bank-financed pipeline continue to be hotly contested – despite a comprehensive cost-benefit analysis, extensive plans to ensure a 'social licence' to operate and 165 consultation meetings with Pygmy communities along the pipeline route.

Several impact assessments highlight in more detail what went wrong. A June 2010 report by Group Chad (2010) critically assesses the World Bank's Independent Evaluation Group (IEG) report, cataloguing the project's failures. It claims that 'women and children suffer the most when the subsistence economy on which they depend is disrupted. Widely documented problems such as polluted water wells, poor quality goods given as compensation for the loss of land and the smaller fish catch, contribute to further impoverishment.' (p. 13)

Failures raised by these reports include inadequate compensation to farming and fishing communities in Cameroon's Coast and non-development of a promised indigenous people's plan with the participation of Cameroon's Bagyeli and Bakola Pygmy communities. Pygmy populations' ability to gather and hunt in the forests traversed by the pipeline has been severely affected by the pipeline (ibid.). The Group Chad report also refers to evidence that the 'infrastructure built with oil revenue has contributed little to social development'. School construction costs were excessive and health clinics often lacked the equipment to function (p. 9).

While the IEG report admits the failure of many of the measures put in place, it justifies World Bank involvement and financing for a project that would have been built anyway (World Bank 2009). This is disputed by several NGOs and the Group Chad report claims that the WB misjudged the political situation in which 'harsh repression, extra-judicial killings, wide-spread corruption and the lack of evidence of government commitment to addressing the plight of the poor were the hallmarks of Chadian realities' (p. 10).

3.4 Revenue transparency and good resource governance

Transparency is crucial for accountability mechanisms to work and for oversight bodies such as the media, parliaments and civil society to hold governments to account. Transparency alone, however, is not enough. Systems and institutions of integrity, functioning systems of justice and law, anti-corruption mechanisms that are effective, as well as political will, are all required. This means that a patchwork of initiatives – some local, some international and some global, is needed in order to achieve good resource governance outcomes.

One important initiative and piece of the good governance patchwork is the Extractive Industries Transparency Initiative (EITI). The Oslo-based initiative is a coalition of governments, companies, civil society groups, **investors** and international organizations. It sets a global standard for increasing the transparency of revenues from oil, gas and mining. To be recognized as EITI-compliant, countries have to go through an independent validation process. Specifically, they must commit to the following:

- Regular publication of all material oil, gas and mining payments by companies to governments ('payments') and all material revenues received by governments from oil, gas and mining companies ('revenues') to a wide audience in a publicly accessible, comprehensive and comprehensible manner.

- Where such audits do not already exist, payments and revenues are the subject of a credible, independent audit, applying international auditing standards.
- Payments and revenues are reconciled by a credible, independent administrator, applying international auditing standards and with publication of the administrator's opinion regarding that reconciliation including discrepancies, should any be identified.
- This approach is extended to all companies including state-owned enterprises.
- Civil society is actively engaged as a participant in the design, monitoring and evaluation of this process and contributes towards public debate.
- A public, financially sustainable work plan for all the above is developed by the host government, with assistance from the international financial institutions where required, including measurable targets, a timetable for implementation, and an assessment of potential capacity constraints.

According to the EITI, over 50 of the world's largest oil, gas and mining companies support and participate in the process (EITI 2011), including many of the (predominantly Western) IOCs operating in Africa. While Brazil's Petrobras is among the EITI's supporters, Russian and Chinese companies have not signed up.

EITI has, however, also received its fair share of criticism. For instance, Nick Shaxson (2009) argues that EITI and the Nigerian NEITI did not actually drive reforms but instead piggy-backed on other existing initiatives. Nevertheless, NEITI helped shape the quality of reforms and significantly increased understanding and transparency of the oil sector.

A recurring criticism of oil states' governments in Africa has been the lack of transparency in oil revenues which makes it difficult to fully understand the (potential) economic benefits of the sector for the national economy and to hold governments accountable for how the money is spent. In Nigeria a 2005 audit report released in 2009 highlighted 'unprecedented financial discrepancies, mispaid taxes, and system inefficiencies' (EITI 2009). The report found over \$800 million of unresolved differences between what companies said that they paid in taxes, royalties and signature bonuses, and what the government said it received.

Since then, Nigeria has made efforts to increase revenue transparency and in March 2011 was judged to be compliant with the EITI, only the second oil-producing African country to be deemed so, after Ghana in October 2010.¹⁵ Other EITI-compliant African countries are Central African Republic, Liberia and Niger. A number of other countries, including Cameroon, Chad, Côte d'Ivoire, Madagascar, Mozambique and Tanzania, are candidate countries. Equatorial Guinea had to exit the EITI validation process after long delays in necessary reform.

Angola has not signed up to the EITI and the government has been criticized for significant gaps in the published data on revenue generated through the oil sector, allegedly amounting to billions of dollars (OSISA/GW 2011). The lack of transparency is anchored in the *Angolan Petroleum Activities Law* (PAL) (10/04).

The article relates to 'duty of confidentiality' and states:

- The supervising Ministry, as well as the persons or entities which cooperate with it, shall keep confidential all data or information of a technical, economic, accounting or other nature supplied by licensees, the National Concessionaire and its associates.
- The licensees, the National Concessionaire and its associates, as well as the persons or entities which cooperate with them, shall keep confidential all data or information supplied by the supervising Ministry.

¹⁵ See <http://eiti.org/> for a list of implementing and candidate countries.

Even IOCs that have signed up to transparency initiatives such as 'Publish What You Pay' (PWYP) have to abide by Angolan laws, and are thus unable to honour their PWYP commitment. Any breach of the confidentiality clause in article 77 of the PAL may result in the loss of concessions. There are, however, instances where leverage was brought to bear to promote changes. For instance, the IMF influenced the Angolan government to (partially) publish Sonangol accounts. Similarly, the publication of the signature bonus for Block 0 (\$500 million) on 27 June 2003 was achieved through political pressure and advocacy by US President George W. Bush (and Chevron). The Angolan government was also forced to disclose a \$30 million signature bonus paid by Ranger Oil, Odebrecht and Sonangol for Block 16 on 27 June 2003. This was in response to an inquiry by the Angolan National Assembly about the deal (HRW, 2004).¹⁶

3.5 Wider economic impacts

3.5.1 Employment and income opportunities

Employment potential in the oil sector has generally not lived up to communities' expectations. While jobs in oil companies tend to be among the highest paid in SSA oil-producing countries, they often may remain out of reach of the country's nationals and in particular the members of local communities owing to shortages in technical skills. Even where technical training is provided by the companies, the capital-intensive nature of the industry means that overall employment opportunities remain small. Moreover, the oil sector is an enclave economy with limited forward and backward linkages, and thus limited multiplier effects on the broader economy.

In Nigeria in April 2010, the Nigerian Oil and Gas Industry Local Content Bill was signed into law. It places obligations on international and local oil companies relating to capacity-building and use of Nigerian services and personnel.

Lack of employment opportunities has been one of the factors stimulating the emergence of an illegal and highly risky local refining 'industry' in the Niger Delta. Oil from the swamps of the Niger Delta is boiled in barrels to evaporate the diesel, which then flows through a water-cooled pipe and drips into a container at the other end. In the absence of alternatives and because of high fuel costs, local refining can generate a steady income despite the risks of injury from explosions and fires, and of disease from contact with the oil and breathing in the fumes. Local refining, which is spread over a wide area, can also cause significant environmental damage.

Expectations of employment generation have also been disappointed in Angola, although they have so far not been as conflictual as in Nigeria. 'Angolanization' of the workforce in the oil sector (**Error! Reference source not found.**) has seen limited progress because of a lack of high-quality graduates. For instance, Angolan faculties of engineering only produce between 12 and 20 high-calibre Angolan graduates, while BP alone around 100. Another example is Soyo where the 30-year presences of the 'Base do Kwanda', run by a joint venture between Sonangol and Delong Hersent Lda, has brought little real advances in terms of general education or professionalization of the workforce.¹⁷ There are only around a dozen local staff in higher management, and no faculties for higher education exist in Soyo. For the last three decades training was confined to (primary education) teacher training. Expectations amongst the town's 200,000 inhabitants for employment in the Angola LNG Plant are again high. These hopes are bound to be dashed as there is a very limited need for unskilled labour. Around 50 youngsters from Soyo have been hired by Angola LNG and are currently being trained as operators in Canada and Indonesia.

¹⁶ When BP tried a similar move by publishing data on its operations in Angola in its 1999 annual report for BP Exploration (Angola) Limited, but with no inquiry in the Angolan National Assembly, it was heavily censured by the Angolan government.

¹⁷ Interviews under Chatham House Rule, Angola, April 2011.

Box 6. Angolanization under national legislation

Article 86

(Recruitment, integration and training of Angolan personnel)

1. Entities that carry out in national territory the activities set forth in Article 1 hereunder shall be required to employ only Angolan citizens in all categories and functions, except if there are no Angolan citizens in the national market with the required qualifications and experience, under terms to be regulated.
2. National and foreign workers employed by the entities referred to in the preceding paragraph who occupy identical professional categories and carry out identical functions shall enjoy the same rights of remuneration and the same working and social conditions, without any type of discrimination.
3. The duties of recruitment, integration and training of Angolan personnel that fall upon the entities referred to in paragraph 1 shall be established by Government decree.

