Whose energy future? Big oil against people in Africa



The groundWork Report 2005:

Whose energy future? Big oil against people in Africa

Written by David Hallowes and Mark Butler

September 2005

ISBN 062035017-2

Published by groundWork , P.O.Box 2375, Pietermaritzburg, 3200. South Africa

Tel: +27 -33 342 5662 Fax: +27 -33 342 5665

Email: team@groundwork.org.za Web: www.groundwork.org.za

Dedication: This Report is dedicated to "The Ogoni Nine": Ken Saro-Wiwa, Dr. Barinem Kiobel, Saturday Dorbee, Paul Levura, Nordu Eawo, Felix Nuate, Daniel Gboko, John Kpuine and Baribor Bera, who were executed by the Nigerian state for resisting the tyranny of big oil on the 10 November 1995. groundWork calls for this day to be commemorated annually as a day for Environmental Justice action.

Cover page: The flare in Africa is a photo of a flare in the Niger Delta that has been burning for 30 years at a local pump station. Photo taken by Bobby Peek, groundWork.

Preface

For the "benefit of mankind" - how noble! How can one help but buy into such a statement? This statement is one of the guiding slogans of the biggest corporate "greenwash" event to be held on the African continent since the World Summit on Sustainable Development (WSSD), the 18th World Petroleum Conference. Their greenwash is so well developed that in a recent South African Airways publication the advert for this event actually acknowledged that during the WSSD the petroleum companies took flak from civil society due to environmental concerns, and said that they are going to respond using this platform.

The groundWork Report 2005 should ensure that the world, and Africa in particular, is not deceived by the corporate spin that will be emerging from Sandton, Johannesburg in September 2005.

This year's report goes beyond the borders of South Africa, and ventures into Africa, examining the ravages of the oil industry and civil society responses to these environmental injustices.

Much has been written on the environmental and social ills of oil in Africa. A brief literature search will show plenty of material. What makes this research different is that it brings together for the first time the upstream and downstream impacts of the oil industry, where the oil is drilled and where it is refined. And, most importantly, it looks at how people are resisting the political domination that accompanies oil and at the alternatives to corporate rule that are germinating in civil society.

In South Africa, this is also the 50th anniversary of the Freedom Charter, which states "the people shall govern", and not "the corporates shall govern". Yet, as the 18th World Petroleum Conference will demonstrate, the corporates want partnerships where they have the power: The power to reap profits, manipulate government and undermine democracy.

It is within this context that this report seeks to understand how a better world can be achieved. A world that is not held to ransom by the oil industry as we are now, as oil starts shifting towards the \$100 per barrel level, and community resistance is met with more violence and political repression.

An oil-based future is questioned in the concluding sections of the report. It is not only unsustainable because it is so polluting and the oil will run out, but because it is an energy future principally for the elite. Ordinary people living next to oil wells and oil refineries are most certainly not getting the benefits promised to "mankind". In fact they are the scapegoat for the elite of mankind, for they not only have to live with the pollution of oil production processes but they also do not have access to the very energy for which they are made to sacrifice their health and wealth.

preface

Over the last three years, The groundWork Reports have consistently questioned not only the system that produces injustice but also the civil society and political responses needed to ensure that injustices are reversed. And they have presented the initial possible building blocks toward another world. This report builds on that tradition. It suggests that one of the key processes to ensure that justice and true democracy is achieved is to move the imagination and the practice of political resistance beyond the oil era, to a place where local people's movements define and control their own energy needs and systems.

The inevitable decline and disintegration of the fossil fuel regime has perhaps already begun. What civil society needs to do is to ensure that the world understands this, and that we prepare ourselves for a future without oil, managing our own energy provision at local levels. We can start at the 18th World Petroleum Conference.

Bobby Peek Director groundWork

Contents

Int	troduction	7
	Whose energy future?	9
1.	Global Context	11
	Military behemoth	11
	The mask of failure	12
	The American Century	16
	The character of US hegemony	16
	Signal crisis for the US regime	19
	Late boom	19
	Terminal crisis and after?	20
	Brief history of oil	22
	Lamp light	22
	Engines of war	25
	Supply panics	27
	The US takes the lead	28
	Signal crisis and oil shocks	30
	Money rules	32
	Protection racket	35
2.	Upstream in Africa	37
	Africa's oil rush	37
	Making dependency	38
	Colonial hangovers	38
	Working for the Americans	42
	Subsidising oil and gas	44
	Africans doing it to themselves	45
	Producing environmental injustice	47
	Enclosure	49
	Externalisation	50
	Exclusion	51
	Getting at the oil	53
	Getting the oil out	59
	Losing their grip on the Delta	65

contents

3.	Downstream in Africa	70
	Refining in Africa	72
	Refining environmental injustice	74
	Refineries in South Africa	74
	Enclosure	77
	Externalisation	79
	Exclusion	83
	Markets	85
4.	Movements against and beyond oil	89
	Class curse	89
	Voices of civil society.	96
	Collaboration	96
	Reform	97
	Environmental justice	100
	Voices of the peoples	101
	Saro-Wiwa's legacy	101
	Life from death	108
	The politics of resource control in Bolivia	111
	Solidarity crossing borders	116
	Conclusion	
So	urces	

Tables

Table 1: Sub-Saharan African crude producers

Table 2: Oil dependency

Table 3: Shell Nigeria production and emissions in tonnes

Table 4: Refineries and ownership in South Africa
Table 5: Refinery expansions - 1990 to 2004

Table 6: Air emissions for selected refining and chemical processes

Figures and maps

Figure 1: From Standard Oil to Super Majors

Figure 2: Map of the Niger Delta

Boxes

Box 1: Peak oil

Box 2: Corporate pariah
Box 3: The resource curse

Box 4: The Extractive Industries Review

Box 5: 'It wasn't us'

Box 6: How refineries work
Box 7: The 'oilgate' scandal
Box 8: Disputed production

Box 9: Enclave oil

Box 10: Venezuela's 'Bolivarian' option Box 11: The Kaiama Declaration

Box 12: Call that legit?
Box 13: Pleasing no-one

Box 14: What the people really need

Introduction

The World Petroleum Congress (WPC) meets in Africa for the first time in September 2005. This is the 18th WPC and it brings delegations from 57 member countries to Johannesburg's upmarket Sandton Convention Centre. Everybody who is somebody in the oil and gas business will be there. To be more precise, oil corporations, investors and government officials will be there since no-one else really qualifies as a somebody in the business.

The outsiders, environmental justice organisations calling attention to the human costs of the oil industry, will be just that: outside.

The theme of WPC 18 is 'Shaping the Energy Future: Partners in Sustainable Solutions'. The future, it seems to say, is in safe hands and it will be sustainable. At the same time, however, it makes very clear that the hands in question are those of the petroleum industry: the insiders at the Sandton Convention Centre are the ones who will shape the energy future.

The WPC's mission statement clarifies that they will be doing this for the whole of society.

The purpose of WPC is to promote the management of the world's petroleum resources for the benefit of mankind. It aims to encourage the application of scientific and technological advances and the study of economics, management, environment and social issues facing the industry [WPC 2004].

The WPC thus assumes that it has been given a social mandate, represented here as 'the benefit of mankind'. In the speeches of oil executives, the mandate is more commonly seen as coming from 'our customers' or 'our stakeholders'. The mandate is for 1. a cheap and reliable supply and 2. environmental and social responsibility. Thus, WPC President Eivald Røren comments that the WPC 18 theme "reflects the continuing efforts of the petroleum industry to meet consumers growing demand for cleaner, reliable and affordable energy supply in socially acceptable ways" [WPC 2003]. 'Sustainable Solutions' is about how to do this and the answer is basically "investing heavily in new technology" [Baird 2003: 36].

On the formal agenda at WPC 18, the big topics will be about the 'business case for sustainable development' and 'partnerships'. Partnerships between the corporations and governments, the partnership of WPC with the Organisation of Petroleum Exporting Countries (OPEC), WPC partnerships with other big energy forums like the International Gas Union (IGU), the International Association of Oil & Gas Producers (OGP) and the International Petroleum Industry Environmental Conservation Association (IPIECA), partnerships between

corporations co-operating in joint ventures. Informally, WPC provides the opportunity for networking, cutting deals and negotiating the division of the spoils. This, perhaps, is the real business.

It is a comfort to know that all this is for the benefit of mankind - or consumers.

In Sandton, as in London and New York, the fashionable owners of gas guzzling 4x4s (or SUVs) certainly appreciate cheap fuel. So does the motor industry - its best profits come from SUVs and, in the US, motor corporations have lobbied to make sure they are not subject to fuel economy standards that apply to other family cars. This worked for big oil too. In the 80s and 90s, oil was cheap and the corporations wanted more bigger consumers to 'grow' the market.

Consumers are not just your average motorist or the passengers in a South African taxi. Driving into Iraq for the second time in a decade, the US military runs on petrol too. But as the bombs fell, ordinary Iraqis might have wondered if they were part of the petroleum industry's 'mankind'. And as the bombs fell, the price of oil went up - which is good for big oil too. The super-majors posted record profits in 2003 and again in 2004.

The people of the Niger Delta will also wonder if they are not excluded from the definition of mankind. No-one has formally declared war on them but Ken Saro-Wiwa, who was murdered on the instructions of the Nigerian state ten years ago, described his people as the targets of ecological warfare. This warfare has been waged against them by the oil industry and the state working in 'partnership' while most of the oil is pumped out to the consumers in the northern economies.

The US oil corporations and George Bush's administration are cooperating on another partnership. It is a partnership of denial: climate change is not good for oil, it's not good for the US economy and it's not good for the American way of life. Therefore, it is not happening and it is not good for the American people to hear evidence that it is happening. Unfortunately, this will not stop the already apparent increase in extreme weather events - the storms and droughts that wreck people's lives, starting with the poorest who are most vulnerable.

Whose energy future?

The people outside the convention centre will be asking: Whose interests will be served by the energy future shaped by the WPC insiders at Sandton? Who comes inside the WPC's definition of mankind and who falls outside? What cost will those who live on the wrong side of the definition be made to pay for the benefit of the insiders?

The outsiders also take a different view of the future of energy and who should shape it. People who live next to the oil wells, flow stations and refineries, people who see the oil and gas flowing past them while their own energy needs are neglected, people who see their own assets being laid waste are acting to save themselves from the WPC's future. They are looking for a different future. They believe that another world is possible. And they see that no-one but themselves will make a world where they too are part of humankind and can enjoy a life of plenitude based on human and environmental richness rather than on the endless accumulation of monetary wealth.

This report takes an outside perspective. Chapter 1 looks at the global context. It starts with the war on terror which, on the face of it, looks very much like a war for oil. Yet it has far wider implications. Under the heading of the American Century, the report considers why US military victories are beginning to look like defeat. The oil industry developed along with the rise of the US to the status of a global power. The second part of this chapter gives a quick run through of the history of oil and aims to show the dynamics of the industry as it has been shaped by the major powers and dominant interests - the big players who will be inside at the WPC.

Chapter 2 is on Africa's 'upstream' industry - extracting the crude oil. It opens with an overview to locate oil in Africa in the global scene. It then looks at the making of environmental injustice all along the crude production chain, focusing on Nigeria and Chad which are the oldest and the newest Sub-Saharan producers. Chapter 3 carries on down the petrochemicals production chain to the 'downstream' industry which is about refining and markets. It focuses on refining in South Africa and concludes with a brief discussion of how African markets are being shaped.

Chapter 4 opens with a review of the way in which the elite classes of the oil regime have been constructed and then takes up the different view of the energy future that is being shaped, debated and acted on in different ways within civil society. Civil society outside the corridors and orders of power is not a neat and tidy place. Even 'progressive' civil society is not a single coherent thing: people are working at different scales, from local to national to global; they come from different parts of the world where the possibilities for action are shaped by locally specific histories; they are differently positioned in relation to the structures of dominant power either because of their class backgrounds or because of their global situation in the north or south. From the

contradictions and tensions the report teases out the agendas that are shaping the debate in different ways from different locations.

Just as the corporations are networking, so too is civil society. An exciting dimension of this is the connecting of different locals across the global space. South African groups from communities on the refinery fencelines have been networking with communities in the US for nearly a decade. They have also connected with groups from oil producing regions through Oilwatch. This year, groundWork organised a South African solidarity visit to the Niger Delta where they saw something of the continuing destruction brought by the ecological war and listened to people's stories:

At Odioma, we witnessed a community that had been burned to the ground by its own government. As we walked through the streets of what had several months ago been a prosperous fishing village, we found nothing but gutted houses and the charred remains of personal effects ... Chief Orumiegha-Bari described how on the morning of 19 February 2005, the military's Special Task force arrived, shooting into the streets and burning down homes. [Khanyile and Losier 2005: 7]

Stories like this are all too common in the Delta. They are all too common in Africa. They are all too common in the world. They describe the energy future on offer from the insiders at WPC. The work of solidarity, linking environmental justice struggles in South Africa and Nigeria, in Africa and the Americas, Asia and Europe, from the local to the global, is the work for another energy future. This report is offered as a contribution to the debate in the firm conviction that, if another world is possible, then its seeds are being germinated here in struggle.

1. Global Context

Military behemoth

George Bush's war on terror headed straight for the oil lands. Following the break-up of the Soviet Union, the major oil corporations had already moved to cut deals with the new republics surrounding the Caspian Sea area. The US government had also established a strong diplomatic presence in the area and military links with countries such as Georgia. With the justification of the invasion of Afghanistan, it consolidated its growing influence with military bases in Uzbekistan and Kyrgyzstan.

In the 19th Century, these were the original oil lands of the Russian Empire. To the south was Persia (now Iran) which the British marked as within their sphere of influence to keep Russia away from the Gulf sea ports. That stand-off was about control of trade routes to the east. But the border that it established between 'West' and 'East' remained essentially unchanged throughout the 20th century, even as the US supplanted Britain as the leading western power and as the Russian Empire was transformed into the Soviet Union. The US advance across this border confirms its victory in the Cold War. More than this, it appears to shift the boundaries of international power established by the 'great game' of 19th Century imperial rivalries.

The war on terror also provided the spurious justification for the invasion of Iraq. There is little doubt that oil was central to the strategic calculations behind the invasion. The US moved quickly to secure the oil wells and preserved Iraq's oil administration while targeting the rest of the civil service - from health and education to water, sewage and energy services - for destruction. The war profiteers are led by oil services corporation Halliburton and closely linked to Bush's administration.

The war on terror provides the justification for the US military moving in on Africa too. In the process, it is displacing the former colonial powers as the primary military 'partner' for most African countries. Various official reports and statements emphasise the link with oil. For example, "the report of Vice-President Cheney's Energy Task Force stressed the importance of gaining and maintaining access to African oil resources, which US intelligence assessments expect to increase to as much as 25% of US oil imports by the year 2020" [Hartung and Berrigan 2005].

In the east, a major base in Djibouti was established in 2001 and overlooks the Middle East. Other bases, such as in Uganda, Senegal and Botswana, are designed to service the 'rapid response' strategy. The permanent US troop contingent is light but maintains an infrastructure to enable a rapid build up of troops when required. The island state of Sao Tome e Principe is thought likely to host the next US base, providing a

platform for monitoring the off-shore oil installations on the African west coast. At the same time, joint military exercises and training programmes in 43 African nations provide for a regular US military presence across the continent. This is backed by military aid funding to a more select group of countries. In 2003, the top two recipients of this aid were Nigeria and South Africa.

US spending on military aid and training in Africa increased sharply from about \$20 million in 2000 to \$37 million in 2005. This is supplemented by a four-fold rise in US arms sales to Africa between 2000 and 2003, with government to government sales reaching \$40.3 million and commercial sales \$7.7 million in 2003¹. These figures are, however, dwarfed by US military spending in the rest of the world. Including the Iraq war budget of \$82 billion, the Pentagon will spend \$500 billion in 2005 - about the same as the rest of the world put together².

This spending has bought it massive supremacy in military technologies as well as a global military presence with US troops and military facilities located in foreign and supposedly sovereign countries around the world. It appears then, that with the Soviet Union out of the way, US power cannot be challenged and successive US governments have said they will keep things that way.

The mask of failure

The appearance, however, is deceptive. Two years ago, the 2003 groundWork Report argued that the US is facing a major crisis - economic, political and environmental. In this report, we argue that US military supremacy masks its failing power. The war on terror is intended to reassert the US grip on global power. It is the legitimating label given to the neo-conservatives who came to power with Bush by the spectacular 9/11 attacks on New York and Washington in 2001. As sociologist Giovanni Arrighi notes, the attacks "scared the hell out of the American people" and so served the same purpose as the Cold War: justifying the US's global role and, more immediately, providing a reason for war "that made sense to the American public" [2005a: 54].

The 'neo-cons' had already published their agenda before Bush's election under the title of the Project for a New American Century³ and it is this project that is now rebranded as the war on terror. This is a war without end and with no defined enemy. It is a declaration that any political group or organisation or any country may be defined as outlaws at any time convenient to the US. It announces a more directly imperial role for the US, claiming the right to 'pre-emptive' attack but also defining the use of force by the US as police actions - Saddam Hussein was not so much an enemy as a criminal. Effectively, it proclaims that the US alone decides the legitimate use of international force and does so in its own interests. Far from protecting liberty, this looks like a protection racket.

See Hartung and Berrigan 2005

²See Green Left Weekly, 11 May 2005, at www.greenleft.org.au

³See www.newamericancentury.org

Controlling the world's oil taps is a key instrument of the Project for a New American Century. Oil provides the energy that drives the industrial world including its war machines. Ensuring that the US has enough of it and can also turn off the supply to potential rivals for power - economic, political or military - thus seems like a double security. But what is at stake is not just oil. At stake is the continuation of the system of global capitalism under US leadership.

Maintaining US global leadership is not, of course, simply a neo-con idea. It is a basic assumption of all US policy and divisions within the US establishment are about how to do it. Journalist Greg Palast has shown that there were alternative plans for dealing with Iraq through a discretely organised coup that would dispose of Hussein but keep the Iraqi Ba'athist⁴ administration in place under a more amenable leadership. The neo-con strategy for all out invasion, the destruction of the Iraqi government and a total makeover of Iraq in the interests and image of free market America was hotly contested within the US State Department responsible for foreign policy.

It was also contested by 'big oil'. According to Palast, the major corporations felt that privatisation of Iraq's oil industry would likely turn it over to cronies of the new regime. In any case, they were not interested in owning "oil fields in flames" - widespread sabotage being the likely consequence if they were seen to have stolen the oil through force of arms. Finally, they were opposed to the broader neo-con goal of using the privatised Iraqi oil to destabilise the Organisation of Petroleum Exporting Countries (OPEC) because this would destabilise oil prices and undermine corporate profits. In Palast's view, big oil has won back its influence on policy and the privatisation agenda in Iraq now excludes oil.

Political crisis

The larger failure of the neo-con strategy is also evident. Rather than showing that the US can impose its will unilaterally, it has shown that it still needs the endorsement and support of at least the other major powers in the United Nations Security Council. Rather than demonstrating that the US is invincible, it has shown it to be vulnerable on the ground in Iraq and, despite winning the conventional war in record time, it now operates in the shadow of its humiliation in Vietnam.

More than this, the strategy has undermined any claim that the US can make to acting for the common good of humanity - or at least for the common interest of power holders in the capitalist system beyond its own political and corporate elite. The blatant fabrication of evidence to justify the invasion reveals that brute force is the standard of US leadership. More recently, its administration of the occupation has been shown to be deeply corrupt - plundering the Iraqi treasury, giving open season to corporate war profiteers and schooling Iraqi cronies in corruption⁵. In another echo of Vietnam, the neo-con strategy has divided the American people and alienated almost everyone else. This alienation is most intense in the Arab world itself and, for long-term ally Saudi Arabia, the political costs of hosting US troops now outweigh the benefits - hence the growing importance of the US base in Diibouti.

⁴ The Ba'ath Party was Hussein's party and all government posts were staffed from its ranks. The US justified destroying the capacity of the Iraqi state by removing Ba'ath members from the civil service as necessary to eliminate Hussein's power base.

See, for example, Ed Harriman's account of official audit reports [2005].

Most immediately, the failure puts in doubt the US ability to take out Iran, the next country on its hit list. Again, the issue is being represented as being about Iran's supposed ambitions to develop nuclear weapons. The US has been careful not to mention Iran's oil reserves which rank second after Saudi Arabia and ahead of Iraq in third place. American oil corporations, meanwhile, have been banned from dealing with Iran. According to oil analyst Michael Klare, they are not likely to be allowed back "as long as Iran is controlled by anti-American mullahs and refuses to abandon its uranium enrichment activities ..." [2005]. The intention of this boycott was to force Iran back into the fold of US influence on the assumption that it is dependent on western markets, capital and technology. It has backfired. Iran is now doing deals with China, Pakistan, India and even Japan, all of whom are defying US instructions and investing in Iranian production. Carrying through with plans for regime change in Iran is thus likely to escalate resistance from all sides.

Dissent to the regime of global capitalism led by the US has sharpened throughout the world. Popular protest against the war was unprecedented in its global scope and drew on the global civil society networks that have developed in opposition to neo-liberal globalisation. Many of the governments that allied themselves with the US did so at considerable risk to their electoral positions. Resistance is gathering strength particularly in some key oil producing states where people are demanding 'resource control'. In Venezuela, the popular government of Hugo Chavez survived a US-backed coup attempt and is nationalising the oil industry and redistributing wealth in favour of the poor. In Bolivia, a more radical demand for people's control is carried forward by social movements who have thrown successive pro-US governments out of office. In Nigeria, resource control has become a popular rallying cry uniting people across the devastated oil regions of the Niger Delta.

Economic crisis

At the same time, the US economy is looking increasingly vulnerable - the more so since it has had to pay the bills for this war itself in contrast to the first Gulf War when it could boast having made a small profit from the contributions of other countries. In 2003, The groundWork Report noted that the US economy needed the infusion of \$1 billion every day from the rest of the world. In 2004, this figure had risen to \$1.5 billion. Now, in 2005, it stands at over \$2 billion. Arright notes that it has off-set the cost of this transfer of capital by purposely deflating the dollar, effectively defaulting on a substantial portion of its debt by reducing the value of money borrowed from foreigners [2005a: 69].

The foreigners, particularly China and Japan, are still investing in US debt for two reasons. First, because the dollar has been made the world's reserve currency and second because a collapse of the US market would create a global recession and hit the export-oriented economies of East Asia hardest. In effect, this looks increasingly like a kind of voluntary tribute paid to the US by virtue of its global dominance. But it cannot be sustained and is likely to undermine the dollar's status.

This status is critical to the US's leading position and the link with oil is significant. Oil is traded in dollars, which means that all consuming countries must maintain a dollar reserve to pay for it. This is not the only reason for keeping dollar reserves but, given the sums of money involved in oil transactions, it is certainly a very significant one. These 'petro-dollars' not only expand the reach of US economic control but also give it considerable leverage over global oil flows. In 2000, Hussein announced that Iraq would trade its oil in euros, "a decision that conspiracy theorists - and not a few eminent Middle Eastern experts - say triggered the US invasion" [Bush 2004]. Paul Harris [2003], for example, argued that the real target of the invasion was to prevent the euro from usurping the dollar as the world's premier reserve currency by warning off any oil producer thinking to copy Iraq. It has not, however, had this effect. To the contrary, Janet Bush (no relation) reports in the New Statesman⁶ that Indonesia is actively considering trading in euros while Arab disapproval of the war is creating a growing "consensus for switching out of dollars ... OPEC has openly discussed the option and even Saudi Arabia, once America's staunchest Middle Eastern ally, is reported to be considering rejecting the dollar" [2004].

Environmental crisis

Recognising the environmental dimension of the crisis has no place in the Bush administration's vision of world leadership. Within the US itself, it has rolled back environmental laws and undermined the Environmental Protection Agency. Internationally, it has notoriously refused to sign the Kyoto Protocol on Climate Change - despite the US being the original architect of this market oriented and ineffective agreement - again asserting its prerogative to act unilaterally. Effectively, US policy on climate change - a mixture of denial and obstruction - has been crafted by its cronies in the US oil industry to ensure business as usual and it is widely seen to be acting for a narrow sectional interest rather than for the common good.

The poor of the world will be hit first and worst by the effects of climate change although the rich world, and the US in particular, are responsible for the bulk of the greenhouse gas emissions that have caused the problem. Nevertheless, as the 2004 groundWork Report noted, business as usual will produce environmental disturbances that finally overwhelm the capitalist system itself. Fossil fuels are, of course, at the centre of the problem. In their 1998 report on the oil industry, *Drilling to the Ends of the Earth*, the Rainforest Action Network and Project Underground put the issue like this:

Over 800 billion barrels of oil have been burned since the search for oil began in 1859 ... It's not that we're running out of oil - it's that we cannot afford to burn what we already have. This business cannot continue as usual ... the oil industry currently spends \$156 billion annually seeking new reserves of oil and gas. Meanwhile, the world's top climate scientists agree that to burn this new petroleum ensures devastating climate change. If we burn more than approximately a quarter of existing reserves, we risk suffering the worst impacts of climate change. [RAN & PU 1998: 1]

⁶ Thanks to Patrick Bond for this reference.

At local levels, the environmental depredations of the oil industry are intrinsic to the production of poverty as people's resources are laid to waste. Nigerian environmentalist Ken Saro-Wiwa described it as ecological warfare waged by the state and corporations against the people. It is a process that transforms landscapes to make them serviceable to the needs of corporate capital and the production of wealth. Chapters 2 and 3 of this report take a close-up look at the process all the way down the oil production chain.

The American Century

The US proclaimed its global leadership during the 20th Century under the banner of the American Century. At the dawn on the 21st Century, it remains without question the leading power in the world. Indeed, the 1980s and 1990s saw the defeat of its global rival for power, the collapse of 'third world' resistance to its economic policies and the retreat of labour unions. At the same time, the political and economic elite - the capitalist class - never had it so good. Everywhere the rich got richer and nowhere more so than in America. The dramatic failure of the Project for a New American Century seems to run against this endless flow of accumulating wealth and power. But a longer historical view suggests that this is not simply the aberration of a strategic error.

The history of capitalism is marked by the succession of distinct regimes of accumulation, according to Giovanni Arrighi. To date there have been four such regimes of accumulation and each has been led and dominated by a specific political power. In the 19th Century, this power was Britain - the third in line. In the 'long' 20th Century, it is the USA. The transition from one regime to the next is marked by two crises. The first is the 'signal crisis' and it is followed by the 'terminal crisis' of the old regime and the accession to world leadership of the new regime.

The 'signal crisis' of the British regime of accumulation was the economic depression that lasted from 1873 to 1896. From this time on, the growing power of the US became increasingly evident. US power, however, developed within the global order of capital commanded by Britain and was subordinate to it. At the beginning of the 20th Century, the British regime enjoyed a resurgence that seemed to guarantee its continued leadership. This was followed, however, by its terminal crisis which extended from 1914 to 1945 and was marked by the two World Wars, with the great economic depression of the 1930s in between. During this period the US increasingly assumed leadership of the global capitalist system and finally re-ordered that system in its own image.

The character of US hegemony

The transition from the British to the American regimes also involved a transformation of global capitalism. It is not just that the US assumed leadership, but that its leadership was accompanied by substantial changes in the

way in which economic and political power was organised and exercised. For our purposes, the key differences are as follows:

First, Britain's global leadership was founded on direct imperialism. The US by contrast, was born out of the war of independence from Britain and saw itself as anti-imperialist - despite the fact that the making of the USA itself was an imperialist exercise. Besides, the US itself wanted access to the raw materials and markets monopolised by the old colonial powers. Under its hegemony, the European colonial empires quickly crumbled following the Second World War. Apart from some Pacific and Caribbean islands, the US preferred to exercise power through the international system of nation states supposed to be independent both politically and economically. Each state was thus held to encompass a distinct national economy even though the US refused to tolerate any exercise of independence that threatened its economic interests. Whereas the British had actually practiced the free trade ideology that it preached and tariff protection was used by weaker economies to protect their emerging industries, the US turned tariff protection into an "offensive weapon in the hands of the powerful" [Hilferding quoted in Arrighi 1994: 290]. It protected its own markets while using free trade rhetoric to force lesser nations to open their markets to US corporations.

The mechanisms through which the US exercised leadership and domination were the UN system, along with international financial and trade institutions⁷, and the Cold War. Both mechanisms could be used to claim the common interest of the 'free world' in US leadership while also justifying overt and covert coercion. The regions at the frontier of the Cold War were generously supported. The Marshall Plan financed the reconstruction of Europe - while also expanding the market for US goods - and the Korean War served the same function for Japan with South Korea and Taiwan following behind.

Second, American leadership was accompanied by the rise of corporate capitalism. This represented a transformation of the organisation of production and trade. Large corporations certainly existed within the British regime but they were there primarily to do the bidding of the state. Thus, the East India Company served to open India to British trade and then to subjugate it to British rule, but its charter was revoked when the task was done and the British state took control of the country. The Royal Niger Company played a similar role in Nigeria, forcibly suppressing competition from local traders and appropriating territory and command of productive resources, particularly in palm oil. Its charter was revoked in 1898 once it had paved the way for colonial rule and also demonstrated the value of the trade. For the most part, however, British production and trade was organised through relatively small and decentralised firms "held together by a complex web of commercial transactions" [Arrighi 1994: 283].

In contrast, the US regime gave birth to giant corporations which centralised decision making to enable corporate bosses to control and coordinate production from beginning to end - from raw material input through all stages of manufacture to marketing the product. These were 'vertically integrated' corporations

⁷ The key institutions are the International Monetary Fund, the World Bank and also the General Agreement on Trade and Tariffs which has now been replaced by the World Trade Organisation.

which could control the relationship between supply and demand and so dominate markets and suppress, if not eliminate, competition. They were centred on giant factories with the mass of workers organised along 'rational' production lines. New entrants into any particular industry therefore had to be able to invest massive amounts of capital in order to compete.

This form of organisation was rapidly exported around the world but US transnational corporations (TNCs) had two advantages: first, they enjoyed steep tariff protection from international competition in the US itself, the world's largest market; and second, they benefited from the forced opening of other markets. Through foreign direct investments (FDI) they took "managerial control over substantial sectors of foreign economies" [Gilpin quoted in Arrighi 1994: 73]. At the same time, being vertically integrated, they internalised a growing proportion of international trade. Thus, for example, the oil corporations extracted crude oil in one country and sold it to their own refineries in another. In doing so, they could manipulate prices to transfer wealth to their home markets in the north.

Third, the key energy source for the British regime of accumulation was coal, whereas the key energy source for the US led regime is oil. The British regime was the first to develop an industrial production base. It therefore depended on a massive supply of cheap energy, leading one 19th Century economist to remark that coal stands "entirely above all other commodities. It is ... the universal aid, the factor in everything we do" [Jevons quoted in Yergin 1991: 543]. Oil has substantially taken its place, particularly in the northern markets: "In 1955, coal provided 75 percent of total energy use in Western Europe, and petroleum just 23 percent. By 1972, coal's share had shrunk to 22 percent, while oil's had risen to 60 percent - almost a complete flip-flop" [Yergin 1991: 545]. As well as energy, oil also provides the basis for the massive chemicals and plastics industries. The price of oil therefore affects the price of almost everything else. It is arguably the largest industry in the world. It dwarfs the mining industry "by several orders of magnitude" [EIR 2003: Vol.6, 22] and, for most countries, it is the biggest single import item. Power within the industry is highly concentrated. Throughout the 20th century it was dominated by a handful of 'majors' and, following a series of mergers, there are now just six 'super-majors'.

⁸ The tourist industry now claims to be bigger, but is really an amalgam of very disparate activities and not a single industry in the way that oil is.

Signal crisis for the US regime

Oil played a significant part in the 'signal crisis' of the US regime. It does not follow that oil was the crisis. For Arrighi, the 'oil shocks' of the 1970s was rather symptomatic of a wider loss of US power and authority precipitated by its defeat in Vietnam. The victory of a poor people over the world's greatest military power gave hope to the dispossessed of the world and encouraged the assertion of third world nationalism. The US and its first world allies were rudely confronted by third world states acting as if the legal sovereignty and supposed equality of nations proffered by US leadership was for real. For the first time, the OPEC states actually acted together to increase their share of oil revenues and Arab producers subsequently went so far as to impose oil sanctions on the West in support of Egypt in the 1973 Yom Kippur War with Israel.

The economic dimension of the crisis came in the form of a recession. This was really the result of increasing competition between the dominant economies - the US, Europe and Japan⁹. After the Second World War, the economic growth in these economies was mutually reinforcing. From the early 1970s, however, their combined production had overtaken the growth in markets: they were producing more than they could sell at a profit. Profits from production were also being squeezed by the successful demands of labour as well as the rising price of third world commodities.

This over-production was part of the larger crisis of 'over-accumulation': there was more money capital in the system than could be safely invested and too much capital was invested in producing too much for too few. The oil shock played into this crisis in two ways. First, it stoked inflation because the rising price of petrol fed into all other prices and second, the windfall profits to oil producing countries created a glut of 'petro-dollars' - more capital with nowhere to go. The crisis was partly managed by laying it off onto the third world. Bankers, led by the World Bank, rushed to sell cheap loans to third world governments who were only too eager to take them. Oil producers in particular spent on arms and prestige mega-projects which recycled the money back into the profits of northern corporations.

Late boom

In the 1980s, the US clawed back power using economic rather than military weapons. It pushed interest rates through the roof to reassert its grip on money capital while also subduing the challenge of third world nationalism. Money flowed back to the northern countries while the easy borrowing of the 1970s turned into the crushing debt that still burdens many southern countries. The IMF and World Bank were sent out to impose structural adjustment programmes based on the neo-liberal policy agenda known as the 'Washington consensus'. This made debt repayment the first priority of governments and required that they 'open' their economies to unequal competition with the northern economies. They were to export more to earn the dollars to pay for the debt and to encourage foreign investment to produce the goods for export.

⁹This is described in more detail in the groundWork Report [2003: 19ff].

The flood of exports collapsed prices of commodities, including oil, and entrenched debt in southern countries while the northern economies, and the US in particular, enjoyed a new boom. But this boom had a different character to the boom that followed the Second World War and it did not resolve the basic crisis. Power passed from production capital to finance capital and because too much was still being produced for too few, money was increasingly invested in money rather than production. Even corporations whose primary business was production put money into trading money in order to show profits. Enron is just one corporation that did this only to tangle itself in its increasingly complex web of deals. It ended by cooking the books to show the profits needed to attract more capital to cover its losses.

This process of money chasing money is known as 'financialisation'. This is what drove the British boom at the beginning of the 20th century - the boom that heralded the terminal crisis of the British regime of accumulation. This process similarly drove the US boom at the end of the 20th century. The failure of the neo-con strategy in the Gulf War confirms for Arright that the terminal crisis of the US regime of accumulation is now under way. But it also indicates that it will not go quietly.

