NIGERIA
Oil & Gas

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Grand theft
Billions in oil revenue is controlled by a cartel that touches the armed forces, says **Patrick Dele Cole**

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Law set to be a 'game-changer'

Experts say legislation falls short of its aims, but investors will know where they are. reports **Xan Rice**

Hands on: a Nigerian man shows his oil covered hands near an abandoned well. Nigeria's output is still only between 2m and 2.5m b/d, roughly the same as a decade ago AFP

The oil and gas industry is booming across sub-Saharan Africa.

To the east, large new discoveries have been announced in Mozambique, Kenya and Tanzania, while Uganda is close to starting commercial production of crude.

On the opposite side of the continent, oil has been struck off the coasts of Sierra Leone and Liberia, raising hopes they can emulate Ghana, where petroleum began flowing in 2010.

The accompanying excitement is understandable, both for the countries, for whom the looming windfalls are potentially transformative, and for the explorers and producers, which stand to make large profits.

But, in terms of the scale of resources, the new kids on the oil block have nothing on the region's hydrocarbon granddaddy: Nigeria.

Despite more than 50 years of production, and minimal exploration in recent years, Nigeria still has proven reserves of more than 37bn barrels of oil – nearly three times more than Angola, its nearest challenger.

Nigeria's sweet, light crude is also of the highest quality, and fetches top prices on international markets.

Natural gas reserves of about 190tn cubic feet are also unrivalled on the continent.

"When you look at the resources, oil and gas companies should be having a love affair with the country," says Duncan Clarke, head of petroleum consultancy Global Pacific & Partners, and author of *Africa: Crude Continent.* "But they are not. Nigeria is sleeping while the other countries are getting on with it."

Despite the long-desired goal of producing up to 4m barrels of oil a day, Nigeria's output is still only between 2m and 2.5m b/d, roughly the same as a decade ago.

Deep-pocketed multinationals such as Shell, ExxonMobil, Chevron, Eni and Total are all on the ground or offshore, yet investment in maintenance and exploration is dropping.

The government has not held a licensing round for five years.

There are numerous reasons for the malaise, including insecurity in the Niger delta region, corruption, and the dysfunction of the state-run oil company, Nigerian National Petroleum Corporation (NNPC). But the main obstacle to growth in the oil and gas sector has been regulatory uncertainty.

Legislation designed to introduce sweeping changes to the industry, including fiscal terms, has been sitting with the government for four years without ever being approved.

Oil companies have refused to commit fresh money to existing and prospective projects as a result and stagnation has set in.

Bayo Odubeko, a partner at the law firm Norton Rose, who has extensive experience in oil and gas transactions in Nigeria, estimates that the country has lost $40bn in potential onshore and offshore investment because of the lack of clarity about the legal framework.

But the cost of the failure to reform the sector – and stop the rot in the related state institutions – extends far beyond stunted oil production and missed signature bonuses, and has even touched on the country's stability this year.

Just as the NNPC has been mismanaged, so the four refineries mandated to supply the domestic market with petrol have been neglected and operate well below 50 per cent capacity. The demand for imported fuel has soared, and with it the scale of corruption, since Nigeria heavily subsidises petrol at the pump and makes large payments to oil marketers who bring in the refined product. The cost of the subsidy alone in 2011 was $16bn by some estimates.

When Goodluck Jonathan, the president, tried to abolish the subsidy in January it caused an outcry and a nationwide strike, and he was forced to backtrack and partially remove it. The rationale for getting rid of the subsidy may have been clear, but so was the public's response: clean up the oil sector first before inflicting pain on us.

Mr Jonathan appears to have listened. He set up multiple committees designed to speed reform.

The most crucial of those are related to the Petroleum Industry Bill (PIB), the wide-ranging legislation that is intended, among other things, to introduce a tax and royalty regime, increase the participation of local producers, stimulate

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Legislation suggests better prospects for local groups

Indigenisation

Guy Chazan finds a new confidence in homegrown operators

When it comes to explaining his mission, Austin Avuru does not pull his punches. "We believe we're leading a revolution," he says.