*Source: Petroleum Activities Law 2004***3.5.2 Revenue generation and poverty**

Despite their oil wealth, poverty remains widespread in oil-producing countries. Even at peak production, Nigeria, with its large population of which 92% survive on less than \$2 a day (UNESCO 2010), produces only around 6–7 barrels of petroleum equivalent (boe) per person per year, worth no more than a few hundred dollars for every Nigerian. Without a massive multiplier effect this will not on its own sustainably develop Nigeria (Myers, 2005). Implementation of federal and state government plans for development of the Niger Delta region has fallen far short of expectations (see Box 7)

In Angola, the government estimates that as many as 68% of the population live on less than \$1.70 a day, according to a household survey carried out in 2000/01 (MdP 2004). Hodges (2004) claims that Angola features all three characteristics of the resource curse: ‘Dutch disease’¹⁸, exposure to price fluctuations and the lack of a long-term economic and social development strategy owing to its long civil war. Negative impacts of the unsustainable use of oil revenues (such as very high spending on internal security and defence, high dependence on imports, subsidies on fuel, water and electricity), the enrichment of regime families in Luanda and the effects of Dutch disease on the national economy (ibid.). In 2007, the agriculture sector accounted for just 8% of GDP (although this excludes subsistence agriculture) (OECD/AfDB 2009).

Box 7 Regional development of the Niger Delta

The Niger Delta Development Commission (NDDC) was established in 2000 to carry out development projects in the region, and oil companies must contribute 3% of their annual operating budget to the Commission. There is broad consensus that despite a budget of billions of naira, the NDDC has not to date fulfilled its mandate, though it is seen as an improvement on its predecessor, the Oil Mineral Producing Areas Developments Commission, as it does make an effort

¹⁸ Dutch disease is the negative impact on an economy of anything that gives rise to a sharp inflow of foreign currency, such as the discovery of large oil reserves. The currency inflows lead to currency appreciation, making the country's other products less price competitive on the export market. It also leads to higher levels of cheap imports and can lead to deindustrialisation as industries apart from resource exploitation are moved to cheaper locations. (Financial Times Lexicon, <http://lexicon.ft.com>)

to engage with stakeholders. The latest agency created to try to improve the situation is the Ministry of Niger Delta Affairs. This new agency reportedly has the political power, while the NDDC has the funding.

3.5.3 Revenue-sharing among provinces

Another issue of concern at the sub-regional level is the way in which oil revenues are shared with the provinces where the oil is found. In Nigeria, there have been long-standing disagreements regarding the distribution of oil revenues which were partly blamed for the Biafra War in 1966–70 when oil-producing provinces tried to secede from the rest of the country (Ahmad and Sing 2003). After decades of divisions, the 1999 Constitution stipulates that 13% of revenues must be transferred to the oil-producing states while the remaining 87% is split between the federal government (52.7%), the states (26.7%) and local governments (20.6%). Since 2003, the federal government has been publishing the monthly revenue allocations that are transferred from the federal to state and local governments to avoid under-reporting by provincial authorities.

In Angola, government transfers to the oil-producing provinces such as Cabinda and Zaire are not commensurate with the amounts of oil produced. The size of transfers is in theory based on the levels of oil production by those provinces. In 2007, Block 0 (Cabinda) produced 130,370,747 barrels, while Blocks 15 and 17 (off Zaire province) produced 194,020,181 barrels and 170,817,719 barrels respectively (MdP 2007). However, government transfers to Cabinda and Zaire do not reflect these realities: in 2007 transfers to Cabinda consisted of 0.78% of total transfers (or 19,547,331,381 KZN), while those to Zaire consisted of only of 0.3% of total transfers (equal to 7,450,126,754 KZN) (MdF 2007). In the 2011 general state budget of Angola Zaire is set to receive around \$4 million, while Cabinda is set to benefit from around \$12 million, although oil production is likely to be an inverse of these figures.

Experiences from other African countries are varied. Success for effective revenue-sharing depends to a large extent on the type of state system (federal vs. centralized), but also on existing decentralization mechanisms and efforts. A lot of countries in SSA have experimented with decentralization with varying degrees of success. Some, including Mozambique, South Africa and Uganda, have had some positive results. An effective and efficient revenue management system that can be employed at sub-state levels (such as provincial or municipal levels) seems to be a precondition for the success of such local government budget allocation. Mozambique and other countries have established such systems with the help of international development partners. Countries with some degree of fiscal decentralization will be better suited for revenue-sharing among provinces (or other territorial units). However, decentralization is not a panacea; other mechanisms (including political will and oversight bodies) must be in place to ensure fair and efficient allocation.

3.6 Oil theft

Oil theft (or oil bunkering) in Nigeria, has ranged from 20,000 to 100,000 barrels per day according to the oil industry, although the federal government has estimated that it could be as high as 300,000 barrels per day. Oil bunkering happens on different scales. Small- to medium-scale crude theft is for local refining and use. At this scale, the method of theft involves boring holes in the thousands of miles of pipelines that crisscross the delta and inserting valves – a highly risky practice that often results in explosions and deaths. Large-scale oil bunkering is a highly profitable business (or form of organized crime), in which crude is also stolen directly from the wellhead and mixed in with legitimate oil or refined regionally en route to international markets.

The small-scale stolen oil is crudely refined in the Niger Delta for the domestic market, often resulting in significant environmental pollution. The larger amounts from the wellheads are exported by barge for refining in other parts of West Africa. There is also evidence that it is shipped as far afield as South America and Eastern Europe. While the large-scale/commercial bunkering is less

immediately damaging to the environment, it has implications for oil spills as it obscures data on pipeline losses. It also fosters an opaque and corrupt political environment, with negative ramifications for development.

Although oil bunkering on this scale requires sophisticated organization, and the complicity of state officials up to a very high level, it flourishes amid the poverty and sense of injustice in the Delta area. Given the extent of the wealth involved, and the degree to which such activities have international connections, the issue deserves further attention. In 2008 President Yar'Adua called for international support to combat 'blood oil'. This encouraged some industry and academic research into further developing oil fingerprinting to assist traceability of oil. To be successful such technology would have to be coupled with more effective law enforcement efforts, strengthened judicial systems and better monitoring of regional refineries and the deliveries of crude to them.

4. CURRENT EFFORTS TO MITIGATE AND ADDRESS THESE IMPACTS

4.1 Government regulation, implementation and enforcement

4.1.1 National laws

While some commentators argue that Nigeria's environmental regulatory framework is insufficiently robust (e.g. Ibaba 2010), many feel that implementation and enforcement, rather than the regulations themselves, are the main constraints. The complex bureaucracy, a lack of capacity and difficult working conditions in the relevant government departments mean that efficiency and strong oversight remain a challenge. Others also suggest that the system is open to abuse; for example, Environmental Assessment Officers must visit the oil facilities regularly to carry out inspections, but the oil companies are asked to pay for flights, accommodation and subsistence. Oil companies also insist that Nigeria's environmental performance laws are stringent and their performance is improving, especially since both militancy and community disruption caused production losses (or 'shut-ins') and oil companies are seeking to improve their image.

In addition to national laws, oil companies are also subject to joint-venture or production-sharing agreements with the host government, which provide opportunities to impose additional requirements, but also leave the details to the discretion of the government rather than enshrining them in law. In Nigeria, the major oil companies mostly operate under Joint Operating Agreements (JOAs – mostly onshore) which set out the relationship between the parties in the venture, including their share of rights, budget approval and supervision, crude oil lifting and sale in proportion to equity, and funding by the partners (Ameh 2005). More recently, production-sharing contracts (PSCs – mostly for deep offshore and shallow waters) have been introduced following the emergence of offshore oil and gas operations and the granting of deepwater rights. Similarly, in Angola, operators enter into production-sharing agreements (PSAs) with the government which may include specific clauses related to censure and penalties as well as regulation and appropriate responses with regard to oil spills. These agreements are usually confidential.

4.1.2 Regulatory and administrative responsibilities

Dealing with environmental and health impacts is also marred by the strong position of petroleum ministries *vis-à-vis* other government departments. In Nigeria, the Department of Petroleum Resources (DPR) holds the oil licences, so the oil companies need to maintain a close and positive relationship, but the DPR itself is interested in production and revenue generation as well as

environmental regulation. There is some overlap between the DPR and Ministry of Environment, but the DPR maintains prime responsibility for environmental regulation in the oil and gas industry.¹⁹

Similarly, the Angolan Ministry of Petroleum and the state-owned oil company Sonangol dominate the political landscape in the oil sector. While any IOCs operating in Angola also have to comply with regulations instigated by the Ministry of Environment and the Ministry of Finance, these ministries are much weaker and politically less relevant than the Ministry of Petroleum. Significant power also rests with Sonangol as the concessionaire and operator. Every oil block has a chairman from Sonangol who is the contact point for all block participants. The chairman then communicates with Sonangol, which may communicate further with the Ministry of Petroleum.

4.1.3 Oil spills

In Nigeria, oil spills are dealt with directly by the National Oil Spill Detection and Response Agency. Every oil spill reported would be attended by NOSDRA, DPR, the oil company concerned, a community representative if the spill is near a host community, and sometimes the police or the Joint Task Force²⁰ if security conditions require it. An estimated volume for the spill is worked out by an agreed formula and signed off by all parties. NOSDRA later reviews the numbers and a final figure for the scale of the spill is agreed. The form relating to the spill needs to be agreed and signed before the company can move ahead to recover oil in order to limit the amount that goes into the environment.

In Angola, emergency capabilities for dealing with oil spills (and other accidents) and inter-company cooperation have improved, but addressing the impacts on local communities remains a concern. The Gulf of Mexico blowout prompted the Ministry of Petroleum to establish an Incident Management Team (IMT) which responds to emergencies. In the IMT various oil companies in Angola cooperate, and IMT equipment is stored at the Sonils base in Luanda. In any emergency response Sonangol, which leads from a legal point of view, has to be notified and it must approve any clean-up or other operation by the IMT. The technical operation/implementation is in the hands of the IOCs through the IMT. In the case of spills above the threshold, however, there are no mechanisms in place that get activated (for instance a court case) – rather, the ministry initiates ‘negotiations’ with IOCs, which are often not public.

4.2 Company standards and initiatives

4.2.1 Environmental impact assessments and technology options

Some oil companies are undertaking environmental impacts assessments (EIAs). However, some have questioned their effectiveness. Shell, for instance, undertakes around 30 EIAs every year in the Niger Delta. But Dadiowei (2009) claims the environmental impacts of SPDC’s activities on the Gbarain oil field communities of Bayelsa State are at least in part attributable to the company’s inadequate use of environmental impact assessments. In terms of mitigating measures, IOCs, NGOs and government agencies are accused of carrying out remedial environmental work on a piecemeal basis (Imoobe and Iroro 2009), but there is no comprehensive restoration strategy in place for the Niger Delta (FMoE et al. 2006).