Terminal crisis and after?

The terminal crisis is a time of increasing chaos, visible today in the volatility of the globalised economy as much as in the war on terror. This raises some obvious questions for civil society actors concerned with social and environmental justice. First, will another regime of capitalist accumulation rise to succeed the US regime?

China seems the obvious candidate. Its rising economic power is widely recognised and it is emerging "as an alternative to US leadership in East Asia and beyond" [Arrighi 2005a: 80]. In particular, it is positioned to lead a resurgence of third world nationalism. This, however, is likely to be based on a solidarity of southern elites recognising 'national sovereignty' and 'non-interference in internal affairs'. Whereas the US regime makes hypocritical use of human rights, China has been entirely indifferent to human and environmental rights in southern countries where it is doing deals to access commodities including oil. Further, as with all previous capitalist regimes of accumulation, a Chinese (or East Asian) regime will require unequal development making poverty for the many even as it makes wealth for the few 10. A Chinese regime of accumulation may claim to be based on anti-imperialism, but it will be as ruthless as all the regimes that preceded it.

It is not certain, however, that there will be a successor to the US regime. The global scope of its destructive power is such that its fall may collapse capitalism as such. It may even collapse the environmental resource base on which any economic activity depends. Resource depletion is one aspect of this and Box 1 considers how much oil and gas is left. As noted above, the question is in one sense irrelevant since using only a fraction of available oil will produce irreversible climate change.

¹⁰ This is already happening in China itself as the peasantry is plundered to subsidise urban industrial development and even to support US consumption through China's purchase of US debt [see Yang 2005].

In another sense, however, it is deeply worrying. Depletion will intensify the competition between nation states (and corporations) for control of oil and so feed into the chaos of the terminal crisis. The price will be one aspect of the competition. As Simms et al put it, "The moment that production and demand head in opposite directions we can expect a sudden price explosion. The poorest oil importing countries will be hardest hit" [2004: 8]. Their economies will shrink, their debts escalate and, as always, the costs will be devolved to the poorest who never saw the benefits of oil in the first place. Oil producers, on the other hand, may find that Iraq was but a pale image of the terrors to come.

Higher prices will encourage fuel switching to gas - less polluting than oil but still a carbon fuel - and may encourage renewable energy investments. But it will also push money into more polluting and expensive methods of producing 'synthetic' liquid fuels from coal and tar sands which are not in short supply. It will also encourage 'biofuel' production from crops such as maize and sugar and so create "a competition for arable land between cars and people, exacerbating the famines that climate change is likely to cause" [Monbiot 2005]¹¹.

An alternative world - and an alternative future - is possible. It can only be based on people's control of resources. The call for resource control is now echoing around the world and nowhere more so than in the oil producing regions where people have experienced the assault of capitalist extraction on their bodies, their environments and their livelihoods. But resource control cannot be based on simply stepping into the shoes of capitalist managers to take over the resources that they have developed.

This is nowhere more obvious than in the case of oil and gas. First, climate change will not stop because people control oil. It will stop only if there is a radical reduction in carbon emissions. This implies that people need to develop renewable energy resources to service their needs. Second, as argued in the 2004 groundWork Report, "Technology is not simply the neutral servant of whatever power holds sway" [84]. The association of oil with the US regime of accumulation is not merely incidental. Its exploitation requires a massive concentration of social power which is not compatible with people's control of resources. Chapter 4 of this report will explore this question further.

¹¹ Additional pressure for producing fuel from crops is created by the absurdities of the global agricultural economy. South African farmers fear bankruptcy as maize prices have dropped below the cost of production and Grain SA has announced plans to build ethanol plants to absorb surplus production [Business Times, August 21, 2005]. At the same time, parts of southern Africa are facing potential famine.

Box 1: Peak oil

The future of oil depends on the relationship between production and consumption. Consumption increased by leaps and bounds throughout the 20th Century but potential production from the discovery of new oil fields grew even faster. In other words, the potential supply was mostly greater than the demand. The pace of discovery has already slowed down both in absolute terms and in relation to the growth of consumption - with rapidly growing Chinese demand coming in on top of still growing demand in the dominant northern markets.

'Peak oil' is the point of maximum production. After that, production will decline at roughly the same rate that it increased before the point of peak oil. Peak oil is thus the point at which potential demand becomes greater than the supply and consumption will be forcibly reduced.

Everyone accepts the basic peak oil thesis but there is little agreement on when it will happen. Industry boosters say there are still three decades to go before peak oil. However, oil producing countries and corporations tend to lie about how big their reserves are. In 2004, for example, Shell was forced to admit that its oil fields had 25% less oil than it had claimed. Independent analysts in the Association for the Study of Peak Oil believe that peak oil will be reached sometime between now and 2010.

Gas is the new big thing for the industry, with markets growing rapidly since the 1990s. Peak gas, however, is expected to follow only "a decade after oil" [Simms et al 2004: 9].

Brief history of oil

Lamp light

The oil industry started with the demand for paraffin (or kerosene) to light lamps ¹². In the 1850s, lamps were supplied mostly by whale oil. The slaughter of whales depleted the supply while more people were demanding lamp oil. In the eastern US state of Pennsylvania, what was called 'rock oil' seeped from the ground in a number of places. A group of businessmen decided to drill for it, using a technique developed in China for drilling out salt and later applied to drilling for water. They were generally regarded as mad since no-one believed that pools of liquid oil were trapped underground. In 1859, however, they found just that - oil that could be pumped up like water.

¹² The historical matter in this section draws particularly on Yergin [1991] and Yeomans [2004] although they are not responsible for our interpretation of that history.

The discovery precipitated the first oil rush. People crowded into the remote village of Titusville, property prices soared, rival drillers crowded their rigs onto whatever parcel of land they could get hold of, horse drawn transport wagons blocked the muddy roads, oil was spilled everywhere, the traditional wooden barrels used for storing and transporting it caught alight, refineries exploded and the local community was overrun. Oil was soon also discovered in other areas of what became known as the oil regions. Towns were thrown up on cleared forest or open fields but were abandoned as the wells suddenly ran dry, leaving soils drenched in oil.

Boom and bust was thus a feature of the oil industry from the start. This was not just about the producing areas. The market expanded rapidly as more people could afford 'illumination' but the supply grew faster. Paraffin prices dropped as chaotic competition governed every link in the chain, from drilling and extraction, to transport, to refining, to marketing. By 1866, just 17 years after the first discovery, prices fell below the costs of production and distribution. Companies cut costs and tried to impose the losses on others in the production chain. Survival depended on the power of a company's position in the chain and on having enough capital to ride out the price wars.

In this context, John Rockefeller set about taking control of the 'downstream' industry. He started out as a refiner in Cleveland and called his product Standard to denote that it was of a standard quality at a time when poor quality paraffin was apt to explode as people lit their lamps. He concluded that the industry would only be viable if supply met demand but did not exceed it. Standard therefore aimed to establish such dominance that it could restrict production. It rapidly bought out competing refiners or drove them bankrupt by underselling them. As its capacity expanded, it used the same techniques to move into marketing to ensure that it could sell the product. With growing power, Standard negotiated a scam with the railways, getting a discount on the transportation of its own oil and 'drawbacks' on its rivals' oil - so that competitors effectively subsidised Standard without knowing it. The company was widely hated and frequently the target of legal and political action. But it grew to control about 90% of refining and 85% of the market.

In an attempt to bypass Standard's stranglehold on transport, a consortium of independent producers built the first long-distance pipeline. It succeeded in its aim of substantially reducing transport costs but the advantage was short-lived. Standard responded by building four pipelines and even secured shares in the original one.

Despite the glut, enough Pennsylvania wells ran dry to raise the spectre of scarcity. With the discovery of new oil fields in Ohio in the 1880s, Standard entered the 'upstream' industry of exploration and extraction. It did so to secure a supply to its own refineries and reduce its dependence on what it regarded as a disorderly mob of independent drillers. Standard thus pioneered the first integrated oil company with command over the entire chain of production from exploration to marketing.

Global competition

Standard established markets in Europe in the 1860s. Two decades later, it was facing stiff competition from two very well resourced companies, headed by the Nobels and the Rothschilds and supplied by Russian oil from Baku on the shores of the Caspian Sea. Despite the standard dirty tricks - which included disinformation and sabotage - they substantially eroded Standard's monopoly in Europe.

As in America, however, Baku was producing more oil than the market could take. The Rothschilds therefore formed a partnership with Samuel Marcus, a London based trader, with a view to entering into the East Asian market. Standard, of course, was already there. To take it on, Marcus needed cheap transport and for this purpose he commissioned the first of the modern sea going oil tankers. He also needed to enter all Standard's eastern markets simultaneously - otherwise Standard would sell at a loss to undercut his prices and use their profits in other markets to subsidise the loss. To do this, he built storage tanks at strategic locations and drew on his extensive network of trading partners to facilitate marketing.

The Shell Company had its origins in the success of this venture. Standard still dominated in America and remained the largest international oil company, but could never again establish monopolistic control of the global industry. Neither of these companies liked competition and they had various negotiations to establish either a combination or an agreed division of markets, but each successive agreement failed. Standard made one last effort to regain its dominance in East Asia when a new company, Royal Dutch, struck oil in Sumatra. Standard bid to take over the company so that it would have a local source of crude for the East Asian market and so eliminate its transport costs from the American east coast. Rather than be swallowed up as a minority share holder in Standard, however, Royal Dutch went with Shell and secured the majority position in the merged company.

These early years thus established several features that remain characteristic of the oil industry:

- A boom and bust economy created at the local scale by the discovery and depletion of oil and
 at the larger scale by the volatility of prices and of supply and demand;
- A corresponding drive for power and control through the concentration of wealth in monopolies or oligopolies;
- Intense antagonism between 'big oil' and 'independent' producers;
- Appalling pollution (though the response to this was muted in the early years);
- The destruction of local communities.

Box 2: Corporate pariah

Standard has an important place in corporate history. In the 19th Century, share holders had to be actual people - a corporation could not hold shares in another corporation. Standard did, however, control many companies that operated under their original names in order to disguise ownership and the extent of Standard's dominance. It managed this by setting up the Standard Oil Trust which held its various interests. Legally, the individual members of the trust held the shares in the companies controlled by Standard. Under this cover, it could deny in court that it controlled 90% of the US refining industry.

In the 1890s, the state of New Jersey introduced a series of laws that gave greater power to corporations. The effect was that a corporation acquired a legal identity similar to that of a person-except that, unlike a person, it was potentially immortal. The corporation was no longer confined to a particular location or to a specified purpose, and it could own shares in another corporation in its own name. A spate of mergers and acquisitions followed. According to Joel Bakan, a Canadian legal academic, the US economy was transformed "from one in which individually owned enterprises competed freely among themselves into one dominated by a relatively few huge corporations, each owned by many shareholders" [2004: 14]. Standard had not waited for the law to permit mergers and acquisitions but took advantage of it as soon as it did. It registered in New Jersey.

Nevertheless, its history was catching up with it. A series of revelations made the Standard Oil Trust synonymous with monopoly bullying, cheating, spying, sabotage and outright (if surrogate) violence. The US government brought an anti-trust legal suit against Standard and the company was finally dissolved into a number of successor companies. The most significant descendants continue to embody the notion of 'big oil'. And big oil has got bigger with the recent round of mergers and acquisitions. The descendants include Exxon and Mobil (now ExxonMobil), Chevron (now merged into ChevronTexaco), Amoco (now part of BP), and Conoco (now merged into ConocoPhillips).

Engines of war

The internal combustion engine saved oil from an early and unlamented death at the hands of the electric light bulb invented by Thomas Edison. The lamps were going out but, in 1911, both Britain and the US switched their military navies from coal to oil. War was threatening and Germany intended to challenge Britain's naval supremacy. Britain was persuaded that oil fuelled ships made better fighting machines - faster than coal and requiring less manpower in the engine room. But there was another dimension to the question: Britain had

plentiful supplies of coal but none of oil. The decision therefore implied that Britain must maintain its imperial reach to secure oil from beyond the home territory.

In 1909, the newly formed Anglo-Persian Oil Company struck oil in Persia (now Iran). Britain regarded Persia as being within its strategic sphere of interest - in opposition to Russian ambitions in the region - and Anglo-Persian was a British company. It was also cash-strapped. It had found a major source of oil but had no market for it. The British government provided the market with a contract to supply the navy and it provided the money by buying 51% of the company. It also contracted with Royal Dutch Shell both for marine oil and the use of its substantial fleet of tankers in the event of war.

The experience of World War I confirmed that modern warfare would run on oil. War provoked speedy technological development: motorised transport became essential, the combatants developed armoured vehicles, they took to the air and they used oil-derived chemicals to make explosives and poison gasses. The war also tested the combatants' power to secure oil or deny it to the enemy. Oil fields became strategic targets to capture or defend, Britain blockaded German ports and Germany developed diesel-driven submarines to attack merchant supply ships. At the same time, the war-time demand for oil was unprecedented and stretched production to the limit. By the end of the war, Germany was running out of fuel. Britain and France faced critical shortages in 1916 and 1917 and ultimately relied on the US - the world's biggest producer - which massively expanded production and supplied about 80% of the allied demand.

In all countries, including the US even before it entered the war in 1917, governments took direct control of oil allocations. In early 1918, an Inter-Allied Petroleum Conference pooled and coordinated supplies to all allied countries with the two largest international companies - Standard of New Jersey (Exxon) and Royal Dutch Shell - managing the process.

The pattern was repeated in World War II. The US was still the largest producer and Germany's submarines posed the major threat to allied supplies. The allied governments and oil companies again cooperated closely in coordinating supplies while market competition was eliminated in Britain, with all oil going into a common pool and distributed at the authority of government.

In Germany, the chemicals company IG Farben developed a massive fuel-from-coal industry during the 1930s with the active support of the Nazi government - a strategy for fuel security later emulated by apartheid South Africa. Using slave labour from the concentration camps, this industry accounted for about half Germany's war time fuel supplies including over 95% of aviation fuel. Access to oil also influenced Germany's decision to invade the Soviet Union - but its forces ran out of fuel before reaching the oil fields of Baku. In 1944, allied bombing campaigns targeted the synthetic fuel plants. Production virtually collapsed and the German Air Force was effectively grounded.

Japan was similarly short on supplies and seizing Royal Dutch Shell's oil wells in the Dutch East Indies (present day Indonesia) became a major strategic objective. Japan realised, however, that this would provoke the US to enter the war and so made its pre-emptive strike on Pearl Harbour. As the US gradually won control of the Pacific, Japan faced an increasingly critical shortage of oil which eventually confined its fleet to its home waters.

Supply panics

Following both wars, demand expanded massively as people took to the roads, particularly in America, and as oil began to substitute for coal as an industrial and heating fuel. At the same time, the experience of war time shortages created anxiety about supplies in the minds of governments and corporations alike. Following the First War, the US feared that its own reserves were depleted and, together with the major US corporations led by Standard of New Jersey (Exxon), was keen to be in on what seemed the best bet - Iraq.

Iraq was one of the countries cut from the dismemberment of Turkey's Arabian empire and placed under the 'protection' of Britain and France who, naturally, installed puppet governments. Britain took Iraq, the only Middle Eastern country besides Persia then thought to have oil reserves. Intense negotiations followed, resulting in what was essentially a four way split between Royal Dutch Shell, Anglo-Persian, the US companies, and the Compagnie Francaise des Petroles established by the French government. The newly installed Iraqi government had merely to confirm the award of a drilling concession to this consortium. In 1927, it struck a major 'gusher'. Before it was capped, it spilled about 800,000 barrels of oil and released poisonous gasses threatening the extinction of local villages.

During the 1920s, major new fields were also found in the US itself as well as in Mexico and Venezuela. High post-war prices collapsed and the fear of scarcity was replaced by panic as companies drowned in the glut of oil and prices dropped below the costs of production. A round of mergers and acquisitions followed. Lacking the power of global reach and vertical integration, the 'independents' were being squeezed out of markets dominated by the majors. Yet no single oil major now had a monopoly position comparable to that of Standard Oil. They themselves were feeling the squeeze but failed in various attempts to create a big oil cartel capable of price-fixing 13. In the US, government intervention - bitterly opposed in the past - was now loudly demanded particularly by the independents whose operations were restricted to the US. From within the US state, intervention was further justified on the basis of a need to maintain a 'strategic reserve' that could be drawn on in the event of war. National security was thus linked with the notion of resource conservation.

These demands resulted in the US government imposing tariffs on imported oil and quotas controlling how much oil could be produced within the US. Quotas of course meant that unregulated sales were now illegal

¹³ The 'as is' agreement between the global majors tried to establish informal quotas based on their market share in 1928.

and bootleg oil was vigorously policed. The price in the US thus recovered from less than 10c a barrel to the target price of \$1 a barrel. Outside the US, competition intensified.

At this time, the US was the only country that was both a major producer and a major consumer. Indeed, it topped the league on both counts. Other producing countries, mostly in the global south, were dependent on the oil majors to find the oil, produce it and to gain access to markets. Their interests were primarily in securing revenues, which they initially did by granting concessions to whoever would pay upfront for the right to explore. The first concessions thus gave monopoly rights over the host country's oil to the corporation or consortium that secured it. The corporation wanted it as cheap as possible but were also concerned for the stability of the regime that had granted the concession.

From the first concession in Persia, these deals were backed by the corporations' home country governments. Their interests were geo-strategic. They wanted secure oil supplies and stable regimes aligned with their own imperial interests - which were by no means restricted to their interest in oil. Thus, Britain's interest in Persia was driven by imperial rivalry with Russia long before oil came into the picture: Russia wanted access to the Gulf ports and Britain saw this as a threat to its global domination of trade. The Anglo-Persian deal was a cheap way of supporting a weak and cash-strapped Persian government - through royalties paid by the corporation - while making it dependent on British interests. When Britain converted its navy from coal to oil, however, control of oil itself became a strategic objective.

The US takes the lead

Following World War II, the Middle East rapidly overtook the US as the leading producing region as huge fields in Kuwait and particularly Saudi Arabia came on stream. This oil would fuel the Marshall Plan for recovery in Europe since US production was reserved for growing domestic demand. Under British and especially US ascendancy, the boundaries between big oil and state interests became blurred. Oil executives came to act as surrogate ambassadors to producing countries and key sources of intelligence. For their part, conservative Middle Eastern governments valued great power protection both from Soviet ambitions and from competing regional rivals - a view not necessarily shared by the people. This cosy set of overlapping, but not identical, interests was disturbed by several factors.

First, it was upset by the conflict of interests between oil producing countries and corporations over the division of profits. The former observed that their oil revenues were dwarfed by massive corporate profits. Further, the imperial countries themselves were taking more in taxes on oil in the downstream industry than they were getting from the upstream industry. They thus came to see greater control of oil revenues as a matter of sovereignty. It was, after all, their oil. The corporations saw the concessions as granting a right of property - it

was their oil. This property, however, was not automatically guaranteed by the imperial powers. In the context of the Cold War, they were as sensitive to the interests of 'friendly' producer countries as to those of corporations. First in Venezuela and then in the Middle East, the majors were forced to accept a 50-50 split in oil revenues. The 'seven sisters' who controlled crude oil supplies outside the US agreed between themselves that they would not bid higher than this standard deal.

Second, the balance was upset by the volatility of markets as attempts to 'solidify' the market failed once again. With the US market controlled by regulation, competition focused on the European market dominated by the seven sisters. But newcomers, including US independents, wanted to break in. They needed their own source of crude to do so and were prepared to outbid the standard deal for new oil concessions. Having been refused a share of existing Middle East concessions by the majors, the state backed Italian company Agip negotiated a minor concession in Iran in 1957. The split was 75-25 in favour of Iran. Agip found no oil but the writing was on the wall. A Japanese consortium soon followed with a 57-43 split on a concession off-shore of Saudi Arabia and Kuwait. Standard of Indiana followed with another 75-25 deal off-shore of Iran. In 1958, the Soviet Union re-entered the international market and cut prices to do so. The seven sisters followed suit but this opened a growing gap between the market price and the 'posted price' which determined what they paid to the producer countries. The effect was to erode the corporate share of overall oil revenue. A year later, acting in concert, the majors unilaterally cut the posted price and thus also the revenues of producer countries, effectively restoring the 50-50 split.

Producer countries responded by forming the Organisation of Petroleum Exporting Countries (OPEC) in 1960¹⁵. The idea, proposed by Venezuela, was that global production should be regulated by quotas after the model of US regulation. The US, however, rejected global regulation and new producing countries kept appearing. Massive fields were discovered in Algeria and Libya and the first West African fields were discovered in Nigeria. Libya avoided granting a monopoly concession to a single consortium. Instead it divided the potential oil regions into concession 'blocks', encouraged independents to bid, and pegged the government share to the market price. The purpose was to ensure that the majors would not go slow on exploration in order to protect their established production capacity. In this context, OPEC had little impact and was split by internal rivalries for markets. Market access was in the hands of the corporations and it was they rather than OPEC who decided production rates.

Third, the balance of power was shifting. Anti-imperial sentiments gathered force after World War II, bringing Mohammed Mossadegh to power in Iran in 1951. Mossadegh promptly nationalised Anglo-Iranian. Britain retaliated with sanctions. With the support of the oil industry, which pushed up production elsewhere and collectively coordinated supplies as they had done during the war, Iran was cut off from oil markets. The Iranian economy crashed and Mossadegh's domestic support base wilted. As a last resort, he crossed the line

¹⁴ The seven sisters were: Standard of New Jersey (Exxon), Socony-Vacuum (Mobil), Standard of California (Chevron), Texaco, Royal Dutch Shell and British Petroleum (formerly Anglo-Persian). Given its share in the Iraq concession, the French company CFP was also part of the group with its own access to Middle Fast oil.

The original OPEC members were Venezuela, Saudi Arabia, Iran, Iraq and Kuwait.

of imperial politics and turned to the Soviet Union. In 1953, Britain and the US jointly organised a coup, restoring the Shah to power. Anglo-Iranian could not be restored, however, and nor could the nationalisation of the industry be formally revoked for fear of reigniting rebellion. Instead, all corporations active in the Middle East were prodded by the US and British governments into forming a consortium to manage Iranian production, leaving the National Iranian Oil Company with largely symbolic ownership.

Britain's client regime in Egypt was toppled in a coup in 1952. Colonel Gamal Abdul Nasser emerged as the leader and combined Egyptian nationalism with pan-Arabism. In 1954, Egypt seized the Suez Canal and nationalised it. Britain and France, the major shareholders, saw this as an affront to their imperial dignity and a threat to their strategic interests which included oil supplies shipped through the canal. Painting Nasser as a fascist and using Israel as an alibi, they launched an ill-planned attack to re-take the canal. Nasser promptly scuttled some ships to block the canal. Pipelines carrying Saudi oil through Syria and Lebanon were simultaneously sabotaged. Finally, the US disapproved of the European powers' action and was incensed that it had not been informed of it. It refused to make good the short-fall of oil unless Britain and France withdrew. In a reversal of the Iranian case, the European market was now cut off from its supplies. The two European powers complied with the US demand within a month and the US then coordinated an emergency 'oil lift' to Europe.

The episode graphically demonstrated the decline of the 19th Century empires. In the next decade they would be in full retreat as national movements ejected them from the colonies and claimed independence, and the surrogate regimes in Iraq and Syria were overthrown in the name of pan-Arabist parties.

In reality, World War I had already marked the beginning of Britain's fall from global dominance. Suez confirmed what was already the case - that the US was now the dominant capitalist power. Henceforth, irrespective of what political party held power in Britain, its foreign policy would be abjectly subordinated to US geo-political strategies. For its part, the US inherited something of the role of the old empires. The Cold War evolved from the template of the 19^{th} century imperial rivalries even as it transformed them. Thus, the US replaced the British as the patron of power in the Gulf region and its navy took over patrolling the Gulf itself. And in South East Asia, the US stepped into the shoes of the retreating French colonial power.

Signal crisis and oil shocks

The US defeat in Vietnam was seen as more than just a blow to American power. It appeared as the reversal of four centuries of imperial and capitalist expansion. The weakening of US power laid the basis for the oil shock of the early 1970s. It coincided with a fundamental change in the balance of supplies. By the late 1960s, massive global demand was rising to balance available supplies - the oil glut was over. In the US, the 'strategic reserve' was eliminated and production quotas made redundant as full-out production fell short of domestic

demand. In 1973, the US scrapped import tariffs and the world's most profligate consumer joined the global market. The US was now in a similar position to Britain at the beginning of World War I: its access to oil depended on its imperial reach and its imperial reach depended on its access to oil.

Political and economic power thus shifted to the producing countries. Rising prices had created windfall profits for the corporations as the market price overtook the 'posted price'. For the first time OPEC acted in concert, initially to restore the 50-50 balance. Just as the corporations had unilaterally cut the posted price in the 1950s, now OPEC unilaterally raised it. Several countries, led by Venezuela, Libya and Iraq, followed this by nationalising the production industry. They retained links with the oil majors to ensure access to markets and the corporations reluctantly accepted the deal to retain their access to crude.

In this context, Egypt and Syria moved to reverse the losses of the 1967 'six day war' with Israel. Since then, Israel had occupied the Egyptian territory of Sinai and was entrenched in military positions on the east bank of the Suez Canal. This had in effect become another surrogate front of the Cold War and, with US support, Israel's occupation threatened to become permanent. In 1973, backed with Soviet weapon supplies, Egypt overwhelmed the Israeli positions. The US responded by airlifting weapons to Israel to save it from defeat. The Arab oil producers, in their turn, 'embargoed' oil to the US and its allies. In practice, this involved a 5% cut in Middle Eastern and North African oil production - sufficient to produce a global crisis of supply - coupled with a ban on sales of Arab oil to the US.

The war itself ended in military stalemate as both superpowers guaranteed the respective combatants against defeat. The oil crisis, however, represented the first failure of US control of oil. During earlier crises, the US itself had coordinated global relief supplies with corporate cooperation. In 1973, the oil corporations were left to themselves to decide how oil would be allocated. Acting collaboratively, they supplied the US with non-Arab oil while imposing equal cuts in the overall supply to all consumer nations.

The end of the Arab embargo, and of OPEC unity, was a piecemeal affair, indicating the difficulties of holding together a coherent alliance of interest. Saudi Arabia had been the last of the major OPEC producers to nationalise its production industry, reluctantly responding to domestic nationalist sentiment in 1974. It had earlier argued for 'participation' - meaning that OPEC producers should take a substantial shareholding in the corporate production consortia - on the grounds that full nationalisation would shift the burden of competing for markets from the corporations to producing countries and so lead to price wars between OPEC countries. This fear proved to be well founded.

One consequence of nationalisation was that, despite operating and marketing agreements with national oil companies, the oil majors were no longer fully 'integrated'. That is, they could no longer meet the total demand of their downstream systems - refining and marketing - from their own upstream crude supplies. To a greater or lesser degree, all the oil companies were now forced to obtain oil on the open market.

This would have major implications when the Iranian revolution of 1978 deposed the dependent, if erratic, Shah and evicted the oil corporations, so provoking the 'second oil shock'. BP (formerly Anglo-Iranian) was most exposed, but all the majors were involved in the deal that followed the coup against Mossadegh and all had to turn to the spot market to make good their loss of Iranian oil. A bidding war followed as oil corporations attempted to secure supplies. This pushed up the market price up by 150%. Several producing countries then reneged on supply contracts in favour of selling on the spot market and so provoked another round in the bidding war. Just as the market appeared to stabilise, Iraq invaded Iran in 1980. This time, however, the bidding panic was short lived. Despite the interruption in supply from two major oil nations, the market was moving into glut.

The OPEC countries had in fact squandered power in a rush for windfall profits. Higher prices coincided with a recession in the dominant markets - itself a symptom of imperial weakness - which had the effect of reducing demand. Higher prices and the threat of scarcity also provoked energy conservation and diversification. Thus Denmark initiated its wind energy programme while gas was substituted for oil in a wide range of applications. The spectre of scarcity also provoked a massive expansion of exploration financed by windfall corporate profits. New oil came on stream, including from the North Sea and Alaska as well as from Africa, and by 1982 non-OPEC countries were producing more than OPEC countries. Finally, Saudi Arabia had attempted to stabilise the markets by pumping out more oil even as it suspected that panic buying concealed an emerging glut.

When prices began to fall, OPEC attempted to defend its official (posted) price by imposing production quotas on its members. But this was no longer enough. Nigeria, for example, could not sell oil at the official price. The OPEC members soon broke ranks, concerned to defend market share rather than price. Finally, in 1985 Saudi Arabia abandoned the role of 'swing' producer - cutting production in times of glut and expanding production in times of scarcity. Its own market share was rapidly eroding and it would no longer carry the cost of what it saw as the opportunism of its OPEC partners. With that, the price collapsed from \$30 to \$10 a barrel. Desperation drove the OPEC members back to negotiating quotas while several non-OPEC producers supported the move with cuts of their own. In 1986, the price was stabilised at \$18. By this time demand was once more escalating, with the US economy booming and conservation reduced to the odd rhetorical flourish.

Money rules

As OPEC squandered power, imperial capitalism was clawing back power - as much from labour as from assertive former colonies and client states - using the instrument of neo-liberal market-oriented economic policy. First, under President Jimmy Carter and more emphatically under Ronald Reagan, the US pushed up interest rates to compete for capital and restore dollar dominance as the world reserve currency.

At the same time, the oil glut further loosened the ties between the oil majors and country producers. Until the late 1970s the majority of oil was supplied within the integrated structure of the oil majors and trading on the spot and futures markets were essentially a side show. By 1982, the majority of oil was being traded on the market while the corporations decentralised into different 'profit centres' and moved into oil trading (as opposed to simply procuring supplies) as a distinct and profitable activity in its own right. The oil corporations were also exposed to the growing power of financial capital engineered by the neo-liberal turn. A spate of mergers and acquisitions followed. Most notably, Gulf Oil - one of the seven sisters - fell prey to corporate raiding led by a minor independent in search of fast money and was eventually bought by Chevron.

Nevertheless, the long term strategic significance of the Middle East is assured. The region's oil reserves are such that it will remain the last major producer as global reserves are finally depleted. In a curious twist, following the 1980s battle for market share, some of the main producing countries started buying into the downstream systems, so reasserting the drive towards industry integration. Thus the Venezuelan and Kuwaiti national oil companies established refining and marketing infrastructure in the US and Europe while Saudi Arabia took shares in Texaco's US operations. Having established control of upstream supplies they were looking to match it with secure access to stable markets. The strategy repeats the logic of Standard Oil in the 19th Century.

From the late 1970s the US also started to re-establish its military dominance, building a 'rapid response' capacity through a chain of US bases located at strategic points around the world. Following the Iranian revolution Carter declared that, "An attempt by any outside force to gain control of the Persian Gulf region will be regarded as an assault on the vital interests of the United States of America and such an assault will be repelled by any means necessary, including military force" [quoted in Yeomans 2004: 14]. The outside force in question was, of course, the Soviet Union and the 'Carter Doctrine' was in fact the reassertion of the great power policy that the US inherited from Britain. With the collapse of the Soviet Union, however, Russia no longer shares a border with Iran. To the contrary, significant Western interests have been established in the newly independent southern republics where the Russian oil industry began. Not only have the oil majors assumed control of production, but the US has established military bases on the back of the 'war on terror'.

In contrast, the Iraq-Iran war marked a deviation from the old imperial policy which had aimed to contain rivalries for regional dominance - primarily between Iran and Saudi Arabia - and so keep peace within the region, or at least reserve the exercise of force as the prerogative of imperial power. The Reagan administration, however, covertly supported Iraqi aggression in the hope of exhausting the Iranian revolution and splitting OPEC. In doing so, it promoted Iraqi ambitions for regional dominance. In 1990, two years after its war with Iran ended in stalemate, Iraq invaded Kuwait. This move would give Iraq 20% of current OPEC production and 20% of total global reserves. It would, in short, make Iraq the dominant oil producer and the

dominant Gulf power and it posed a threat to US interests equal to that of any 'outside force'. The UN, including even Russia, sanctioned a military response and the US led operation quickly drove the Iraqi army out of Kuwait and 200 miles into its own territory. Despite calling for Iraqi President Saddam Hussein's head, the imperial powers were clearly not about to allow a revolution that might not produce a suitable client regime. The US responded to a rebellion in the southern oil regions of Iraq by opening a path for Hussein's forces to put it down.

A decade later, the militant Islamic Al Qaeda network attacked the World Trade Centre in New York with spectacular success. The US responded by declaring 'war on terror' - an open ended declaration of perpetual war proclaiming the right of the US to use force in any place or situation where it declared a terrorist threat. Its first target was Afghanistan where the Taliban regime sheltered Al Qaeda, both of whom had been armed by the US as surrogate forces in the Cold War against the Soviet Union. Then, in 2003, a US-led coalition invaded Iraq, this time without UN sanction and justified only by blatantly fabricated evidence - that Iraq was developing weapons of mass destruction and providing assistance to the Al Qaeda terror network. The invasion clearly aimed to depose Hussein and install a suitable client regime. The first of these objectives has been met. Whether the second objective is achieved remains deeply uncertain.

The neo-liberal economic regime continued in place throughout the 1990s, but with a subtle difference. Interest rates in the northern economies were reduced almost to nothing and booming share prices were made the mechanism for transferring huge wealth to global finance capital. That wealth was taken from workers and the global poor as southern countries were forced to open their markets to northern capital, goods and services¹⁶. Yet profits from investment in production - as opposed to investment in money - continued to stagnate. Low oil prices contributed to a consumer boom, particularly in the US, but the profits from the industry did not meet the exaggerated expectations of share holders. From 1998, another round of mergers and acquisitions turned the majors into 'super-majors': ExxonMobil, BP and Royal Dutch Shell followed by Total, ChevronTexaco and ConocoPhillips.

As always, low prices indicate that power lies with consumers and this consolidation of power within the industry was primarily aimed at controlling markets while driving down the returns to producing countries and so transferring profits from the crude production end of the 'value chain' to the marketing end. By 2000, according to Public Citizen [Claybrook 2004], the super-majors were actively restricting supplies to the US market by various means, including driving independent refineries out of business, to increase retail prices and profits. In 2004, these corporations (excluding Total) controlled 50% of the refining capacity and 60% of retail sales in the US.

¹⁶ This political engineering of this process is reported in detail in The groundWork Report 2003 [23-28].