The claim may smack of hyperbole, but change is clearly in the air. Mr Avuru is chief executive of Seplat, a small Nigerian oil company that symbolises the new confidence of the country's fast-growing local operators. "The climate for indigenous companies is better than it's ever been," the geologist and petroleum engineer says.

The homegrown oil sector is still small, with local independents accounting for just 100,000 barrels a day of production – less than 5 per cent of the country's output. Much of that is in fields operated by larger companies.

But the figure is expected to grow, driven partly by government policy aimed at putting an expanding share of output into domestic hands, and moves by the western majors to divest their mature, onshore fields. "I expect indigenous-operated production to quadruple by the end of next year, if all the others following in our footsteps achieve what we have," Mr Avuru says.

The emergence of companies such as Seplat has big implications. Osman Shahenshah, CEO of Afren, an Africa-focused independent, says Nigeria still has 9bn barrels of oil reserves left to produce onshore and in its shallow waters – areas the majors consider mature or too difficult to develop. If the smaller companies take them over, he says, output could rise from 2.5m b/d to 4m b/d, making it the world's sixth largest producer.

Mr Shahenshah says locals are becoming more alive to that opportunity. "There seems to be a genuine desire to develop a real oil sector in Nigeria that's not just the preserve of the five majors," he says. "Local companies are making real investments, organising themselves to list in London and Singapore and taking a longer-term view."

Sceptics say, however, predictions of a domestic oil boom have never panned out. "The whole process of giving indigenous companies more access has been very slow," says Dragan Trajkov, an oil analyst at Renaissance Capital. "Everyone's dissatisfied, and has been for a long time."

The authorities first launched the indigenisation policy in the early 1990s when, for the first time, licence blocks were awarded to local companies. But most of these were small outfits that typically sold stakes in the blocks to foreign groups for big signature bonuses, and played little role in operations.

In 2004, the government assigned 30 marginal fields that the majors had failed to develop, bundling them into 24 contracts and auctioning them off to local entities. By 2010, however, only about six of them were in production.

A big problem was local companies' inability to raise sufficient funds to develop the assets.

"It's a constant battle to get the kind of capital we require," says Wale Tinubu, CEO of Oando, one of the biggest local groups. "Our enterprise value is $1.2bn, but we've only been able to raise $260m of equity since we started the business." Oando has been forced to rely on short-term loans charged at 18 per cent interest, he says.

For some, the solution has been to team up with wealthy foreign companies. That has advantages for both sides: the local groups get access to long-term capital, while the foreigners can tap vast reserves while complying with strict local content rules.

> Government policy is aimed at putting an expanding share of output into domestic hands

Seplat is a good example. It was formed in 2009 when two small local producers, Platform and Shebah E&P, came together to try to acquire some of Shell's onshore fields.

To boost their financial muscle, they brought in Maurel & Prom, the French oil company, which took a 45 per cent stake in their new vehicle, Seplat. "It was a near perfect fit," says Mr Avuru.

Maurel & Prom has substantial onshore experience in Africa and the right corporate governance framework, he says, while Sheba and Platform had the local expertise and a small domestic production base. "It was much easier for the fused entity to raise funds and put together a technical team." Ever since, he says, "others have been trying to replicate our model".

A deal was finally struck in 2010, with Seplat acquiring stakes in three of Shell's Niger delta licences. Since then, it has more than doubled production from the properties, to 43,000 b/d. Shell went on to sell its stake in another block, OML26, to local group First Hydrocarbon Nigeria (FHN), an affiliate of Afren. Last year it sold its stake in another block, OML42, to Neconde Energy, a local consortium.

But Seplat, FHN and Neconde's success has been the exception rather than the rule. Shell's decision to run auctions for its remaining blocks slowed its divestment programme. And the bidding process proved controversial: Conoil, another big local group, tried and failed to buy Shell's OML30 block last year for $1.1bn. In the end, it was acquired in June by another Nigerian outfit, Shoreline Natural Resources, backed by the UK-listed explorer Heritage Oil, for $850m.