While the use of modern technology could provide important opportunities to mitigate environmental and social impacts, companies operating in Africa are often accused of not using the best available technology and practices as they do in other parts of the world (e.g. FMoE et al. 2006). It is felt that even some comparatively simple upgrades, such as replacing old leaking pipelines and installations, could greatly improve their environmental performance.

¹⁹ Interview held under Chatham House Rule, Nigeria, May 2011.

²⁰ Set up in 2004 to bring order to the Niger Delta, the JTF comprises troops of the army, navy, air force and mobile police.

Similarly, the technology to avoid gas flaring is already available and commonly used in other countries (Opukri and Ibaba 2008). In particular, critics highlight the fact that the method of ‘open pipe flare’ found in Nigeria is no longer used by the same companies in developed countries (as outlined above).

4.2.2 Corporate social responsibility projects

Under the banner of ‘corporate social responsibility’, IOCs invest large amounts of money in community projects and direct payments to communities, but often with limited success. In the Niger Delta, CSR has been a matter of trial and error: early efforts by oil companies to achieve positive impacts were found to create greater divisions and inequalities in and between communities, creating conflict over ownership and compensation (see **Box 8** for a brief history of CSR in the Delta). Projects were often poorly designed and unsustainable, and the main beneficiaries tended to be local elites rather than the most vulnerable. Much of the literature in this area focuses on the experience of Shell through SPDC, which was heavily criticized for its social and environmental policies and collaboration with repressive security operations in the Niger Delta in the 1990s (**Box 9**).

Box 8: Evolution of CSR in the Niger Delta

Up until the social movements of the 1990s and the growth of militancy thereafter, companies did not regard community matters as their responsibility. In the early years of oil exploration in the delta which began in the mid-1960s, companies’ engagement with local communities was characterized by what Idemudia (2010) calls a ‘pay-as-you-go approach to community relations [... giving] communities what they thought communities needed’ (p. 835), such as school or hospital buildings, but without providing teachers or doctors. The failure of many of these projects led to (initially peaceful) community protests and calls for negotiations with the companies.

Conflict and militancy in the Niger Delta triggered change. By the late 1990s, violence in the Delta had increased sharply. In response, companies began to embrace the principles of CSR and pursue community development models. However, communities continued to lack any meaningful ownership of these projects, which were therefore unsustainable. Companies’ choices of target communities for CSR programmes also fuelled intercommunity disputes between those that benefited from such programmes and those that did not.

Facing production losses from shut-ins and severe security risks, companies have been attempting to seek more creative solutions to community-related problems.²¹ To this end, they are increasingly emphasizing partnerships with NGOs and communities.

Source: Idemudia (2010)

In response to conflict in the western Niger Delta in 2003, Chevron re-evaluated its community relations management approach which led to the launch of the Global Memorandum of Understanding (GMOU) process, which is designed around more active community participation as partners. Since then, the GMOU process has also been adopted by other companies including SPDC. It creates clusters of communities represented on ‘regional development councils’ (RDCs) and provides funding to these clusters so they can decide how the money will be best spent. This bottom-up approach to decision-making is designed to take the oil companies out of the equation in terms of determining community needs and to build communities’ capacity for leverage *vis-à-vis* the oil companies and local and state government. These initiatives are still at an early stage and it remains to be seen to what extent they will be more successful in garnering community support and promoting development.

²¹ Interview, Foundation for Partnership Initiatives in the Niger Delta, Nigeria, May 2011

While the oil companies can play an important part in the development of the region, they run the risk of filling the role of the state in terms of service provision. In some areas in the Niger Delta, oil companies are even seen as having taken over the role of government through extensive infrastructure provision (Idemudia 2008). In this role they are exposed to accusations of 'selective patronage'. This concern has also been raised in respect of the GMOU. Given a lack of both capacity and funding in local government authorities, there is concern that RDCs may undermine local government. Some observe that this important local government authority is already being left behind.²²

Critics have also noted that CSR only addresses some of the symptoms of poverty, but ignores underlying development challenges. Idemudia (2010) notes that 'while the GMOU strategy might offer an opportunity to mitigate the intra- and inter-community violence, its broader impact on poverty reduction, capacity building and livelihood improvement remains limited' (p. 842). Similarly, Peter Utting (2003) of the UN Institute for Social Development stresses that 'if large corporations are to contribute in a meaningful way to social and sustainable development, the CSR agenda needs to address the central question of the structural and policy determinants of underdevelopment, inequality and poverty, and the relationship of [transnational corporations] to these determinants' (p. 7). It is noteworthy that the lack of development experienced in the Niger Delta is not unique to the region, and that according to UNDP data, the human development index for the region is 0.564 – slightly higher than the average Nigerian HDI of 0.448.²³

Box 9: Shell's engagement in the Niger Delta

Shell's governance contributions remain contentious. Feil et al. (2008) argue that Shell has engaged in direct security governance in the Niger Delta to a limited extent by signing up to the Voluntary Principles on Security and Human Rights and exploring possibilities for their implementation. Shell also contributes to governance in the 'political order' and 'socio-economic' dimension by support for EITI and the investment of large sums into health care, education, youth development and economic empowerment, and community development programmes.

Critics contend that Shell and other MNOCs fail to compensate communities sufficiently for the negative externalities of oil production and do not involve communities sufficiently in decision-making processes. Some go further, arguing that certain qualitative costs of oil production – such as water pollution, light pollution and polluted agriculture – cannot be redeemed by CSR activities or compensation (Feil et al. 2008; Ite 2007). At times, even sincere CSR efforts can be counterproductive. Cash payments created incentives for hostage-taking and fuelled conflict among and between local communities for access to monies in the Niger Delta. Additionally, a 2003 internal Shell report found that its development efforts could incite conflict, as communities that were not targets of CSR projects became hostile to communities that were.²⁴ As militancy and production losses due to insecurity mounted, and public pressure increased, leading to a more negative international image, Shell and other IOCs operating in the region were forced to rethink their community engagement strategies. The success and sustainability of these new strategies have yet to be determined.

In Angola, most if not all IOCs are also engaged in CSR initiatives This is also codified in the *Petroleum Activities Law* under Article 26 which states that 'the National Concessionaire and its associates shall cooperate with governmental authorities in developing public actions to promote

²² Ibid.

²³ Ibid.

²⁴ Interview held under Chatham House rule, Nigeria, May 2011.

the socio-economic development of Angola', and that 'before such public actions are undertaken, the parties involved shall agree upon the scope of the projects, the origin of the funds to be used and the recovery of costs related thereto, if applicable'. Information on the effectiveness of these CSR initiatives, however, is limited.

Allan Cain (2007), director of the Angola-based NGO Development Workshop, argues that there are inherent risks if CSR initiatives take the shape of 'traditional' philanthropy:

- There have been ad hoc attempts by some petroleum sector companies to engage in social development but these often have not gone beyond corporate philanthropy.
- Oil and gas companies often try to 'take credit' for donating high visibility infrastructure and services. As a result, communities tend to hold them responsible for providing electricity, water, education, fictitious scholarships, cash, and other benefits to communities.
- Company-sponsored development projects often become a source of corruption that *increases* social tensions and local conflict.
- Community members may decide that they can leverage greater benefits by obstructing company activity, then demanding more.
- Politically influential parties may pressure companies into funding projects that are not well integrated or are not even high community priorities.

Aspects of such a philanthropic relationship include paternalism on the part of outside partners, and a distrust of locals to manage their own affairs. CSR and philanthropy may be easy ways to 'make friends' through patronage, but the risks remain.

Anecdotal evidence from Soyo also highlights some of the challenges with CSR activities as that created a perception among stakeholders that they are little more than window dressing and unsustainable.²⁵ In Soyo, CSR has only involved insignificant support to a local hospital which consisted of providing rubbish bins and shade. There are however plans for a new hospital as well. The road from the airport to the LNG plant has been tarred, but the other roads in Soyo remain as dirt tracks which turn into muddy rivers during rainfall. There is a general consensus amongst the few educated Soyo citizens that there has been some benefit from CSR by IOCs, but that it is the minimum possible. The potential gains for a little extra cost (for instance tarring more than one road in Soyo) have not been achieved.

4.3 Community engagement

As outlined above, the oil companies' engagement in particular in the Niger Delta has changed significantly over recent years, with an increasing emphasis on partnerships. However, a change in thinking on the part of oil companies with regard to host communities does not always translate to how they are perceived by host communities. Almost half the respondents in the Rivers State survey felt that companies do not comply with the standards and rules set by the government.

Among seven civil society groups surveyed in Rivers State, none believed that oil companies take steps to mitigate negative impacts. Only one agreed that oil companies take steps to listen and respond to community needs, but it argued that responses are selective and politicised. While only one of the seven reported that it had access to discuss matters relating to its work with oil company personnel, three of the six noted some positive change in the last five years, relating to availability of scholarships, drilling boreholes for water, roads, electricity and attempts at dialogue. Of the two that

²⁵ Interviews held under Chatham House Rule, Angola, April 2011.

noted change for the worse in the last five years, one stated that this was in relation to the use of state security agents to suppress communities.

At the same time, Niger Delta communities also do not trust the government to regulate the oil companies.²⁶ In the Rivers State survey, 19% of respondents felt that the government set standards but does not implement them while 26% said that the government sets no standards. Only 6% thought that standards were set and companies comply. While the region varies widely, these responses are indicative of perceptions of communities in the Niger Delta.