Protection racket

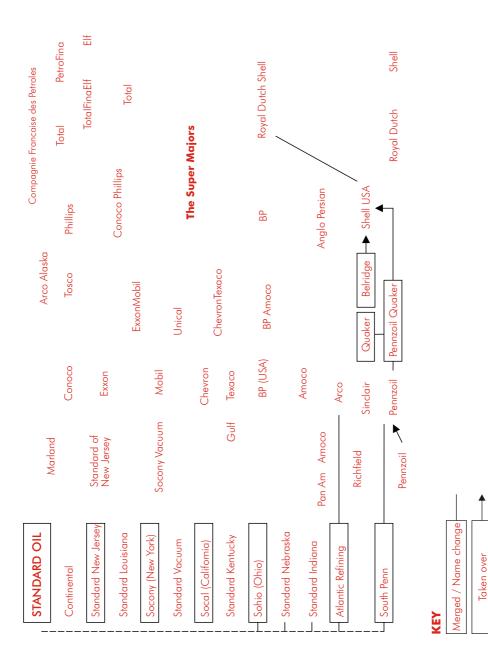
The second Gulf war has turned the situation upside down, doubling the price of crude and resurrecting the spectre of a global shortage - this time reinforced by the prospect of peak oil. This has not put an end to industry consolidation. The mergers and acquisitions are continuing but under the logic of competition for crude reserves and financed by the windfall profits from the price surge.

The competition for crude is as much between nations as it is between corporations. This is most graphically illustrated by a bidding war for Unocal between ChevronTexaco and CNOOC, China's offshore oil corporation. Unocal was a very large 'minor' focused on exploration and crude production and holding substantial reserves. Its association with human rights abuse in Myanmar was apparently of little concern to either bidder. The Chinese state owns 71% of CNOOC shares and the bid was backed by state financing. With a lower offer on the table, ChevronTexaco called in its political credit bought with campaign funding to politicians¹⁷. In July this year, the US Congress voted that CNOOC's bid was a threat to US security and mandated political intervention if it went through. CNOOC withdrew its offer and shareholders accepted Chevron's bid on August 10, 2005.

This action is a blatant example of US double standards. It insists that other countries should open their economies to its corporations but refuses to live by the same rules. This is not just about oil. It is a symptom of US anxiety that China's growing economic power threatens US dominance. In the same way, the US complains loudly that China's currency is undervalued and this gives it an unfair advantage in global trade. The effect of Chinese currency policy is to protect its manufacturers in the context of export oriented policies imposed by the 'Washington consensus' in the same way that tariffs protected US manufacturers in the context of Britain's free trade dominance in the 19th Century. The Congressional action is likely to be seen as one more sign that the US no longer offers protection in the general interest of all capitalist powers, but that it is now running a global protection racket.

¹⁷ Los Angeles Times, CNOOC foes got Chevron donations, July 23, 2005, at www.latimes.com.

Figure 1: From Standard Oil to Super Majors



Dissolved into

2. Upstream in Africa

The oil industry is generally talked of in terms of upstream and downstream production. Upstream production is about exploration and extraction - finding the oil and getting it out. This chapter opens with an overview to locate oil in Africa in the global scene, identifying the big players and what they are up to. It then looks at the making of environmental injustice on the ground all along the crude production chain, focusing on Nigeria and Chad which are the oldest and the newest Sub-Saharan producers.

Africa's oil rush

The Gulf War has both pushed up the price of oil and reinforced anxieties about security of access to crude supplies both for countries and corporations. It has added impetus to Africa's oil rush but did not initiate it. Corporations have always been anxious to be in on the next big thing lest they should find themselves excluded later. This is particularly so as the number and size of new discoveries globally is falling while demand is rising. The Gulf of Guinea off west and central Africa is "viewed by the oil industry as the world's premier 'hotspot', soon to become the leading offshore oil production centre" [Gary and Karl 2003: 9]. By far the biggest discoveries worldwide in 2001 were made here. For corporations, offshore production has the advantage of being separated from the social consequences of production. In some onshore fields, they have looked for cover from 'political risk' before venturing in.

Security and the cost of crude supplies is also top of the agenda for consuming countries. The US in particular has stepped up diplomatic and military activity in the region, edging in on the regional hegemonies of the former colonial powers of Britain and France. Also reflecting the changing pattern of power relations in the globalised world order, several third world countries have developed active interests in African crude supplies, including China, Malaysia, India and South Africa. While corporate and state interests are not necessarily identical, they are certainly closely aligned as they move pretty much in lock-step into the oil regions.

The international financial institutions - the IMF and the World Bank - are key actors in support of the northern agenda. The World Bank itself has a direct financial interest in oil and gas. The bulk of lending by its private sector financing arm, the International Finance Corporation (IFC), is for resource extraction and the IFC makes its best profits from these loans. The Bank also acts to leverage capital from private financial institutions who are, of course, concerned with the profits of oil debt. Its presence as a lender provides political cover. It reassures both oil and finance corporations that they will get their profits out from projects in unstable countries. Thus, the financial arrangements for the Chad-Cameroon pipeline ensure that the interest owed by these countries is paid before they see the money.

Producing countries, and would-be producers, are no less enthusiastic. Their economic interest is primarily in oil revenues as well as balance of payments, although much lip service is also paid to technology and skills transfer. Politically, they benefit from the international recognition that comes with sitting on top of a strategic resource and may reinforce their grip on power - provided they play the game. Thus, Equatorial Guinea moved from being a virtual outcast nation to being courted by the great powers with the US re-opening its embassy, closed in 1988. But the attention of big powers may be unsettling. In 2004, a coup attempt, organised by an odious group of British business mercenaries against the unlovely Equatorial Guinea regime of Teodoro Obiang Nguema, was alleged to have the nod from the US, Britain and Spain 18.

The producing countries and leading corporations in Sub-Saharan Africa are listed in table 1 below. Most have expanded production to cash in on current high prices while new exploration concessions have been awarded in almost all African countries, even where the hopes of finding oil seem slim. Everyone, it seems, is doing well by the escalation of prices - except ordinary people in oil producing countries. While the fabulous wealth of oil is paraded before them, they have been driven ever deeper into poverty. The very common association of oil wealth with the impoverishment of people and the failure of national economies has given rise to the notion of the 'resource curse' (see Box 3).

Making dependency

The relationship between producing countries and corporations tends to be as close as that between corporations and their 'home' countries but it is an unequal relationship marked by duplicity and double dealing. The dominance of particular corporations in each country tends to reflect international relations of power at the time that oil was discovered. The global revenues of the super-majors listed in table 1 dwarf the gross national product of most of these countries. Compounding this inequality of power and experience, production is increasingly networked with operations owned by a consortium of big oil corporations and supported by a much larger number of minor oil companies, some of which are nevertheless very large by the standards of most other industries.

Colonial hangovers

The biggest producer, Nigeria, was also the first producer in Sub-Saharan Africa. Oil was discovered in commercial quantities in 1957, three years before independence. It was thus the colonial government that granted a joint venture between Shell and BP monopoly rights to exploration and extraction with the intention of creating a secure source of crude for Britain. Nigeria's economy was structurally tied to that of its former colonial master but, to make sure of a dependent regime, Britain manipulated the first independence elections and the monopoly remained in place for some time. The pattern was repeated in the French colonies, starting with Gabon, where Elf - now merged into Total - dominated production.

¹⁸ See Vidal [2004].

Table 1: Sub-Saharan African crude producers

Producing Countries	Barrels/day*	National Corporations	Dominant and Leading Foreign Corporations	
Nigeria	2,100,000	Nigerian National Petroleum Corporation (NNPC)	Shell , Total, Agip, ChevronTexaco, ExxonMobil	
Angola	900,000	Sonangol	ChevronTexaco, Total, ExxonMobil, BP, Shell, CNPC	
Congo- Brazzaville	283,000	Societe Nationale des Petroles du Congo (SNPC)	Total, Shell, ChevronTexaco	
Equatorial Guinea	265,000	GEPetrol	ExxonMobil, Total, ChevronTexaco, ConocoPhillips	
Gabon	247,000		Total, Shell, ConocoPhillips	
Sudan	227,000	Sudapet	CNPC, Petronas	
Chad	225,000		ExxonMobil , ChevronTexaco, Petronas	
Cameroon	75,000	Societe Nationale des Hydrocarbures (SNH)	Total , Shell, ChevronTexaco, ExxonMobil	
South Africa **	26,000	PetroSA		
Dem. Rep. of Congo	25,000		Total, ChevronTexaco	
Cote d'Ivoire **	11,000		Total, Shell	

Source: Gary and Karl 2003.

CNPC = Chinese National Petroleum Corporation

^{* 2002} production figures except for Chad which had its first full year of production in 2004.

^{**} South Africa and Cote d'Ivoire are not exporters of crude.

Nigeria and Gabon were already major producers by the time of the first oil shock and both joined OPEC in the early 1970s and established national oil companies as part of their the assertion of national sovereignty rights. At the time of the second oil shock in 1979, Nigeria felt confident enough to nationalise BP's holdings on the grounds that it was breaking the oil embargo against apartheid South Africa. BP's assets were turned over to the Nigerian National Petroleum Company (NNPC), giving it a 50% holding in the Nigerian industry. Both countries also learnt to drive better bargains with the corporations and, in formal terms, Nigeria now captures "between 50 to 70 percent of oil revenues from international companies" [Gary and Karl 2003: 25]. Obscure accounting, however, enables the corporations to appropriate rather more than the formal agreements would suggest¹⁹.

Nigeria was racking up debts on the security of oil during the 1970s. It was thus exposed to the debt trap when commodity prices collapsed in the 1980s and it was one of the first OPEC nations to break ranks on oil prices as the northern powers reasserted their grip on producers. As argued in Chapter 1, debt was pushed by northern institutions to off-set the crisis resulting from the surplus capital in the 1970s and much of the money was instantly recycled back to the northern economies through arms deals and large-scale infrastructure and industrial projects constructed by northern corporations. The subsequent debt crisis of the 1980s was induced to subordinate, once again, the third world, using an economic instrument for both economic and political purposes.

These global scale manipulations were replicated in the activities of oil corporations at the national scale. The best evidence for this came to light in a French trial which resulted in the conviction of 30 senior Elf executives in 2003 for defrauding the corporation. Elf was the largest corporate producer in Sub-Saharan Africa with a dominant position in the Francophone countries and major interests in Nigeria and Angola. This leading position has been consolidated within Total following the mergers of Total, Petrofina and Elf in the late 1990s and early 2000s. Prior to this, Elf was owned by the French state.

The 'Elf system' revealed at the trial is described in detail by Global Witness [2004]. It involved the systematic corruption of African leaders through a variety of kick-backs, under-invoicing on crude bought from Elf's subsidiaries to skim the revenues owed to African countries, and the peddling of oil backed debts with the specific intention of creating a perpetual dependency on Elf. The debt system was purposely obscure so that "Africans were only aware of the official lending bank" [20] while Elf itself profited from the debt. It also profited from facilitating arms deals financed by the debt. In both Congo Brazzaville and Angola it hedged its bets by arming both sides in the civil wars in those countries. Overall, however, its arms dealing was aimed to keep dependent leaders in power. To the same end, it also used its financial power to manipulate the outcome of elections in Congo Brazzaville.

¹⁹ See Okonta and Douglas [2003: 50ff] on the manipulations of corporate accounting.

These revelations put Total on the back foot in its local negotiations. Although Elf had helped Sassou-Nguesso return to power in Congo Brazzaville, "the president appeared to be playing hardball with Total, encouraging advances from US oil companies" in 2002 [25]. By mid-2003, Total seemed to have restored its relationship with the president following an obscure deal that benefits a private Congolese company "described as having a single shareholder" who is not named [25].

Elf's activities in Nigeria during the 1990s are also under investigation. But it is certainly not the only corporation to have instigated corruption. The French investigations have in turn led to investigations into allegations that US corporation Halliburton was implicated in bribery in Nigeria. Allegations of corrupt dealing, price manipulation, political string pulling, and complicity with state brutality have also haunted Shell's operations in Nigeria.

Box 3: The resource curse

The resource curse is argued to work in the following ways:

- The discovery of oil pushes up the value of a country's currency. This makes other economic sectors such as agriculture less competitive. In many cases, oil becomes the only game in town. Oil now produces 40% of Nigeria's gross national product (GDP) while agricultural production has slumped and manufacturing is stillborn.
- The volatility of oil prices creates boom and bust economies.
- Oil is capital intensive and so produces an 'enclave economy', disconnected from other economic activity and providing few local jobs. This is particularly the case when oil production is almost exclusively for export.
- Oil rents (royalties, taxes etc.), even when legitimate, provide an easy source of revenue for governments. They therefore depend on their relationship with oil corporations rather than on taxes from their people. Accountability goes the same way. And government neglects other economic sectors and so reinforces the tendency to economic narrowing.
- Oil producing countries tend to accumulate massive debts, effectively selling off a large part of the revenues from future production.
- Oil economies are strongly associated with corruption (illegitimate rents), more so than diverse economies.
- Oil economies are also associated with secrecy, authoritarian rule and state brutality used to protect corrupt leaders and officials as well as to enforce corporate rights to access oil over people's existing rights in other economic resources.
- Oil generates conflict between national states and within states as governments, politicians and other power holders compete for rents.

This account of the resource curse is based on treating each oil producing country as a separate economy. It leaves out the broader context of global corruption, the purposeful subordination of southern countries, and the use of the global south as the shock absorber for global economic crises - all essential to maintaining the US regime of accumulation. This does not excuse southern elites whose active complicity in the pillage of their people has been well rewarded. Table 2 shows the extent of dependency on oil for selected African producers. Chapter 4 opens with a different view of the resource curse - as a symptom of global and local class relations.

Table 2: Oil dependancy

	%GDP	% exports	% govt income	
Nigeria	40	95	83	
Angola	45	90	90	
Congon-Brazzaville	67	94	80	
Equatorial Guinea	86	90	61	
Gabon	73	81	60	
Cameroon	4.9	60	20	

Source: Gary and Karl [2003: 12]. Figures are estimates.

Working for the Americans

While Chevron has been active in Africa for some time, the US corporations are prominent in the new oil fields - off-shore of Nigeria as well as in the new petro-states. Nigeria's take of oil revenues contrasts with the very poor deals done by late comers. Equatorial Guinea gets 10 to 20% and Chad only 10%. According to a government adviser, Equatorial Guinea's lawyers were in fact "working for the Americans" [quoted in Vidal 2004]. Even the World Bank has said that the deals are unfair but its offers of technical assistance have been refused. The oil project in Chad, however, would not have gone ahead but for World Bank participation because of the level 'political risk'. Chad initially negotiated its deal in 1988 and subsequently tried to revise it in 2004. "Despite approximately \$1.6 million in World Bank-financed legal assistance, the Chadian government was able to negotiate only a marginally better deal in the new convention" [Gary and Reisch 2005: 39]. It is hard to escape the conclusion that the World Bank too was 'working for the Americans'.

The World Bank justified its participation in the project on the grounds that there was no other developmental option in Chad, that its participation would ensure that Chad would escape the 'resource curse' and the project would thus contribute to poverty alleviation, and that poor Chadians need access to modern energy. Critics argued that Chad's governance and human rights record made it a dead ringer for the resource curse and that a project focused entirely on exports was scarcely conceived to access energy for poor people. Thus far, the experience of the project confirms the critics' view as will be seen below. Moreover, the Bank's public position has been shown to be duplicitous. In a report for Friends of the Earth Cameroon, Nguiffo relates that:

Just how determined the Bank was [to support the project] was revealed in 1999 when, at the height of public opposition, a leaked correspondence between two vice-presidents indicated their objective to "secure support for the project" through an approach based on "buying time from critics", so as to "push ahead with the main thrust of the campaign towards key decision makers" meanwhile convincing NGOs that "we [i.e. the Bank] are really prepared to listen, learn and

eventually make some proposal that might mollify them". The Bank was obviously less interested in finding solutions for the risks and problems identified by civil society than in assuring the approval of the project at all costs. [Nguiffo 2002: 4]

Clearly, the Bank's mission was to get the oil out. Beyond this, Chad is next door to Sudan where China's state owned oil corporation has taken the leading position in the context of a US boycott. The project thus establishes a boundary in the global competition for oil and political patronage.

The broader context of World Bank lending for oil projects bears out this conclusion. It first invested in the sector at the behest of the US in the late 1970s. A central aim was to open production in new countries and so reduce OPEC control of prices. It was also in this period that the neo-liberal 'Washington consensus' began to emerge as the US started to make more direct use of the IMF and World Bank to extend its control over the economic policies of third world countries. Vallette and Kretzmann note that, between 1992 and 2003, the Bank has "approved 133 financial packages to oil, coal, and gas extraction projects" worth over "US\$10.7 billion" and almost every "package benefits Northern fossil fuel corporations, especially those based in the United States" [2004: 7]. Further, 82% of Bank oil projects are designed to export the oil to the major northern markets and a good many of them are located in countries ruled by despots and war lords.

Box 4: The Extractive Industries Review

The World Bank commissioned the Extractive Industries Review (EIR) in 2000 in response to mounting criticism from civil society organisations that its lending to oil, gas and mining projects contradicted its stated mission of alleviating poverty. The Review, published in December 2003, found that the Bank's "project funding in the extractive industries has not had poverty reduction as its main goal or outcome" [Vol.I: 18]. Indeed, "Over the course of two years of examination, the World Bank ... was unable to provide an example of a single instance where an oil project alleviated poverty. Many examples were provided of oil projects that exacerbated poverty" [Kretzmann and Nooruddin, 2005: 13].

The central recommendation of the EIR was that the World Bank "should phase out investments in oil production by 2008" and focus on sustainable energy [Vol.1: 64, 65]. It also said there should be no support for oil projects in a context of human rights abuse or corruption. The Bank rejected the phase out - repeating its discredited claim that such projects were necessary for poverty reduction and the delivery of energy to the poor - but said it was adopting most of the other EIR recommendations. Dr Emil Salim, who headed the EIR, commented that in fact the Bank's response intended to justify business as usual and made "few commitments to addressing these recommendations fully or to implementing them" [quoted in Stockman and Muttitt 2005: 16].

Subsidising oil and gas

Ironically, the World Bank was mandated to play a central role in the sustainable development agenda defined at the 1992 Earth Summit in Rio de Janeiro. And its formally stated mission is to create a 'world without poverty'. In a report for the New Economics Foundation, Simms et al [2004] show that support to renewable energy for local consumption is compatible with both these goals whereas support to fossil fuels for export is compatible with neither. Yet World Bank financing of renewables remains insignificant in comparison to its oil and gas financing. The World Bank itself is a multilateral institution funded from public money so its support to oil extraction is a public subsidy to the industry. It is not the only one.

All the northern countries operate export credit agencies (ECAs) which provide guarantees for projects undertaken by 'their' corporations in foreign countries. Effectively, the ECAs transfer the risk of doing business for private profit onto the public purse. Oil features very largely in their financing and the value of this support is considerably larger than the nominal value of World Bank subsidies. The risk, however, does not necessarily remain with northern countries that sign off on the guarantees. The ECAs own a high proportion of the debt owed by African oil producers. In 2000, they held 71% of Nigeria's external debt, 55% of Gabon's, and 42% of Congo-Brazzaville's²⁰. In short, the northern countries take the risk but the southern countries pay for it.

Northern development aid agencies also provide subsidies to oil. Like the World Bank, the formal mission of most donor agencies is humanitarian. For example, Britain's Department for International Development (DfID) is supposed to "eliminate poverty in developing countries through sustainable development" but Stockman and Muttitt show that it makes substantial grants using "development aid to reform developing countries' oil taxation and regulation regimes to better favour British business interests" [2005: 1]. DfID is certainly not the only aid agency that provides humanitarian clothing for naked self interest.

More obscure forms of subsidy are provided by publicly funded research. Simms et al calculate that Britain spends "£40 million of taxpayers money ... each year on subsidising research into fossil fuels". This is supplemented by the increasing levels of big oil sponsorship of academic research which appropriates public knowledge institutions to serve corporate interests. All told, a "solid estimate" puts the total value of fossil fuel subsidies at "\$235 billion for every year" from 1995 to 1998 [2004: 13].

At bottom, resistance to renewables and support to fossil fuels are two sides of the same coin:

Global energy markets based on fossil fuels form an integral part of the infrastructure of globalisation. Poor countries get hooked into this infrastructure through their reliance on oil, coal and gas imports, and end up caught in a nexus of dependency relationships with other nations, multilateral donors and foreign companies. [Simms et al 2004: 23]

²⁰ See Gary and Karl [2003: 16].

Africans doing it to themselves

The New Partnership for African Development (Nepad) embodies the vision of Africa's governmental leaders "to enable the continent to catch up with developed parts of the world" [Nepad 2001: para 65]²¹. The 'partnership' of the title is between Africa and the major powers who are asked to help finance Nepad as a 'Marshall Plan' for Africa. From its inception, Nepad has been presented to successive meetings of the G8 rich country club. Consultation with African civil society - primarily labour and faith based organisations - appeared as something of an afterthought following intense criticism.

Nepad opens by criticising the role of colonialism in impoverishing Africa and acknowledging "poor leadership, corruption and poor governance in many countries" [para 21] in the post-colonial period. It commits African leaders to democracy, respect for human rights and good governance and to the pursuit of the United Nations Millennium Development Goals (MDGs) which set targets for addressing poverty. This sounds good but is already given away in the core vision of emulating northern development - of 'catching up'.

Nepad in fact commits Africa to capitalist development. Its key goals are to attract capital investments of \$64 billion per year - from donors as well as private sector investment - and to gain 'market access' through increased productivity and expanding exports. By this means it reckons to achieve 7% economic growth per year for 15 years. This is not credible. The central problem is that northern development was substantially financed by plundering the third world and there is no other third world left to plunder unless African leaders plunder, once again, their own people.

This is more or less what they do anyway. As Manuel Castells argues, the northern powers and African elites have a common interest in Africa's fragmented integration into global capitalism. Europe and the US benefit from the extraction of valuable assets and "what is a human tragedy for most Africans continues to represent a source of wealth and privilege for the elites" (2000: 127). In this light, the 'partnership' in Nepad is hardly encouraging. Money will be made as the poor are made poorer and the MDGs slip away.

Developing regional infrastructure corridors for transport and energy is a key focus for Nepad. The West African Gas Pipeline - to take Nigerian gas to Benin, Togo and Ghana - fits the bill. Originally proposed by Chevron in the early 1990s, it is now Nepad approved. Nepad argues that this breaks with the colonial infrastructure that connected African countries only to the colonial power. So it appears. Yet the money flows are as colonial as ever. The project will be subsidised by "generous exemptions from taxes, rates and customs duties" while the \$400 million invested will return to the northern countries which provide the engineering resources [ERA and Oilwatch 2000: 13]. The profits will follow in the same direction. The people, meanwhile, are unlikely to be able to afford the energy at the end of the pipeline. The benefits of gas will pass them by as surely as if the gas went north. A similar project is to supply gas from Cote d'Ivoire direct to AngloGold

²¹ This and all subsequent references to the Nepad document are to paragraph numbers rather than pages.

Ashanti's Ghanaian gold mines. It is an infrastructure developed for the benefit of capital, not people.

The West African Gas Pipeline also reflects Nepad's bias towards capital intensive mega-projects. Such projects are favoured by financial institutions, particularly the World Bank. This is partly because they are easier to administer than numerous small initiatives but, more substantially, because they reflect the interests of global capital. Mega-projects produce 'enclave economies' divorced from local needs and dependent on transnational corporations and expatriate resources. They give concrete form to Africa's fragmented integration into global capitalism.

A regional power

The South African government's contribution to Nepad was critical and, allowing for differences in context, the document reflects its development thinking. This role reflects the pan-African sentiments of its leaders but also its growing economic interest as the leading economy in the region - producing 44% of Sub-Saharan Africa's GDP. As Deputy Minister of Foreign Affairs Aziz Pahad put it, "economic diplomacy is a central pivot around which to anchor all our efforts to address underdevelopment and poverty. In this regard, there are many new economic opportunities in Africa, the Middle East and Asia which should be investigated and exploited by the South African private sector" [2005].

South Africa's corporations, public and private, have certainly followed the diplomats into Africa, investing in a wide range of sectors, from cell phones and supermarkets to resource extraction, and accounting for nearly half of all foreign direct investment in the Southern African Development Community. Mining and metal processing have been prominent, as indicated by the acquisition of Ashanti by Anglo American, South Africa's biggest corporation.

The country's interest in crude extraction is relatively new, although it has the best developed refining and petrochemicals sector in the region. PetroSA, the state oil corporation, was established in 2002 from a merger of the state's exploration and refining businesses and has two relatively small fields off South Africa itself. It has been moving into Africa since 2003, acquiring exploration and production licenses in Gabon, Algeria and Nigeria. In 2005, following on the heels of South Africa's peace keeping troops in Darfur, PetroSA signed an exploration agreement with Sudan's state owned corporation.

Sasol developed as a creature of the apartheid state but was privatised in 1979 and is now a major beneficiary of South Africa's re-admission to global markets (see Chapter 3 below). It has expanded rapidly into upstream oil and gas exploration and production with operations concentrated in Africa. Gas fields in Mozambique were brought into production in 2004 to supply Sasol's South African production plants through a dedicated pipeline. In Gabon, it has shares in several oil fields and is the operating partner in an exploration project. It is entering into deep sea exploration in Nigeria and is reviewing operations in Equatorial Guinea and South

Africa. Sasol is also developing a gas-to-liquids project with ChevronTexaco at Escravos in the Niger Delta. Clearly, it is not deterred by the idea of dealing with regimes that abuse human rights although it says it is determined "to bring world-class environmental standards to all new and planned future projects, irrespective of location and project type" [2004: 39].

Corporate South Africa's march into Africa is backed by state-directed funding through the Industrial Development Corporation. The IDC has typically backed large scale capital intensive projects, reflecting an historical bias towards mega-projects which is reinforced by newly developed institutional relations with the World Bank. It has a specific interest in the petroleum sector and provided substantial backing to Sasol's Mozambique gas development. Not surprisingly, the IDC, Sasol and PetroSA are all keen to identify their African projects with Nepad.

Producing environmental injustice

The industry likes to talk of the production chain as a value chain. The 'value added' at each link in the chain includes salaries and wages, taxes and other payments to governments, debt repayments and interest and, finally, what is taken as profits by the corporations and either paid out to shareholders or reinvested. It excludes the costs of raw materials and services provided by other businesses. Value added is thus the difference in value between what comes in and what goes out.

The notion of value added serves a vital ideological function. It proclaims that what it counts as value amounts to a general social good. And this proclamation is then turned into an assumption. Thus, a country's Gross National Product (GNP) is, put simply, the aggregate of value added from all economic activity. The basic assumption of mainstream economic thought is that the growth of GNP is in everybody's best interests even if some people benefit more than others. Value added is thus viewed as the basis of creating wealth and creating wealth is, in the end, the same as development. It follows that poor people are poor because they lack development. Put crudely, anything that 'adds value' is then said to be good for the poor.

Yet value added conceals more than it reveals. The calculation of value excludes major costs which are also produced at each link in the chain and imposed on other people, on society in general or on the environment. These costs could be called 'value subtracted' although they are more conventionally known as 'externalities'. Those who pay these costs - those from whom this value is subtracted - are those who are made poor by the process of wealth creation.

The idea of value added is the idea of those who have power in society. The idea works for them because it conceals unequal relations of power. By proclaiming value added as a general social good, it can also be

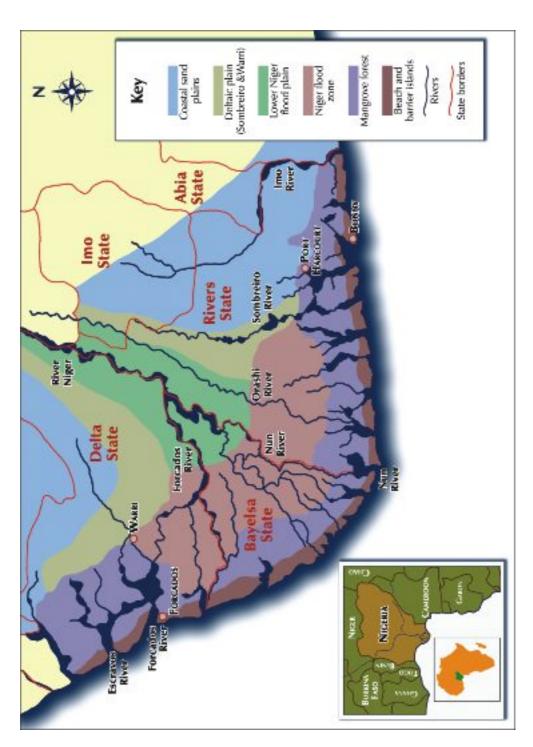


Figure 2: Map of the Niger Delta

claimed that everyone is finally on the same side, that the interests of the poor are the same as the interests of the rich. It may be questioned whether the total of value added is equal to the total of value subtracted. For corporations and the dominant institutions of capitalism, however, this question does not arise. Indeed, it is precisely the function of the concept of value added to keep the question off the table.

Environmental injustice arises from this unequal distribution of the benefits and costs of production. There are three basic ways in which value subtracted costs are imposed on people: enclosure, externalisation and exclusion.

Enclosure

Enclosure involves the appropriation of a common resource and the dispossession of those who previously had rights to the resource.

Nigeria's Land Use Act, promulgated in 1978 by the then military regime under President Obasanjo, gives the state control of all land and allows it to evict people where land is required in the 'over-riding public interest'. The public interest specifically includes "the requirement of the land for mining purposes or oil pipelines or for any purpose connected therewith" [quoted in HRW 1999: 59]. The Petroleum Act makes oil and natural gas the property of the federal state. It provides for compensation for loss of use but any rent on the land goes to the state.

The practical effect of these two acts is that oil corporations can and do take what they want from the people within their areas of operation. The corporations themselves call this the 'land take'. They also decide what they will pay in compensation. The land take is enforced by the state security forces. This includes the navy, army, and the Mobile Police who are described by Human Rights Watch as "a notoriously brutal paramilitary riot unit within the Nigeria Police Force" [HRW 2002: 12].

The elite of the Mobile Police are deployed within the oil installations and paid by the corporations themselves at well above normal rates. They are commonly known as the 'Shell police' or the 'Chevron police' etc. On at least one occasion Shell made a deal to supply arms to security forces. It denied doing so until confronted with evidence and then claimed that the deal had fallen through. Various gangs recruited from the ranks of unemployed youth and armed with anything from machetes to sub-machine guns have also been deployed to intimidate and terrorise people.

This is the pattern for the oil industry throughout Africa: the corporations are given the right to take what they want while all rents, royalties and other monies received in exchange for this right are taken by the state. Consultation with communities in Chad is touted by the World Bank as a model of best practice. Consultation,

however, comes after the negotiation between the state and the corporations has already expunged people's rights in land and made them over to the corporations. That the oil project will go ahead and that the land required by the project will be appropriated is not up for negotiation in the course of consultation. Even the parameters of compensation are pre-defined. What is left to consultation amounts to little more than a public relations exercise.

Externalisation

Externalisation is about excluding the costs of pollution from the value chain so that these costs do not appear in the market price of the commodity. Externalised costs are thus made to constitute free benefits to the corporate producer. They are an unacknowledged subsidy. But these costs do not in fact disappear. Rather, they are imposed on others: they reappear as uncompensated costs to communities and workers who suffer the loss of resources and health damaged by pollution and other forms of environmental degradation.

In the Niger Delta, externalisation is an extension of dispossession as polluted water sources, fields and fisheries are simply lost to their owners. But the effects are not restricted to this. The health impacts of air pollution spread across a wide area, and all who rely on locally produced food - whether from their own production or bought at market - risk contamination. At the global scale, the emissions of carbon dioxide and methane from Nigeria's flares make a substantial contribution to climate change and the costs will, again, fall heaviest on the poor.

Nigeria does have environmental laws that should notionally ensure that these costs are internalised - that they are actually paid by the corporations. The state does not, however, have the capacity or the inclination to enforce the law. This contrasts starkly with the political will and resources devoted to enforcing dispossession. Consequently, corporations have been almost entirely self-regulating in respect of their environmental practices in Nigeria and have externalised costs without inhibition. This began to change in the 1990s when the actions of local people's movements combined with international civil society organisations to expose corporate practices. The corporations, notably Shell, perceived this primarily as a public relations disaster and responded mostly with PR 'spin'. Such caution as they now exercise is proportional to the national, and particularly the international, visibility of their practice.

Chad is Africa's newest oil state and the externalised costs to date have been mainly those associated with exploration, drilling and construction. It has also been subject to unusual scrutiny as the political price that the World Bank paid for insisting that here it would demonstrate how oil extraction can contribute to alleviating poverty - even against the odds. The oil started to flow in 2003 and the flares are burning above the villages of southern Chad. The impacts will be felt in time and will most likely escalate over time. They will be mitigated only in so far as it is possible for local and international civil society to maintain present levels of scrutiny.

Exclusion

Exclusion relates to decision-making power in the market and in society. Given the weight of economic forces in shaping broader social institutions and relations, these two aspects of exclusion frequently reinforce each other. The institutions of the market are specifically designed to remove decision making from the public sphere and so exclude all who do not have an interest in profit. Thus, those who are dispossessed or who carry the externalised costs of production are prevented from contesting the theft or contamination of their resources.

Niger Delta communities have a long history of resisting the enclosure of their land. The Movement for the Survival of the Ogoni People (MOSOP) became the best known organisation of resistance and an inspiration for communities across the Delta. In 1993, it organised mass protests throughout Ogoniland and forced Shell to close down its Ogoni production wells although active pipelines still cross the territory.

Resistance was met with brutal repression. It started with security force attacks thinly disguised as inter-ethnic violence. At the same time, Shell was trying to buy off MOSOP leaders. Then, in 1994, four 'moderate' Ogoni chiefs were murdered at Giokoo. The circumstances indicate that they were killed by security operatives acting under cover. Prominent MOSOP leaders were immediately accused of the murders and arrested - without allowing time even for the pretence of an investigation. In 1995, Ken Saro-Wiwa and eight others were executed on the order of a rigged court. According to Owens Wiwa, Shell's managing director told him earlier that year that he could secure his brother's release "but would only do so if MOSOP called off its international campaign against his company" [Okonta and Douglas 2003: 58]. Saro-Wiwa refused. Shell denies making this offer.

The Giokoo murders also provided the pretext for the military occupation of Ogoni. A special task force closed off media access and launched a terror campaign marked by assault, arbitrary detention, torture, rape, murder and military assaults on towns. Colonel Paul Okuntima, who led the operation, described these assaults thus: "So we shall surround the town at night ... The machine gun with five hundred rounds will open up ... four or five like that open up and then we are throwing grenades ..." [quoted in Okonta and Douglas 2003: 132]. Okuntima later claimed that Shell helped finance the costs of the operation. Shell denied it and Okuntima subsequently retracted. Human Rights Watch established, however, "that all through the Ogoni crisis Shell Nigeria representatives met regularly with the commander ..." [1999: 135].