Shell's negotiations with potential buyers were complicated by the desire of its joint venture partner, the government-controlled NPDC, to take over the role of operator in the fields Shell wants to sell – a condition that Conoil rejected.

Local oilmen hope the Petroleum Industry Bill will give a fresh boost to indigenisation and so give locals preferential rights to acreage. The proposed reforms of NNPC will also help.

"We will get a national oil company that will be commercialised and [publicly] listed, with which we'll be able to do joint ventures and co-finance projects," says Mr Tinubu.

With the bill's passage increasingly likely, the outlook for local independents is improving, says Mr Trajkov. "The PIB has been a real catalyst [for indigenisation]," he says. "This year it's looking much better."

Slow to exploit power supply

Gas

But privatisation is starting to change things, says **Guy Chazan**

Laying a gas pipeline in the middle of Lagos, Africa's most populous city, is not for the faint-hearted. Plans of the city's underground wiring and plumbing are often misleading, so holes are dug in the wrong place. "There's a lot of improvisation," says Wale Tinubu, chief executive of Oando, one of Nigeria's biggest oil groups.

But the chaos did not stop Oando building a 100km pipeline system that is delivering natural gas to 120 companies in a city that accounts for 60 per cent of Nigeria's industrial capacity. The pipe has enabled customers to replace expensive diesel generators with gas-fired power plants and reduce their energy costs by more than 50 per cent.

Oando is one of the first private companies in Nigeria to pipe gas directly to consumers, a job that has traditionally been the preserve of the federal government and the western majors. Already the largest fuel distributor, it is emerging as a big gas supplier. It has just completed a second pipeline system in the east of the country, which involved nine river crossings, and has a third one planned for the south.

Nigeria sits on the world's ninth largest reserves of natural gas – about 180.5tn cubic feet, enough to meet the EU's needs for 11 years. But it has been slow to exploit this valuable resource. For decades, much of the gas it produced in the course of extracting crude oil was simply flared – burnt or vented into the atmosphere.

Later, it built one of the world's largest liquefied natural gas plants on Bonny Island near Port Harcourt: the plant, NLNG, exports 22m tonnes a year of supercooled gas to international markets. Nigeria is now the largest producer in the Atlantic Basin, with 8 per cent of global sales last year. But little of its gas has been developed for the domestic market. "Nigeria has a huge gas resource," says Phillip Ihenacho, CEO of Seven Energy, a fast-growing indigenous gas group. "It should be using it domestically instead of exporting it."

Because it has failed to exploit the gas for domestic use, and particularly in power generation, Nigeria has among the lowest energy consumption rates per capita in Africa. It has between 3.5 and 4 gigawatts of installed power capacity working at the moment, compared with 8GW in New York City alone, according to one foreign executive. "The gap between power supply and demand in Nigeria is larger than anywhere else in the world," Mr Ihenacho says.

Previously, investors were deterred from developing gas reserves because of poor domestic pricing.