Company-community relations in the Niger Delta also highlight the differing perceptions of the role of companies in the local community. After decades of company presence, local people regard the companies as part of their community with the responsibility of prioritising community issues in decision-making and in negotiations with the government (Idemudia 2010). In some instances, the companies are even seen as having taken over the role of government through extensive infrastructure provision. In contrast, oil companies tend to view the government as largely responsible for community development and wealth redistribution as negotiations and contractual relationships have been limited to oil companies and the Federal Government, and revenues are redistributed to the state and local government. By failing to take community perceptions into account, oil companies have struggled to secure community support and use CSR activities to reduce conflicts. The perception of the communities is that it is their own oil. The severe environmental impacts and interference by oil companies in the lives of host communities, combined with a lack of understanding or rejection of the legal rights of oil companies by communities have led to conflict. Oil companies do share responsibility for perceptions that exist, and feeding this problem is a lack of structured mechanism for engagement by communities and a sectoral rather than integrated approach by government agencies.²⁷

While oil companies have been accused of taking advantage of weak governance structures, civil society organizations in the Niger Delta have been accused of becoming self-serving in an ongoing cycle of negative impacts and failed corrective or development projects. Corruption and a governance vacuum in the Niger Delta have left the situation open to conflict and mistrust and a counterproductive 'us and them' mindset has evolved. Competing interests have sustained problems relating to oil company activities in the Niger Delta.

Community discontent and feeling of neglect by both the IOCs and the government are also rife in Angola. According to the president of APESCAB, the politics of the government are strongly in favour of oil to the detriment of fisheries, environment and health, and the government has no interest in protecting the members of the association or the general population of Cabinda. APESCAB is not consulted on matters of its concern, and the organization has no leverage.

Even if IOCs such as Chevron were willing and interested in working directly with the fishermen, they are often unable to do so since their contact point is Sonangol which represents the interests of the government. This is also true on case of an oil spill: Chevron would file an incident report with the provincial Sonangol office which is then sent to Luanda. Similarly, fishermen have to direct their concerns to Sonangol. The Sonangol office in Cabinda province, however, is only a representative office and mainly deals with the distribution of refined products. All relations are conducted via the central headquarters in Luanda, with the provincial director of Sonangol merely being informed at a closed meeting.

There are some official avenues for dialogue between APESCAB, the government and oil companies, though they are rarely used. These are sometimes used for mediation talks between APESCAB and oil companies which may result in agreements, for instance to provide small payouts to fishermen for nets damaged by oil spills, but bigger issues such as compensation payments for

²⁶ Interview held under Chatham House rule, Nigeria, May 2011

²⁷ Interview, civil society network coordinator, Nigeria, May 2011.

lost revenues and livelihoods are not dealt with at this local level. In practice, however, IOCs often prefer to let Sonangol deal with any community relations/communications – especially in oil spill scenarios.

Members of APESCAB report that neither the central nor the provincial governments represent their interests well. This includes the Ministry of Environment and the Ministry of Fisheries. One potential ally of local fishing communities is the provincial secretariat for agriculture and fisheries. However they are not immune to the oil politics of Angola and frequently tell APESCAB that the association should not raise certain issues.

Experiences in Angola also highlight the importance of strengthening communities' ability to make their case to local authorities and oil companies. Commentators suggest that part of the reason why Zaire province's share of the oil revenue is disproportionately low is the general lack of education in the province and the consequent inability to assess oil production and revenues, rights of citizens and duties of the government which ultimately results in a general inability to hold government to account. Local elections (*autarquias*) could increase accountability and responsiveness of provincial officials, but these are not yet on the agenda and are only likely to take place in 2013 or later. In Cabinda on the other hand, higher education establishments exist and the population there has a much greater understanding of the rights and duties of citizens and government as well as a much greater awareness of political issues. Cabindans regularly demand to know how much revenue is generated by government from oil production in the province, and the government has to (and does) respond.

Experiences from other countries also highlight the importance of local community and government engagement. Research conducted by Angola-based Development Workshop into IOCs' relations with communities in different countries concluded that benefits to local communities from extractive industries can be best ensured if democratically elected local councils can negotiate directly with industries.²⁸ The research extracted lessons from the experience of the elected Shetland Island Council (which managed to build up a Shetland Community Development Fund of \$1 billion) as well as the Valdiz community's negotiations for compensation from IOCs, and experiences from the Niger Delta and Angola.

4.4 National regulations and initiatives in oil companies' countries

In addition to regulations in the countries where they operate, international oil companies are also subject to the jurisdictions where they are listed on a stock exchange. In the case of the operators in Nigeria and Angola the relevant jurisdictions are provided in Table 3

²⁸ Interview, Development Workshop, Angola, April 2011.

Table 3: Main operators in Angola and Nigeria and their stock exchange listings

Company	Index Code	Headquarters	Stock Exchange Listings
Alrosa	ALNU	Mirny, Russia; Moscow, Russia	MICEX
BP	BP	London, UK	LSE; NYSE; FWB
Chevron	CVX	San Ramon, California, US	NYSE
Cobalt International Energy	CIE	Houston, Texas, US	NYSE
ENI Group	ENI	Rome, Italy	NYSE; Milan
Esso	XOM	Irving, Texas, US	NYSE
ExxonMobil	XOM	Irving, Texas, USA	NYSE; LSE
Maersk Oil	MARSK B	Copenhagen, Denmark	CSE
Petrobras	PETR3.SA	Rio de Janeiro, Brazil	NYSE; BM&F Bovespa
pluspetrol		BA, Argentina	N/A
Shell	RDSA; RDSB	The Hague, Netherlands	LSE; Euronext NV; NYSE
Somolil		Luanda, Angola	N/A
Sonangol		Luanda, Angola	N/A
Total	FP	Courbevoie, France	NYSE; Euronext Paris LSE; BSE
Tullow Oil	TLW	London, UK	LSE
Vaalco	EGY	Houston, Texas, US	NYSE

Key: BSE – Brussels Stock Exchange, BM&F – Bolsa de Valores, Mercadorias & Futuros de São Paulo, CSE – Copenhagen Stock Exchange, FWB – Frankfurt Stock Exchange, LSE – London Stock Exchange, MICEX – Moscow Inter-bank Currency Exchange, NYSE – New York Stock Exchange

4.4.1 European Union initiatives on corporate governance and transparency

Two on-going regulatory initiatives in the EU are of relevance to the oil sector:

EU corporate governance framework

Currently, the corporate governance framework for listed companies in the EU combines legislation and 'soft law', including recommendations and corporate governance codes. While corporate governance codes are adopted at national level, Directive 2006/46/EC promotes their application by requiring that listed companies refer in their corporate governance statement to a code, and that they report on their application of that code on a 'comply or explain' basis.²⁹

On 5 April 2011 the European Commission published a Green Paper on the EU corporate governance framework (COM(2011) 164) aimed at assessing the need for improvement in corporate governance by EU-listed companies. The Green Paper cites a recent study which found that 'informative quality of explanations published by companies departing from the corporate governance code's recommendation is – in the majority of the cases – not satisfactory and that in many Member States there is insufficient monitoring of the application of the codes' (EC 2011b, p. 3).

While the Green Paper favours a continuation of the 'comply or explain' approach, it asks whether there should be more detailed rules to improve the quality of the explanations and whether national monitoring bodies, such as securities regulators, stock exchanges or other authorities, should be authorized to check whether the available information (in particular, the explanations) is sufficiently informative and comprehensive. The Commission has launched a consultation on the

²⁹ This approach means that a company choosing to depart from a corporate governance code has to explain which parts of the corporate governance code it has departed from and the reasons for doing so (EC 2011a).

Green Paper (until 22 July 2011). No date yet has been placed on any future legislative or non-legislative outcome proposals.

Disclosure of non-financial information

The European Commission has recently held public consultations to gather views on ways to improve the disclosure of non-financial information by enterprises. Current EU legislation addresses disclosure in the Fourth Company Law Directive on annual accounts which requires that '[t]o the extent necessary for an understanding of the company's development, performance or position, the analysis [in the annual review] shall include both financial and, where appropriate, non-financial key performance indicators relevant to the particular business, including information relating to environmental and employee matters'.³⁰

Implementation of this disclosure obligation varies across EU member states. Some countries may choose to exempt small and medium-sized companies. Several EU member states, including the UK, France, the Netherlands, Sweden and Denmark, have introduced requirements that go beyond the Directive. Certain member states have made the disclosure of non-financial information mandatory while others have adopted a 'comply or explain' regime. The Commission notes that demand has been growing in the EU for 'improving the comparability, reliability, and relevance of information companies disclose, for example, on issues relating to social and environmental aspects' (EC 2011c, p. 3).

A number of gaps were raised in a recent online public consultation organised by the European Commission which closed in January 2011 (EC 2011c). Participants noted that regulations differed considerably across the EU and half of the respondents felt that the regulations in their jurisdictions were insufficient. The current EU legislative framework was seen as non-transparent, thereby making it difficult for shareholders and others to judge CSR activities. Rather than developing new standards, however, most suggested drawing on existing best practice, e.g. those established by the Global Reporting Initiative, the UN Global Compact, the OECD Guidelines or ISO 26000 (see Section 3.4). Some supported integrated reporting at EU level, but many would like to see further thinking on how to make it operational without increasing administrative burdens.

Information that was judged to be useful included:

- whether or not the company has a CSR policy (and if so, how it is implemented);
- the principal business risks and opportunities arising from social and environmental issues and how these are taken into account in company strategy; and

key information on other specific issues e.g. employee engagement, customer satisfaction, public perception of company, environmental issues and innovation, but also in the field of human rights and corruption and bribery.

4.4.2 Norway

The **Norwegian Agency for Development Cooperation's Oil for Development programme** assists developing countries (upon request) in managing their petroleum resources.³¹ The programme was launched in 2005 and has co-operated in seven core countries in the long-term, and, in a limited capacity, in a further 13 states. In SSA, core countries supported by the programme include Angola, Ghana, Mozambique, Sudan and Uganda. In Angola, for instance, the programme aims at promoting improved management of national petroleum resources by strengthening the capability to exercise regulatory control and to develop policies and strategies ensuring better

³⁰ Directive 2003/51/EC of the European Parliament and of the Council of 18 June 2003 amending Directives 78/660/EEC, 83/349/EEC, 86/635/EEC and 91/674/EEC on the annual and consolidated accounts of certain types of companies, banks and other financial institutions and insurance undertakings

³¹ See www.norad.no/en/Thematic+areas/Energy/Oil+for+Development.

administration of the Angolan petroleum resources. SSA countries with limited cooperation include Côte d'Ivoire and Tanzania.