The use of brutal security force violence did not begin or end in Ogoni. From the early 1990s protest across the Delta became more organised and numerous ethnic groups adopted charters loosely modelled on the Ogoni Bill of Rights. They commonly claimed the right to control land and natural resources, including oil, and demanded a meaningful political voice within a restructured Nigerian federation. They also looked for a

broader unity as 28 ethnic groups joined to form the Southern Minorities Movement. This was followed in 1997 with the launch of the cross-ethnic Chikoko Movement as "a representative mass organisation for the defence of the rights of the ethnic minority nationalities in the rich Niger Delta Area ..." [quoted in HRW 1999: 109].

The savagery of the security force response also intensified throughout the decade. Ijaw youth greeted the new year of 1999 by mobilising in support of the Ijaw Youth Council's Kaiama Declaration [see Box 11]. In response, security forces killed over 100 people and burned down ten or twenty homes. In many similar incidents around the Delta, corporate helicopters and boats were seen carrying security forces. The corporations routinely deny involvement. However, new evidence brought to light in preparation for a court case against Chevron indicates that soldiers not only used Chevron's helicopters in a 1999 attack on the villages of Opia and Ikenyan, but that Chevron paid them for the operation 22.

The death of military dictator Sani Abacha in 1998 opened the way to a restoration of civilian rule and the election of Olusegun Obasanjo, himself a former military ruler, as president. The occupation of Ogoni was lifted but the Delta is still saturated with security forces and abuse of people is routine. On the other side, people have occupied oil facilities and forced temporary shut-downs across the Delta. In 2002, several hundred women occupied ChevronTexaco's Escravos terminal in Delta State for 10 days, one example of the growing assertiveness of women in resistance.

In this period, gun trafficking in the Delta has escalated and armed youth groups, sometimes known as 'cults' or 'area boys', have emerged. Mostly, it appears that they have been armed by politicians to intimidate opposition party supporters, by local elites to secure their control over oil sub-contracts and pay-offs against rival factions, or through 'illegal bunkering' networks responsible for the wholesale theft of oil. Cult leaders have also been used to infiltrate and subvert resistance movements.

Five months into Obasanjo's rule, 12 policemen were reported killed in a clash with armed youth from the town of Odi. The army retaliated against the whole town of 15,000 people according to Human Rights Watch [2002: 21ff]. Over a period of ten days, they razed the town to the ground leaving just three buildings standing - the bank, the Anglican church and the clinic. They killed several hundred people and local people reported rape and torture as well. Obasanjo, as Commander in Chief, allowed that the soldiers had gone 'beyond their brief' but refused to apologise, to promise compensation, to investigate the incident or to discipline the army unit.

Chad's president, Idriss Deby, took power when his rebel troops captured the capital N'Djamena in 1990 but subsequently gave his regime a veneer of democratic legitimacy through rigged elections. Friends of the Earth report that, "In 1997 and 1998, hundreds of civilians were massacred in the project area by national troops,

²² The law suit has been filed by Earthrights International. See story posted August 3, 2005 at www.earthrights.org

for the sake of 'pacifying' the region to make way for oil development" [Nguiffo and Breitkopf 2001: 8]. Community consultations were conducted in the presence of security forces "at least until 1997" and thereafter in the presence of government officials [Djiraibe and Horta 2004].

Chad ranks at the bottom of international league tables on most indicators of good governance including corruption and 'voice and accountability'. Government officials are increasingly appointed from a narrow clique around the president and arbitrary arrests, torture and summary executions by security forces are routine. Independent radio stations are regularly closed down and journalists arrested in response to critical broadcasts. In 2003, a station run by local human rights groups was closed down "less than two weeks after international VIPs had been in the country for the October 2003 pipeline inauguration" [Gary and Reisch 2005: 21].

These then are the means by which the value subtraction chain is made to work. Below, we look at each link in the upstream chain, focusing on Nigeria, Africa's oldest oil state, and Chad, the newest oil state. This is not a complete description. A detailed documentation of every incident of abuse would be a very long book indeed. Rather, our intention is to show the oil industry at work and the stories told here are only a very small selection of the stories that could be told.

Getting at the oil

Seismic lines

Exploration starts with geological surveys. Crude oil is formed from vegetation that rotted many millions of years ago and is typically found in porous rock formations. Early oil exploration relied on what could be seen on the surface of the ground - visible oil seepages or mound-like formations associated with earlier discoveries. Following World War I, however, it was realised that an image of underground geological strata could be produced by setting off a sequence of explosions²³. The explosions cause seismic events - that is, they make the ground vibrate - and an 'echo' from these vibrations can be measured to produce the image of underground formations.

What happens is this: First, seismic lines are cut by clearing all vegetation to make a straight corridor across the country. The corridors are getting narrower but may be from 1 to 8 metres wide, depending on the terrain, and are many kilometres long. Next, holes are drilled to plant dynamite at regular intervals along the line. Finally, the dynamite is set off to create a series of explosions along the length of the line. This exercise is repeated in parallel lines cut at intervals of 400 metres or more. Alternatively, if the terrain is suitable, giant 'thumper trucks' are used to vibrate the earth. Worldwide, the industry cut some 15 million kilometres of seismic lines in the ten years between 1988 and 1998²⁴. In Nigeria, Shell estimated in 1993 that it had cut

²³ This followed from a technique developed by German army engineers who found that they could pin-point enemy artillery by measuring the ground vibrations caused by firing the big guns.
²⁴ See RAN and PU 1998: 1

60,000 kilometres of seismic lines, including 39,000 kilometres through mangroves, and said it planned to cut a further 31,380 kilometres with 17,400 through mangroves²⁵.

The impacts vary according to location. Blasting has an immediate effect on people and domestic stock, fish and wildlife. Clearing seismic lines has a longer term effect. The lines cut through Niger Delta mangroves affect sediment deposition and the stability of soils. Mangroves are slow growing and ecological recovery slow and often disrupted by the next round of development. In forest areas, seismic lines have the additional effect of fragmenting ecological systems and so reducing their resilience to further shocks. Seismic lines create corridors of access for non-local people, undermining local resource use regimes and creating conditions for conflict. These corridors of disturbed land also facilitate the migration of invasive plant species.

Drilling

Seismic mapping indicates potential sources of oil, but only drilling can confirm that oil is indeed present and in commercial quantities. Drill rigs are massive pieces of equipment and transporting them into an area involves more clearing of vegetation to make roads. In the Niger Delta, canals are also constructed to take rigs to selected drill sites. Dredgings are simply dumped on the banks. In mangrove areas, this matter turns acidic on contact with oxygen and in all areas the effect is to turn the waters muddy. In some areas, natural land barriers between fresh and salt water have been breached, as at Okoroba where a canal dredged "right across the village" in 1991 joined two distinct water bodies and resulted in the death of species in both as well as the loss of the village's source of fresh water [Okonta and Douglas 2003: 81]. Along the way, several coconut plantations were destroyed. In other places, road construction has created land barriers that have cut off and dried out flood plains on the one side while waterlogging the other. "As a result, trees die, fish ponds are destroyed, and seasonal fishing [is] completely disrupted, often destroying a significant percentage of [local] income" [HRW 1999: 57].

If the exploration drill strikes oil, further drilling for production wells follows. There are over 250 wells in the three oil fields developed in Chad so far. Drilling and extraction produces exploration and production wastes (E&P wastes). Doyle reports that the global industry produces about three million tons of E&P wastes every year, little of which "is regulated even in the US" [2002: 135]. The waste includes 'drilling muds' used to lubricate the drills. Traditional muds were oil based and highly toxic. Water based muds are less toxic and promoted on environmental grounds. However, they still contain a wide variety of heavy metals and other toxins and are more difficult to recycle than oil muds. The massive quantities dumped therefore partly off-set the lower toxicity. Drilling also produces tailings or 'drill cuttings' - which include bits of rock coated in oil from the oil bearing strata. This too contains materials which are toxic or may become toxic through chemical reactions that result from mixing with other matter - including the drilling muds - or from being exposed to oxygen at the surface.

²⁵ See HRW 1999: 55

Disposal has typically been negligent. E&P waste has simply been dumped - into the sea from marine operations or in pits or ponds on land. In wet areas such as the Delta, the toxics leach into the surrounding soils and water systems. The oil has long since ceased to flow from Nigeria's first well at Oloibiri, but the earth remains poisoned and barren. Whatever marginal benefits may have trickled down through Nigeria's corrupt networks of patronage, people who depend on cultivation and fishing are considerably worse off than before the curse of oil was laid on them. In the dryer environment of Chad, where the oil wells are brand new, monitoring groups²⁶ report that waste drilling fluids are injected into shallow groundwater used by local people for drinking and domestic use. At the same time, the corporations have sunk bore-holes to satisfy the considerable water demand of oil production. These wells are deeper than those used by villagers and served by powerful pumps, so threatening to dry out local water supplies.

Infrastructure of dispossession

In the Niger Delta, oil is found in relatively small fragmented pockets. The wells from several fields will therefore supply a single flow station through a network of pipelines. Major pipelines then transport the oil either to the refineries in Port Harcourt or to shipping terminals and are complemented by tank farms and pumping stations along the way.

This infrastructure in itself occupies and traverses the land. The massive storage tanks, the pipelines - many of which are above ground in the Niger Delta - and the processing plants along the way dominate the landscape of oil producing regions. This land has been appropriated from local people. People are also hemmed in by the infrastructure. Pipelines frequently pass directly over their fields and within metres of their houses.

Shell produces half of Nigeria's oil. Its concession area in the Delta covers 31,000 square kilometres and it can effectively take what it wants within that area. By 1996 its 'land take' in the Niger Delta totalled 240 square kilometres. The act of taking land is frequently met by local resistance but carried through by force provided by state security forces. In 2002, Shell initiated a pipeline project to connect wells in the Olomo area to its nearby Bonny terminal. The construction involved cutting canals through the mangroves to move equipment and labour. The decaying plant matter was left clogging up waterways. According to the Niger Delta Project for Environment, Human Rights and Development, the environmental impact assessment (EIA) was flawed and work began before the EIA was even completed. Construction was accompanied by heavy security led by the naval commander at Bonny. People from the local fishing community quoted him as saying: "Nothing can stop the project, and you Olomo people should comply with everything or else."²⁷

The Delta is intensively used, so people who are dispossessed do not easily find alternative land. Consequently, land dispossession has contributed towards the growing population of people living in urban shanty towns. In April this year, the Rivers State government evicted the people of 'Ogoni Village' in Port Harcourt and demolished their homes to make way for an expansion of the Agip corporation's waterfront

²⁶ Official monitoring in Chad, commissioned by the World Bank, has been carried out by three groups: the External Compliance Monitoring Group, the International Advisory Group and the Inspection Panel. Reported in ED, CRS and BIC [2004: 5].

facilities. Many of the residents had previously been displaced from villages destroyed by the military in Ogoniland. The eviction was carried out without notice, without compensation and without alternative provision of housing. Opposition to the eviction, from residents supported by MOSOP and other human rights organisations, was met with intimidation by armed gangs as well as police harassment and arbitrary arrests. According to Minority Rights Group International, "one resident was reportedly killed in an attack by youths, while a number of others were left with machete wounds." Agip denied any involvement or responsibility.

In Chad, it was originally estimated that 150 households would be "made non-viable" by the first three oil fields developed since 2000. As is typical for big World Bank supported projects, the costs to local people were underestimated. By 2004, according to the Bank's own documentation, about 240 households had been dispossessed and the final tally was expected to reach 300 as the oil installations "had taken more land … than predicted" [Gary and Reisch, 2005: 34]. These are the households worst affected but not the only ones dispossessed of some part of their resource base. According to Gary and Reisch,

The villages closest to the facilities stand in the shadow of gas flares and are almost completely surrounded by oil field installations, earning them the name "villages enclavés". High-tension power lines traverse the landscape, yet those villages in and near the OFDA are still without electricity - a fact not lost on many villagers. [2005: 23]

This is only the beginning of the oil story in Chad. The project consortium - ExxonMobil, ChevronTexaco and Petronas - are constructing two new fields in 2005. They, and several other consortia, are also actively exploring for oil elsewhere in Chad and in neighbouring countries - Niger, north Cameroon and the Central African Republic.

This round of exploration is made feasible by the Chad-Cameroon pipeline which links these land-locked countries to the global market. The pipeline has the capacity to carry 250,000 barrels per day (bpd) which can be expanded to 500,000 bpd. Production from the existing Chad fields, according to the consortium²⁹, is now peaking at about 217,000 bpd, but these fields have an expected life-time of only 25 years and production will start falling off from 2010. Keeping the pipeline in business thus depends on further discoveries. This was anticipated from the beginning. Nevertheless, the EIA on the Chad Export Project investigated only the impact of constructing the pipeline itself and the first three fields that are now in production.

The pipeline itself cuts through the length of Cameroon - some 1,070 km from southern Chad to the port of Kribi with a further 11 km of sub-marine pipeline to an off-shore loading terminal. The pipeline is buried and construction involved cutting a wide corridor through Cameroon's rainforest. The impact is similar to cutting seismic lines, except on a larger scale. For the people who live in it, the rainforest is not 'wild nature'. It is defined in terms of a commons regime that allocates rights in different resources - to cultivation, to gathering

²⁸ Minority Rights Group International, Press Release 17 May 2005

²⁹ See Esso Exploration, 2004.

forest fruits and to hunting - and so provides people with their livelihoods. All along the pipeline, people lost economic trees and fields.

A report for the Extractive Industries Review (EIR), on the impact of World Bank projects on indigenous people, notes the disproportionate impact on the Bagyeli Pygmy people, a minority group who rely almost exclusively on the forest for their livelihoods and most of whom live along the pipeline route. The pipeline construction opened access to commercial loggers and bushmeat traders. It also degraded water sources. According to the report, "... in-migration and social upheaval brought by the pipeline has left them with little to survive upon, and under severe cultural attack" [Caruso et al 2003: 68]. Even the 'bio-diversity offset' programme threatens Bagyeli access to forest resources. The programme has established two national forest parks and will subordinate the people's commons regime of forest management and use to the authority of the conservation body [73].

Sama Bailie from south west Cameroon described the experience like this:

They promised us jobs. They took everything from us. They took our land. They took our forest. They took our water. [Quoted in Caruso et al 2003: 1]

Compensation and conflict

To be sure, compensation has been paid out for some of the assets appropriated. The experience in Chad and Cameroon, being subject to exceptional scrutiny, is probably as good as it gets. The compensation plan was elaborate and the rates of compensation were raised "to a more realistic level after lobbying by local civil society groups in Cameroon and Chad" supported by international NGO research [Gary and Karl 2003: 75].

This merely highlights the fundamental inequality of the relationship between oil companies and people. Just as the corporations are able to appropriate land at will, so too they are the final arbiters of what they will pay for it, to whom and in what form. Compensation in Chad and Cameroon thus remains a point of contention and is criticised as arbitrary and frequently inappropriate with once-off payments, sometimes in cash and sometimes in consumable items, substituting for assets that provided long-term livelihoods.

In contrast, there is no scrutiny in the militarised oil enclave of western Democratic Republic of Congo. Details of compensation cannot be verified because the entire area is sealed off, but it is thought to consist in the odd bag of rice³⁰. Yet even this may be better than Myanmar where local people are compensated by being enslaved

Compensation is also a source of local conflict as it is paid to those in a position to claim it - who are not necessarily those dispossessed. In Cameroon, the minority and semi-nomadic Bagyeli people were mostly not

 $^{^{\}mbox{\tiny 30}}$ See Gary and Karl [2003: 37].

in a position to claim. They received some "insignificant consumer goods such as small agricultural tools and foodstuffs" while people from the majority Bantu claimed compensation for Bagyeli assets. "The Bagyeli have been left landless" [Caruso et al 2002: 78]³¹.

In Nigeria, conflict over compensation and who gets it is pervasive and intense. As is usual, the oil corporations decide what they want and what they will pay for it. Resource users are supposed to be compensated at set rates, but "government agencies and private companies are largely able to ignore customary land use rights" [HRW 1999: 60]. Instead, notification of a corporate 'land take' is the starting signal for elite competition over the spoils of compensation. Generally, the corporations hand over a substantial lump sum to someone supposed to represent the community - usually the chief or local government representative - and claim innocence for whatever might follow. Further distribution of the money is as likely to depend on the operation of patronage networks as on the loss of assets.

The entire village of Finima, at Bonny on the Rivers State coast, was moved in the early 1990s to make way for corporate oil and gas terminals. As is common in 'host communities', the chieftaincy is disputed. In 2001, according to Human Rights Watch [2002: 10-14], Finima youth occupied the ExxonMobil terminal claiming that the original compensation was "inadequate and paid to the wrong people" - to the challenger for the chieftaincy rather than to the incumbent chief. The terminal was closed down for three days and, following negotiations, ExxonMobil paid US\$3 million further compensation, but again paid it to an account controlled by the challenger. When the legitimacy of this payment was guestioned, a detachment of the feared paramilitary Mobile Police appeared in Finima. They harassed and arrested known supporters of the incumbent and "several dozen youths" fled town. Those that had jobs lost them because of their enforced absence. The 'MoPo' also took the opportunity to extort money from local people. More people were arrested in Port Harcourt, the capital of Rivers State. The implication is that the compensation payment was used by the challenger to buy in the support of the state level command of the Mobile Police. Supporters of the incumbent allege that ExxonMobil was complicit in the Mobile Police action. The corporation denies it but the circumstances in which the payment was made strongly suggests an agenda in support of the challenger. And the effect was a kind of proxy punishment meted out to people associated with the youth group who occupied the terminal - whether or not they were directly involved.

Constructing boom and bust

During the construction phase of oil extraction - from drilling to building the infrastructure of flow stations, treatment facilities and pipelines - the demand for labour increases dramatically. It falls equally sharply when construction is completed because oil is capital intensive and produces few long-term jobs. The result is a short term boom in the local economy quickly followed by bust. But even the boom is a boom only for those who can ride it. Construction creates a masculine, unstable and floating labour force and the short-term influx of workers is more likely to destabilise than sustain local communities. In-migration is in turn associated with prostitution and the spread of communicable diseases and Aids in particular.

³¹ See also Nguiffo [2002: 5].

In the villages of the Niger Delta, the successive stages of exploration and construction are experienced as so many invasions. And indeed, the fleets of barges, lorries, corporate 4x4s and helicopters are invariably accompanied by state security forces. Where jobs are available to local people, they are managed through sub-contracts designed to buy the support of politically connected patronage networks, to divide local communities and suppress resistance.

Even the work opportunities taken by locals can be at the expense of the longer term local economy. Gary and Karl note that in Chad, the World Bank foresaw the "real risk that farmers could leave their fields ...". They comment that agriculture forms "the backbone of the rural economy in southern Chad, employing hundreds of thousands of workers ..." [2003: 74]. The impact on local education was less expected. By mid-2002 at the height of the construction boom in Chad, 14 schools in the oil region had closed down as teachers and students joined the oil rush [2003: ft.nt. 33].

Getting the oil out

With the infrastructure in place, the oil starts to flow. The liquid that comes to the surface is a mixture of oil, gas and water. Before being transported out of the region and delivered to refineries, the crude oil goes through its first treatment to separate out 'associated' gas and 'produced' water.

Flaring

There are three options for dealing with associated gas: re-inject into the oil bearing strata, use it as an energy source, or flare it off.

Nigeria's crude has a high associated gas content which is separated out at flow stations and flared off. The Delta communities live with the most intensive flaring in the world. In 1999, 95% of associated gas was flared off as compared with .05% in the USA. The gas flares burn for the life-time of the well - which may be as long as 40 years in Nigeria. The flame may be as high as 200 feet, creating a permanent day in the vicinity, and it roars like a jumbo jet taking off on full throttle. Most are located close to the ground - where the recognised standard requires a stack of at least 25 metres high - and burn horizontally behind earth bund walls. In one case, a Shell flare near the coast was sited so low that it was flooded at high tide. Vaporised salt was thus added to the flare emissions that settled on nearby Iko village. This flare was closed only when it was publicised by local environmental groups.

Flares are the major source of air emissions in the upstream industry. In Nigeria the impact is increased by poor maintenance. Many flares do not burn efficiently and deposit soot (particulates) and oily spots on neighbouring communities while also releasing unburned methane and other hydrocarbon compounds.

Table 3 is based on Shell's own figures for its emissions to air but these figures do not distinguish between flaring and other emission sources. Nigeria's light crude has a high evaporation rate. Volatile organic compounds are emitted along the length of the production line from faulty seals on valves, joints, storage tanks and loading equipment and from spills as well as from inefficient flares. Shell's reporting implies that all sources including incidents are taken into account but the failure to specify sources leaves this ambiguous. Shell produces roughly half Nigeria's oil so these figures can be doubled to give an idea of a low estimate of total emissions. It is a low estimate because industry habitually under-reports and other corporations which have been subject to less intense scrutiny than Shell may in fact be worse performers.

Table 3: Shell Nigeria production and emissions in tonnes

	1999	2000	2001	2002	2003
Oil and gas production	45,160,000	53,750,000	57,720,000	48,000,000	61,560,000
Gas Flaring	6,458,000	7,693,000	7,909,000	5,222,000	6,385,000
Carbon dioxide emissions	18,353,000	21,838,000	22,489,000	15,467,000	18,821,000
Methane emissions	86,500	98,400	111,600	72,800	87,000
Volatile Organic Compounds	48,800	61,800	71,700	27,600	30,200
Sulphur dioxide emissions	1,500	1,700	1,800	1,100	1,100
Nitrogen oxide emissions	20,100	17,800	27,300	22,300	23,100

Source: Figures adapted from Shell Annual Report 2003

Carbon dioxide and methane are greenhouse gases and flaring makes Nigeria a major contributor to climate change. A recent publication on flaring in the Delta by Environmental Rights Action (ERA) and the Climate Justice Programme (CJP) lists a heady cocktail of toxic substances that can be expected from flaring associated gas [ERA and CJP 2005: 24]. Thus, volatile organic compounds are likely to include benz[a]pyrene, benzene, toluene and xylene. Dioxin and hydrogen sulphide are also likely emissions in addition to the sulphur and nitrogen oxides.

The oil industry claims that acid rain is not caused by flaring in the Delta because the crude is 'sweet' with a low sulphur content. However, the quality of crude across the Delta is not uniform and acid rain is caused by nitrogen oxides as well. ERA and CJP cite studies confirming what residents have alleged for many years: that there is a serious acid rain problem which accelerates the corrosion of corrugated iron roofs [26]. It also affects water bodies and plant life, including crops. In contrast with Nigeria, Chad's crude is of very poor quality and sulphur emissions from flaring will be considerably higher.

The health impacts of flaring in Nigeria have not been researched but people living near flares complain of respiratory ailments, skin diseases, miscarriages, cancers and other ailments. This is consistent with flaring

emissions. ERA and CJP calculate the minimum probable impact just from particulate emissions in Bayelsa State as follows: "49 premature deaths; 4,960 respiratory illnesses among children; and 120,000 asthma attacks" each year [2005: 25]. These figures do not include the impacts from non-particulate emissions nor does it take account of the combined effect of different toxic elements or the accumulated effect of exposure over time.

Nigeria legislated against gas flaring in 1969 and has imposed fines since 1980. The fines have been treated simply as an operational expense and much cheaper than the costs of not flaring. Re-injecting associated gas into the oil bearing strata is used only in so far as it 'enhances production'. Local markets for gas were not developed either by government or corporations. In the 1990s, however, new transport technologies enabled gas exports to meet growing international demand for liquefied natural gas (LNG). With this, gas has become a profitable proposition and the corporations committed to eliminating flaring by 2008.

Whether they will live up to their word is another question. Shell's 1999-2003 figures show that claimed reductions in the rate of flaring were entirely off-set by expanded oil production. Further, the corporations are managing the expansion of gas production against market demand. Profitable markets, rather than environmental commitment, is likely to determine whether they meet the 2008 deadline. Shell nevertheless records its investment in associated gas gathering under its 'environment-related spending profile' and this investment makes up over 60% of that spending [see Shell 2003: 10]. Finally, the new gas plants are supplied from dedicated gas fields (non-associated gas) as well as from associated gas. The former is cheaper to produce and therefore more profitable. ERA and CJP show that most of Shell's production to date is from dedicated fields and comment that the Bonny Liquid Natural Gas plant "bears the hallmarks of a [non-associated gas] project" [2005: 18].

Produced water

A portion of produced water is re-injected into the oil bearing strata to maintain pressure in the well and so optimise extraction. The rest must be disposed. Shell pumps it with the oil to the coastal terminals where it is separated, treated and discharged into the sea. The oil industry claims that disposal of produced water to sea has negligible environmental impact because the residue of oil is insignificant and quickly dispersed. Nevertheless, the quantities of produced water are immense. Shell discharged 33 million cubic metres in 2003 which suggests a Nigerian total of about 60 million cubic metres. The regulatory limit for oil-in-water content is 48 parts per million in deep water³². Shell claims an average of 7.33 ppm. Assuming that Shell is to be believed and that this figure is the average for all Nigerian production, then 440 cubic metres of oil residue was discharged in 2003. Moreover, this residue is composed of those compounds which are most difficult to strip out from the water and these are the most soluble and toxic hydrocarbon compounds³³. Produced water also typically contains heavy metals which are not mentioned in Shell's 2003 report.

³² Previously there was a limit of 20 ppm for disposal in coastal waters and 10 ppm for disposal to inland waters. These limits presumably fall away with a recent requirement that all produced water be disposed 12 miles off-shore.
³³ See Wills (2000).

However, the assumption that Shell's claims represent the oil industry's practice is very optimistic. In 1999, Human Rights Watch reported that large quantities of produced water are neither treated nor discharged to sea. "At Abiteye, on the Escravos River in Delta State, Chevron has for several years reportedly pumped hot untreated [produced] water directly into mangrove creeks, not even piping it into the main tidal channel where it would be diluted and cause less damage" [52]. This has major implications for marine fisheries as well as inland fisheries since the mangroves are the spawning grounds for a wide variety of species. Indeed, since the Europeans are now plundering West African marine fisheries, it is likely that pollutants from the Delta are entering even the European food chain.

In 2002, Nigerian regulators required deep sea disposal. In 2003, Shell claimed 72% compliance with the remaining 28% still disposed to coastal waters. The impact of produced water in Nigeria is unresearched, but studies in other parts of the world show significant impacts on marine life which are more or less severe according to dilution and dispersal rates³⁴. Over the forty odd years of largely unregulated oil production, the impact on the coastal fisheries off the Delta is likely to have been considerable. Within the Delta, the cumulative impact would be much greater and "can be devastating at some locations" [HRW 1999:52]. Nor can it be assumed that dumping in the Delta will now cease since strict enforcement of the new regulation for deep sea disposal is unlikely.

Spills

The impacts of gas flaring and produced water are part of normal operations. Spills are supposedly not normal but are so common in Nigeria that they might as well be. Human Rights Watch [1999: 50] quotes official figures estimating that "2,300 cubic meters of oil are spilled in 300 separate incidents annually" but notes chronic under-reporting and cites a 'conservative estimate' of up to ten times higher. Official estimates give a total of 2,446,322 barrels spilled in the twenty years between 1976 and 1996 of which 77% "was lost to the environment". In the worst incident to date, between 200,000 and 400,000 barrels spilled from a Texaco well blow-out off shore of the Delta in 1980. The spill destroyed 340 hectares of mangrove as well as polluting the sea.

On its own figures for 2003, Shell spilled 9,900 barrels in 221 incidents although it disclaims responsibility for 68% of the spillage. Judging by its past record, these figures will not include multiple 'minor spills'.

The impacts are all too obvious. Much of the area is mangrove and freshwater forest wetland and more is periodically flooded. The flood of spilt oil soaks into the land, spreads out across the swamps, is carried downstream on the rivers and upstream on the tide. Moreover, oil soaked up in the environment is released again with the next rainy season. Nineteen years after one major spill, a study found that vegetation was recovering at the site but vegetation downstream "was still being degraded due to a slow seepage of crude oil from the spill site" [HRW 1999: 53]. Being a light crude, there is also substantial evaporation of volatile

³⁴ See [Wills 2000].

organic compounds to air and spilt oil frequently catches fire and billows smoke across the neighbourhood.

Fishing, cultivation and hunting remain the most significant sources of people's livelihoods. Leaking oil from high pressure lines is frequently sprayed over a wide area and can wipe out fields, economic trees, fish ponds and natural fisheries as well as contaminating domestic water sources. Households can lose their food supplies and income for a year or more. "The consequences ... range from children missing school because their parents are unable to afford the fees, to virtual destitution" [HRW 1999: 54]. More households are affected by illness - and the loss of income and costs of caring that go with it - resulting from air and water pollutants and by contamination of fish and other food. The shock to household economies is frequently compounded by a psychological trauma. Human Rights Watch have interviewed farmers who "appeared dazed and practically unable to take in the consequences of a recent spill" [1999: 54].

The corporations claim that they clean up spills promptly. This does not reflect the experience of communities. Apart from what appears to be punitive neglect in Ogoni, clean up work is frequently delayed. The corporations blame delays on 'community access problems' - meaning that their staff are stopped from entering the area by the community. If this is so, it is symptomatic of the disastrous relationship of corporations to communities. But the quality of the clean up work suggests that prompt and adequate remediation is not a high priority. Typically, contaminated soil is simply shovelled up by hand and dumped into pits, as was the case following a spill in 1997 at Kolo Creek in Rivers State. In the next rainy season, "the community believed that a new spill had taken place when [the 'cleaned up'] oil was released back into the water" [HRW 1999: 52]

An oil spill is an immediate catastrophe. It is overlaid on the slow catastrophe of cumulative impacts that are turning the Delta into a toxic environment. At one site in Ogoni, excessive levels of oil pollution were found in water four years after production had ceased. Fish and other species gathered for food have died out in some areas and have been shown to be contaminated in others. In many places, people no longer cultivate vegetables because the effects of contamination are visible. Since toxics are concentrated at the top end of the food chain, it seems reasonably certain that a large part of the Delta population are carrying a heavy toxic 'body burden' and that this will have long-term consequences for health.

Compensation is paid for oil spills provided that the corporation acknowledges responsibility. Where it is paid, however, it does not reflect the value of what is lost. Even the World Bank estimated, in 1995, that the value of forest products was 50 times the compensation rates laid down by government [HRW 1999: ft.nt. 195]. The corporations pay a standard rate agreed within the industry which is higher than the government rate but well short of real costs. They also effectively decide what they will pay for and define damages in the narrowest possible way. This most certainly does not include the longer term and more diffuse impacts described above. Beyond this, compensation for spills is subject to the same dynamics as compensation for loss of land. Those who suffered the loss are not necessarily those who get whatever money is paid out.

Like the environmental impact, the impact of social destabilisation is cumulative and it is in this context that disputes over the causes of oil spills must be read. In 2003, Shell claimed that it was responsible for only 32% of the 9,900 spilt barrels that it reported and attributed these spills to "equipment failure, corrosion, human error and engineering faults" [Shell 2003: 8]. Civil society organisations believe a far higher proportion of spills are cause by the rotten state of equipment and pipelines - many of which are past their replacement date. In 1996, Shell said it had replaced all old pipelines and would bury its network by 1998. Be that as it may, its own figures for 1999-2003 show spills rising to a peak in 2001, although substantially improved by 2003. Whether this claimed improvement is credible to people on the ground is another matter.

Shell attributed the remaining 68% of oil spilt in 2003 to "wilful damage ... caused by theft, or motivated by the prospect of compensation payments and/or employment opportunities in the resulting clean-up" [Shell 2003: 8]. The corporations effectively decide if a spill was caused by 'sabotage' and have a clear interest in deciding that it was since they are not then held liable for compensation. Civil society organisations point out that the people affected by spills have no interest in sabotage because compensation does not begin to cover the true cost. Besides, the process of claiming compensation is itself traumatic and time consuming.

In 2001, Shell claimed that a major spill from a wellhead in Ogoni resulted from vandalism. Production in Ogoni has been shut down since 1993 as a result of sustained community resistance, although active pipelines still cross the territory. Wellheads were poorly secured and local activists note extensive corrosion. The clean up was also delayed, in Shell's words, "due to the issue of compensation demand raised by the communities" [quoted by HRW 2002: 21]. It is difficult to resist the speculation that Shell's finding of vandalism and its laggardly clean up were part of a punitive response to its exclusion from Ogoni. Nor would this be the first case of punitive neglect in Ogoni. Already in 1993, a Shell executive implied that the corporation "had done virtually nothing to clean up its pollution in Ogoni because 'only the Ogoni were making noise'" [Okonta and Douglas 2003: 77].

In another case, Elf refused compensation to a family whose land was ruined in 1996. The family demanded that they should at least be employed in the clean up. In the course of these events, members of the family were imprisoned for a night on suspicion of sabotage and also warned off the spill site by the Mobile Police. Human Rights Watch [1999: 63ff] notes that no credible evidence or independent confirmation of sabotage was given. Moreover, it would appear that the 'beneficiaries' of the spill were members of the elite whose relationship with Elf enabled them to get the clean up contract and who could call on the Mobile Police to protect their interests.

The theft, or 'illegal bunkering', of oil is indeed common. How much is taken is disputed and the amount varies according to circumstance. Estimates range from 7.5% to over 30% of Nigeria's annual production. At the low estimate and assuming an official oil price of \$30 a barrel, Human Rights Watch [2003] estimated the profits

of illegal bunkering at between US\$ 750 million and \$1 billion and put the loss of revenue to the state at \$1.5 billion. At the higher estimates and with higher oil prices, these figures can be multiplied several times over. Most of the stolen oil is thought to be sold to Nigeria's own state run refineries and to neighbouring West African countries.

As Human Rights Watch describes it, "Illegal oil bunkering is effectively Nigeria's most profitable private business" [18] but it is a business that is organised from within the top echelons of Nigeria's political, bureaucratic and security elite - with inside information on the oil industry, shipping and market contacts, control over state security forces and patronage networks linking them to local elites and the armed groups who operate as the first link in the bunkering chain.

Losing their grip on the Delta

For Saro-Wiwa, the operation of the oil corporations was nothing short of ecological warfare. The social dimensions of this warfare are intrinsic to the environmental injustice visited on the Delta. It is here that the corporate grip on things is beginning to slip, first because people are organising in resistance but second because corporate and elite strategies carry within themselves a self-destructive logic.

Turner and Brownhill [2004] identify three phases of escalating resistance from mid 2002 as women took a leading role in response to the destruction of the environmental and social basis of their livelihoods. In July 2002, 600 women occupied the ChevronTexaco export terminal at Escravos and shut down production for 10 days. The action inspired people across the western part of the Delta and women and youth groups occupied at least 12 more oil facilities. Christiana Mene from the Escravos Women Coalition protested that, "Our farms are all gone ... [w]e cannot catch fishes and crayfish" and demanded that ChevronTexaco should go or at least provide local jobs that would replace the lost income [quoted in Turner and Brownhill 2004: 67]. Naked protests by women were a significant feature of these actions and demonstrated a determination to defend commons regimes of resource control. The protests were rapidly connected with the gathering global movement opposed to the threatened invasion of Iraq by the US as Environmental Rights Action, Project Underground and Oilwatch mounted a campaign against ChevronTexaco, linking its practices in the Delta with its practices in Ecuador's Amazon region. At the same time, Nigerian popular opposition to the war kept Obasanjo from joining the US coalition.