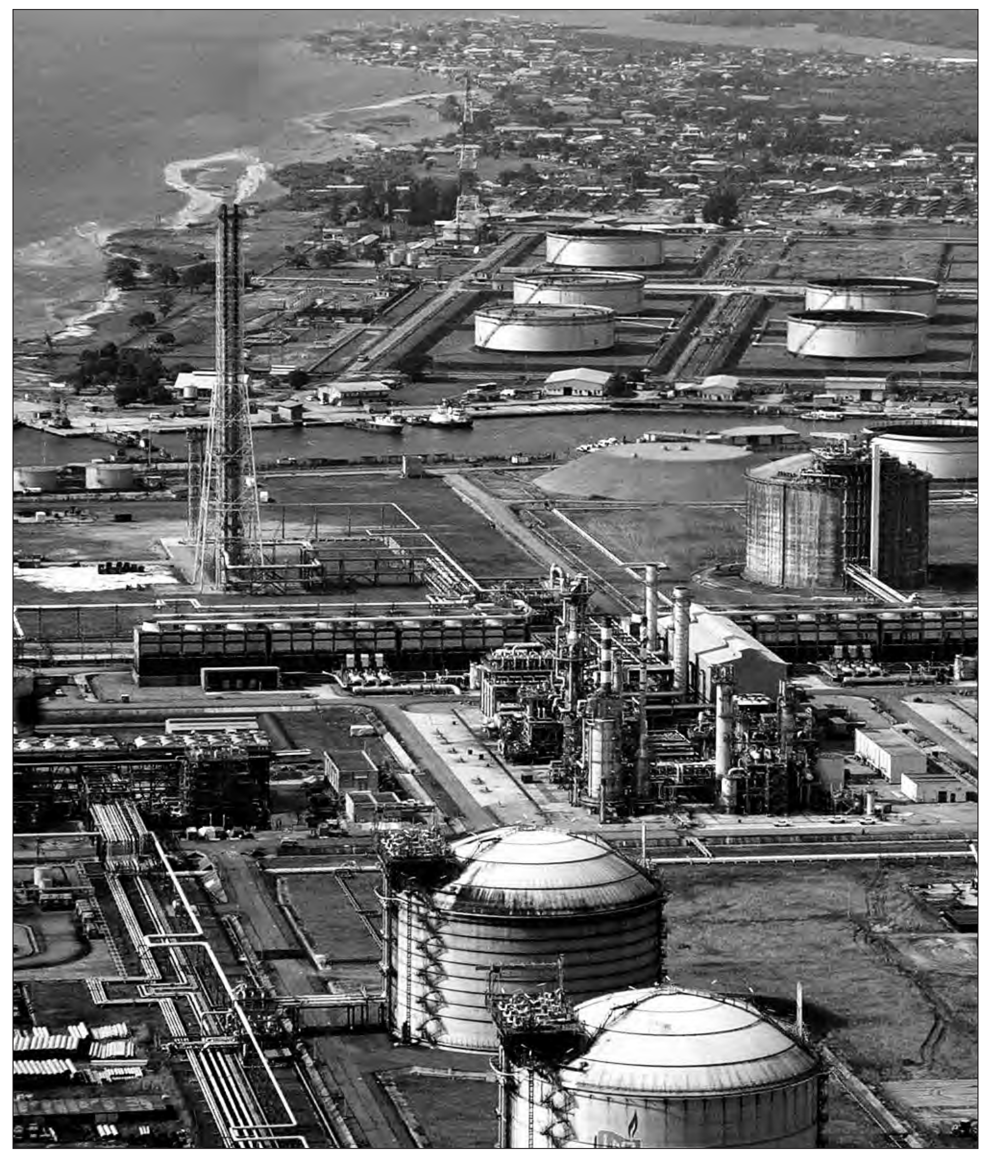
But that is beginning to change as the authorities privatise the power sector and move to liberalise gas prices. "The government knows it will have to harness the private sector to fill the power generation gap," says Mr Ihenacho. "To do that it needs to implement a pro-private sector regime. If that comes off, it will be one of the biggest opportunities for the power sector in the world."

Founded in 2004 as a division of Weatherford International, the oil services company, Seven was bought out by management three years later and has since established a strong position as one of the few independent gas producers in Nigeria.

It has two gasfields in the Niger delta – Uquo and Stubb Creek – and plans to create a local network of gas-processing and transportation facilities in the region, capable of delivering more than 1tn cubic feet of reserves. It has entered gas sales agreements with power plants and built pipelines to supply them.

Oando has gone a step further and started building power stations. Its first was for the Lagos Water Corporation, a small, 12.15MW plant backed by the World Bank that is connected to Oando's Lagos pipeline system. "It has both a social and commercial return, because it helps to provide water to the city, reducing the risk of waterborne diseases," Mr Tinubu says.

While domestic gas infrastructure is improving, Nigeria also has plans to expand its export capacity.