As part of the Oil for Development programme, the **Petroleum Governance Initiative** is a bilateral collaboration between the Government of Norway and the World Bank. It is looking to develop petroleum governance policy as well as supporting developing countries to implement appropriate petroleum governance frameworks. The three issues it addresses are petroleum sector governance and revenue management, environmental management and community development. Activities are carried out at the global level (e.g. surveys of environmental management systems and decommissioning schemes) and by providing technical assistance on resource management in specific countries. Based on information available on the World Bank website, no country-specific programme has so far been implemented in sub-Saharan Africa.

Another interesting initiative is the **Government Pension Fund** – Europe's largest pension fund worth over \$500 billion – and the associated **Council on Ethics**. The pension fund is financed through the surplus wealth generated by Norwegian petroleum income. It was set up in 1990 in an effort to counter the effects of the forthcoming decline in income and to smooth out the disrupting effects of highly fluctuating oil prices. The government-initiated Council on Ethics is tasked with evaluating whether companies financed by the fund comply with its ethical guidelines. Based on recommendations from the Council, various companies have been excluded from the fund either because of the sectors in which they operate (such as arms or tobacco) or because they are found to have violated the ethical guidelines. Given the significant size of the fund, these exclusions can have important financial and public relations impacts.

4.5 International standards and initiatives

4.5.1 Environmental and social impacts of oil production

A number of measures have been undertaken in order to try and mitigate the negative effects of industry on humans and the environment. Some of the more pertinent ones are listed here:

The World Bank's **Global Gas Flaring Reduction Partnership** (GGFR) provides a platform for oil producers, importers and oil companies to promote joint efforts to increase the use of natural gas associated with oil production and thus reduce flaring and venting.³² Launched in August 2002, the GGFR is a public-private partnership designed to bring together representatives from all the stakeholders affected by gas flaring. Partners include government representatives from oil producers (including Angola/Songangol, Cameroon, Chad, Equatorial Guinea, Gabon and Nigeria/NNPC in Africa), oil importers (including the EU, the US, Norway and others) and major oil companies, including several of those operating in Africa.

The **United Nations Global Compact** provides organizations and businesses with a framework to align their operations and strategies with ten specific principles in the areas of human rights, environment, labour and anti-corruption.³³ Launched in 2000, the UN Global Compact is a voluntary corporate responsibility initiative which commits organizations to including those principles in their strategies and decision-making processes. It has more than 8,700 participants, including over 5,300 businesses in 130 countries. There are currently no participants from Angola, but 88 from Nigeria. One major criticism of the UNGC is the fact that it has no enforcement or monitoring powers and most companies can join the compact without having to demonstrate progress. As a result it has been described as a 'bluewash' (GCC 2008).

The **OECD Guidelines for Multinational Enterprises** set out voluntary principles and standards for responsible business conduct in areas such as environment, information disclosure, combating

³² See go.worldbank.org/NEBP6PEHS0.

³³ See www.unglobalcompact.org.

bribery, and human rights. First adopted in 1976, those guidelines constitute one of the four elements of the Declaration and Decisions on International Investment and Multinational Enterprises. Countries adhering to the guidelines agree to encourage multinational enterprises operating in or from their territory to implement them.

Voluntary multi-stakeholder initiatives such as the ones set out above are well-meant initiatives however they rarely achieve what they set out to do. The initial idea is often diluted along the way and momentum is lost. In the worst case total failure is disguised by positive rhetoric. Nevertheless, these initiatives can provide important functions in terms of raising awareness and engaging the private sector in tricky and important issues. Higher level voluntary (global) measures should be seen as complementary to other local and (inter-) national regimes such as the UNCAC or OECD Convention on Bribery of Foreign Public Officials and/or other legal instruments.

4.5.2 Revenue transparency and management

As already mentioned above, EITI sets a global standard for increasing the transparency of revenues from oil, gas and mining. EITI produces regular publication of material related to oil, gas and mining payments by companies to governments ('payments') and all material revenues received by governments from oil, gas and mining companies ('revenues'). While this is in theory very simple, payments and revenues have to tally. This is thus a potential starting point of integrity on which to build.

Among initiatives to improve revenue management, the World Bank in 2008 launched the **Extractive Industries Transparency Initiative Plus Plus** (EITI++) which 'seeks to develop national capability to handle the boom in commodity prices, and channel the growing revenue streams into fighting poverty, hunger, malnutrition, illiteracy, and disease'.³⁴ EITI++ complements the EITI by offering capacity building and technical assistance to improve the management of resource-related wealth. To this end, it aims to improve the quality of contracts for countries, monitoring operations and the collection of taxes and royalties. It will also improve economic decisions on resource extraction, managing price volatility, and investing revenues effectively for national development.

The **Natural Resource Charter** is a set of principles for governments and societies on how to best manage the opportunities created by natural resources in development.³⁵ It was drafted by an independent group of experts in economically sustainable resource extraction, assembled by Paul Collier, Director of the Centre for the Study of African Economies at Oxford University. The Charter comprises of 12 precepts, or principles, that encapsulate the choices and suggested strategies that governments might pursue to increase the prospects of sustained economic development from natural resource exploitation.

One of the most important recent regulatory developments to increase transparency of the oil industry is the 'Lugar-Cardin' Provision in Dodd-Frank Act of 2010 (Wall Street Reform Act), which was signed into law by US President Obama on 21 June 2010. The Act demands all US-listed/registered extractive industry companies to disclose payments to governments in SEC filings starting in 2012/13 (Gary 2010). This new law is a success for the PWYP coalition after a five year effort. The legislation will cover around 90 percent of internationally operating oil companies – US and foreign.

Similar requirements are also in place for companies listed on the Hong Kong Stock Exchange. South Korea may also soon follow suit. In December 2010, similar legislation was also introduced in the National Assembly to increase the transparency of payments made by Korean resource extractive companies (Donowitz 2011).

³⁴ See go.worldbank.org/XYLUR236T0.

³⁵ See www.naturalresourcecharter.org.

The process has also been set in motion in the EU to develop regulations on revenue transparency. Inspired by the US move, France's president Nicolas Sarkozy has recently been lobbying for a European law to require companies to publish payments to governments for oil and minerals. His proposals have also been endorsed by the UK (Stewart 2011). The call for greater transparency was also echoed in the final G8 communiqué where governments committed to 'setting in place transparency laws and regulations ... that require or encourage oil, gas, and mining companies to disclose the payments they make to governments' (GW 2011).

In the EU, European Council President Van Rompuy and European Commission President Barroso in a joint statement outlining priorities for the G8 summit in Deauville in May 2011, announced that the Commission would table legislative proposals in October that include the obligation for companies to publish information about their activities in support of the EITI.

A number of other civil society-led initiatives are also working towards increasing the transparency of extractive industries:

- **Publish What You Pay** is a global network of civil society organizations that are promoting transparency of oil, gas and mining revenues.³⁶ The network also has members in African oil-producing countries, including 18 (national and international) members in Angola and 16 (mainly international) members in Nigeria.
- **The Revenue Watch Institute** promotes the transparent and accountable management of oil, gas and mineral resources for the public good.³⁷ In addition to helping to promote the EITI, the institute undertakes research on best practices in revenue management and through local partnerships to create savings and expenditure strategies for natural resource incomes. Among current and prospective African oil producers, the institute is engaged in Angola, Cameroon, Côte d'Ivoire, DRC, Gabon, Ghana, Liberia, Nigeria, Tanzania and Uganda.

4.5.3 Standards for sustainable lending

There are also opportunities to encourage and support sustainable practices of oil companies through standards and regulations applied to the banks that finance them.

Equator Principles

The Equator Principles (EP) provide a financial industry benchmark for determining, assessing and managing social and environmental risk in project financing. Launched in 2003 in response to NGO criticism, the Principles were developed by private sector banks led by Citigroup, ABN AMRO, Barclays and WestLB, with support from the IFC and input from NGOs. By May 2011, 70 financial institutions from 28 countries operating in more than 100 countries had adopted the Principles.³⁸ A survey carried out in 2006 found that the Equator banks have underwritten \$10 billion in project financing debt, representing 34% market share (Ellis and Caceres 2006).

The Principles are modelled on World Bank and IFC environmental standards and social policies. Originally, the guidelines were applied globally, across all industry sectors, including mining, forestry, and oil and gas, and to all projects with a capital cost of \$50 million or more. This was revised in July 2006 to apply to all projects worldwide over \$10 million (including advisory roles). Though the EP were devised and promulgated under the auspices of the IFC and its Performance Standards, they have no formal oversight organization. They are simply a set of principles that exist by common

³⁶ See www.publishwhatyoupay.org.