A second phase of resistance opened in 2003 when largely male trade unionists used the opening created by the women's occupations to launch a series of strikes. By March, Nigeria was brought to verge of collapse. In Warri, the major oil town in Delta State, more than 100 people died in struggles over oil resources and Shell and ChevronTexaco evacuated most expatriate workers. Oil workers took over seven off-shore oil platforms

Box 5: 'It wasn't us'

The oil corporations claim that they operate to high environmental standards in the Niger Delta. In its own words, "Shell Nigeria believes that most of the environmental problems are not the result of oil operations" [quoted in HRW 1999: 49]. There are indeed other environmental issues but it is not evident that they can be separated from the impact of oil operations.

The Delta was formed from sedimentation deposited by the Niger and Benue rivers. Both rivers are now dammed and the Delta has lost both the transfer of fertility and the process of land formation. This combines, however, with river bank erosion to which the industry makes a substantial contribution. Further, climate change induced sea level rise will speed up present rates of coastal erosion. Human Rights Watch cites estimates that 40% of inhabited Delta land could be lost in the next 30 years [47]. True, the World Bank has pushed big dams all over the world, but a bit of oil debt no doubt lubricates the process.

The population of people dependent on farming has also increased. Many settled on floodplains that dried out with the building of the dams. Perversely, the dams are now so silted up that they no longer hold the flood waters and these lands are again inundated. Modernising capitalism is everywhere associated with the destabilisation of populations and heightened rates of migration. The oil economy in Nigeria has exaggerated this tendency in two ways. Following the logic of the resource curse, Nigeria's formal economy is now reduced to the one dimension, creating pressure on people across the country. Second, the construction booms have certainly drawn people into the Delta while the busts push people to look for alternatives.

Logging is perhaps one industry that oil has stimulated by opening access to remote areas and accelerating the fragmentation of common resource management regimes.

In 1994, the same year that Shell made the complacent self-evaluation quoted above, a senior Shell environmental officer resigned in disgust because, "Wherever I went ... Shell's installations were not working cleanly ... Every Shell terrain I saw was polluted .." [J. van Dessel quoted in Okonta and Douglas 2003: 67].

and in some cases held corporate staff hostage. These rolling strikes ended in May, "just as British mercenaries and the Nigerian navy prepared to end the strike with force" [73].

In June, however, Nigeria responded to World Bank pressure and increased domestic petrol prices by 55%. The National Labour Congress responded by calling a general strike for July. At the same time, Delta activists threatened a community-led shut down of oil production across the Delta. This evidently alarmed the leadership of the oil unions who withdrew from the general strike but could not control community occupations of oil facilities. These actions were reinforced as informal sector workers united to challenge government's grip on power and "the highly organised market women and traders kept the markets closed for nine days" [74].

At this point it seems that Obasanjo's government threatened a return to military rule. The national union leadership called off the strike and settled for a 31% petrol price increase. In preference to military rule, Turner and Brownhill comment that they "opted for the maintenance of 'corporate rule' democracy" [75]. But this merely opened the third phase of struggle as women once more took the lead. Just as US President Bush arrived for a state visit to Nigeria, Delta activists launched another round of occupations, closing down as much as 1 million barrels per day production.

Resistance was just one dimension of the crisis, particularly in the Warri area of Delta State. National and state level elections in April 2003 were a major focus of violence. According to Human Rights Watch [2003], this was a 'resource war' fought over control of government office to provide access to "virtually unaudited" state revenues and over illegal bunkering [2], but also a political conflict reflecting the ethnically defined terms of inclusion or exclusion from power. It took two forms. First, politicians supplied arms to youth groups and paid them to "participate in attacks and intimidation of political opponents" [25]. The "wholly fraudulent" elections returned the incumbent Delta State Governor, Onanefe Obori, to power. Second, ethnically defined youth groups launched attacks and counter-attacks in Warri itself and on villages in the area and engaged security forces in fire fights over control of bunkering. Youth militants also "destroyed several flow stations" already abandoned by the oil corporations [8]. This dimension of the crisis is thus overlaid on the resistance recounted above.

The oil corporations demanded stepped-up military intervention and a joint security task force was established in August and beefed up protection of oil facilities. In contrast, security forces have rarely provided "real protection to civilians threatened" by violence [HRW 2003: 23]. Turner and Brownhill cite evidence that the US also stepped up its military presence in the West African region and that, by September 2003, US troops were in the Delta [2004: 77]. The military, however, no longer have a monopoly of force in the Delta as many local groups have armed, whether to protect their communities, to fight for political turf on behalf of elite patrons, or to carry out 'illegal bunkering' operations.

The logic of the corporate and elite oil regime was brought home when areas of Nigeria's oil capital, Port Harcourt in Rivers State, was attacked in the course of a virtual war over bunkering territories waged throughout 2004. The main rivals, Ateke Tom and Dokubo Asari³⁵, both built their power under the patronage of national and state politicians according to Human Rights Watch. Tom was "given free rein to carry out profitable bunkering activities" in exchange for driving out opposition supporters from particular local districts ahead of the 2003 elections. Asari was used to subvert resistance: "In 2001, with the financial support of the state government, [he] became president of the ljaw Youth Council and ... used this position to exploit divisions between the ljaw in different states and recruit youths to help ensure [Rivers State governor] Odili's re-election in 2003" [HRW 2005: 6]. Both Tom and Asari bought increasingly sophisticated weaponry with bunkering profits. They also formed alliances with local 'cults' (or 'area boys') many of which are now challenging the local elites - who had originally armed them - for labour contracts and other such crumbs off big oil's table.

Asari, however, was not quite in the patron's pocket. He publicly criticised the conduct of the 2003 elections and the political elite moved to marginalise him and used Tom to wage a surrogate war on his group with the backing of state security forces. From October 2003, the fighting focused on villages south west of Port Harcourt - Asari's home area and close to key bunkering routes. Thousands of villagers fled and many homes, schools and churches were destroyed. In late August 2004, Asari took the fight into Port Harcourt, launching three successive attacks on areas assumed to be under Tom's control. In September, President Obasanjo authorised a joint security force counter attack, again centred on Asari's home turf. Asari then threatened all out war on the federal government and oil corporations, causing the international oil price to spike on an already jittery market.

Human Rights Watch [2005] sees Asari's 'increasing' use of "popular rhetoric ... for resource control and self determination" [11] as an opportunistic response to being marginalised by the political elite, but remarks that it resonates with "thousands of ... unemployed ljaw men, providing him with an effective recruiting tool" [20]. The organisation believes the violence "is essentially a fight for control of oil wealth and government resources" [4] but notes too that some local 'cults' claim that they have acquired arms to defend their communities in a context where those who use violence, whether militias or state security forces, are allowed to act with impunity [10].

In contrast, Okonta identifies Asari as an "insurgent leader ... [who] has shown courage and remarkable consistency in his articulation of the crisis of the Delta" although he disagrees with the violence of his methods. Either way, Okonta is surely right to see Asari as "symptomatic of a larger and quickly spreading national crisis" [2005].

Within days of Asari's threat, Obasanjo himself brought Asari and Tom to Abuja and presided over an agreement to a ceasefire and to disarming and disbanding "all militias and militant groups" [quoted in HRW

³⁵ Asari is also referred to as Asari Dokubo.

2005: 20]. According to Human Rights Watch, the fighting is "sharply diminished" [3] but the agreement reinforces the "culture of impunity" and "fails to address the root causes of the violence" [21]. The disarmament process has reportedly culled mostly "very old" weapons and Human Rights Watch looks forward with apprehension to the 2007 elections, when the elite will again compete for the oil revenues afforded by public office. Beyond this, it might also be asked what else was agreed at Abuja: was the published deal the same as the real deal?

For his part, Okonta notes that peace and disarmament in the Delta will lack credibility unless the security forces themselves are disarmed. On the contrary, however, the US "is dispatching yet another batch of fast-attack boats, armed with lethal weaponry" to police the Delta [2005].

The oil corporations represent themselves as the victims of bunkering, sabotage and the loss of state authority. They are, however, directly complicit in creating Nigeria's outlaw economy and creating the context which makes bunkering commonplace:

- o First, they have set the example of grabbing what they want. Just as they have trampled on people's rights to land and livelihoods, so too their right to the oil is now disputed. Thus, Asari says he does not steal oil since it belongs to "our people" [HRW 2005: 8] and so makes a rhetorical link with civil society calls for local resource control.
- o Second, they have collaborated with the use of security forces to criminalise dissent and suppress resistance.
- o Third, both Shell and ChevronTexaco have recently admitted that their corporate social responsibility spending has fuelled violence and corruption³⁶. The same could be said of their sub-contracting arrangements. But while they represent themselves as innocents abroad, this spending fits into the pattern of managing dissent through patronage networks. Their admissions indicate that the strategy no longer serves the purpose and is getting out of hand.
- o Fourth, the corporations have a history of bribing government officials to gain contracts and are thus directly complicit in state corruption. In the most recent case that has come to light, oil services giant Halliburton is being investigated for a series of payments made between 1999 and 2002, allegedly to secure major contracts for construction work at the large liquefied natural gas plant at Bonny.

The official oil regime now appears bereft of all legitimacy. Getting the oil out, whether it is done by the corporations or the bunkerers, is dependent on gangs of armed men whether or not they are uniformed. This situation in the Delta is replicated in numerous producing countries. And, at the global scale, the invasion of Iraq, the plunder of its treasury and the wholesale rewriting of its legal framework in the interests of US corporations by the occupying powers, shows that all oil is now the product of protection rackets.

 $^{^{\}rm 36}$ See Balint-Kurti [2005] and also Shell Nigeria [2003: 16].

3. Downstream in Africa

The downstream industry is made up of refineries and markets. This Chapter opens with a broad overview of refining in Africa and then focuses on the South African industry and the making of environmental injustice. Box 6 gives a brief description of how refineries work. The chapter concludes with a short discussion of how African markets are being shaped.

Box 6: How refineries work

Refineries turn crude oil into marketable products. The first refineries worked pretty much like a whisky still and separated out lighter from heavier elements (or fractions). They produced petrol, paraffin, lubricants and waxes. The main market was paraffin for lamps and the petrol was regarded as a waste product and dumped into drains and rivers. However, just when the market in 'illuminating oil' was threatened by the invention of electric light, the development of the internal combustion engine to power everything from cars to ships created a new market for oil and particularly for petrol. Refinery engineers therefore started looking for ways to increase the amount of petrol they could get out of a barrel of oil.

'Fractional distillation' remains the basic refining process. The lightest fractions rise to the top of the distillation tower which produces:

- o petroleum gases (methane, ethane, propane and butane) which are used either as gas for heating or as feedstock for plastics and other chemical products;
- o naphtha, which is processed into petrol and also used as a chemical feedstock;
- o petrol (called gasoline in the US);
- o kerosene, used for jet fuel and paraffin for lamps and stoves;
- o gas oil, used for diesel fuel or as heating oil;
- o lubricating oils;
- o heavy fuel oil, used as a fuel to power industries;
- o residuals, which include asphalt, tars and waxes.

How much of each fraction can be produced depends on the quality of the crude supply. A high quality 'light' crude may produce as much as 40% petrol but much less petrol can be distilled from heavy crude oils. Refineries that rely on distillation are called 'simple' refineries.

'Complex' refineries use a catalytic cracker - or 'cat cracker' - to break up the heavier fuel oil produced by the distillation process³⁷. This enables them to get more petrol from each barrel of crude oil but at the cost of producing more pollution. The process works by mixing the fuel oil with a catalyst at high temperatures. The catalyst itself is composed of particles which cut up the carbon molecules which make up the fuel oil. In the process, the catalytic particles are covered in coke and must be regenerated by having the coke burned off. The catalyst is then reused but will eventually decay to the point where it must be disposed of. This waste is contaminated with heavy metals and particularly with vanadium.

Refineries are generally located close to markets because it is easier to transport crude oil than volatile products like petrol. The configuration of a particular refinery is determined by the quality of the crude oil supply and the mix of products demanded by the market that it produces for. Thus, the corporations claim that the oil produced by Chad's Doba field is of such low quality that only a few complex refineries can handle it. At the market end, the US runs mostly on petrol whereas Europe uses more diesel. The US therefore demands a greater number of complex refineries.

Pollution from refineries is produced from two main systems. First, refineries are intensive users of energy as all the processes require heating to high temperatures. This energy is supplied by burning fossil fuels - heavy fuel oil or petroleum gas produced by the refinery itself, or gas which is imported into the refinery from elsewhere. Burning gas produces less local pollution than heavy fuel oil but still pumps out greenhouse gasses. Refineries also consume substantial amounts of electricity mainly for pumping oil through the system. Second, the refining process itself produces air emissions through:

- o flaring,
- o the process of regenerating catalysts,
- o the evaporation of volatile organic compounds from valves, storage tanks and loading points.

Refineries also produce large quantities of liquid and solid wastes.

³⁷ There are a number of cracking technologies. Thermal cracking using a 'visbreaker' is less polluting than catalytic cracking but also less efficient. Catalytic cracking can use a 'fluid catalytic cracker' or a 'hydrocracker'. The first is more common. Some refineries, such as Natref in South Africa, use all three processes so as to maximise the production of the lighter high value products.

Refining in Africa

Since 1954, 48 refineries have been built in Africa. Many of them were built by newly independent countries "for economic reasons, to ensure energy independence, or often for reasons of status" [Sigam 1997: 24]. Most are simple refineries and a number are, or were, small-scale producers. During the 1980s, neo-liberal policies imposed by the World Bank and IMF resulted in five 'uneconomic' refineries being closed. The World Bank followed this up with more direct commands for 'rationalisation' of the industry on a continental scale and a further five small refineries have closed since 1998. Tanzania, for example, was forced to close its refinery as a pre-condition for receiving World Bank loans in terms of its Structural Adjustment Programme.

In theory, South Africa and Nigeria, as the main centres of refining in Sub-Saharan Africa, are best placed to meet this demand. Nigeria has three complex refineries operated by the state-owned Nigerian National Petroleum Company. However, they are badly managed and run at less than 50% efficiency and do not meet the demand for petrol even in Nigeria, let alone the rest of West Africa. Consequently, a portion of the West African demand is supplied from US refineries.

The South African refineries have been more successful in following the World Bank script. They have massively expanded production since 1991. As well as supplying South Africa's own growing demand, they are exporting refined products to Southern and Eastern Africa and, to a lesser extent, to the Indian and Atlantic Ocean rim markets.

Post-apartheid South Africa stands in marked contrast to Nigeria. Its Constitution is seen as one of the best in the world, with formal guarantees on civil liberties and an exemplary clause on environmental rights³⁸. Elections are credible and a massive majority for the ruling African National Congress (ANC) provides the assurance of state legitimacy. This legitimacy is reinforced by an independent judiciary. The President has shown an apparent willingness to act on corruption, dismissing the Vice-President following a court finding that he was involved in a corrupt relationship with a businessperson, although an oil stain has recently appeared on this record (see Box 7).

South Africa has the most developed and diverse industrial economy in Africa, manageable debt and economic policies that meet with international approval. It has adopted 'best practice' corporate governance and embraced globally approved forms of stakeholder dialogue. Poverty, portrayed as the legacy of 400 years of colonial and apartheid rule, is claimed by the ruling party to be the central challenge of the state. South Africa is heralded by such as the World Bank as a model of developing country governance and has even been awarded the status of environmental champion by the United Nations Environmental Programme.

According to the official view of things, Capitalist Development works in South Africa as advertised.

³⁸ Constitutional rights relevant to environmental justice are discussed in The groundWork Report 2004.

Box 7: The 'oilgate' scandal

A series of reports by the Mail and Guardian newspaper show evidence that the ruling ANC received election funds through a front company which diverted money meant to pay for oil consignments.

As the newspaper reports tell it, the story starts in 2001 when the company, Imvume Management, received support in negotiating with Iraq for oil allocations from senior ANC office bearers, officials of the Department of Minerals of Energy (DME) and a director of the Strategic Fuel Fund (SFF), the state agency responsible for crude oil reserves. The deal implied the exchange of diplomatic support to Iraq for oil supply deals, with the profits contributing to ANC funding. This was followed by Imvume being awarded a contract for the delivery of Iraqi oil by the SFF. The newspaper details a series of irregularities in the tender process and concludes that the award was rigged. However, the US invasion of Iraq put paid to these deals and the expected profits were not realised.

In 2002, PetroSA was established as a state owned petroleum corporation. It immediately awarded Imvume a contract to supply oil condensate to the corporation's Mossel Bay gas-to-liquid refinery. Imvume acted as a go-between in these deals, buying the oil from resource trader Glencore. Several cargoes were delivered in terms of this arrangement. In December 2003, Imvume requested, and was granted, an advance payment of SAR 15 million from PetroSA for the next cargo. Five days later, it donated SAR 11 million to the ANC which was then short of funds for its 2004 election campaign. But Imvume failed to pay Glencore for the cargo. Under threat of having the next cargo withheld, PetroSA then paid Glencore directly. The Mail and Guardian reporters conclude that, "The effect of the entire transaction was that PetroSA, and ultimately the taxpayer, subsidised the ruling party's election campaign: a blatant abuse of public resources" [M&G, May 20-26, 2005].

The ANC, Imvume, SSF, DME and PetroSA all deny wrong doing. The ANC and Imvume have each served notice of court actions against the newspaper.

Source: Reports by Stefaans Brummer, Sam Sole and Wisani wa ka Ngobeni in the Mail and Guardian, May 20-26, 2005; July 15-21, 2005; July 22-28, 2005.

Refining environmental injustice

Previous groundWork Reports have argued that capitalist development in South Africa has indeed worked as should be expected, if not exactly as advertised. It creates wealth for the few and poverty for the many. It is true that poverty in South Africa is the product of centuries of colonial and apartheid rule. The problem is that poverty is still being produced and the process of its production is also the process of the production of environmental degradation. Government has provided some benefits for poor people through welfare payments and programmes for housing and services. For the most part, the value of these benefits has been negated by the underlying process of development marked out by government's economic policies. In economic terms, South Africa was one of the two most unequal countries in the world in 1994 and this is still the case in 2005.

Against government's claims that poverty alleviation and service delivery to the poor majority are at the centre of policy, previous groundWork Reports have argued that its core policies are about maintaining the conditions for profit and the accumulation of wealth. This section looks at how these policies are manifested in the petrochemicals industry, following the logic of 'value subtracted' in the oil production chain.

Refineries in South Africa

South Africa's four crude oil refineries are all complex. They are Sapref and Engen in Durban, Caltex in Cape Town and Natref at Sasolburg. Natref is the only inland crude refinery and is supplied by pipeline from Durban.

In 1995, over two thirds of the crude was sourced from Iran. Saudi Arabia is now the largest supplier (45%) followed by Iran (33%). These crudes have a high sulphur content with major implications for pollution. Since 2000, Nigeria has become an increasingly significant supplier and it now supplies 16%. South Africa itself has developed three small oil fields and is the fourth largest source at less than 3%. Oil is South Africa's biggest import item, with 21 million tonnes imported in 2003³⁹. Most of it is imported through the port of Durban.

Liquid fuels and chemical feedstock are also produced from coal at Secunda, east of Johannesburg, and from gas at Mossel Bay on the south coast. Sasol's production of synthetic fuel - or 'synfuel' - from coal is particularly polluting and consumes about 41 million tonnes of coal each year. Sasol has also developed a massive chemicals industry based on the same technology.

³⁹ See Sapia 2004 Annual Report, Appendix 5.

Table 4: Refineries and ownership in South Africa

Refinery	Location	Owned By	Fuel Source	
Calref	Cape Town	ChevronTexaco (Caltex)	Crude oil	
Engen	Durban	Petronas 80% & Worldwide Africa	Crude oil	
		Investment Holdings 20%		
Sapref	Durban	Shell 50% & BP 50%	Crude oil	
Natref	Sasolburg	Sasol 64% & Total 36%	Coal	
Mossgas	Mossel Bay	PetroSA	Gas	

The South African refining industry developed under apartheid. Sasol was established in 1950 as a state owned corporation, initially to protect the national balance of payments against crude imports. Its first synfuel plant was developed over coal mines on the greenfield site that became Sasolburg. From 1975, as international sanctions threatened to squeeze the crude oil supply, Sasol came to be seen as a key strategic security asset and its second synfuel plant was built at Driefontein, which the corporation renamed Secunda. Sasol was privatised in 1979 but the state has retained a substantial shareholding.

Synfuel production is very costly by comparison with crude oil refining. These costs were subsidised first by cheap labour in South Africa's coal mines and second through the fuel price. As part of the deal between the state and the petroleum industry, Sasol did not compete independently on the market and its synfuel was blended into the refined crude oil products sold by the other corporations.

The transnational oil corporations were also complicit with apartheid and sanctions busting. Mobil eventually disinvested, selling its Durban refinery to mining group Gencor which subsequently unbundled to create Engen. Mobil (and now ExxonMobil) continued to provide technical assistance throughout this period. Shell, BP, Caltex and Total collaborated in evading the oil embargo and Shell covertly supported a black antisanctions lobby group as part of an international strategy to counter the threat of a consumer boycott in the northern markets. In return for this cooperation, the state guaranteed corporate profits.

By the late 1980s, the apartheid state was in decline. The majority of people were challenging the legitimacy both of the state and of the economic system of racial capitalism. It began to seem doubtful that apartheid could continue to enforce the social controls that enabled big business to profit. The political transition to majority rule was initiated in 1990 and the African National Congress, as the leading liberation movement, came under intense pressure to abandon its socialist inclinations. This culminated in the first democratic government adopting a neo-liberal economic policy in 1996⁴⁰. These policies were subsequently given a continental dimension with the New African Partnership for Development (Nepad).

 $^{^{\}scriptscriptstyle 40}$ The politics of the transition are discussed at length in The groundWork Report 2004.

The petroleum industry did well from the economic openings afforded by the transition. Sasol has become a transnational corporation in its own right with operations in more than 30 countries and major production facilities in South Africa, the US and Europe. It has entered joint ventures with super-major ChevronTexaco to develop gas-to-liquid plants in Qatar and Nigeria and has moved upstream to establish oil and gas exploration interests concentrated in Africa (see Chapter 3 above). Sasol listed on the New York Stock Exchange in 2003. Major shareholders are South African financial corporations - most of which have themselves become transnationals - and government retains its stake through the Industrial Development Corporation and the Public Investment Commission.

Engen, on the other hand, was acquired by Malaysian para-statal Petronas. The refinery supplements Petronas's upstream interests in other African countries including Chad. Engen has expanded its retail business into the African market and now operates in 14 Sub-Saharan countries including South Africa.

In 2004, Sasol and Petronas - together with their respective black economic empowerment (BEE) partners, Tshwarisano and Worldwide African Investment Holdings - agreed to merge their liquid fuel interests under the name Uhambo Oil. The deal awaits regulatory approval and is being opposed by the other petroleum corporations who argue that Uhambo will dominate the market. If approved, Uhambo will include the Engen and Natref refineries, the liquid fuels produced by Sasol Synfuel, and the combined retail network in Africa.

BEE is a critical feature of South Africa's economic transition. For the state, the creation of a black capitalist class is necessary to justify pro-capitalist policies. For the managers of capitalist enterprises, BEE is necessary to secure a 'social licence' to operate. It creates a black interest group ready to defend industry interests and to take the political offensive to legitimate profits. This is particularly necessary for the refineries because local organisations have questioned the legitimacy of profits bought at the cost of people's health. The petroleum industry pioneered the concept of sector empowerment charters with the Liquid Fuels Charter. It includes the target of 25% black ownership of the industry and all the corporations operating in South Africa have moved rapidly to meet it.

The industry also makes much of its contribution to the South African economy. Thus, the annual reports of individual corporations and of the South African Petroleum Industry Association (Sapia) give prominence to 'value added statements'. Sapia claims R 30.4 billion as the combined value added for the industry in 2003, an increase from R 24.8 billion in 2001. Reflecting the capital intensive nature of the industry, salaries and wages account for just 10% of this⁴¹. Salaries include the exorbitant remuneration of top directors.

⁴¹ See Sapia 2004 Annual Report: Appendix 2.

Expansions

The formidable process of refinery expansion is shown in table 5. Despite this, Sapia claims that the local refineries will not be able to meet rising demand for petrol and diesel in the countries of the Southern African Customs Union - South Africa, Namibia, Botswana, Lesotho and Swaziland - by 2010.

Table 5: Refinery expansions 1990 to 2004

Capacity in thousand barrels per day (or equivalent)

	1990	1992	1993	1994	1995	1998	2001	2002	2003
Calref	50				90			100	
Engen	67	85		105			125		150*
Sapref	120				165	180			
Natref	78		86					108	
Secunda	150								
Mossgas	45								
TOTAL	510	528	536	556	641	656	676	708	733

Compiled from industry sources

Enclosure

South Africa's polluting industries are notoriously located in black working class neighbourhoods. This pattern was established by the pre-apartheid local government of Durban. Responding to demands from the white local Chamber of Industry, the council initiated a process of industrial modernisation in south Durban from the mid-1930s. The process took off following the Second World War when the Standard Vacuum refinery (now Engen) was built in 1954. BP and Shell built their Sapref refinery in the same area in 1960.

This area south of Durban Bay was a complex of wetlands, flood plains and mangroves. It was occupied largely by people of Indian descent who had developed a thriving market gardening economy. The wetlands were drained, the fields appropriated and the people moved aside to accommodate five industrial belts. At the same time, working class people were moved into the area to create a cheap labour supply. The result is a patchwork of residential and industrial areas housing some 285,000 people cheek by jowl with about 600 industrial plants. These communities were divided by the racial categories of apartheid. They are mostly black-African, Indian and 'coloured' - but include a white working class community. The refineries occupy one of the industrial belts and are connected to a petrochemicals storage and loading facility at Durban's harbour by pipelines running beneath residential streets.

^{*}Engen currently runs below capacity at about 135 thousand barrels per day [pers.com.]

A further round of industrial modernisation is now in full swing. Government is pushing for a 'world class' chemicals cluster centred on the refineries and is planning an Industrial Development Zone adjacent to the harbour. In the meantime, hundreds of industrial expansion projects have been pushed through the planning process, enclosing public open spaces and eroding buffer zones, where they exist, between industry and residents. Contrary to earlier promises, the South Durban Basin Spatial Development Framework, published by the local government in late 2004, proposes that people should be 'relocated' to make way for new roads to service industry. Many of the people of south Durban have experienced forced removals more than once in their lives and express strong opposition to further removals.

In contrast, Cape Town is pushing people into the buffer zone around the Caltex refinery. Unusually, the refinery was built about a kilometre from a thinly populated middle class area. Successive governments have promoted housing development in the area and, by 2003, 400 low-income houses were built within the buffer zone and more were planned.

Sasolburg and Secunda have operated as company towns. The black working class area of Zamdela was built immediately downwind of Sasol's original plant in Sasolburg. The white town of Secunda displaced the black town of Driefontein and the people were moved to eMbalenhle, downwind of Sasol's second plant. This area is now surrounded by mines and is next door to the local waste dump.

Unemployment is high in all these locations - particularly Sasolburg and Secunda - and job creation is a top political demand. As with the upstream industry, however, petrochemicals is a capital intensive operation and the expansion of industry has not been accompanied by increased employment. Indeed, much of the investment has been accompanied by automation and job losses. Various functions have also been redefined as 'non-core' business and that work is now outsourced. Cheap seasonal maintenance labour at the Durban refineries is now managed through labour brokers.

This follows international trends which have changed the nature of employment. It divides the workforce into the core group of mostly skilled workers with secure jobs, a non-core group of outsourced, part-time and temporary workers, and a peripheral group of informal workers, unpaid workers and the unemployed.

Workers in the non-core group have an insecure hold on formal work. Refinery maintenance and construction workers are constantly slipping into the peripheral group and can never be sure if, this time, it is forever. They follow the industrial construction booms across the country and return for the cyclical boom in the south Durban economy created by annual maintenance shut-downs at the refineries. They are vulnerable to the economic busts and to illness or accident. They also believe that the refineries have illegally blacklisted union and community activists so as to secure a more docile workforce.

This generalised insecurity, always on the edge of dispossession, has worked into the social fabric of the south Durban community of Wentworth where at least half the working age population falls into the non-core and peripheral groups. Sharad Chari [2005] argues that it has created a ghetto economy in the shadow of the refineries: a stigmatised place where the social fall-out from the violence of capitalist development can be confined; where the distinction between legal and illegal work becomes blurred; and where the costs of broken lives falls heaviest on women who pick up the pieces through the unpaid work of caring, or stitch together some means of survival for their households.

In south Durban, the division of core and non-core workers is now also reflected in workers' own organisations, with established unions representing the core group and the newly emerged Chemical Engineering and Industrial Workers Union (CEIWU) representing short-term contract workers.

In 2004, contract workers went on strike during the seasonal maintenance shut-down at Engen and 176 were fired. CEIWU challenged the dismissals in court and won a major victory when the court not only reinstated the workers but also re-interpreted the meaning of contract work. It ruled that they could not be fired "either for insubordination or operational requirements without following due procedure" [Chari 2005: 105]. In short, the refinery could not use short-term contracts to evade labour laws and it will find it more difficult to use arbitrary dismissals as a way of getting rid of militant workers.

Externalisation

All the petrochemical corporations boast environmental improvements, most of them dating from the final death of apartheid in 1994. These improvements are off a very poor base. Under apartheid, they had a virtually unlimited licence to pollute. Laws such as the mis-named Atmospheric Pollution Prevention Act (APPA) of 1965 were limited in their application, increasingly dated and scarcely enforced. The refineries and other major industries were protected from public scrutiny by the Key Points Act, a piece of apartheid security legislation that outlawed the publication of any information about them - including emissions data⁴².

The walls of secrecy started to crumble in the 1990s and national and local civil society organisations began putting real pressure on the corporations and on government. Much more is now known about the extent of pollution but this is very uneven. Information still relies heavily on what industry chooses to reveal or is forced to reveal. This means that most is known about those areas where civil society is most active.

Sapref and Engen now publish information on source emissions and other wastes from the Durban refineries. Their reporting is clearly designed to respond to - and often to rebut - local criticisms. Sasol publishes environmental information, but at group and business division level. It does not show pollution from individual

 $^{^{\}rm 42}$ South Africa's regulatory history is described in detail in The groundWork Report 2002.

plants such as Natref or the aggregate pollution from Sasol's different operations in single localities. Sasol's reporting is thus of limited use to local communities but responds to the corporate social responsibility framing of global institutions and business organisations⁴³. The Caltex refinery in Cape Town publishes nothing. This appears to reflect ChevronTexaco's general indifference.

Information is also contested. Industry has on occasion been forced to admit under-reporting - as when Sapref admitted in 2000 that it had under-reported sulphur dioxide emissions by 12 tons a day for the previous five years as a result, it said, of a miscalculation. Government, however, has not developed its own capacity to verify or dispute industry claims on pollution from source. Unless it does so, the credibility of basic data will remain suspect.

During the late 1990s, government's weak regulatory system was allowed to collapse altogether. Civil society organisations turned to the media and focused public attention on a string of serious environmental incidents. Government finally responded in 2000, apparently because it felt it was losing the 'publicity war', with a 'multipoint plan' for south Durban where activism is most organised. The plan promised new legislation to replace the APPA and was premised on the devolution of regulatory authority to local government.

The Air Quality Management Act was finally passed four years later. A substantial improvement on APPA, it introduces legally enforceable standards but remains weak on information systems. In Durban and Cape Town, local government regulators are developing the capacity to monitor ambient air quality although they appear to be reluctant to put the data to work. In Sasolburg and Secunda, government has no monitoring capacity and leaves it to Sasol to monitor ambient air. Government also says it will act to enforce the law and prosecute offenders - a novel notion in South Africa.

Table 6 is constructed from industry reports or direct communication with the refineries. It shows some improvements in source emissions over previous years. The Durban refineries made environmental improvements conditional on expansions. They have reduced sulphur dioxide emissions in absolute terms but improvements in the rate of emission of some substances, such as nitrogen oxides, have been off-set by expanded production. Sasol is converting from coal to gas, extracted from Mozambique, to fire its synfuel plants and as the feedstock for chemicals production in Sasolburg. This mitigates the astronomical pollution from coal-based processes but emissions remain high even by the standards of the oil industry. This is particularly significant in relation to 'peak oil' (see Box 1) as demand for this technology may rocket. Sasol is also involved in gas to liquid technology developments in partnership with ChevronTexaco in Nigeria and Qatar.

These figures show normal emissions from normal operations. Abnormal incidents seem pretty normal too. Fires, explosions, gas leaks and spills occur with appalling regularity at the petrochemical plants.

⁴³ Sasol is a signatory to the UN Global Compact initiated by General Secretary Kofi Annan and widely criticised by environmental justice organisations as corporate 'blue wash'.

Table 6: Air emissions for selected refining and chemical processes (tonnes p.a.)

Atmoshperic emissions		Sasol / Total Natref	Sasol Chemical Industries	Sasol Secunda Synfuels	Caltex Calref	Petronas Engen	Shell / BP Sapref
Sulphure Dioxide	2002	19,140	26,000	248,000	8,760	4,745	13,140
	2004	1,333	30,989	189,923	4,940	5,004	6,935
Nitrogen Oxides	2002	1,380	22,000	143,000	-	-	-
	2004	686	25,824	148,300	953	1,971	1,180
Carbon Dioxide	2002	819,000	7,1000,000	49,607,000	-	947,905	1,236,000
	2004	829,000	8,872,000	52,164,000	746,476	909,215	1,086,200
Hydrogen Sulphide	2002	-	-	-	-	-	-
	2004	-	16,496	85,682	-	-	-
Particulate Matter	2002	1,150	3,000 (fly ash)	8,000 (fly-ash)	-	-	-
	2004	583	1,128	6,128	85	230	-
Volatile Organic	2002	-	42,000	404,000	-	-	-
Compunds	2004	-	17,663	409,783	2,189	1,365	4,170

Sources: Adapted from industry reports; Sasol and Calref figures from personal communication. Notes:

Engen and Sapref report average daily emissions. The annual figure shown in the table is calculated by multiplying the daily figure by 365.

All Sasol 2004 figures are for their financial year from July 2003 to June 2004.

Sasol reports 'non-methane hydrocarbons' from its coal based industries (Chemicals and Synfuels), shown here under Volatile Organic Compounds.

Figures are for direct emissions and do not include emissions associated with electricity consumption.