Gas exporter: Bonny Island, near Port Harcourt, sends 22m tonnes a year of LNG abroad AFP

The partners in NLNG intend to build a seventh "train", as the liquefaction facilities are known, on Bonny Island. There are plans for another plant, Brass LNG, backed by ENI of Italy, ConocoPhillips, Total of France and the state company NNPC, which will be built near the Brass oil terminal on the coast. Another project, Olokola LNG, is backed by Shell, Chevron and others, but is still far from sanction.

But Brass LNG was originally designed to sell large volumes of gas to the US. That reckoned without the North American shale gas boom that has turned the US from a gas importer to an exporter. It is unclear into what market Brass will now sell.

There are also fears that tax and other changes to be introduced in the Petroleum Industry Bill could make big investments in LNG projects uneconomic – especially at a time when several gas liquefaction developments around the world are competing for the same pool of funding. "You need to create the right conditions for exports to be competitive, especially against the backdrop of reduced LNG imports into the US," says Ciro Antonio Pagano, ENI's head of Nigeria.

Flaring: a practice that persists, despite initiatives and best intentions

Uchenna Ekwem has learnt to live with the gas flares but they are a constant irritant."It stings your eyes, and stains your shirt black," the 19-year-old says. "When the rain falls, we can't drink the water."

Oil companies in Nigeria still burn off much of the natural gas that comes up with the oil they produce – a practice banned in many other countries. Nowhere is it more visible than in Ebocha, Uchenna Ekwem's village, where the Italian company ENI has been pumping crude since the 1960s. A collection of tin shacks about 100km north-west of Port Harcourt, Ebocha is overshadowed by two flare stacks burning day and night.

Villagers complain of respiratory and skin diseases, of the constant noise and heat from the flames and acid rain that corrodes their rooves.

Governments – Nigeria's included – have long understood the need to eradicate flaring. As well as being a serious source of climate-warming greenhouse gases, it is also a huge waste of resources. According to World Bank statistics, more than 150bn cubic metres (bcm) of gas are flared and vented annually around the world. The annual 35 bcm of gas flared in Africa alone is equal to half the continent's power consumption.

Since the launch of a huge liquefied natural gas plant on Bonny Island in the 1990s, Nigeria has been exporting some gas. Satellite data collected by the National Oceanic and Atmospheric Administration in the US, shows its flared volumes fell from 16.3 bcm in 2007 to 14.6 bcm in 2011. But it is still the world's worst flarer after Russia.

Campaigners say companies should be using the gas to power local communities. "People complain that, in the premises of the oil companies, they have electricity round the clock, but in their homes there is darkness," says Inemo Saniama of Stakeholder Democracy Network, a local NGO.

Women sit near a gas flare fire

But despite repeated initiatives, it has persisted. Flaring dipped during the wave of violence in the delta over the past decade as militant attacks forced oil companies to curb onshore production. Since an amnesty that encouraged the rebels to lay down their weapons, production is back up – and so is flaring.

NGOs place most of the blame on the government rather than the major oil companies. It set a 2008 "no flare" deadline, but failed to enforce it. And the state-controlled Nigerian National Petroleum Company, which dominates all joint ventures with foreign producers, rarely comes up with its share of financing for reduction programmes.

The majors say they are committed to stamping out the practice. ENI started harnessing associated gas in 1985 at its Obiafu Obrikom facility, reinjecting it to improve oil recovery. Later, it began using the gas at its remote flow-stations to power pumps in its oil wells.

But by far its most ambitious effort is its Okpai power plant, It is 16km from Kwale, a facility that collects oil from nearby wells and separates it from the associated gas. The gas is then piped to Okpai, on the Niger River, which supplies 480 megawatts of electricity to the national grid.

The logistical difficulties posed by building such a plant deep in the malaria-infested jungle were huge.

ENI spent $471m on the project, and operational costs are high: constant breakdowns of the national grid damage components, necessitating regular overhauls that cost $60m a time.

But Okpai is crucial to ENI's plans. The company says it is flaring 15 per cent of the gas it produces, down from 31 per cent in 2007. It hopes to get that down to 5 per cent by 2014.