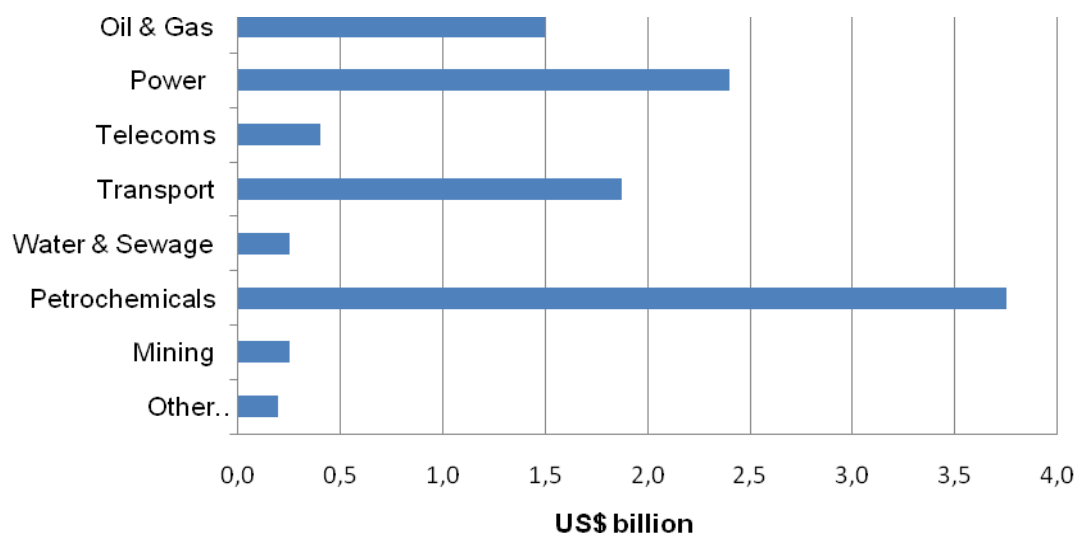
³⁷ See www.revenuewatch.org.

³⁸ See www.equator-principles.com for a full list.

agreement among the banks that have adopted the EP. Banks do not sign anything; rather, the term 'adopt' appears to have been carefully chosen to highlight the voluntary nature of the EP.

Participating institutions also include banks which play an important role in financing the oil industry in Africa. The 2006 survey found that oil and gas was the fourth largest sector financed by Equator banks after petrochemicals, power and transport (**Figure 8:**).

Figure 8: Equator debt financing by sector (2006)



Source: Ellis and Caceres (2006)

For instance, the France-based BNP Paribas entered into a syndicate with the China Development Bank, China Exim Bank, China Construction Bank, ING Bank NV, Natexis Banques Populaires, Agricultural Bank of China, Bayern LB, Calyon, KBC Finance Ireland, Standard Chartered Bank, Bank of China and Société Générale to offer financing worth \$1.4 billion to Sonangol Sinopec International Limited (SSI), a joint venture majority-owned by Sinopec with Sonangol (BNP Paribas 2007). More recent feedback however has revealed that SSI is not what it seems. Vines et. al (2009) have shown that SSI is part of an opaque web of companies and interests which spans from China to Angola and other African countries such as DRC and Guinea amongst others. SSI is also listed as an equity stakeholder in Angola. The opacity and lack of clarity regarding ownership and participation (and thus ultimate responsibility) may have effects on social and environmental risk – especially in the event of an oil spill or other disaster.

A number of foreign investors including European banks such as RBS. have also supported development of Madagascar's untapped oil reserves, where one field alone holds estimated recoverable reserves of 2.5 billion barrels -- enough to put the country within reach of the top 30 oil producers. The two main tar sands fields in Madagascar are at Bemolanga and Tsimiroro, in the western Melaky region of Mahajanga province. Banks involved in the development of such tar sand fields have been heavily criticized by numerous environmental NGOs (Evans et al. 2010).

Principles of Responsible Investment

Signatories of the Principles for Responsible Investment commit themselves to incorporating consideration of environmental, social and governance issues into investment decision-making and ownership practices ⁽³⁹⁾. The Principles were finalised in 2006 under the auspices of the UN Secretary-

³⁹ See www.unpri.org.

General and coordinated by the UNEP Finance Initiative and the UN Global Compact. As of June 2011, the Principles counted 903 signatories, including asset owners (235), investment managers (505) and organizations that offer products or services to asset owners and/or investment managers (163). Many of the participating asset owners are European, including a sizeable number of state and private pension funds.

European Investment Bank

The European Investment Bank (EIB) – the long-term lending bank of the European Union – is involved in European financing in Africa as the 'investment facility' of the European Development Fund, the main instrument for providing EU aid to the African, Caribbean and Pacific states. The EIB can play a role in addressing environmental and social impacts of oil production by granting loans for projects that mitigates such impacts and through the application of socially responsible investment standards to its lending.

In 2001-2010, the EIB invested just over €5 billion in Africa, 85% of which went to individual countries while the remainder included loans to African regions or the continent. Nigeria was the largest country recipient during that decade with around €470 million, including a €240 million loan, the largest EIB loan in Africa to date, provided to three Nigerian banks (FirstBank of Nigeria, Guaranty Trust Bank and Stanbic IBTC) to facilitate private and public private partnership infrastructure. Other lending included small and medium-scale health and education projects and a cement factory. None of the projects were specifically linked to the oil sector.

Basel Committee on Banking Supervision

Some observers also see opportunities for the Basel Committee on Banking Supervision to play a role in ensuring a greater regard for sustainability criteria in all lending, financing and investment decisions of banks and other financial institution (including among banks investing in the oil sector). The Committee was created by the central bank Governors of the Group of Ten nations.⁴⁰ in 1974 and meets regularly four times a year. The Committee formulates broad supervisory standards and guidelines and recommends statements of best practice in banking supervision in the expectation that member authorities and other nations' authorities will take steps to implement them through their own national systems, whether in statutory form or otherwise.

A recent report from Friends of the Earth Europe, BankTrack, Campagna per la riforma della Banca Mondiale and Berne Declaration (van Gelder and Stichele 2011) recommends that 'capital requirements – as defined in the Basel Capital Accord II, the recommendations for the Basel Capital Accord III and transposed into the EU Capital Requirements Directive – could force banks to put aside a minimum percentage of their capital to cover for potential defaults of other loans or investments. These current requirements should be modified to ensure that banks better and more thoroughly integrate sustainability factors in all their lending, financing and investment decision making processes. Sustainability risks can and should play an important role in differentiating the risk weighting factors for sectors and types of companies, while leaving the overall capital requirement at the same level. (p. 10)

⁴⁰ Belgium, Canada, France, Italy, Japan, the Netherlands, the United Kingdom, the United States, Germany and Sweden

5. EXPERIENCES FROM OTHER SECTORS

This section reviews regulatory initiatives in other natural resources sectors to draw out lessons that could also be applied to the oil industry. In the mining industry, international and national initiatives have also sought to stop trade in minerals that fund conflict, such as the Kimberley Process on conflict diamonds and recent US legislation to regulate trade in 'conflict minerals' from the DRC. Other regulations have focused on preventing trade in illegally sourced natural resources, such as timber, fish and wildlife.

5.1 Kimberley process for conflict diamonds

The Kimberley Process (KP) is a joint government, industry and civil society initiative to prevent trade in diamonds that fund conflict.⁴¹ Through its certification scheme, the KP imposes requirements on its members to certify shipments of rough diamonds as 'conflict-free'. As of December 2009 the KP had 49 members, representing 75 countries, (the European Community counting as a single participant), including all major rough diamond producing, exporting and importing countries. It has the support of the UN, based on a UN General Assembly's Resolution supporting the creation of an international certification scheme for rough diamonds (UNGA 2011).

Participating states agree to issue and require certificates for import and export of rough diamonds, and prevent import and export from non-participants. Furthermore, they must establish internal controls to eliminate conflict diamonds from shipments of rough diamonds that they import and export.⁴² The KP has been reasonably successful: There are no current 'diamond wars', and conflict diamonds are a negligible part of the trade (it was 15% ten years ago). Certain features of the KP could presumably be adapted for the oil sector. Virginia Haufler (2008) argues that the fusing of international governmental commitment and enforcement with industry self-regulation could be a promising institutional model for other areas.

However, other features of the oil sector may lend it less well to a scheme such as the KP. For example, there is a question of whether the oil industry is as concentrated, and as easily controlled, as the diamond industry. Furthermore, whereas as luxury items diamonds have little intrinsic value and rely heavily on cultural taste and reputation, oil has a high intrinsic value and demand for it is presumably less sensitive to negative connotations brought about by campaigning. Owing to the nature of oil its large-scale illegal trade usually requires more government involvement than that of conflict diamonds which were easily acquired by small scale operators and rebel groups. The negative impacts of the illegal trade in oil are often more diffuse, involving greater environmental impacts and often deeper and higher-level corruption than the diamond trade.

Finally, some of the weaknesses of the KP would also have to be addressed. For instance, a number of NGOs, such as Amnesty International, One Sky and the Fatal Transactions campaign, believe that the 'guarantee' established by the certification scheme is flawed by the lack of mandatory, impartial monitoring of the diamond industry itself (MI 2009). Others, such as the African Diamond Council, have attacked it for being fundamentally unenforceable on the ground, claiming that the system of officials and paperwork on which it relies is easily undermined in many countries, particularly in Africa (PAC 2010). Finally, the definition of conflict diamonds has been criticized for excluding diamonds that fund repressive regimes or lead to human rights abuse, and Global Witness and Partnership Canada Africa have called for revision of the term (PAC 2010).

⁴¹ Defined as rough diamonds used by rebel movements to finance conflict aimed at undermining a legitimate government (Kimberley Process Certification Scheme document, Preamble and Section I, available at http://www.kimberleyprocess.com/documents/basic_core_documents_en.html accessed on 29 May 2011)

⁴² Kimberley Process Certification Scheme document Section II-V.

5.2 US legislation to prevent trade in conflict minerals from DRC

The recently adopted Dodd-Frank Act 2010 mentioned above also deals with so-called 'blood minerals' from DRC. The law requires companies listed on the US stock exchange to disclose whether they are using conflict minerals that originate from DRC or its nine immediate neighbours. Companies also have to report on the due diligence they have undertaken to verify their supply chain and avoid conflict minerals. The regulation will impact in particular the electronics industry, which sources minerals such as tin, tungsten, tantalum and gold from the region. While the requirements only apply to listed companies, it is expected that they will also trickle down to smaller operators along the supply chain (Shoemaker-Hopkins and Thwing Eastman 2011).