Sasol's record in 2004 was particularly dismal. At least 14 people lost their lives during the period⁴⁴. From a long list of incidents four stand out:

- On June 21 a gas liquor storage tank exploded. One employee was killed and six others were injured. It has been reported that maintenance work was being done on the tank at Sasol's Synfuels Phenosolvan facility when a fire broke out in the tank and caused the explosion.
- o On 1 July 2004 a mere ten days later, an explosion at Sasol Collieries killed one person.
- On Sunday 29 August 2004 a huge explosion rocked Centurion when a Sasol gas pipeline ruptured at the Gateway Industrial Park. Flames shot more than 30m into the air. No one was injured or killed but Sasol and the police confirmed that a nearby facility was damaged, parts on several trucks were melted, and a wall was knocked over by the force of the explosion.
- o On 1 September 2004, 10 people died and more than 360 were injured in an explosion at the Sasol Polymers' ethylene plant in Secunda. The report on the accident has not been released to the public.

In Durban, spills from tanks, pipelines and water treatment plants are common. In 2001 Sapref lost 26 tons of tetra ethyl lead - which is as toxic as it sounds - from a badly maintained tank. Later that year it spilled between one and two million litres of fuel from a pipeline buried under a residential street. These are two of 26 spills from both refineries recorded by local activists from 2001 to the end of 2004, not including spills from road tankers.

Fires, explosions and other releases to air are also common. Local activists have recently put the spotlight on excessive flaring. Flares are necessary safety valves in case of a build up of explosive gasses but, in the US, the Environmental Protection Agency found evidence suggesting that they are frequently used to evade limits on emissions: "On numerous occasions, US EPA has uncovered information on acid gas flaring incidents that shows that 100 tons or more of sulphur dioxide can be released in such flaring over a 24-hour period" [quoted in DN & SDCEA 2005: 12]. The South African regulators would not have the capacity to detect such practices if they occur in South Africa.

Engen reported 109 flaring incidents in 2003. Sapref reported one. The difference lies in the definition of an incident. Engen calls an incident if the 'flow rate' of flare gas exceeds a defined limit or if the flare smokes. Sapref says it wants to avoid flaring but defines all flaring as normal unless it is caused by an external event such as a power failure. This definition gives it considerable latitude in what it decides to report and would potentially enable it to conceal emissions.

[&]quot;These events have been widely covered in the press. See, for example: Government halts Sasol operations at www.suntimes.co.za (Sunday Times) posted March 16, 2005. Sasol's Sustainable Development Report 2002-2004 reports for the period to June 2004 and so excludes the last three incidents.

People in Durban remember 21 April 2004 as 'black Wednesday'. A power failure resulted in Sapref shutting down and a dense plume of smoke from the flare spread over the city. According to Sapref, "...apart from the possible irritation of smoke and odour in the air, there should not have been other effects" and its samples showed the impact on air quality "did not exceed the World Health Organisation limits" [2004].

More likely, Sapref got lucky in where the pollution came down. The statement fits the pattern of refinery responses since the early 1990s: it starts with the assumption that there is little probability of any significant impact. Yet flaring emits a range of very toxic substances and irritation and odours already indicate serious impacts.

An earlier health study at the Settlers Primary School, situated between the two Durban refineries, found that 53.5% of students suffered from asthma, a prevalence higher than any comparable findings reported in the scientific literature ⁴⁵. It suggested that the students' history of exposure might make them more sensitive to new exposures. In short, incidents are overlaid on the background of 'normal' pollution and people carry the history of an environmental debt in their bodies.

Less formal investigations indicate a leukaemia rate in south Durban 24 times the national average [Carnie 2000]. A recent study in Cape Town directly linked the Caltex refinery to the high rate of respiratory diseases confirming, as local residents remark, what they already knew. Sasolburg and Secunda residents know it too. As yet, however, science has not given credence to what they know and relevant information is not being collected in the health system.

The refineries are disappointed that their reductions have not resulted in better relations with local communities. For civil society, however, the issue is whether the Constitutional right to "an environment that is not harmful to people's health and well-being" has been met. Thus far, it has not.

Exclusion

Apartheid was specifically designed to exclude black people from decision making. The multiplicity of laws that kept them in their place as cheap labour were reinforced with the jack-boot wherever necessary. Information was restricted and strategic industrial plants were veiled in secrecy mandated by the Key Points Act as noted above. Industry did more or less as it pleased and more or less dictated environmental policy relevant to their operations.

South Africa's new Constitution promises participatory decision making based on open access to information. The first democratic government undertook a massive re-writing of policy across the board. The

⁴⁵ The Settlers Primary School Health Study, Summary of Interim Report of 21st February 2002. Investigating institutions: University of Natal Faculty of Medicine; Department of Environmental Health, Technikon Natal; University of Michigan, USA.

environmental policy process was noted as a benchmark of participatory process and resulted in the National Environmental Management Act which is guided by a powerful set of principles. In contrast, macro-economic policy was apparently too important for participation. The Growth, Employment and Redistribution (GEAR) policy was announced to the country as non-negotiable. It was lauded by business and decried by civil society organisations concerned with labour, social and environmental justice.

This has set the pattern for selective participation at all levels. Business and industry gain privileged access to strategic economic processes which drive and shape development, entrenching the concentration of corporate power and the bias toward capital intensive mega-projects founded on cheap energy inherited from the apartheid economy. This pattern is evident at local level in planning for Industrial Development Zones and, most recently, in the South Durban Basin Spatial Development Framework. Civil society is meanwhile restricted to processes concerned with 'delivery' - on environmental management, basic services, pensions etc. - which may mitigate the impacts of capitalist development but are not allowed to challenge it. Alternatively, delivery itself comes to mean delivering people to the corporate markets as services such as water are privatised or commercialised.

This regime of governance is what earlier groundWork Reports have called 'ecological modernisation'. It frames 'sustainable development' in the language of corporate business and uses the vocabulary of equity, stakeholder participation and partnerships to legitimate its procedures. It masks the links between the making of wealth and the making of poverty to build a social hegemony while creating a multiplicity of mechanisms to manage dissent.

Dissenting civil society has itself responded with a range of strategies: keeping a seat in formal processes, broadening debate through the media, instituting legal actions and taking to the streets. These strategies have, for the most part, been defensive even when they erupt in rebellion as they increasingly do at local level. They remain caught in the language of delivery, divided by sectoral definitions of environment, housing, land, labour etc., and are often locally isolated. They have not, as yet, broken through to challenge the command of productive resources.

The soft policing of ecological modernisation puts information at the centre of environmental struggles. As noted above, corporations have formidable control over the production of technical data and its interpretation. Civil society groups challenged this initially from a knowledge based in experience. More recently they have also worked to produce knowledge on the technical terrain through, for example:

- o 'bucket' sampling of air quality, which highlighted the range of refinery pollutants not previously identified in South Africa; and
- o comparative studies of refineries and their regulation in Denmark and Durban, which amongst other things, questioned the technologies of refining used in South Africa.

Refinery managements responded to this incursion on their terrain, particularly the refinery study, by using every opportunity to discredit the research [see Box 8]. Central to these knowledge struggles is the question of who frames the debate, what this framing includes and excludes, what interpretations it allows and disallows and whose interpretations are taken to be credible.

The opening of access to information and freedom of expression with the political transition was dramatic. As resistance to its economic policies intensified, however, government has moved to restrict the legitimate bounds of opposition and reveal, as occasion warrants, the coercive power behind the soft policing of ecological modernisation.

The disgraceful Key Points Act remains on the statute book like a legal sleeper. The potential for its use was brought home to south Durban activists in 2002 when the Ministry of Defence invoked it in relation to Engen and "stated that environmental information must be regarded as 'extremely sensitive'" [Peek 2003: 4]. Government also introduced 'anti-terror' legislation in 2004. This was temporarily withdrawn following fierce civil society opposition. The Freedom of Expression Institute rightly argues that the Bill cannot be redeemed by amendments and should be binned [2004: 14]. In 2005, when anti-nuclear activists blew the whistle on high radiation readings at a site near the Pelindaba nuclear facility, the responsible minister threatened to criminalise the publication of information which government regards as causing unnecessary public alarm. More generally, the state has used administrative and procedural means to restrict access to information and to criminalise protest 46.

Markets

As the World Bank encouraged the concentration of refining capacity in Sub-Saharan Africa, it was also promoting the establishment of a regional road fund which would encourage an expansion in the market. The market is expanding anyway, "at about twice the rate of GDP growth" according to a 1997 UNCED report [Sigam 1997: 29]. The report notes that regional supplies would fall short of demand by 1999, particularly in view of the refinery closures required by the World Bank. Importing refined product in place of crude adds considerably to the total cost of imports to poor countries and will compel them to export more. For most non-oil producers in Africa, this means exporting more agricultural products and has serious implications for food security.

The concentration of refining capacity is matched by the concentration of market power created by the mergers of the major oil corporations into the super-majors. Many African countries feel that this increases their dependence on big oil and fear a repeat of the shortages experienced during the 1970s oil crisis [Sigam 1997: 28]. Indeed, poor countries may well find themselves cut off from oil as competition increases following the point of 'peak oil'.

 $^{^{46}}$ The curtailment of dissent is discussed in detail in The groundWork Report 2004.

Of the corporations that have interests in the South African refineries, Shell, Total and ChevronTexaco have a substantial presence in the retail markets of all the Sub-Saharan African regions. BP is active mainly in the southern and east African markets. Under Engen's name, Petronas is active mostly in southern and east Africa but also in Ghana and the Democratic Republic of Congo.

The refineries claim thin margins with profits sensitive to the relationship of crude oil prices and the value of the South African Rand. But the sheer volume of throughput makes for large figures. In 2003, according to Sapia figures, the South African industry sold over 30 billion litres of refined product to make over SAR 1.5 billion after tax, down from SAR 3.8 billion on a similar volume in 2002. State taxes, duties and levies amounted to about SAR 21 billion ⁴⁷.

Until recently, Sasol's presence in the retail market was restricted and its products sold under the brand names of the other corporations. For this reason it has a minor share of South Africa's domestic market ⁴⁸. Engen has the largest share of this market followed by Shell, BP, Caltex and Total. Regulatory approval for the Uhambo deal would give the consortium led by Sasol and Petronas about one third of the market and half of refining capacity.

Vehicles are the end point of the oil chain. They burn the largest part of hydrocarbons and contribute proportionately to air pollution. The Department of Mineral and Energy Affairs publishes fuel-saving tips. They do not include advising against getting a 4x4 - otherwise known as an SUV. The South African middle classes have embraced the gas guzzling behemoths with as much enthusiasm as the Americans and Europeans.

The South African government has introduced cleaner fuel regulations to eliminate lead in petrol, and thus also enable the use of catalytic converters which reduce a range of other pollutants from vehicle exhausts, and to reduce the permitted sulphur content in diesel from 3,000 ppm to 500 ppm by 2006. These improvements are driven as much by new engine technologies as by environmental concerns and are linked to South Africa's strategies in manufacturing cars and catalytic converters.

The regulations should mitigate pollution, particularly in congested urban areas, although this will be partly off-set by expanding demand. As with the refinery improvements, however, they are off a low base. Northern country regulations are now targeting a sulphur content of between 10 and 50 ppm in both diesel and petrol. What Sasol advertises as 'ultra-low' sulphur diesel comes in at the top of this range.

The regulations will also put pressure on environmental management at the refineries. The reduced sulphur content, for example, implies the removal of more sulphur at the refineries assuming that the sulphur content in crude oil input remains constant. Globally, this is creating a glut on the sulphur market since the production of sulphur is now driven by the demand for petroleum rather than for sulphur⁴⁹. If this additional sulphur cannot

⁴⁸ For practical purposes, the domestic market includes the countries of the South African Customs Union (SACU) Namibia, Botswana, Lesotho and Swaziland as well as South Africa.



⁴⁷ See Sapia, Annual Report 2004, Appendix 1.

Box 8: Disputed production

The 'Comparison of refineries in Denmark and South Durban in an Environmental and Societal Context; a 2002 snapshot' was produced by Danmarks Naturfredningsforening (DN) and the South Durban Community Environmental Alliance (SDCEA). It includes a technical comparison of the refineries based on information supplied by the refineries.

During the research process, refineries were asked to corroborate data where there appeared to be anomalies. The Durban refineries did not do so. A month prior to publication they were given two weeks to comment. The Durban refineries said this was too little time. At the launch of the publication, both refineries produced a long list of what they said were technical inaccuracies. They demanded its withdrawal and said they would help correct it for re-issue. This was seen as an attempt to take editorial control of the report and was refused.

The refineries' views are summarised in a paper to the World Congress on Environmental Health in February 2004, given by Engen's Sustainable Business Manager, Alan Munn:

Another situation where information is being misinterpreted and used incorrectly is in the study that was intended to compare refineries in Denmark and South Africa. Engen had reservations about assisting with this study which unfortunately proved to be well founded. The study compares the performance of two simple hydro-skimming refineries in Denmark, that process low sulphur North sea crude oil, with two large complex refineries in South Durban processing higher sulphur crude oil from elsewhere. This is like comparing a single engine aircraft with a jumbo jet and trying to draw meaningful conclusions. For example, for the authors to suggest that catalytic crackers, which are the heart of any modern refinery, are obsolete is ridiculous. Unfortunately a number of so called incidents are also referred to in this report that didn't actually happen. These errors were pointed out to the authors prior to publication but the report was published anyway without the corrections.

To take the last issue first, there were indeed some errors in the report, a number of which derived from the inaccuracy of the original data supplied by the refineries. The authors and reviewers of the report studied the refineries' comments and produced an errata sheet which was circulated. A substantial number of the refineries' comments were rejected.

The central point of contention relates to the refinery technologies and the study is, in fact, at pains to point out the difference [DN and SDCEA 2003: 21]. It does not suggest that the catalytic crackers are obsolete. It says:

The quality of crude oil has wider implications because it determines the limits on technology options. It thus relates to the complexity of the refinery and therefore also its energy consumption. The additional production units necessary to fully exploit the lower quality crude - particularly the cat cracker - are major sources of particulate and sulphur dioxide pollution. The quality of crude oil also results in a high sulphur content in oil products and in emissions from the refineries' own energy systems. [45]

It goes on to encourage refinery plans to seek higher quality crude inputs but argues that: "Making full use of the environmental potential that follows from this would, however, depend on closing the cat cracker. That unit would no longer be necessary to production but it would still increase the fraction of high profit products" [45]. This does not suggest that the cat crackers are obsolete but that they could be sacrificed in the interests of reduced pollution. It also clearly indicates that this would involve a sacrifice in the proportion of high value products - particularly petrol - produced from each barrel of crude and hence also of refinery profits.

There would certainly be broader implications to such a decision. First, South Africa's vehicle fleet would need to shift from a bias to petrol and use more diesel which is, in any case, much more efficient in terms of mileage. Second, applied globally, it would imply a radical reduction in usable oil reserves and so push the transformation of energy and transport systems. This transformation is essential if catastrophic climate change is to be avoided.

At another level, the dispute brings into focus the question of who makes society's technology choices. At present these choices are largely made by corporations. For the refinery managers this is only natural and their response to the report perhaps indicates some shock that anyone should have the temerity to challenge this prerogative. For civil society, the deeper question must be how to democratise production and what technologies are compatible with such democratisation.

be sold, it becomes a waste product. The main market for sulphur is agricultural chemicals. Stripping the sulphur out of fuel is thus substantially dependent on the continued practice of toxic farming.

Sulphur is but one of the products of the petrochemicals industry. Petroleum products are used in the manufacture of an extraordinary array of products besides fuel: tar for roads, agricultural fertilisers, herbicides and pesticides, all plastics and most rubbers, synthetic textiles, explosives, medical products, cosmetics, detergents, paints, varnishes, waxes, glues and solvents. Sasol has six distinct chemicals businesses with production plants in the US, Europe and East Asia in addition to the Sasolburg and Secunda plants. The products are marketed globally, mostly supplying chemicals for industrial use.

4. Movements against and beyond oil

This chapter explores protest and resistance against the ravages of the oil industry. It is not intended as a comprehensive account of the many ways in which people have responded to these injustices. Rather, it should enable a critical accounting of key issues for civil society and themes that might make up the agenda for progressive forces fed up with the status quo and determined to change it. We recount and reflect on stories of current struggle, defeat and partial victory from the African continent and elsewhere. For, while much of this report speaks about the interests and actions of very powerful actors, the actual course of history is also shaped by resistance and critique against those powerful interests, classes, and actors. If another world is possible, then its seeds are germinated here in struggle.

For too many people, in too many places, extraction and processing of hydrocarbons imposes unacceptable costs while the benefits from both use and profits accrue to too few. This allocation of costs and benefits is not accidental. It is structured by relations of power and of production that are themselves embedded in globally connected economic and political systems that are continuously reproduced and contested at all levels. This chapter opens by looking at these relations through the lens of the 'resource curse' (summarised in Box 3) and goes on to discuss the complex positions of resistance that have emerged in response to the curse. It argues that the forms of action and the demands of activists are partly conditioned by their location within the relationships of power.

Class curse

The 'resource curse' thesis has been vigorously used by civil society organisations to argue for an end to oil exploration, for a rapid transition to renewable energies or for the reform of the way the industry works. The thesis certainly describes the most representative model of how the elite of the oil regime, located in northern and southern states, in international institutions and in transnational corporations, rig the game in their favour at the cost of ordinary citizens and their environments. Oil may have particular characteristics that lend themselves to the resource curse. It is, for example, inherently polluting - although this can be mitigated - and capital intensive. Yet the unequal structure of costs and benefits is not pre-ordained. It is political.

Norway is often cited as an example of a major oil producer that has escaped the resource curse⁵⁰. The example of Libya is rarely mentioned although it would seem more pertinent if only because of it positioning as a southern county⁵¹. Libya was established as an independent monarchy 1949. Its king, Idris el-Sanussi,

 $^{^{\}scriptscriptstyle 50}$ See for example, Gary and Karl [2003:18].

In making the illustration, we do not imply that Libya offers or offered an ideal alternative to the prevailing model.

consolidated power with support from powerful Turkish-Libyan families, US and British military advisors, and transnational oil corporations. From 1960, oil became central to the national economy. In 1969, Muammar al-Khaddafi led a successful insurrection and established a Revolutionary Council as the new government. He closed the US and British military bases, joined OPEC and nationalised the oil industry while retaining ties with some foreign corporations to ensure access to the markets they controlled. Oil money financed Khaddafi's modernisation and reform programme: "Industrial investment was 11 times greater than during the monarchy and rural investment was 30 times greater" [ITM 2003: 356]. Libya was transformed, achieving the highest level of per-capita income on the continent at US\$4,000 a year. "According to the UN Development Programme's 2001 report, Libya leads the human development index in Africa" [357].

Libya is now being pressed into the neo-liberal mould as the price of regaining a 'respectable' place in the international community. Eman Wahby comments, "As part of its emergence from political and economic isolation, Libya is converting to an open-market economy after decades of socialist-style policies." The conversion creates a more 'open' and investor-friendly economy and prioritises trade liberalisation, privatisation (of some 360 state-owned companies and enterprises) and severe cuts in state subsidies "of basic commodities, notably fuel" [Wahby 2005]. The result is that the economy has grown in terms of orthodox measures like GDP (which climbed by 9 % in 2003 and 4.5 % in 2004), but the impact on ordinary Libyans is negative: costs of goods and services are increasing and industrial employment is threatened by a flood of imported goods. Social discontent is rising as Libyans seem set to join the rest of the 'resource cursed'.

Equatorial Guinea represents the characteristics of the 'resource curse' model so well it is almost a caricature. Except for the revenues to fund repression, however, the curse was there before the oil. Britain established control of the area that became Equatorial Guinea in the 18th century and used it as a base for their conquest of Nigeria. In the process they turned freed slaves into their agents, creating a ruling group that, in many aspects, still exists today. Since independence in 1968, Equatorial Guinea has been ruled by anti-democratic and authoritarian 'strong men'. Teodoro Obiang Nguema took control through a coup against his uncle in 1979 and remains in power. After an initial flirtation with the Soviet bloc, he has consistently applied "IMF recipes in return for loans" [ITM 2003: 236]. In 1996, the same year that Nguema was 're-elected' as president⁵², giant oil deposits were discovered. As a result the country's GDP grew by 71% in 1997, by 22% in 1998, and 15% in 1999. "The US company Mobil handled oil extraction and production, and all income from this was controlled by the presidential entourage. According the UN, 80% of the wealth ... was held by less than 5% of the population" [237]. Oil wealth has enabled some spending on social services, but real distribution is grossly skewed and regressive. The majority do not have access to decent water and are prey to dysentery and malaria resulting in very high rates of infant mortality.

The economy grew spectacularly again (by 50%) when natural gas deposits were discovered in 2001. According to David Leigh [2005], British Gas is buying up the entire planned output for 17 years - an amount that is worth about \$15 billion at today's prices. But the deal is clearly premised on the assumption that prices

⁵² The election count gave him 99% of the vote!

for natural gas - 'the fuel of the future' - will ratchet up significantly during the course of the contract, bringing huge profit. The corporation will not disclose what it will pay for the gas, despite having signed up to the British government's Extractive Industries Transparency Initiative, under which companies and governments are urged - though not compelled - to come clean about oil payments. Secrecy in the gas deal follows secrecy in oil dealing - and the point of the secrecy is to hide the millions that are routinely channelled to Nguema and his ruling elite and to cover corporate manipulations.

Angola's war of liberation against Portuguese colonialism was turned into one of the surrogate fronts of the Cold War through the support of the US CIA and apartheid South Africa for Jonas Savimbi's UNITA against the Marxist MPLA government. Part of the legacy of this forty years of civil war is that state power is concentrated within the 'Futungo' elite group surrounding President Jose Eduardo dos Santos while civil society remains weak. Oil funded the government's war effort and, according to Global Witness, the Futungo skimmed huge sums off the arms deals, turning the legitimate defence against UNITA "into a conspiracy to rob the country of its oil money" [2004: 38]. Since 1996 "over US\$ 1 billion a year has gone unaccounted for" and new evidence indicates that Dos Santos himself has amassed a substantial fortune [4]. At the beginning of 2005, an IMF mission to Angola was delayed because the government failed to account for an estimated \$600 million windfall resulting from the dramatic increase in the oil price during 2004.

At the same time the Angolan government has racked up enormous debt, owing "US\$ 9.6 billion to foreign creditors, or 129% of its average annual export income" in 2001 [Global Witness 2004: 42]. Debt deals themselves have been used to skim yet more money into private hands, while Portugal has secured repayment of debt owed by UNITA. Angola's future oil production stands surety for most of the debt so most of its income will simply be recycled through the oil corporations and banks that have facilitated the deals. Finally, the consequences of debt will be paid for by ordinary Angolans who have seen no benefit from oil. Even after the end of the civil war, and with significantly increased oil profits, the country has slipped further down the UN Human Development Index. 70% of Angolans live in poverty; 80% have no access to basic medical care; average life expectancy is only forty years; and three in ten children will die before reaching their fifth birthday [Eviatar 2004]. Human Rights Watch notes that the money that went missing between 1997 and 2002 is "roughly equal to the entire sum the government spent on all social programmes in the same period" 54.

The main centre of oil production is in the northern province of Cabinda, which is separated from the rest of Angola by a strip of the Democratic Republic of Congo and remained outside the main theatre of war, although a small separatist movement in Cabinda waged a distinct campaign against the government. Following its victory in the civil war in 2002 the government moved 30,000 troops into Cabinda and, by mid-2003, had destroyed the separatist movement. The troops remain, however, and Human Rights Watch reported in 2004 that the "Angolan army arbitrarily detained and tortured civilians with impunity in Cabinda" 55.

⁵³ See www.irinnews.org: "ANGOLA: Transparency on oil money delaying donor conference", 2 February 2005

⁵⁴ IRIN, 'Missing oil billions explained' posted January 13, 2005 at www.irinnews.org

⁵⁵ Human Rights Watch press release, 23 December 2004, in Pambazuka News No. 188

Box 9: Enclave oil

Relations of power are visibly portrayed in the walled compounds that separate oil wealth from the poverty it creates. ChevronTexaco's expatriate employees are housed at its Malongo compound in Cabinda, Angola. They are not allowed to drive outside on their own and they may not venture into the countryside at all. Journalist Daphne Eviatar [2004] visited Malongo and describes it thus:

Built in the 1960s, Malongo is a campus of ranch houses, manicured green lawns and smooth paved roads. ChevronTexaco's own well and private filtration system supplies drinkable tap water - a rare luxury in Africa. Spacious dining halls offer a stunning array of fresh seafood, imported meats, salad and dessert bars ... For entertainment, there's baseball, basketball, volleyball and tennis, a cricket pitch, horseshoes and a rolling green golf course. Unlike the rest of Angola, where the official language is Portuguese, the language of Malongo is English. If workers still get homesick, they can dial direct from their rooms to the United States - no need for international dialling codes. Indeed, except for the extraordinary bats that hang in ominous clusters from the branches of the compound's mango trees, you'd never know you were in Africa.

ChevronTexaco does everything it can to keep it that way. No one enters or leaves the compound without special permission. And there's no way to avoid the tightly guarded security gates, because the entire compound is surrounded by a double fence of barbed wire that encloses a ring of anti-personnel land mines. The mines, planted by the government during the war, are just one manifestation of the longstanding relationship between the Angolan government and the oil company. ... The government still maintains an armed base on a hill just outside Malongo's gates to coordinate with the company on security. ...

But the benefits of the company's relationship with the government these days go well beyond security. When I visited, ChevronTexaco officials told me that the company is working closely with the government to develop the environmental, tax and other regulations that will govern, well, ChevronTexaco. "For a long time there were no real regulations in Angola," Artur Custodio, who holds the bold title of 'operational excellence champion' for ChevronTexaco, told me as he showed me around Malongo. "So the government is asking ChevronTexaco to create them."

[Eviatar 2004]

Nigeria, the biggest oil producer on the continent, is deeply marked by the resource curse. As a political unit, it was created during the European colonial scramble for Africa and administered essentially as a space designed for plunder. Britain created a small commercial, administrative and military elite, based primarily on the indigenous northern aristocracy, to serve its colonial interests. At independence in 1960, Britain effectively handed power to this class. Since then the political power of the ruling class in Nigeria has been secured by a series of military dictatorships with occasional gestures to civilian democratic rule, invariably presided over by cronies of the military or former generals.

The instability of the post-independence Nigerian state is a function of its neo-colonial or 'comprador¹⁵⁶ character. It is 'neo-colonial' because the ruling elite is drawn from the social classes created to serve the colonial state and because the state itself came to depend on the 'rents' from production organised by transnational corporations rather than on production organised by Nigerians. Moreover, political power, rather than entrepreneurship, became the preferred route to accumulating wealth through kickbacks on government financial deals. The dynamic that this set up led to instability and incoherence because competition for state office is more about competition for the profits of office than about competing social interests. In periods of 'democratic' rule this competition has escalated to violent conflict precisely because the state "was itself the major source of money and opportunities for the indigenous bourgeoisie and their clients" [Williams quoted in Turner 1980: 205].

In short, the 'bureaucratic compradors' milked the state while, under the cover of nationalist rhetoric, the state squeezed what it could out of the oil profits. Over time, the Nigerian government has taken a progressively larger share of most new ventures,

... rising from 35% in the early 1970s, to 60% in some cases by 1979. Today (2002), all oil development in Nigeria is by way of the joint venture or specific production-sharing contracts made through the Nigerian National Petroleum Corporation (NNPC). However, the oil companies typically operate the ventures and make most of the day-to-day decisions. [Doyle 2002: 162]⁵⁷

Following the example of other OPEC countries there were attempts to create an indigenous oil technocracy with the capacity to take direct control of production on behalf of the state. These efforts were resisted by the oil corporations and their comprador allies who saw the potential for an emerging technocratic class as a threat to their grip on power. The political elite has therefore maintained de facto dependency on foreign oil capital, ensuring Nigeria's continued subjugation to foreign domination, and nationalist interventions have been limited to scraps over the size of the oil rent.

⁵⁶ The Oxford English Dictionary gives the following definition of comprador: "In China, a native servant, employed as the head of native staff, and as agent, by European houses." During the 1970s, Latin American writers found it a useful term to describe the relationship between the Latin American and northern hustiness (Inspect

⁵⁷ There is a further irony here in that this partial nationalisation is itself used by the corporations because they can hold the state liable for investment capital according to the ratio of its formal ownership. The corporations constantly complain that NNPC's failure to provide its share of capital retards investment in development & maintenance, so passing the buck for incidents and delays in eliminating flaring. But Okonta and Douglas [2003: 102] argue that the corporations systematically inflate production and investment costs, so lowering their tax bills, while inflating the cash call on the state. They see exorbitant expatriate salaries (invariably higher than wages for Nigerians) as intrinsic to this cost inflation. So 'partnership' on these terms becomes the means by which the oil companies are able to re-appropriate oil revenues from the state!

Even now, Terisa Turner's 1980 conclusion remains apposite: "Little has changed in Nigerian oil beyond a much larger transfer of money from the companies to the state. The government remains very much a passive tax collector" [Turner 1980: 210].

While the politics of the Nigerian state is dominated by struggles between different elite factions, the citizenry - particularly the poor - are marginalised from political decision making. As Charles Abugre comments, where one commodity provides most of government's revenue (83% in Nigeria in 2002):

... this factor not only makes its continuous flow critical to the survival of governments, it also makes citizens essentially worthless in the eyes of governments since tax revenues play no significant role in the survival or thriving of governments. Consequently, de facto accountability of host governments to oil companies and their home countries takes precedence over any formal forms of democratisation. [Abugre 2004: 12]

Even an IMF report (in 2003) recognised the shocking disparity between Nigeria's huge oil revenues and increasing poverty: from 1970 to 2000, the share of the population living on less than a dollar a day increased from 36% to just under 70%; from 19 million "to a staggering 90 million" [quoted in Turner and Brownhill 2004: 69]. The contrast between the permanent crisis that is life for poor and marginalised Nigerians who live in the oil-rich zones, and the wealthy and powerful elite who profit from their misery, is scandalous. Weston points out that Nigeria has made something like \$400 billion out of oil over the last four decades to the benefit of the oil companies and the Nigerian ruling class and state. He puts it bluntly:

This ruling class in 44 years of independence has been totally incapable of developing Nigeria. ... They are merely tools in the hands of the imperialists. Their job is to hold down the Nigerian masses and make sure the wealth flows out of the country and into the hands of the imperialists. In exchange they get to take a share of the loot. [Weston 2004]

These countries are constituted on the peripheries of the global orders of power. Equatorial Guinea, for instance, virtually disappeared from the map when the US closed its embassy in 1988. Oil has put it back on the map but in an entirely dependent relationship with the corporations. The peripheral location makes it open season for plunder by the unholy alliance of northern interests and southern elites without reference to the interests of the people. South Africa occupies a different position in the global order. It remains subordinate to global capital and vulnerable to financial shocks but has a well developed and diverse business infrastructure, and core government policy has been successful in maintaining and expanding that infrastructure. It has also developed 'world class' mechanisms for managing dissent. While millions of South Africans experience poverty comparable to that in other African countries, it remains a good place to do business and is a respected partner of the major powers. These different locations within the global relationship of power reflect particular histories which create different conditions of exclusion and different possibilities for action by civil society.

Box 10: Venezuela's 'Bolivarian' option

The current 'Bolivarian Revolution' in Venezuela is an important inspiration to many. President Hugo Chávez's state-led national project constitutes a determined reversal of the neo-colonial 'resource curse' model by using oil revenues to seriously address poverty and create a more egalitarian society. The state is spending billions of dollars annually to provide housing, free medical clinics, schools and literacy programs and is subsidising food for the poor to the tune of US\$ 25 million a month. The country now has the lowest rate of infant mortality and one of the highest rates of literacy in Latin America.

In 2002, Chávez was detained by a group of military officers in a coup attempt backed by the Venezuelan business elite and the US. Massive street protests demonstrated overwhelming support for Chávez and forced his release. This popular mobilisation and the real achievements of the regime suggest that there is still room for optimism that the nation state can provide a viable vehicle for genuine transformation.

There are, however, some flies in the ointment. First, Chávez is accused of authoritarianism. This is partly the special pleading of the authoritarians from whom he has taken power. More ominously, he is centralising state control and filling key positions with loyal military officers. In a generally sympathetic account of his achievements, Schaffer and Chestnut note that "Latin American armed forces have a long and well deserved reputation of obstructing the development of democratic governance" [2005]. Oscar Olivera's critique of the state, quoted below under 'The politics of resource control in Bolivia', is aimed precisely at this tendency.

Second, oil contributes 52% of government revenues. This makes the project vulnerable both to oil price shocks and declining production - and there are indications that Venezuelan production is declining. Third, Chávez's project has little to say about the environmental and social conditions reproduced all the way along the production chain. Nor does it address the broader problem of climate change which will certainly have severe implications for Venezuela's poor.

Voices of civil society

Civil society is messy, with multiple voices and initiatives. Organisations and movements which aim to change things for the better have developed various responses to the conditions created all along the oil production chain. That organisations respond to the same set of contradictions does not mean that they have a common understanding of the issues or that civil society action is guided by a common purpose. Nor does the subjective intention to make things better guarantee that this is the actual effect of different actions and strategies.

One reason for these differences is that people and organisations have very different places within the structures of the global economy. International organisations, in northern and southern countries, may or may not speak and work in solidarity with people living in the shadows cast by the flares, but they relate to the institutions of power from a very different position. Position creates particular opportunities and constraints but does not dictate how organisations use it. People sharing similar locations and histories can still read the situation differently and so arrive at different strategies for action. Below, this report looks first at the various positions taken by international civil society organisations and then at the people's movements. In doing so, it keeps in mind the question posed in the introduction: whose energy future?

Very broadly, civil society organisations act in three different ways, although there is a lot of muddiness in between. These actions are collaborative, reformist, or founded on environmental and social justice.

Collaboration

First, collaborative actions are basically supportive of the strategies of dominant institutions and of the status quo more generally. Thus, the World Wide Fund for Nature and the Nature Conservation Society entered a partnership brokered by the World Bank to take a management role in the national parks established in Cameroon to off-set the loss of biodiversity resulting from the Chad-Cameroon pipeline. Caruso et al comment that, "Bagyéli communities worry that their rights to practice their subsistence livelihoods will be under increasing threat from the new protection measures currently under consideration by WWF, who have so far failed to consult with local communities" [2003: 73]. Various organisations, local and international, have also partnered with Shell's Corporate Social Responsibility programmes which cover a range of activities from malaria control to 'business development'. Such strategies ask no questions of power and they leave the energy future where it is, in the hands of the industry.

Reform

Second, reformist actions are generally concerned to make global capitalism work as advertised, and to have the oil industry managed, as the World Petroleum Congress would have it, "for the benefit of mankind". Thus, states should be properly democratic; people's rights should be protected; corporations should be held to account - or at least to the standards advertised by their own public relations; oil revenues should be transparently accounted for, to end the corruption; and the environmental wrecking should be stopped. All this seems self-evident and certainly it would be better to have the oil industry managed in a manner that does not produce serial catastrophe.