5.3 Regulatory initiatives to combat illegal trade in natural resources

Various EU, US and international regulations have been implemented to address trade in illegally sourced timber, fish and wildlife. As noted above, trade in illegally sourced oil is also a concern in Africa, in particular in the Niger Delta where oil is stolen from pipelines and sold on the international market. The following section provides a brief overview of EU illegal timber and fishing regulations (see also Appendix 3 for additional detail), the US Lacey Act and Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).⁴³

Under the EU's Action Plan for **Forest Law Enforcement, Governance and Trade (FLEGT)**,⁴⁴ the EU is negotiating voluntary partnership agreements (VPAs) with timber producing countries.⁴⁵ The VPAs include a licensing system designed to identify legal products and license them for import to the EU (unlicensed products will be denied entry). This is combined with capacity assistance to partner countries to set up their own licensing scheme. The VPAs also contain provisions for independent third-party monitoring of the system's functioning in the partner country. While slow in their implementation, the VPAs have the potential to trigger long-lasting governance reforms.

In October 2010, the EU adopted **another regulation to address illegal timber imports** – the 'EU timber regulation'⁴⁶ – which will apply from 3 March 2013 to allow time for the development of secondary legislation. The regulation prohibits the placing of illegally harvested timber and timber products on the EU market and requires operators to implement due diligence in order to minimize the risk of doing so. It specifies elements of the due diligence systems that operators must implement, as well as penalties for failing to do so.

In the US, the main regulatory mechanism to address illegal trade in natural resources is the **Lacey Act** which provides US authorities with the means of encouraging the timber industry to exercise 'due care' in preventing imports of illegal timber. The determination of a violation of foreign law is made by the judge presiding over the case. The Lacey Act provides a powerful combination of penalties ranging from confiscation of products to fines and imprisonment.

The differences between the Lacey Act and the EU timber regulation lie primarily in their coverage of actors in the supply chain and specifications of requirements for compliance. The Lacey Act's offence of handling illegal timber applies to all actors in the supply chain and leaves it up to them to work out what steps to take to avoid committing such an offence. The prohibition offence in the

⁴³ For a more detailed comparison of the EU timber and fish regulations, see also Baumüller et al. (2009). For a comparison of US and EU regulations on illegal timber see Brack and Buckrell (2011).

⁴⁴ European Council Regulation No 2173/2005 of 20 December 2005 on the establishment of a FLEGT licensing scheme for imports of timber into the European Community.

⁴⁵ By the end of 2010, negotiations had been concluded with Ghana, the Republic of Congo, Cameroon and the Central African Republic. Negotiations are also under way with DRC, Gabon, Indonesia, Liberia, Malaysia and Vietnam.

⁴⁶ Regulation (EU) No 995/2010 of the European Parliament and of the Council of 20 October 2010 laying down the obligations of operators who place timber and timber products on the market.

EU regulation applies only to operators but provides some detail on what they need to do to avoid handling illegal products.

In the fisheries sector, the **EU regulation to combat illegal, unreported and unregulated fishing**⁴⁷ introduces comprehensive certification and traceability requirements for anyone wishing to import fish products into the EU. Any import of fish or fish products has to be accompanied by a catch certificate validated by the flag state of the vessel that caught the fish. The certificates will need to be passed along the entire supply chain. The regulation also provides for extensive enforcement measures such as financial or criminal sanctions, fish import bans or blacklisting of vessels or countries.

The wide scope of the fisheries regulation, including its emphasis on verification and enforcement by European authorities, is at least partly motivated by global fisheries resources being a 'global common'. While strong on enforcement, the regulation makes only limited provisions for capacity building and does not provide for stakeholder engagement. There is also no verification mechanism to ensure that certified fish are indeed caught legally, raising questions about the actual validity of the catch certificate.

At the international level, the only multilateral agreement to address illegal trade in natural resources is the **Convention on International Trade in Endangered Species of Wild Fauna and Flora** which entered into force in 1975. Trade in species listed on either of the three CITES appendices are either strictly regulated or prohibited. Where trade is allowed, the species need to be accompanied by an export permit and a certificate of origin. While the Convention is generally judged as successful, it has to date largely focused on commercially minor species while attempts to add heavily traded commodities, such as mahogany, toothfish or bluefin tuna, have generally met stiff resistance.

These initiatives have their own genesis which is closely related to the nature of the subject matter at hand (timber trade, fishing, and endangered species). Oil is very different not only in its physical properties (liquid) but also (and partly because of it) in terms of its exploration, production, transport and trade. Moreover its impact on societies and environment is different too. Unlike the illegal trade in timber fish or endangered species, oil spills create acute environmental challenges.

Nevertheless, these initiatives can potentially offer useful lessons for global regimes to guide, regulate and even legislate oil production in Africa with a view to mitigate its ill effects on society and environment. While such analysis is outside the scope of this report, the most important points are likely to relate more to 'structure' rather than 'content' and may include aspects regarding monitoring, evaluation and enforcement as well as creating political will and ensuring private sector buy-in.

⁴⁷ Council Regulation (EC) No 1005/2008 of 29 September 2008 establishing a Community system to prevent, deter and eliminate illegal, unreported and unregulated fishing.

6. CONCLUSIONS AND RECOMMENDATIONS

Negative environmental and health impacts of the oil industry are a major concern in SSA. Information on oil spills remains sketchy. While larger spill are more likely to be reported (albeit at times with delays), the problems created by smaller, but more common spills are easier to conceal and thus tend to be underestimated. In addition to direct health and environmental effects, impacts on livelihoods pose a particular threat in African countries where local communities largely depend on natural resources for agriculture and fisheries.

Gas flaring also continues, in particular in Nigeria, even though the technology is available and widely used in other countries. Cost-effective solutions are required not only to prevent health impacts and greenhouse gas emissions, but also to turn the valuable resource in affordable energy for local communities as a contribution to poverty alleviation in oil-producing countries.

While oil companies are implementing some measures to address these impacts, efforts remain insufficient. CSR activities are piecemeal and short-term, EIAs are insufficiently robust and requirements for accountability and transparency are either not available or not enforced. Community engagement also remains challenging, giving rise to social tensions and even unrest. Nigeria can provide useful lessons in this regard and current engagement strategies through the GMOUs are worth monitoring to see whether they can also provide a model for other producers.

In oil-producing countries, the main limitation is often not the absence of regulations, but the lack of political will and capacity to implement and enforce them. Thus, any solution will ultimately have to deal with issues of governance, including increased revenue transparency, more equitable and effective revenue sharing and use, a better balance of power between ministries, and greater citizens' participation.

The EU, as a major importer of SSA oil and host of companies investing in SSA, has both the responsibility and the opportunity to promote greater sustainability and equity in the sector. Engagement with 'new' producers will be particular important to learn from past experiences in other countries and lay the foundation for oil to contribute to national development. Current efforts to promote greater revenue transparency are an important step that needs to go hand in hand with a push for revenue management and a greater emphasis on preventing trade in oil sourced illegally or from conflict areas.

Based on the preceding analysis, a number of recommendations are put forward to influence oil companies' behaviour towards more sustainable practices through regulations in the companies' host countries, promote technology solutions, target EU development assistance, enhance transparency of oil operations, strengthen producer country measures, and build partnerships between the stakeholders. Different actors will be more suited than others at these various points of intervention. Impact is determined by capacity and ability of actors as well as their responsiveness and sustainability of their actions.

6.1 Recommendations

6.1.1 Regulatory measures targeted at Europe-based companies

The **European Parliament, EU member states** and **European civil society organizations** could

- **Actively input into new EU-wide legislation on revenue transparency in the extractive industries** to be developed in the coming months. (Section 4.4.1).
- **Respond to the Commission's Green Paper on corporate governance** by proposing to go beyond reporting on compliance with existing codes by undertaking a review of

existing national corporate governance codes to identify opportunities for strengthening them and enhancing coherence across the EU. (Section 4.4.1).

- **Input into EU-level discussion on disclosure of non-financial information** (Section 4.4.1) to propose:
 - a review of existing non-financial reporting standards to assess how they could best be adapted to the European context and be made compulsory for European companies;
 - the development of a monitoring standard for CSR activities, including measurement criteria and tools, to ensure positive social and environmental impacts.
- **Influence oil companies through the banks and funds that finance them** (Section 4.5.3) by
 - supporting better monitoring and reporting of compliance with existing sustainable lending standards, such as the Equator Principles (for banks) and the Principles of Responsible Investment (for funds);
 - encouraging pension funds in EU member states to apply social and environmental screening of their investments in oil companies, modelled on the Council on Ethics of the Norwegian pension fund.
- **Encourage the European Investment Bank to provide loans to African oil-producing countries to enhance economic diversification and development** (Section 4.5.3), e.g. to
 - develop modern refineries, LNG projects and distribution networks for petrol and gas to improve domestic energy supply;
 - set up health and education projects in oil-producing countries;
 - guarantee micro-lending initiatives in enable local communities to better cope with the negative impacts of oil companies and to benefit from economic opportunities, such as the supply of food to oil operations (as piloted by BP and Chevron in Angola).

6.1.2 Technology development and support

The **European Union and European companies** could **promote the development and diffusion of cost-effective, locally usable technologies for**

- Encouraging European oil companies, government agencies and higher education and research institutions **to develop effective technologies in oil fingerprinting** to help reduce oil theft, trace the source of pollution and stop imports of certain oil products, (e.g. that originates from areas with a poor human rights or environmental record). The technology may be developed with a view to exploring **regulatory measures to ensure legality of oil imports that build on EU timber regulations** (Section 5.3).
- **Reducing gas flaring**, including the technology to turn gas into LNG and make it available at affordable prices to local consumers in oil-producing countries which could be developed, financed and promoted through the Global Gas Flaring Reduction Partnership (among other channels (Section 3.2).
- **Monitoring and cleaning up oil spills**, including mobile phone-based technology to report oil spills and technology that can be used by local communities to deal with minor but numerous spills (Section 3.1).

6.1.3 European development assistance

The **European Union** could promote directing European development assistance to

- Set up **independent oil spill response teams and clean up mechanisms in oil-producing countries** in order to delink the problem and its remediation from the political context and financial constraints.
- **Channel EU education funding in support of skills and capacity building with a view to economic diversification**, in addition to enabling members of oil-producing communities to benefit from direct and indirect employment opportunities provided by the oil sector, to the extent that they are available.
- **Strengthen local governance** through improved administration and by promoting appropriate local elections and decentralisation, as well as by building capacity of local communities to understand and promote their rights.
- **Undertake independent scientific surveys of oil-producing regions to establish baseline data**, engaging national and local governments, international and national researchers and national civil society groups in the research process.

6.1.4 Revenue and production transparency

International **oil companies and their partner governments and companies in the oil-producing countries** could

- **Implement country by country reporting to make the accounts of multi-national companies more transparent** to help tackle tax avoidance (transfer pricing), improve democratic accountability, curb crime and remove large and destabilising risks from the global financial markets.
- **Continue and support EITI (more)** as an easily applicable mechanism necessitates governments and ministries to 'get their numbers right' by comparing oil company payments to government receipts.
- **Publish oil contracts.** Oil is a national resource for the public good and therefore any contracts should be published in the public interest.
- **Make sure that audits (fiscal and cost) are done at every stage of the process (incl. at exploration and development)** to facilitate good book-keeping as well as audits down the line when exploration and especially development costs incurred by oil companies are often offset against profit oil during the production phase. Funding for audits during these early stages of exploration/development could be funded by external parties (donors).
- **Commission audits through international leading auditors**, given that the oil industry is a highly specialized and global industry.
- **Encourage government to publish and report on audits**, including follow-up activities and action points for the various ministries involved. Support to the government departments involved at this stage may be suitable through capacity building and technical support if needed.
- **Encourage governments to not only publish data (e.g. EITI data, budgets, audits, etc.) but to publish it in a way that is accessible and comparable (e.g. people's budgets)**, i.e. the method of accounting should be similar (cash or accrued) and the period of accounting should be the same (this may differ depending on financial year vs. calendar year for example).

6.1.5 Producer-country measures

Producer-country governments (also under the pressure of international and domestic civil society organizations) could

- **Clarify joint-venture legislation and production sharing agreements** to introduce environmental benchmarks in future agreements for concessions and increase transparency and accountability of oil operators.
- **Streamline management structures and competencies in government agencies dealing with oil industry** (both exploitation and environmental aspects), including by strengthening the role and human resource capacities of environmental and health departments at national and provincial levels.
- **Support the domestic use of gas for energy generation** by reducing market distortions which make alternative solutions for addressing gas flaring non cost-effective and supporting the development of national infrastructure for local energy production and use.

6.1.6 Building partnerships

All stakeholders could

- **Foster greater engagement between oil companies and local communities in the areas where they operate**, for instance through the adopting of a GMOU-style process as currently trialled in Nigeria.
- **Pilot strategic partnerships between the EU and oil-producing countries, particularly building on current momentum in Nigeria as sub-Saharan Africa's biggest producer.** The initiative could be modelled on the EU–South African partnership which provides a framework for political and economic cooperation between the partners.
- **Engage in particular with the parliaments of new and prospective African producers**, such as Uganda, Ghana, Tanzania and Mozambique, and the Pan-African Parliament to share lessons learned from established producers on how to minimise social and environmental impacts of oil production, maximize developmental benefits and design credible national and continental oil policies.
- **Engage with regional bodies, such as the Economic Community of West African States (ECOWAS)**, to assist with strengthening their regulations for region-wide minimum standards, and in particular assist with implementation and monitoring.
- Support the establishment of a **network of researchers and civil society organizations in oil-producing countries, the EU and other oil importers** to facilitate data gathering and sharing, strengthen capacity to analyse and use the data, exchange information about best practice and provide international support for research and advocacy.
- **Liaise with Norway to share best practices and identify areas where the EU could support existing initiatives**, e.g. by expanding the Oil for Development programme or the Petroleum Governance Initiative to other Sub-Saharan African countries.
- **Integrate oil-related discussions into existing bilateral dialogues with other oil investors in Africa, such as China and India**, to explore opportunities for cooperation.

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APPENDIX 1: OIL SUPPLY IN AFRICAN COUNTRIES (1995–2010)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Nigeria	1,998	2,007	2,140	2,160	2,136	2,169	2,261	2,123	2,279	2,332	2,631	2,442	2,353	2,169	2,211	2,458
Algeria	1,347	1,391	1,435	1,402	1,394	1,483	1,559	1,575	1,889	1,967	2,091	2,122	2,175	2,181	2,086	2,078
Angola	645	708	713	735	745	746	742	896	902	1,054	1,261	1,435	1,768	2,014	1,948	1,988
Libya	1,428	1,447	1,504	1,448	1,377	1,469	1,428	1,383	1,485	1,582	1,721	1,810	1,845	1,875	1,789	1,789
Egypt	929	934	870	848	873	793	748	743	744	700	717	792	780	719	678	663
Sudan	0	2	5	10	69	187	211	240	272	345	352	381	467	481	486	514
Equ. Guinea	5	17	52	83	102	168	181	213	206	368	375	363	369	359	346	323
DRC	188	201	265	277	283	292	266	260	256	243	236	247	214	240	274	302
Gabon	365	368	370	352	331	315	270	251	241	239	266	237	244	248	242	228
South Africa	207	208	210	214	195	202	209	211	202	234	216	202	196	194	192	192
Chad	0	0	0	0	0	0	0	0	36	171	177	158	144	127	115	126
Tunisia	90	88	85	81	84	80	73	79	77	82	77	78	86	87	91	84
Cameroon	111	108	124	121	100	85	77	70	67	66	83	87	83	82	77	65
Côte d'Ivoire	8	16	20	21	16	12	12	13	20	28	40	63	53	60	59	45
Rep. of Congo	30	30	28	26	22	26	24	23	22	21	20	20	22	20	22	21
Mauritania	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	0	0	31	15	13	17	12
Ghana	4.1	6.6	5.2	5.0	6.0	7.1	7.2	7.4	7.5	8.6	7.4	7.1	7.7	7.7	7.7	8.9
Morocco	-1.2	3.9	4.8	4.5	3.8	4.0	4.0	4.5	3.7	3.4	4.3	4.1	3.9	3.9	3.9	3.9

(thousand barrels per day)

APPENDIX 2: PARTICIPATION OF SSA COUNTRIES IN OPEC AND EITI

SSA members of Organization of the Petroleum Exporting Countries (OPEC):

- Nigeria (joined in 1971)
- Angola (joined in 2007)
- [Gabon (joined in 1975 but withdrew in 1995)]

EITI-compliant countries in SSA:

- Ghana (October 2010)
- Nigeria (March 2011)
- Niger (March 2011)
- Central African Republic (March 2011)
- Liberia (October 2009, but must be revalidated by 13 October 2014)

Other EITI-compliant countries: Azerbaijan, Kyrgyz Republic, Mongolia, Norway, Timor-Leste, Yemen (suspended)

EITI candidate countries in SSA:

Burkina Faso, Cameroon, Chad, Côte d'Ivoire, Democratic Republic of Congo, Gabon, Guinea , Madagascar, Mali, Mauritania, Mozambique, Republic of the Congo, Sierra Leone, Tanzania, Togo and Zambia

Other EITI-candidate countries: Afghanistan, Kazakhstan, Albania, Peru, Guatemala, Indonesia, Trinidad and Tobago and Iraq

APPENDIX 3: COMPARISON OF EU REGULATIONS ON ILLEGAL FISHING AND LOGGING

	IUU fishing regulation	VPAs	EU timber regulation
Proof of legality	Catch certificate	FLEGT licence for timber shipments	No proof of legality required, but risk of illegality must be minimised.
Definition of legality	Catch certificates certify that catches 'have been made in accordance with applicable laws, regulations and international conservation and management measures'.	Defined in relation to laws of country of harvest; scope set out in VPA.	Timber must be harvested 'in accordance with the applicable legislation in the country of harvest'.
Issuing of proof of legality	A public authority from the flag state of the vessel(s) which made the catches from which the fishery products have been obtained	Designated licensing authority.	'First placers' must possess a due diligence system which can provide access to information that legality is 'reasonably assured'.
Submitting proof of legality	<ul style="list-style-type: none"> • Anyone importing fish or fish products into the EU (excluding aquaculture products and some marine products). • Catch certificate not required for catches for EU vessels from EU waters and sold on the EU market. 	Any operator in a VPA partner country exporting timber to the EU.	No proof of legality of timber products require, but any operator in the EU who first places timber on the EU market must possess due diligence system.
Determining occurrence of illegal activity	<ul style="list-style-type: none"> • Port inspection • Catch certificate • Community alert system • Sightings at sea • IUU fishing information system • Other information 	Licensing system subject to independent monitoring; Joint Implementation Committee provides oversight.	Risk assessment based e.g. on assurance of legal compliance, prevalence of illegal harvesting of particular tree species and in particular countries, UN Security Council sanctions and supply chain complexity
Enforcement/sanctions	<ul style="list-style-type: none"> • Immediate sanctions against vessel • Request flag state to investigate vessels and enforce measures • Joint investigation between port Member State and flag state (and coastal state if in waters of third country) • Measures against vessels placed on a Community vessel list (by decision of the European Commission) • Measures against non-cooperating third countries (identified by the European Council) 	Non-licensed timber from partner country cannot enter the EU. VPA compliance overseen by joint committee; agreement can be suspended by either party.	Member states' competent authorities monitor implementation and effectiveness of due diligence systems and define penalties.
Capacity-building	<ul style="list-style-type: none"> • Consider capacity constraints when deciding on the designation of non-cooperating third states • Simplified catch certificate for small vessels 	Capacity-building components built into agreements.	No provisions
Governance impacts	<ul style="list-style-type: none"> • Catch certificates only accepted from countries with relevant laws in place • Strengthen RFMOs through emergency measures against RFMO violations 	VPAs: includes gap analysis of existing forest legislation and reform process; transparency of information; multi-stakeholder engagement.	Likely to increase uptake of forest certification and legality verification schemes.

Source: Adapted from Baumüller et al. (2009).

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