The prominence of international organisations working in this vein is itself an effect of the global organisation of power. Many of them target their campaigning at the key northern / global institutions that operate in the interests of those who benefit from the current regime. Northern organisations, in particular, have access to resources, information and the media in the key global markets and many of them use this strategic positioning to base their lobbying and advocacy on monitoring the activities and impacts of the oil regime across the globe and publishing accurate information on it. In so doing, they uncover much of the rank hypocrisy of the oil industry and help expose some of the contradictions in the elite's version of the costs and benefits of global oil. In turn, this helps weaken the industry's justifications of its operations and eats away at the legitimacy of the oil project.

The reformist use of such information is illustrated by the position taken by the Catholic Relief Services (CRS) and Bank Information Centre (BIC) in their work in monitoring the scramble for Africa's oil and the Chad project in particular. Their report, 'Bottom of the Barrel', holds that African governments have the "primary responsibility" for managing oil wealth in the interests of their people, but adds: "Other key actors determining the outcomes of this boom are foreign oil companies, International Financial Institutions like the World Bank and the International Monetary Fund, export credit agencies, and Northern governments." They go on to argue for a 'big push': "a sustained, coordinated and coherent international effort ... by the relevant actors involved in Africa's oil boom [to] improve the prospects for transforming Africa's oil wealth into improvements in the lives of the poor" [Gary and Karl 2003: 2].

This may be a 'defensive' position. The report, published ahead of the Extractive Industry Review findings, notes civil society demands for the World Bank to stop funding oil projects, particularly in corrupt regimes, but concludes that "such bold moves are not likely" [46]. The EIR did in fact support the civil society position, but this conclusion was right in that the Bank refused to accept it. These organisations thus attempt to deal with the reality of power as they find it and use what they see as the most effective leverage to reform the way the industry works.

The limits of reform

The first problem with this is that their own work demonstrates that this reform is 'not likely'. Secondly, it implies that the problem of the resource curse is primarily rooted in the character of southern governments and real hope for change lies with the northern institutions putting pressure on them. It thus suggests that these institutions enjoy a legitimacy which the 'failed' African states do not. This is simply wrong. Despite noting the web of interests invested in the oil boom, it buys into the official development theory of the World Bank which analyses individual country economies as if they were separate and sovereign creations. Yet the failed states are themselves a symptom of what Castells calls Africa's 'fragmented integration' into global capitalism. They are produced by a globalised system that concentrates power and accumulation in the north and this relationship of power has been repeatedly enforced by the IMF and the World Bank. The northern powers and the African elites share a common interest in this relationship. The former benefit from the extraction of valuable assets, and "what is a human tragedy for most Africans continues to represent a source of wealth and privilege for the elites" [Castells 2000: 127]. The northern powers get an additional benefit - as they walk away with the goods they leave the blame with the south.

A third problem with reformist civil society strategies is that they are vulnerable to being co-opted into the very system whose impacts they aim to mitigate. The information produced may help erode the legitimacy of the oil regime, but the strategies paradoxically shore up that legitimacy in the longer run. Thus, the CRS and BIC report argues that many of the leading actors "recognise that improving the distribution of benefits from oil production is not only an ethical mandate, but also an essential ingredient towards a more stable and sustainable world" [2]. Applied to the Niger Delta, where the oil regime is maintained by force, this would imply that the dominant actors build up their legitimacy in the eyes of the people. This would replace force with consent to provide for stability and long-run profitability. It would thus take the heat out of popular resistance by accommodating some demands and incorporating those leaders who can be co-opted into a reformed regime of control.

In the current global context, the ideology of corporate-led capitalism is so pervasively internalised as a 'common sense', that such a reform project can be quite easily dressed up as positively benign and progressive. Its catch phrases saturate the rhetoric of all but the most stubborn: good governance; respect for the rule of law; transparency, certainty, efficiency, liberalisation and consistency in business and investment regulation; corporate citizenship and social responsibility; triple-bottom-line reporting and accountability; sustainable development; etc. They saturate the rhetoric not just because they sound good and wholesome⁵⁸ but because they are part of an ideological and institutional structure that enables capitalism to flourish and to claim that it does so 'for the benefit of mankind'. For the African continent NEPAD⁵⁹ scripts this project at scale. Nigeria's Niger Delta Development Commission (NDDC) and South Africa's 'black economic empowerment' are both similarly framed and similarly intended - to cloak a project for ongoing corporate-led capitalist accumulation in a righteous mantle of 'development' on behalf of ordinary people and their environments.

⁵⁸ Part of the reason they intuitively sound good to ordinary folk is that so much of this language has been appropriated precisely from discourses of protest and critique expressing those people's discontent.

⁵⁹ Discussed earlier - see the section: 'Africans doing it to themselves'

Similarly, the World Bank justifies its support to oil projects on the developmental grounds that poor people in exporting countries need modern energy services. As CRS and BIC themselves show, the justification is absurd.

In an evaluation for Oilwatch Africa, Charles Abugre shows how the reform project is brought down to the ground. Reflecting on relations between African members and northern partners of Oilwatch, he illustrates tensions over analysis and interests by drawing on examples that relate to corporate social responsibility (CSR). On the one hand, the Oilwatch position is clear:

... the network rejects self/voluntary regulatory agreements inherent in such CSR initiatives as the Global Compact or the Extractive Industries Transparency Initiative. ... The network is suspicious of corporations claiming green or socially responsible status ... Consequently, many members prefer to monitor, name and shame corporations rather than to be seen to be working in 'partnership' with them. [Abugre 2004: 28]

By contrast, Abugre found that northern partners (especially donors) of Oilwatch are under pressure in their own backyards to promote private sector solutions in 'recipient' countries partly through southern 'partner' civil society organisations. An agenda replete with initiatives like 'private-public-partnerships', the facilitation and encouragement of foreign investment, income generation and fair trade arrangements is pushed from the north "with a zeal akin to a crusade".

The limits of the reform agenda carried within the official discourse of development are starkly revealed in Angola. Human and civic rights groups are emerging but, for the most part, it appears that civil society is being shaped through corporate social responsibility and donor funding. Most of the organisations supported in this way engage in de-politicised relief work and service delivery. According to Irrin News a World Bank report notes that "extensive donor presence during the [civil war] has led to a burgeoning yet uncoordinated landscape of CSOs, dominated by high-capacity international NGOs. Development projects have created a wide range of community-based organisations". The report appears to support the expansion of civil society activity into advocacy and governance issues - but the real focus is to encourage CSOs to shift from relief to 'development'. It motivates this role for CSOs because:

First, they improve governance from the bottom up by creating partnerships between CBOs and local governments. Second, CSOs introduce more participatory approaches to community-level decision-making. Third, CSOs can play a stabilising and mediating role in reducing conflict⁶⁰.

Those elements of civil society that are unlikely to be tame partners with government, or whose activism is unlikely to be seen by the donor establishment as 'stabilising', are excluded. In an interview with a journalist, Benjamin Castello, director of Jubilee 2000 Angola which campaigns for the write-off of debt, argued that:

⁶⁰ See: www.irinnews.org, "ANGOLA: Changing role of civil society must be supported by donors, report", 14 July 2005

... despite their purported charity work, the oil companies give nothing to local pro-democracy organizations, which provide the only hope for holding the government accountable. "Oil companies know that if they support civil society, in the future they won't receive new petrol blocks," he said. The United States has apparently decided such funding isn't in its interest either: The Agency for International Development has virtually eliminated its prior support for pro-democracy organizations that were critical of the government. [Eviatar 2004]

The work of historical forgetting is a peculiar feature of the power of the official developmental discourse. Abugre remarks that "organisations ... without prior experience with the [oil and gas] industry tend to be more optimistic about expectations of development ... than those that have lived with the consequences of the industry for years and whose communities have become radicalised by the experience" [2004: 10]. This forgetting is a form of concealment. It allows global power holders to endlessly renew the promise of reform as if, like Venus, they can restore their innocence each day in the bath of public relations.

Environmental justice

If the reformist orientation of some organisations monitoring the oil industry may blur into a collaborative position on the one side, it can also blur into an environmental justice position on the other. The evidence they produce demonstrates, oil project after oil project, that the first priority of the key northern actors is to get the oil out and make a buck while noble developmental aspirations lag behind and are overtaken by the resource curse. In doing so, they make a powerful contribution to the work of historical memory which is critical to the project of environmental justice.

Other monitoring organisations take their cue from this evidence - from this work of memory - and explicitly focus on highlighting and exposing the contradictions. For example, the Sustainable Energy and Economy Network (SEEN) monitors the World Bank's support for fossil fuels and exposes the gap between its sustainable energy rhetoric and its practice. It notes that those who have lobbied the Bank to live up to the mandate of the 1992 Rio Earth Summit - which "placed much of the financial control over sustainable development aid" in its hands - have been repeatedly disappointed:

Those who embrace the Bank as an impartial and honest carbon broker ought to be aware that this institution's investments are driven in large part by the thirstiest oil-consuming nation in the world, the US. ... Until the Bank's power structure is rewired, it will remain an institution beholden to the world's most powerful polluters. [Vallette et al 2005: 3]

SEEN therefore addresses itself to civil society, concluding that the Bank must be challenged from without. If it cannot "return to its original mandate - poverty alleviation and sustainable development - [it] should be viewed as an impediment to this mandate and abolished" [3].

A key component of the environmental justice process is the work of solidarity, linking and networking people globally. The next section shows that this is a critical resource for people facing environmental injustice on the ground and is understood by the corporations themselves as a real threat to their power.

Voices of the peoples

In the Niger Delta, the voices of those who do not benefit from a parasitic relation to the oil industry are heard outside the formal arena of Nigerian politics - in popular social and environmental justice movements that bitterly attack the neo-colonial state and the transnational oil corporations. The emergence of these movements in the Delta responds to the appalling degradation of life produced by the oil industry's massive and overbearing presence. They have mobilised a resistance that is heroic, as the testimony of Israel Aloja, who now works for Environmental Rights Action (Friends of the Earth, Nigeria), illustrates:

I wanted to do some voluntary work on human rights issues ... I joined Environmental Rights Action/Friends of the Earth Nigeria as a volunteer in 1998... On my visits to the Niger Delta I saw oil spills covering thousands of kilometres that were destroying local communities. The water supplies, fishing and farming were all being affected, and I decided to help no matter what!

I have been arrested on my travels to the Niger Delta, and have been close to death. These experiences have made me more determined to carry on with my work. ... There is a history of atrocities by the military including arresting, beating, raping and even killing. The level of destruction, intimidation, poverty, frustration and pollution that the people of the Niger Delta suffer is my inspiration.

My work during the military regime was extremely hazardous ... The situation is better now, but the military still have a presence - many of the government are retired police or military officers. ...

["Environmental Rights Action, Nigeria: an interview with Israel Aloja" at www.foei.org]

Saro-Wiwa's legacy

This echoes the experience of Ken Saro-Wiwa, the Ogoni writer and activist. As Jack Doyle tells it, he grew up in a world shaped and damaged by oil. He worked in minor government jobs during the 1960s and 1970s, and was a commissioner in Rivers State when he witnessed a major oil blowout and its terrible social and environmental consequences - and Shell's indifference to them. Saro-Wiwa become increasingly involved in movements for worker and minority rights and, in August 1990, he and other Ogoni leaders formed the Movement for the Survival of the Ogoni People (MOSOP). MOSOP "adopted an Ogoni Bill of Rights, demanding political autonomy to participate in the Republic as a distinct unit, seeking control and use of a fair

proportion of Ogoni economic resources, and also accusing Shell of "full responsibility for the genocide of the Ogoni" [Doyle 2002: 166]. Government ignored MOSOP's submissions and deployed its repressive apparatus to protect the oil industry against popular discontent and protest, as described in Chapter 2 of this report.

Following the shutdown of the Ogoni oil wells, Shell officials met repeatedly at their corporate headquarters in London. As leaked minutes made clear, they were particularly concerned that "international networking, most prominently so far involving the Ogoni tribe and Ken Saro-Wiwa, is at work and gives rise to the possibility that internationally organized protest could develop" [quoted in Doyle 2002: 167].

They were right. MOSOP indeed succeeded in internationalising awareness of the fate of oil host communities and Saro-Wiwa's arrest itself provoked internationally organised protest. Amnesty International named him a 'prisoner of conscience' and he received the Right Livelihood Award (also known as the 'alternative Nobel Peace Prize'). Environmental and rights organisations mounted a campaign calling for his immediate release and holding Shell and the Nigerian government responsible for the Ogoni atrocities.

On October 31st 1995, Ken Saro-Wiwa and eight other Ogoni activists were sentenced to death by the Nigerian Tribunal. In his closing statement, Saro-Wiwa wrote:

I and my colleagues are not the only ones on trial. Shell is here on trial and it is as well that it is represented by counsel said to be holding a watching brief. The company has, indeed, ducked this particular trial, but its day will surely come and the lessons learnt here may prove useful to it for there is no doubt in my mind that the ecological war that the Company has waged in the Delta will be called to question sooner than later and the crimes of that war will be duly punished" [quoted in Doyle 2002: 174].

On November 10th 1995, Saro-Wiwa and his colleagues were hanged. Nigeria drew significant international flack and a number of countries' ambassadors were withdrawn.

MOSOP's international profile, and the judicial murder of Saro-Wiwa, has made the identity and struggle of the Ogoni iconic. But their struggle was, and is, representative of many other minority peoples of the Niger Delta who suffer violence, marginalisation, and ecological war. Saro-Wiwa himself saw the Ogoni struggle in this context and it has indeed provided the inspiration for struggles throughout the Delta, just as the Ogoni Bill of Rights has inspired their political declarations. For example, those unfortunate enough to live at Oloibiri where Shell drilled its first well in 1956 are from the Ijaw people. Ijaw groups, some 12 million people all told, are located across the entire Delta region. Oilwatch describes their experience:

... [they] have suffered unspeakable human rights violations as well as environmental degradation, and have lived with constant violence caused by clashes between oil companies and civil society leading to the deaths of many Ijaw. As a result, in December of 1998, the Ijaw people signed the Declaration of Kaiama, demanding an end to all oil activities (exploration and production), and the withdrawal of all transnationals from Ijawland. But the violence continues. [2002: 4]

In April 2005 a 7,600-strong conference of the Ijaw Youth Council in Port Harcourt re-affirmed their commitment to the Kaiama Declaration as "the official position of the Ijaw people" and roundly condemned the Nigerian state for failing to address the issues raised in it. Key themes to emerge from the conference speak eloquently to the crises of oil communities and to a growing militancy in their resolve to end the nightmare. The conference threatened to "assert our autonomy using any means necessary" if grievances are not adequately addressed.

The politics of ethnicity has been sedulously promoted by the corporate and political elite. It has served as a mark of exclusion, a channel for patronage and as a divide and rule tactic, and it has created a history of rivalry within and between communities. These divisions have fed into the violence of the Delta and have also been used as false cover for security force violence. At the same time, people's sense of ethnic belonging is carried within the demands for minority rights and the naming of movements and declarations, starting with MOSOP itself.

It was perhaps Saro-Wiwa's key insight that, firstly, this self-identification of the people provided the basis for mobilising resistance but, secondly, that it could become the foundation of a pan-Delta consciousness and solidarity based on the common experiences of marginalised peoples of the Delta and their common sense of the true targets of their resistance. It is indeed part of his legacy that this wider solidarity is now beginning to emerge. In June this year (2005) for example, communities from across the Niger Delta, with the support of Environmental Rights Action (ERA), filed a legal action against the Nigerian government, the Nigerian National Petroleum Corporation and the Shell, Exxon, Chevron, Total and Agip joint venture companies to stop gas flaring. More broadly, Turner and Brownhill remark:

Over the past decade, through processes of direct democracy, each 'nationality' formulated declarations that contained demands and programs. A fundamental universal demand is 'resource control'. More recently, coalitions of these clan-based organisations have been formed and are calling for a national sovereignty conference to remake the Nigerian political-economy. [2004: 80]

This is at the centre of a discernable common agenda which is emerging as a basis around which the various peoples and movements could coalesce. More particularly, this agenda is founded in the common view that:

Box 11: The Kaiama Declaration

Being communique issued at the end of the All Ijaw Youths Conference ... held in the town of Kaiama, this 11th day of December 1998.

Introduction

We, Ijaw youths drawn from over five hundred communities from over 40 clans that make up the Ijaw nation and representing 25 representative organisations met, today, in Kaiama to deliberate on the best way to ensure the continuous survival of the indigenous peoples of the Ijaw ethnic nationality of the Niger Delta within the Nigerian state.

After exhaustive deliberations, the Conference observed:

- **a.** That it was through British colonisation that the IJAW NATION was forcibly put under the Nigerian State.
- **b.** That but for the economic interests of the imperialists, the ljaw ethnic nationality would have evolved as a distinct and separate sovereign nation, enjoying undiluted political, economic, social, and cultural AUTONOMY.
- c. That the division of the Southern Protectorate into East and West in 1939 by the British marked the beginning of the balkanisation of a hitherto territorially contiguous and culturally homogeneous ljaw people into political and administrative units, much to our disadvantage. This trend is continuing in the balkanisation of the ljaws into six states Ondo, Edo, Delta, Bayelsa, Rivers and Akwa Ibom States, mostly as minorities who suffer socio-political, economic, cultural and psychological deprivations.
- d. That the quality of life of Ijaw people is deteriorating as a result of utter neglect, suppression and marginalisation visited on Ijaws by the alliance of the Nigerian state and transnational oil companies.
- **e.** That the political crisis in Nigeria is mainly about the struggle for the control of oil mineral resources which account for over 80% of GDP, 95 % of national budget and 90% of foreign exchange earnings. From which, 65%, 75% and 70% respectively are derived from within the ljaw nation. Despite these huge contributions, our reward from the Nigerian State remains avoidable deaths resulting from ecological devastation and military repression.
- f. That the unabating damage done to our fragile natural environment and to the health of our people is due in the main to uncontrolled exploration and exploitation of crude oil and natural gas which has led to numerous oil spillages, uncontrolled gas flaring, the opening up of our forests to loggers, indiscriminate canalisation, flooding, land subsidence, coastal erosion, earth tremors etc. Oil and gas are exhaustible resources and the complete lack of concern for

- ecological rehabilitation, in the light of the Oloibiri experience, is a signal of impending doom for the peoples of Ijawland.
- g. That the degradation of the environment of Ijawland by transnational oil companies and the Nigerian State arise mainly because Ijaw people have been robbed of their natural rights to ownership and control of their land and resources through the instrumentality of undemocratic Nigerian State legislations such as the Land Use Decree of 1978, the Petroleum Decrees of 1969 and 1991, the Lands ... Decree No. 52 of 1993 (Osborne Land Decree), the National Inland Waterways Authority Decree No. 13 of 1997 etc.
- h. That the principle of Derivation in Revenue Allocation⁶¹ has been consciously and systematically obliterated by successive regimes of the Nigerian state. We note the drastic reduction of the Derivation Principle from 100% (1953), 50% (1960), 45% (1970), 20% (1975) 2% (1982), 1.5% (1984) to 3% (1992 to date), and a rumoured 13% in Abacha's 1995 undemocratic and unimplemented Constitution.
- i. That the violence in Ijawland and other parts of the Niger Delta area, sometimes manifesting in intra and inter ethnic conflicts are sponsored by the State and transnational oil companies to keep the communities of the Niger Delta area divided, weak and distracted from the causes of their problems.
- j. That the recent revelations of the looting of national treasury by the Abacha junta is only a reflection of an existing and continuing trend of stealing by public office holders in the Nigerian state. We remember the over 12 billion dollars Gulf war windfall, which was looted by Babangida and his cohorts We note that over 70% of the billions of dollars being looted by military rulers and their civilian collaborators is derived from our ecologically devastated ljawland.

Based on the foregoing, we, the youths of Ijawland hereby make the following resolutions to be known as the Kaiama Declaration:

- 1. All land and natural resources (including mineral resources) within the liaw territory belong to liaw communities and are the basis of our survival.
- 2. We cease to recognise all undemocratic decrees that rob our peoples/communities of the right to ownership and control of our lives and resources, which were enacted without our participation and consent. These include the Land Use Decree and The Petroleum Decree etc.
- 3. We demand the immediate withdrawal from Ijawland of all military forces of occupation and repression by the Nigerian State. Any oil company that employs the services of the armed forces of the Nigerian State to 'protect' its operations will be viewed as an enemy of the Ijaw people. Family members of military personnel stationed in Ijawland should appeal to their people to leave the Ijaw area alone.

⁶¹ The principle of derivation concerns the proportion of oil revenue returned to the local state from which oil was extracted. Obasanjo's government has now set the figure at 13%.

- 4. Ijaw youths in all the communities in all Ijaw clans in the Niger Delta will take steps to implement these resolutions beginning from the 30th of December, 1998, as a step towards reclaiming the control of our lives. We, therefore, demand that all oil companies stop all exploration and exploitation activities in the Ijaw area. We are tired of gas flaring, oil spillages, blowouts and being labelled saboteurs and terrorists. It is a case of preparing the noose for our hanging. We reject this labelling. Hence, we advise all oil companies staff and contractors to withdraw from Ijaw territories by the 30th December, 1998, pending the resolution of the issue of resource ownership and control in the Ijaw area of the Niger Delta
- 5. Ijaw youths and Peoples will promote the principle of peaceful coexistence between all Ijaw communities and with our immediate neighbours, despite the provocative and divisive actions of the Nigerian State, transnational oil companies and their contractors. We offer a hand of friendship and comradeship to our neighbours: the Itsekiri, Ilaje, Urhobo, Isoko, Edo, Ibibio, Ogoni, Ekpeye, Ikwerre etc. We affirm our commitment to joint struggle with the other ethnic nationalities in the Niger Delta area for self-determination.
- 6. We express our solidarity with all peoples organisations and ethnic nationalities in Nigeria and elsewhere who are struggling for self-determination and justice. In particular we note the struggle of the Oodua Peoples Congress (OPC), the Movement for the Survival of Ogoni People (Mosop), Egi Women's Movement etc.
- 7. We extend our hand of solidarity to the Nigerian oil workers (NUPENG and PENGASSAN) and expect that they will see this struggle for freedom as a struggle for humanity
- 8. We reject the present transition to civil rule programme of the Abubakar regime, as it is not preceded by restructuring of the Nigerian federation. The way forward is a Sovereign National Conference of equally represented ethnic nationalities to discuss the nature of a democratic federation of Nigerian ethnic nationalities. Conference noted the violence and killings that characterized the last local government elections in most parts of the Niger Delta. Conference pointed out that these electoral conflicts are a manifestation of the undemocratic and unjust nature of the military transition programme. Conference affirmed therefore, that the military are incapable of enthroning true democracy in Nigeria.
- **9.** We call on all liaws to remain true to their liawness and to work for the total liberation of our people. You have no other true home but that which is in liawland.
- 10. We agreed to remain within Nigeria but to demand and work for Self Government and resource control for the Ijaw people. Conference approved that the best way for Nigeria is a federation of ethnic nationalities. The federation should be run on the basis equality and social justice. Finally, Ijaw youths resolve to set up the Ijaw Youth Council (IYC) to coordinate the struggle of Ijaw peoples for self-determination and justice.

- o the Nigerian state represents the interests of oil capital and not the masses of ordinary Nigerians;
- o profits from the exploitation of Delta resources accrue, both through 'normal' business practice and massive corruption, to the elites (of the state and oil capital) and do not benefit ordinary Nigerians of the region;
- o the social and environmental costs of oil exploitation massively outweigh putative benefits, and that they have been borne by ordinary Nigerians of the region;
- o the oil regime has displaced, undermined, marginalised and threatened the very survival of the cultures, livelihoods, and communal life of minority peoples of the Delta region;
- o the oil regime imposed on the Delta is inherently violent.

This agenda also carries a common set of demands that:

- o the structure of the Nigerian state be transformed away from the centralisation of power and towards much greater local participatory democracy;
- o structures of local participatory democracy respect, reflect and build the cultural identities of the peoples of the Delta region;
- o revenue from the exploitation of oil is transparently accounted for, and more equitably distributed to achieve, in the first instance, real benefit for the peoples of the Delta region;
- o if it is to continue at all⁶², extraction and processing of oil and gas must be overhauled completely to stop further environmental harm and reverse the damage done already;
- o the ecological debt owed to the people of the Delta for the history of abuse must be repaid;
- o the developmental future of the Delta (whether or not it includes continued oil activity) must build on the actual (and historic) material practices, livehoods mix, and fundamental needs of the ordinary people of the region, and thus must be based on more than the overwhelming dominance of the oil industry.

President of the Nigeria Labour Congress (NLC), Adams Oshiomhole, in an interview at around the same time as the 2005 Ijaw Youth Council Conference, commented that agitation for 'local resource control' and justice will continue from within the Delta region and added: "I believe that the present generation of leaders may tolerate some of these injustices, the future generation will not." 63

In this emerging agenda, Nigerian movements are going well beyond defensive demands. They are beginning to articulate a vision that encompasses not just reforms to mitigate their circumstances, but also a transformation of the wider economic, political, and social relations that reproduce those circumstances. Further - and critically - this agenda emerges from within mobilisation and movement-building at a grassroots level, and its vision of another future builds on the practices and identity that sustains these movements.

 $^{^{\}it 62}$ We return to this unresolved tension later in this section.

⁶³ This Day, Lagos, April 2005

Box 12: Call that legit?

Nigeria's president, Olusegun Obasanjo, has called a National Political Reform Conference (NPRC), more commonly referred to as the 'national dialogue'. The dialogue responds to widespread demands for a radical makeover of Nigeria's politics. Thus, the Kaiama Declaration called for a 'Sovereign National Conference', something like a constituent assembly process, to bring in a real democracy by democratic means. The national dialogue, by contrast, attempts to restore legitimacy to the present political order: "Obasanjo and his advisers chose the script, designed the stage, and selected the actors and their roles. They did all these without bothering to find out what manner of theatrical fare might be the preference of the Nigerian people" [Okonta 2005c].

So it is that the chairperson of the NPRC Committee on Environment and Natural Resources Reforms is His Royal Highness Obi of Onitsha, recently retired as Shell Nigeria's highest ranking African official and described by critics as 'part of the Shell family'⁶⁴. And the person selected to brief this committee on the state of the environment in the Delta is Dr Amakiri, a longstanding consultant to Shell.

Life from death

Perhaps most pregnant with promise for a new generation of African agitation against the injustice of the current oil regime is the extraordinary role of women in the mobilisations by popular movements that shut down much of Nigeria's oil industry during 2002 and 2003 (see Chapter 3). Turner and Brownhill argue that the women's values are embedded in a subsistence or life-centred 'civil commons' which addresses people's needs through "collective, cooperative, and autonomous activity" [2004: 64]. This is based on communal land holding and the common management of resources and this commons is still very much part of people's lives and their livelihoods. The assault of the oil industry threatens the social and environmental base of this way of life which is why "women who are responsible for much of the farming, fishing, feeding, and life sustenance stood up against corporate destruction" [64]. In this they echo Saro-Wiwa's earlier insight that "... we depend on fishing and farming, and to take that away from us - that's genocide. If you take away our land, and then you pollute the water and so on, it's just saying we don't have any right to live" [quoted in Doyle 2002: 161].

The civil commons is not restricted to rural production but links directly into the urban economy through the markets. Its power was demonstrated when informal sector workers joined the general strike of 2003 and

⁶⁴ This Day (Lagos) April 2005 "Shell out to sabotage our agenda, says S/South"

women traders closed the markets. The action showed the extent to which the day to day economy which holds Nigeria together is based, as Okonta puts it, in "the nation's organic institutions" working through the informal sector [2005b].

These events reached a climax with the renewed wave of occupations of oil installations when much of the Delta was brought "under the control of a network of indigenous clan-based organisations" [Turner and Brownhill 2004: 76]. Many militants were armed, creating a new dimension to the insurrectionary dynamics in the Delta. In one incident an impounded illegal bunkering vessel was reportedly 'rescued' from the Coast Guard by armed Delta youth, indicating that conventional forms of resistance are being linked with a direct challenge to the legal regime of resource control. Turner and Brownhill note that the bunkering operations are part of the creation of a 'parallel market' outside the official oil regime.

These dynamics within the Delta are produced by the operation of the oil regime itself. The final and critical dimension of these struggles are the international linkages of solidarity, also produced by the oil regime, as people around the world made the connection between events in the Delta and the US oil grab in Iraq. In oil consuming countries, naked protests inspired by the Delta women were combined with consumer boycotts organised in solidarity with the people's shut-down of production.

Turner and Brownhill argue that such "a simultaneous global 'production-consumption oil strike' ... has the potential to annihilate the capacities of oil companies to make profits or exercise the power of accumulation" [65]. These actions are based on defending the life-centred economy that supports people against the 'death economy' of the oil regime that makes commodities of people and resources. Felicia Itsero, spokesperson for a group occupying ChevronTexaco's Abiteye flow station, puts this in the language of the people:

We are tired of complaining ... the Nigerian government and their Chevron have treated us like slaves. ... They have been threatening us that if we make noise, they will stop production and leave our community and we will suffer, as if we have benefited from them. Before the 1970s, when we were here without Chevron, life was natural and sweet, we were happy. ... Today, the experience is sad. I am suggesting that they should leave our community immediately and never come back again. ... tell Chevron that we are no longer slaves, even slaves realise their condition and fight for their freedom. [Quoted in Turner and Brownhill 2004: 69]

That the corporations leave was the central demand of the women activists. It was not seriously entertained by the corporations. The fall-back demands included calls for a permanent forum for resolving problems related to oil corporations, employment of local people, and the provision of infrastructure such as schools, clinics and roads. These demands obviously contradict the central demand. They reflect what is on offer on the corporate social responsibility menu and the limits of what corporations are prepared to discuss. They perhaps

also reflect something of the messiness of how people are able to participate in the chaos of the Delta. At the same time, these demands are a claim against the massive ecological debt owed by corporations to the people. Corporate social responsibility, however, is designed to exclude recognition of liability, promoting voluntary codes to pre-empt enforceable standards. It provides corporations with a vehicle for patronage and allows them to determine how it will be distributed. The record to date suggests that people will see a negative return on the debt by these means. Yet it remains important that the claim is made. Shell stopped production in Ogoniland but absconded without paying its debt. If the corporations are forced to leave Nigeria they will certainly try to follow this example. How to enforce repayment of the debt is therefore a key question for the international solidarity networks as much as for the people of the Delta.

Beyond this, Turner and Brownhill see in these events the potential for a different energy future through the connection of local resource control, international solidarity and the operation of the parallel market:

Beyond international solidarity is the deepening of relations fundamental to global alternatives to corporate rule. Direct consumer-producer deals are central to these alternatives. ... Since 1985, Nigerians have organised oil barter or 'counter-trades'. Supplies of Nigerian crude would make possible popular, ecologically-sound citizens' control of refineries in Trinidad and Tobago, in South Africa, in Cuba and elsewhere. [2004: 78-9]

This imagination of another oil future reveals in negative the illegitimacy of the legal regime. The laws which make it legal are those of the 'American Century'. From New Jersey's corporate legislation that made Standard Oil's vast empire legal in the 1890s, to the rigged rules of international trade which ensure that wealth is transferred from south to north, these laws express the interests of the elite of the US-led regime of accumulation. This vision also attempts to trace a future from the material and social dynamics of the present, to take account of the collapsing legitimacy of the present regime and to find in the chaos of its production the possibilities for an economy - an alternative regime of production - that sustains people. Turner and Brownhill thus provoke a necessary debate, starting by throwing out the rule book published by corporate interests, and raising the question of what civil society can make of the crisis.

There are, however, several problems in this vision:

First, it may be questioned whether the parallel market can really be subject to popular grassroots control or if it is not already the creature of predatory protection rackets. Many of the organisations that are the brand leaders in organised crime - the Mafia, the Chinese Triads, the Japanese Yakuzado, Columbia's Medellin cartel - do in fact have their origins in resistance to domination and have deep roots in "the culture of specific countries and regions" [Castells 2000: 173]. With globalisation, they have entered into strategic alliances and joint ventures in much the way that legal transnational corporations do. On their home turf, they are

intimately linked to state institutions through corruption. Globally, they are equally intimate with the institutions of finance capital which collaborate, more or less knowingly, in money laundering of something between US\$ 500 billion and 1.5 trillion a year. Organised crime has also been repeatedly linked with covert state action as, for example, in the US sponsored contra war on Nicaragua.

Organised crime in Nigeria has a more recent origin but there is little doubt that it is organised from within the elite - particularly the oil bunkering. The alliances of 'area boys' and 'insurgent leaders' such as Asari may indicate that some part of this trade is passing into the hands of organisations rooted in the Delta peasantry. This may summons the image of a revolutionary appropriation of oil trading by people's organisations. Yet this trade cannot at present be carried out on any terms other than those of organised crime, and the history of organised crime - which has produced a merciless, mercenary and very masculine authoritarianism - would suggest some strong cautions as to the nature of the outcome.

Secondly, drilling holes in a pipeline to fill barrels is rather different from managing the oil production infrastructure. The massive investments and sheer technical virtuosity required - particularly if it is to be managed on an 'ecologically sound' basis - requires an accumulation of resources that is not evidently compatible with the life-centred economy of a people's commons. It may also be questioned what 'ecologically sound' means here. The chemistry of oil will not change under people's management and, even if it is possible to deal with the sulphurs, nitrogens and other toxic compounds, oil remains a fossil fuel and will continue to drive climate change. Finally, the oil will run out within the life time of this generation of children in the Delta. It seems questionable whether the investments required of Delta communities to realise this vision would be worth it.

These cautions signal at least that civil society needs to think about what production regime is compatible with people's control and what technologies and resources are appropriate to that, and we will return to this question below. Nevertheless, the growing militancy, unity and coherence of the Nigerian movements is very significant and makes it possible to open these debates.

The politics of resource control in Bolivia

It is also encouraging that Nigerians are not alone. Similar voices are being heard around the world. Bolivia in South America is perhaps one of the most important settings where these issues are being worked through. It is notable both for the strength of its social movements and for their debates on the question of 'resource control'. Bolivia thus offers important learnings and also raises important challenges and debates.

Bolivia is South America's poorest country. Spanish colonisers discovered silver there in the mid-16th century. The indigenous people discovered the resource curse. That is, they were dispossessed and subject to enforced

labour to enable the systematic plundering of the country's wealth, enriching the few while the overwhelming majority were left in terrible poverty. Tin followed silver and oil and gas have followed tin. Carmelo Colque, a Bolivian activist, defines the core of the matter thus: "First, they took our silver, then they took our tin, they took everything. The oil and gas is all we've got left. We Bolivians have woken up, we won't let them have it" [quoted in Schnews 2005].

The imperial and business interests behind this sorry show have been repeatedly challenged by various left, nationalist and/or populist movements and insurrections. However, divisions within these movements, together with the dominant economic leverage of imperialist forces internationally, and the recurrent reimposition of military rule on their behalf, have reversed and stalled progressive national projects time and again.

The present round of mobilisation has its origins in the early 1980s when a divided and unpopular military junta was replaced by a centre-left coalition that had won elections (held two years previously!). The elected government's programme included handing the administration of state-owned mines to labour unions; restructuring management of big businesses to facilitate participation by labour and peasant movements; and repudiating the country's foreign debt. The IMF and World Bank responded by cutting off all credit and thus embargoing Bolivia's international trade. The results were devastating, unleashing a fiscal crisis and hyperinflation that had the effect of badly undermining the government's popular credibility.

Elections in 1985 were inconclusive and Gonzalo Sanchez de Lozada was finally nominated as the new president by vote of the Bolivian Congress. His government adopted aggressive neo-liberal policies, ending subsidies, privatising state-owned enterprises and removing price controls. The social and economic costs were predictable and deep, but the broad policy thrust was sustained through the 1990s. During this period Bolivia signed "highly unfavourable investment treaties that invariably prioritised multinationals rights to profit over the Government's right to assert sovereignty over its own resources" [Schnews 505, July 2005].

Outside the corridors of government new movements emerged. Indigenous peoples mobilised, especially around issues of land, while other marginalised groups resisted environmental injustices (resulting, for example, from the importation of toxic waste, tin mining operations, and poor urban environments) and the social and economic hardships resulting from neo-liberal government policies. These new movements featured strongly in popular uprisings of October 2003, in which more than 60 people lost their lives protesting Lozada's pro-transnational corporate gas deals⁶⁵. The protest was so big it forced his resignation. His vice-president, Carlos Mesa, replaced Lozada and promised to nationalise the gas and call a Constituent Assembly to develop a new Bolivian constitution which would involve the indigenous majority meaningfully. In May 2005, Mesa allowed the passage of a new hydrocarbon bill⁶⁶ which fell far short of popular demands for effective sovereign control over hydrocarbons - even though it increased the level of taxation on TNCs

⁶⁵ According to Fuentes the "corporations bought the gas at well below market value and sold it back to Bolivians at 12 times the price" [2005].

Mesa had in fact resisted the Bill's passage for a number of months, threatening to resign 3 times over the matter.

significantly. His action triggered massive protests with "most now calling for nationalisation of gas, the resignation of Mesa and the formation of a new Constituent Assembly to replace the National Congress" [Lehrer 2005]. In Christian Parenti's description,

... day after day, tens of thousands of protesters marched through La Paz [Bolivia's capital city]; as the marches grew, activists blockaded the airport, shut down the major highways ... and surrounded the Parliament. The politicians and the middle classes waited for the spasm of rage to subside, but it didn't. After three weeks several gas fields were seized ... Soon the rebellion held six other major cities in its grip: cut off, blockaded, and surrounded by an angry, well-organised army of protesters. In early June, La Paz started to run low on food and fuel ... Congress was unable to convene. Outnumbered and often undersupplied, the poorly paid paramilitary police fought ... street battles against tens of thousands of Aymara and Quechua peasants, miners, teachers, bakers, street merchants and students. The weaponry was limited to tear gas and rubber bullets on one side, rocks and dynamite on the other; each day's combat ended in a handful of wounded and a few arrests. After three weeks of stalemate the centrist president, Carlos Mesa Gisbert, resigned. [Parenti 2005]

The chief justice of the Supreme Court now heads government as a caretaker executive and has promised elections in six months. But the interregnum reveals some of the contradictions that mark progressive Bolivian politics. As Parenti goes on to discuss:

Mesa's removal was a victory, another measure of Indian power in Bolivia, but it did not bring the crisis much nearer a conclusion. His departure did not lead to nationalisation or a constitutional assembly. ... Despite the crisis, Bolivian elites and their allies in the US embassy have conceded nothing. ... It is almost as if the street battles and the nationwide shutdown had not happened. In other words, despite having had half a dozen major political rebellions since the late 1990s, and despite possessing the strongest and most radical social movements in the hemisphere, Bolivia has as yet no clear way out of its impasse. [Parenti 2005]

One of the leading forces on the Bolivian 'new' left is the Movement Towards Socialism (MAS), headed by Evo Morales. MAS emerged from struggles of the cocaleros (peasant coca producers) who include displaced mine workers, casualties of neo-liberal economic restructuring. Morales remains committed to winning power through elections to state office and on August 1st this year (2005), MAS proclaimed Evo Morales as its candidate for presidential elections in December.

Other movements, however, are deeply sceptical of party politics and the strategy of taking state power. Oscar Olivera represents this position well. He emerged onto the global civil society stage leading successful resistance against the privatisation of water in the Bolivian city of Cochabamba in 2000. In an essay focusing on gas and oil, Olivera argues that:

Box 13: Pleasing no-one

Mesa's timid reforms may have provoked noisy protest from his people. They provoked more discrete protests from capital. Schnews tells the story:

British Gas, along with the Spanish company Repsol and French company Total, has formally initiated legal proceedings that could end up with Bolivia being taken to international court in January 2006. Their aim is to secure changes to the hydrocarbons law passed by Congress in May. They claim that the very modest changes in the law are equivalent to "expropriation" ... [I]n a leaked letter, British Gas stated: "BG invested in Bolivia on the basis of mutual commitments supported by a framework which guaranteed a stable legal environment for foreign investors... The new Hydrocarbons law has radically changed that framework and BG ... [is] in dialogue with the government to discuss ways in which the differences may be addresses since we expect Bolivia to respect the commitments it made to us."

In other words, [BG is] not prepared to accept changes to [its] contracts, even if many of the original contracts have been declared illegal due to the fact they weren't approved by Congress. Even if the new law is democratically supported, [BG] will push for the government to back down.

Like many companies, British Gas in recent years has been keen to emphasise its corporate social responsibility. Yet despite all the rhetoric, they are trying to force the poorest country in South America to reverse modest changes to a hydrocarbons law which would increase resources to tackle poverty.

Source: Schnews No. 505, July 2005.

Up until now, the entity that incarnated the nation, its authority, and its sovereignty has been the state. From the 1940s to the 1990s, the state has attributed to itself the power to represent the nation, its destiny, and its political sovereignty. ... [T]he sovereignty of society over its own resources has been confused with the state's monopoly of the economy, culture, and collective wealth. ...

The opposite of the cataclysmic privatizations and de-nationalization of transnational capitalism is neither state capitalism nor state property. Both options concentrate control of collective wealth in

the hands of a few. ... The true opposite of privatization is the social reappropriation of wealth by working-class society itself ... For the true nation not to be supplanted by the market or the state, the working class, both urban and rural, and the marginalized and economically insecure of the nation in other words, the overwhelming majority of society - must assume control over the wealth embodied in hydrocarbons. And they must do so through assembly-style forms of self-organization at the neighbourhood, regional, and national levels. ... The nation must enact a self-representation; it must self-govern through autonomous structures of participation that socialize responsibility for public life. ... The other road, state re-nationalization, is certainly quicker and easier, but clearly would mean a swapping of one set of elite expropriators for another.

[Olivera 2005]

As Naomi Klein put it in an address to the Centre for Civil Society⁶⁷, the current popular demand in Bolivia is more than 'nationalise the hydrocarbons' - it's 'nationalise our government'.

Box 14: What the people really need

Stephen Peacock writes that:

The U.S. State Dept. recently issued a call to riot-gear manufacturers to submit proposals for equipment that it hopes to ship to the Government of Bolivia by July 31. ... Specifically, the State Dept. needs a company to provide, as soon as possible, 3,700 Upper Body Tactical Padding suits capable of providing non-ballistic protection against blunt trauma to the shoulders, ribcage and chest of their respective wearer. The package also calls for 3,700 pairs of shin guards - each unit being 24 inches tall, six inches wide and five inches thick - that provide double knee protection and side coverage for the ankle bones. ...

Separately, but on that same day, the U.S. Army issued a bid request ... to build and design an emergency operations centre in La Paz. According to that procurement document, the project will consist of a "2-story building addition that will be designed and constructed adjacent to an existing building. Building will be constructed with reinforced concrete floors, masonry walls and a reinforced concrete slab, ribbed roof. Work includes site work with connections to existing water, sanitary sewer and electrical systems with a roof mounted, gravity fed, water storage tank. Estimated cost range of the project is from \$100,000 to \$250,000".

Source: Stephen Peacock, posted July 16th 2005 at http://narcosphere.narconews.com/

⁶⁷ June 2005, at the University of KwaZulu-Natal, Durban, South Africa.

Solidarity crossing borders

There is much to celebrate and learn in the advances being made and the questions being raised by movements against the oil regime. But no particular movement provides a model to be uncritically emulated everywhere. It is as well to remember that, in a sense, all activism is local and always dynamic: it reflects the particular readings of possibilities in an historical moment of particular people. As Gillian Hart argues, "any strategy for mobilisation around dispossession as ongoing process would have to build on the grounds of material and symbolic resources given from the past, but move in new directions" [Hart 2005: 19].

For instance, there is a real difference between the weakened legitimacy of the Nigerian state and corporate oil regime in the eyes of many Delta people and the level of popular support for the South African government. Even in the Delta, radical consciousness is not a given, but emerges from processes of struggle. Abugre, referring to political and strategic differences between activist member organisations of Oilwatch Africa, comments that:

The approach [of organisations] to the oil industry ... varies with the degree of 'rootedness' of the member organisation in community or wider organisational struggles. Organisations that are rooted in, or actively engaged in, democratic organisations of communities or broader, will tend to be radicalised in step with the radicalisation of these [community] organisations. [2004: 10, 11]

In the South African context, the post-apartheid government's broadly neo-liberal capitalist orientation and policies have spawned important and growing resistance and protest. The groundWork Report 2004 noted that the South African Constitution is an ambiguous document, reflecting the culture of rights developed through the anti-apartheid struggle but also enabling the processes of accumulation that create poverty. It is routinely invoked by social movements and environmental activists working for the realisation of social, economic and environmental justice, and the value of defending rights that enable democratic expression has been confirmed precisely by government efforts to whittle them down. On the other hand, the Constitution is also invoked by corporations seeking to extend their power. South Africa's history has thus produced a Constitution - and by extension a state - that is a site of struggle with real political stakes.

The demands of justice activists reflect a commitment to the democratic promises of South Africa's liberation from apartheid but opposition to government's core policies. However, despite major demonstrations of unity in opposition to neo-liberalism, including a massive march at the 2002 World Summit on Sustainable Development in Johannesburg, social movements have tended to split over ideological differences and along sectoral lines of land, housing, services and environment etc. At the local level, frustration at the 'lack of delivery', the privatisation of services and the political manipulation or corrupt management of delivery, has resulted in a series of localised riots. Such riots are visible manifestations of innumerable hidden struggles

across the country, contesting who controls the distribution of state resources and the political and economic systems of delivery. These are largely isolated struggles, however, and 'delivery' is mostly restricted to services and not expanded to the broader relations of power that produce poverty. Gestures in favour of self-organised grassroots or community-level resource control have, for the most part, been nipped in the bud by the ruling party.

Despite deep discontents, for the majority of people this is 'our government'. In contrast to Nigeria, people still have reason to expect benefits from it. The nationalist political discourse thus carries popular credibility and there is little evidence of a mass base ready to ditch government or challenge the state as it is currently constituted.

In this context, environmental justice advocates tend to take the democratic promise at face value and try to hold government to it. Demands - to put people before profits, for corporations to be held accountable, for protection against environmental harm - are generally directed at government. Yet the manner of address has changed profoundly. In 1994 they were made in support of government. They are now made in opposition to the basic thrust of policy. Demands are as likely to be carried on the streets and through the media as in formally constituted policy or planning processes. Mobilising communities on the refinery fencelines and carrying the debate to the broader public are now central to activist strategies. The nature of demands is also changing. Thus, for example, corporate accountability is beginning to be seen as part of a broader strategy of dismantling the power of corporations.

Maintaining the present oil regime is a dynamic project that constantly responds to the different conditions and challenges in specific places, but the global networks of production draw their overall coherence from the basic project of controlling resources for profit. Resistance is similarly dynamic, local and specific but people and movements also need to connect globally to create a coherent and powerful counter project. Commenting on the coming together of movements in the broader opposition to globalised neo-liberal capitalism, Naomi Klein comments:

... if there is one force we can thank for bringing this front into being, it is the multinational corporations. ... Thanks to the sheer imperialist ambition of the corporate project at this moment in history ... multinationals have grown so blindingly rich, so vast in their holdings, so global in their reach, that they have created our coalitions for us. Around the world, activists are piggy-backing on the ready-made infrastructures supplied by global corporations. [2004: 222]⁶⁸

The solidarity visit of South African environmental justice activists from the refinery fenceline communities to the Niger Delta is just one instance of people connecting up and down the global production chain and creating the possibility of combined actions. This promises to go beyond appeals to corporations to clean up

⁶⁸ Along with other illustrations of cross-border and cross-sectoral organising, Klein specifically mentions that "thanks to Shell Oil and Chevron, human rights activists in Nigeria, democrats in Europe, environmentalists in North America have united in a fight against the unsustainability of the oil industry" [2004: 223].

or to states to hold them liable for abuse. It promises to go beyond the making of moving testimonies to the appalling conditions that have pushed people into action. It promises the possibility that people's movements will become the agents of a new history-in-the-making beyond the current oil regime, that they will become the makers of another energy future.

Conclusion

Turner and Brownhill propose a future 'life-economy' built and sustained partly on the basis of radically reorganising the oil economy so that its negative impacts are minimised and its profits are retained to benefit people rather than corporations. Thus, they ask if the Delta people might go "beyond the sacking of oil companies to start up the lifting and sale of crude" on the parallel markets [2004: 78]. In the different context of Bolivia, Olivera proposes a more formally political route to people's autonomy and control of resources through self-organised assemblies that would replace the state.

The visions articulated by environmental justice organisations in the Delta have been more cautious. Environmental Rights Action (ERA), for example, believes that democratic organisation at grassroots, combined with appropriate reforms of government and law, could reach a similar outcome - minimising the negative impacts and sharing benefits and control more locally and fairly. While ERA champions 'community resource control' and advocates building local democratic structures with oversight of the exploitation of oil and other resources, it does not imagine these as building blocks for people's autonomy as an alternative to state rule. For example, ERA's Nnimmo Bassy explained to the Environment and Natural Resources Committee of the National Political Reform Conference that:

Although communities would control their resources they would be adequately taxed by the central government for contribution to the central purse for the development of federating states. This should eliminate opposition to the call for community empowerment through control of their resources. [Bassey 2005. Emphasis added]

Ultimately, these visions of a people's energy future rest on an uneasy assumption that a new world can be built and sustained through its connection to - and dependence on - the oil and gas industry. There may be some virtue in this and, indeed, ERA and Turner and Brownhill see oil as a sort of transitional necessity, a stepping stone to create the material conditions for local economies that are radically less dependent on oil. Yet there are grounds for suggesting that the imagination of another world, founded on the life-oriented economy of the people's commons, would be better served by stepping outside the frameworks and relationships of the oil regime.

The oil regime is not just organised globally but also impacts globally through its contribution to global climate change. Eliminating local impacts is rightly the first demand of local activists because their communities carry the direct and immediate costs of the externalities. The impact of climate change is less immediate and, although climate change gasses are emitted all the way down the production line, the bulk of the emissions come from the final consumers everywhere - but mostly from the consumers in rich countries. And the impacts of climate change will - and already do - hit the poor of the world first and worst. Avoiding climate change is thus essential on both environmental and justice grounds and this implies a radical reduction of dependence on hydrocarbon energy. Further, while oil is close to peak production, "there is far more energy available from renewable sources than human society needs" (Simms et al, 2004: 17).

There are significant obstacles in the way of reconstructing human society, our trade and industry, in ways that shift the energy base away from fossil fuels and towards clean and renewable sources. In 2001, oil and gas supplied 80% of global primary energy while renewables supplied little more than 10%. The spending, investments and subsidies of rich countries, international financial institutions and corporations starkly illustrate that the priorities of the global elites remains overwhelmingly in favour of fossil fuel exploitation. This support guarantees profits and expands the reach of the oil regime. And although much of the investment is for activities in the south, the benefits flow north. As SEEN demonstrate, 80% of all oil projects that the World Bank invested between 1992 and 2003 were for export back to Western Europe, Canada, the US, Australia, New Zealand and Japan [Vallette and Kretzmann 2004]. In other words, the Bank subsidises Northern energy interests and markets - and gets to call it 'poverty alleviation'.

While non-renewable energy resources are extracted and sent north, the global poor are left without access to basic levels of 'modern' energy. Yet the technologies for tapping renewable sources are now well-known and could provide poor people with access to clean and reliable energy. This would, at minimum, alleviate some hardships associated with poverty - for example, by providing energy for cooking, heating and cooling, pumping water and sanitation, and by replacing other expensive, polluting fuels⁶⁹. Additionally, there would be significant developmental spin-offs from providing electricity in schools, homes and small-scale industry, enabling greater efficiencies and releasing women from the ubiquitously gendered burdens of fetching fuelwood and water.

In the dominant discourses though, renewables are downgraded as unrealistic and expensive. During his time as World Bank president, James Wolfensohn commented: "Renewable energy, which represents two percent of the overall global supply, is an interesting option. ... But we also have to remain realistic: renewable energy is expensive" (quoted in Simms et al 2004: 20). The New Economics Foundation (NEF) responds that this view "reflects the interests of the Bank's major donors' fossil fuel industries." Beyond that, they argue that oil, coal and gas are used to catch poor countries "in a nexus of dependency relationships with other nations, multilateral donors, and foreign companies" [Simms et al 2004: 23].

[&]quot;"Smoke trapped inside homes from cooking with these materials accounts for 2.2 million deaths, mainly women and children, and is responsible for 5% of the total burden of disease worldwide" (Simms et al 2004: 19).

Contrary to the establishment view that renewable energy is expensive, it in fact offers options for huge savings by local people in the communities. Poor people in remote areas are in any case least likely to be connected to national power grids because, ironically, it is too expensive to connect them and the suppliers are unlikely to be able to 'recover costs' from the poor. So renewable energy offers probably the only viable and cost-effective way of supplying local energy needs for millions of people - especially in the current ideological climate where the pervasive attitude informing the supply and pricing of public goods and services is to let 'market forces' decide.

Clearly then, the economic case for renewable energies is convincing - and it is even more so from a wider and longer-term perspective. Renewable energies do not impose anything approaching the environmental externalities of fossil-fuel-based energy, and the energy source is more or less freely available and non-diminishing.

In addition, and by contrast to the centralising tendencies of national grid power models, a renewable energy regime can be conceived of where the technologies are actually capable of supporting and allowing decentralised production and consumption patterns amenable to 'ownership' and effective control of community-level forms of social organisation. (As suggested earlier, it seems a somewhat forlorn hope that similar popular local control is possible over a legitimated oil piracy regime based in the Delta.) The New Economics Foundation report cites a number of examples to support their claim that: "Already there is growing evidence that communities in developing countries powered by [renewable energy] supplies are able to exercise a far greater degree of self-determination" [Simms et al, 2004: 24]. And, allowing that estimating the costs of different energy futures is notoriously complex, their research demonstrates the real viability of renewable energy's capacity to deliver to the energy needs of the world's poorest in rural villages and urban neighbourhoods.

To achieve this in practice requires a turnaround of the current pattern of energy investments which overwhelmingly favour fossil fuels as well as "a bit more imagination and political will", as the New Economics Foundation puts it [Simms et al 2004: 27]. But the appeal to 'political will' can be something of a cop out, suggesting that things could change if only the present leadership would champion that change. It is more important to remain realistically engaged with the underlying interests and powers that structure the current and actually existing political will.

Throughout this report, we have described those elite interests and powers who benefit from, and have the power to determine, the way the world and its politics works. But we have also insisted that elite power is neither stable nor inevitable and that it is always and everywhere contested and renegotiated. The real possibility that alternative energy sources, technologies and applications might be taken up by the masses of the poor in a project that they define and drive, lies in connecting the promise of renewables with movements

struggling for deep transformation of the way the world works. And even if these social and environmental justice movements do not succeed against the enormous power of the current regimes, and the descent into a post-fossil-fuel (and post-US empire) era of uncertainty and collapse continues, then the spaces of self-reliance and local democracy created through such struggles will emerge as the only viable basis for rebuilding a new world.

Sources

Abugre, Charles. 2004. Oilwatch Africa 1998 2003: Evaluation Report, ISODEC (Ghana) and University of Wales, Swansea.

Arrighi, G. 1994. The Long Twentieth Century, Verso.

Arrighi, G. 2005a. Hegemony unravelling 1, New Left Review 32, March April 2005.

Arrighi, G. 2005b. Hegemony unravelling 2, New Left Review 33, May June 2005.

Baird, E. 2003. The 5th Dewhurst Lecture, Handbook of the Council of the WPC 2004.

Bakan, J. 2004. The Corporation: The pathological pursuit of power and profit, Constable.

Balint-Kurti, D. 2005. ChevronTexaco Overhauling Aid to Nigeria, Associated Press, 3 May 2005.

Bassey, N. 2005. *Nigeria and her environmental resources*: Presentation by the Executive Director of Environmental Rights Action (ERA) to the Environment and Natural Resources Committee of the National Political Reform Conference, Abuja, 11 April, 2005.

Bush, J. 2004. Monetary Jihad? The New Statesman, 4 October.

Carnie, T. 2000. Suffer little children, The Mercury, September 10, 2000

Carrere, Ricardo 2005. What the people should demand, presentation to Oilwatch-Africa in Lagos, Nigeria, March 2005.

Caruso, E., M. Colchester, F. MacKay, N. Hildyard and G. Nettleton, 2003, *Extracting Promises: Indigenous people*, extractive industries and the World Bank, Forest Peoples Programme and Tebtebba Foundation, Extractive Industries Review Volume 6.

Castells, M. 2000, End of Millennium, The Information Age: Economy, Society and Culture Volume III, 2nd Edition, Blackwell.

Chari, S. 2005. Political Work: The holy spirit and the labours of activism in the shadows of Durban's refineries, in <u>From Local Processes to Global Forces</u>, Centre for Civil Society Research Reports: 2005, vol. 1.

Claybrook, J. 2004. Mergers, Manipulation and Mirages: How oil companies keep gasoline prices high, and why the energy bill doesn't help, Public Citizen.

Danmarks Naturfredningsforening (DN) and South Durban Community Environmental Alliance (SDCEA), 2003. Comparison of refineries in Denmark and South Durban in an Environmental and Societal Context; a 2002 snapshot.

Danmarks Naturfredningsforening (DN) and South Durban Community Environmental Alliance (SDCEA), 2005. Flaring at oil refineries in south Durban and Denmark.

Djiraibe, D. and K. Horta, 2004. Sebastian Mallaby's Portrayal of the Chad-Cameroon Oil & Pipeline Project in his book The World's Banker: An Example of Poor Research and Misrepresentation, Chadian Association for the Promotion and Protection of Human Rights and Environmental Defense.

Doyle, J. 2002, Riding the Dragon: Royal Dutch Shell and the Fossil Fire, Environmental Health Fund.

Engen, 2004 Annual Report, available at www.engen.co.za

Environmental Defence (ED), Catholic Relief Services (CRS), Bank Information Centre (BIC), 2004, The Chad-Cameroon Petroleum Development & Pipeline Project: Environmental and Social Problems Identified by the External Compliance Monitoring Group, The International Advisory Group, The Inspection Panel.

Environmental Rights Action (ERA) and Oilwatch, 2000. Pipe Dream: The West African Gas Pipeline Project and the Environment, Environmental Rights Action / Friends of the Earth Nigeria and Oilwatch.

Environmental Rights Action (ERA) and Climate Justice Programme (CJP), 2005. *Gas Flaring in Nigeria: A human rights, environmental and economic monstrosity*, Environmental Rights Action / Friends of the Earth Nigeria and Climate Justice Programme.

Esso Exploration, 2004. Chad Export Project Report #17: 4th quarter 2004, Annual summary 2004.

Eviatar, D. 2004. Africa's Oil Tycoons, April 12, 2004, at www.thenation.com.

Extractive Industries Review, 2003. Striking a Better Balance. Volume I: The World Bank Group and Extractive Industries. Volume II: Stakeholder inputs: converging issues and diverging views on the World Bank Group's involvement in extractive industries, EIR.

Freedom of Expression Institute (FXI), 2004. Annual Report: July 2003 June 2004.

Fuentes, F. 2005. New uprising in Bolivia, in Green Left Weekly, May 25, 2005 (at www.greenleft.org.au).

Gary, I. and T. Karl, 2003. Bottom of the Barrel: Africa's oil boom and the poor, Catholic Relief Services.

Gary, I. and N. Reisch, 2005, Chad's Oil: Miracle or Mirage? Following the money in Africa's newest Petro-State. Catholic Relief Services & Bank Information Centre.

Global Witness, 2004. Time for Transparency: Coming clean on oil mining and gas revenues, available at www.globalwitness.org

The groundWork Report 2002. Corporate Accountability in South Africa, written by Hallowes, D. and M. Butler, groundWork.

The groundWork Report 2003. Forging the Future: Industrial strategy and the making of environmental injustice in South Africa, written by Hallowes, D. and M. Butler, groundWork.

The groundWork Report 2004. The Balance of Rights: Constitutional promises and struggles for environmental justice, written by Hallowes, D. and M. Butler, groundWork.

Harriman, E. 2005. Where has all the money gone? London Review of Books, Vol. 27, No. 13, 7 July 2005.

Harris, P. 2003. *Petro-Dollar or Petro-Euro*, the Association for the Study of Peak Oil Newsletter, No. 29, May 2003.

Hart, G. 2005. Denaturalising dispossession: critical ethnography in the age resurgent imperialism, Research Report No. 27, Centre for Civil Society, University of KwaZulu-Natal.

Hartung, D. and F. Berrigan, 2005. *Militarization of U.S. Africa Policy, 2000 to 2005,* World Policy Institute at www.worldpolicy.org

Human Rights Watch (HRW), 1999. The Price of Oil: Corporate responsibility and human rights violations in Nigeria's oil producing communities. Written by Bronwen Manby.

Human Rights Watch (HRW), 2002. The Niger Delta: No democratic dividend, HRW Briefing Paper.

Human Rights Watch (HRW), 2003. The Warri Crisis: Fueling violence, HRW Briefing Paper.

Human Rights Watch (HRW), 2005. Rivers and Blood: Guns, Oil and Power in Nigeria's Rivers State, HRW Briefing Paper.

Instituto del Tercer Mundo (ITM), 2003. <u>The World Guide 2003/2004</u>: An alternative reference to the countries of our planet, New Internationalist, Oxford.

Khanyile, S. and T. Losier, 2005. Solidarity in Africa one step at a time: Nigeria Solidarity Exchange, May 2005. groundWork Newsletter, Vol.7, No.2, June 2005.

Klare, M. 2005. Oil, Geopolitics, and the Coming War with Iran, posted April 13, 2005, at www.antiwar.com/engelhardt

Klein, N. 2004. *Reclaiming the commons*, in Mertes, T. (ed) 2004. <u>A movement of movements: Is another world really possible?</u> Verso, London, New York.

Kretzmann, S. and I. Nooruddin, 2005. *Drilling into Debt: An investigation into the relationship between debt and oil*, Oilchange International, Jubilee USA Network, Institute for Public Policy Research, Milieu Defensie, Amazon Watch.

Lehrer, J. (2005). Bolivia on the brink, Green Left Weekly, June 8, 2005 at www.greenleft.org.au).

Leigh, D. 2005. A rich country being stripped of its wealth: British firms among those to profit from energy bonanza in Equatorial Guinea, in The Guardian, 2 June 2005.

Monbiot, G. 2005. Climate change deniers shift their ground, Mail & Guardian, July 15 to 21, 2005.

Morris, R.J. 2003. Sulphur surplus in the making impacts refineries, The Sulphur Institute.

Munn, A. 2004. *Emission reductions at Engen Refinery in south Durban*, Paper delivered the eighth World Congress on Environmental Health held at International Convention Centre in Durban, 22-27 February 2004.

NEPAD, October 2001. Available from www.nepad.org

Nguiffo, S. and S. Breitkopf, 2001. Broken Promises: The Chad Cameroon oil and pipeline project; Profit at any cost? Centre for Environment and Development, Friends of the Earth International and Milieudefensie.

Nguiffo, S. 2002. Traversing People's Lives: How the World Bank finances community disruption in Cameroon, Centre for Environment and Development / Friends of the Earth Cameroon.

Oilwatch, 2002. Oil and war: Oilwatch Position Paper No. 2, prepared for the World Summit on Sustainable Development.

Okonta, I. and O. Douglas, 2003. Where Vultures Feast: Shell, human rights and oil in the Niger Delta, Verso.

Okonta, I. 2005a. Asari Dokubo insurgent or self-serving opportunist, This Day, January 8, 2005, and posted by Black Looks at http://okrasoup.typepad.com/black looks/

Okonta, I. 2005b. Cholera and national dialogue, This Day, March 29, 2005, and posted by Black Looks at http://okrasoup.typepad.com/black looks/

Okonta, I. 2005c. *Chinua Achebe in Abuja*, This Day, March 06, 2005, and posted by Black Looks at http://okrasoup.typepad.com/black looks/

Olivera, Oscar. 2005. Reconquering the patrimony of a nation: Recovering Bolivia's oil and gas, excerpted from Olivera O. <u>iCochabamba! Water War in Bolivia</u>, South End Press, 2004.

Pahad, A. 2005. GCIS IRPS Media Briefing, Pretoria, 6 May 2005.

Parenti, Christian. 2005. Who owns the rain? London Review of Books, Vol. 27, No. 13, 7 July 2005.

Peek, B. 2003. Access denied, groundWork Newsletter, March 2003.

Rainforest Action Network (RAN) and Project Underground (PU), 1998. Drilling to the Ends of the Earth. RAN & PU.

Sapref, 2004. Environmental performance in 2003, at www.sapref.co.za

Sasol, 2004. Annual Review 2004

Sasol, 2005. Sustainable Development Report 2002-2004.

Schaffer, S. and T. Chestnut, 2005. *Hugo Chávez: Latin America's Rising Superstar*, Council on Hemispheric Affairs, www.coha.org.

Schnews 2005. Dutch Oven, in Schnews No. 492, 8 April 2005 (www.schnews.org.uk).

Shell Nigeria, 2003 Annual Report: People and the Environment.

Simms, A., J. Oram and P. Kjell, 2004. The price of power: Poverty, climate change, the coming energy crisis and the renewable revolution, New Economic Foundation (nef).

Sigam, C. 1997. Sub-Saharan Africa's oil sector: Situation, developments and prospects, United Nations Conference on Trade and Development.

South African Petroleum Industry Association (Sapia), 2004 Annual Report.

Stockman, L. and G. Muttitt, 2005. Pumping Poverty: Britain's Department for International Development and the oil industry, Platform Research, Friends of the Earth and Plan B.

Turner, T. and L. Brownhill, 2004. Why women are at war with Chevron: Nigerian subsistence struggles against the international oil industry, in Journal of Asian and African Studies, Vol. 39, No. 1 / 2, Sage Publications.

Vallette, J. and S. Kretzmann, 2004. The Energy Tug of War: The winners and losers of World Bank fossil fuel finance, Sustainable Energy and Economy Network (SEEN).

Vallette, J., D. Wysham and N. Martinez, 2004. Wrong Turn at Rio: The World Bank's road to climate catastrophe, SEEN.

Vidal, J. 2004. The oil grab, Guardian, October 9, 2004.

Wahby, E. 2005. Libya: Economic Reforms Anger Citizens, in Carnegie's Arab Reform Bulletin, Vol. 3, Issue 5, June 2005.

Weston, F. 2004. "Niger Delta, the price of oil and the class struggle", at www.marxist.com.

Wills, J. 2000. Muddied Waters: A survey of off-shore drilling wastes and disposal techniques to reduce the ecological impact of sea dumping, Sakhalin Environment Watch at www.offshore-environment.com

World Petroleum Congress (WPC), 2003: Handbook of the Council of the WPC 2003.

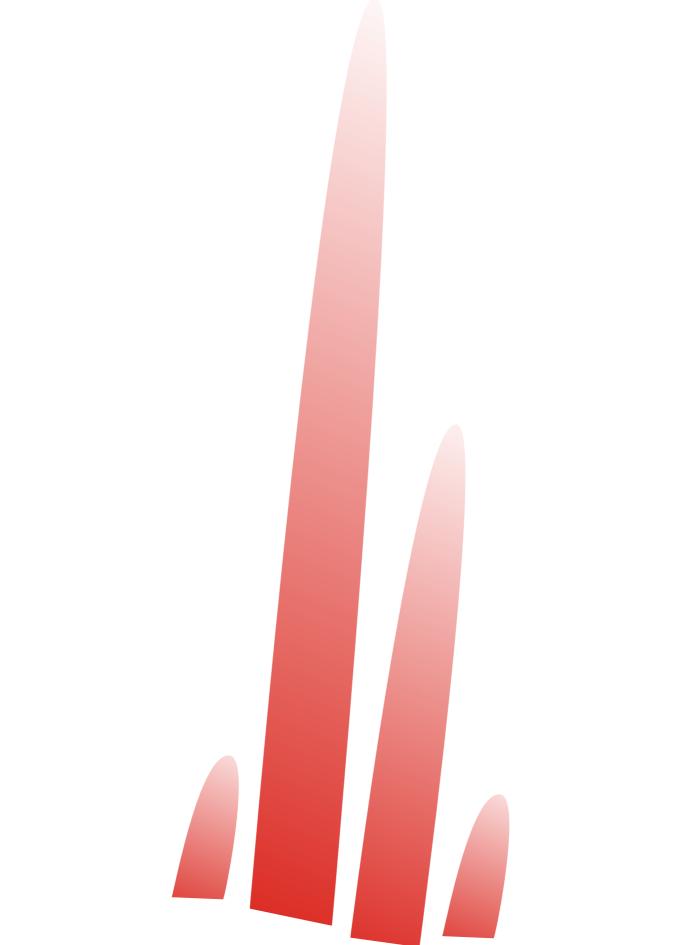
World Petroleum Congress (WPC), 2004: Handbook of the Council of the WPC 2004.

Yang Lian, 2005. Dark Side of the Chinese Moon, New Left Review 32, March April 2005.

Yeomans, M. 2004. Oil: Anatomy of an industry, The New Press.

Yergin, D. 1991. The Prize: the epic quest for oil, money and power, Free Press.

NOTES



groundWork

Box 2375, Pietermaritzburg, 3200, South Africa
Tel +27 (0)33 342 5662 Fax +27 (0)33 342 5665

Email: team@groundwork.org.za

www.groundwork.org.za

Member of