Shell has also made big strides. In 2000 it started installing gas-gathering infrastructure at sites across its area of operations. But the uprising in the delta intervened and 18 of the facilities were either vandalised or not commissioned. In May 2010, Shell revived the programme, repairing sites and starting work at 17 new ones. Shell says that between 2002 and 2010, flaring at its SPDC joint venture fell by more than 60 per cent.

Like ENI, Shell has also branched into power generation. In 2008, SPDC started producing electricity from the Afam VI plant to provide power for millions of people in the delta.

Mutiu Sunmonu, Shell's Nigeria country chairman, says the company has approved a $4bn-plus project designed to fix the remaining sites where gas is flared. In five years' time, "our flaring performance will be one of the best in the world," he says.

NGOs acknowledge improvements but think more should be done. Edward Obi, head of a group called Gas Alert, points to the flares at Ebocha as proof the problem remains acute. "Oil companies are making efforts to harness the gas," he says. "But whether enough is being done, I'm not sure."

Guy Chazan

'We have to track down the oil thieves'

Up the creek: in a canoe ferrying containers used to transport oil siphoned from pipelines. The Niger delta is now a much sought-after posting in the military Reuters

Guest column
PATRICK DELE COLE

It seems the Nigerian government is finally waking up to the financial impact illegal theft and sale of crude oil is having on our nation, as well as on the oil producing Niger delta region.

Last month the minister of finance said she believes up to 17 per cent of the country's production was lost in April. This means we could be losing up to 400,000 b/d.

About $9bn of revenue, equivalent to almost a third of the Federal budget, is thus under the control of a criminal cartel with tentacles that stretch from the Niger delta, through the armed forces into the heart of organised crime and out into the rest of the world.

After years of ignoring the fact that we lose billions of dollars every year, it is a sign of progress that the government is acknowledging the scale of the problem and announcing steps to tackle it.

Unfortunately, when we take a detailed look at the structures behind oil theft and the amounts of money involved, the scale of the challenge becomes clear and the ability of the government to deal with this issue alone is called into question.

The taskforce announced by the minister of petroleum consists of representatives from the international oil companies, the armed forces and the government. They have been mandated to identify ways to deal with the issue. But there is a problem built into this attempt at a solution.

How can we expect our armed forces to proactively seek to put an end to a trade that makes many in their ranks rich? Four years ago I wrote: "It is said in the Nigerian military that you will never find a poor admiral."

If anything, the situation has worsened since that time. The Niger delta is now a much sought-after posting in the military.

It is also questionable whether the government has understood the level of resources required and the action necessary to have an impact. Oil theft is facilitated by the people of the Niger delta because they do not have an alternative. Real and visible development is a pre-requisite for this to change, but it will take time, effort and huge resources. The resources available to those involved in oil theft are astronomical and must be met with an equal response, backed by political will.

We need to look beyond our borders for help that can make a difference. The recipients of the stolen oil are refineries in eastern Europe, Africa, Asia and perhaps even the US. The money used to finance the largest transactions moves from bank to bank in these regions. This money can, and should, be tracked. The mechanisms exist already through antiterrorism and money laundering legislation. If we can make it more difficult for oil theft to be financed, we can begin to make progress towards a long-term solution.

The scale of the theft means that large ships are used to transport stolen oil to the refineries that process it overseas. International governments own and control the satellite tracking technology that can provide the evidence to prove complicity. They should provide the government and international security organisations with access to this tool.

The end user of the fuel that is refined is often the western consumer who, while struggling with austerity, is also conscious of the origin of the products that he or she buys. We must raise awareness of the scale and consequences of oil theft and seek to turn the discerning consumer into an ally.

In my village in Abonnema, the social and environmental impact of oil theft is obvious and immediate. The constant sheen of oil on the surface of the river, the boats lined up on its shores that have been "arrested" by the taskforce for being outside their "approved window of

> Satellite tracking technology could provide evidence to prove complicity

operation" and the distressing lack of girls over the age of 14 in secondary education because they are pregnant with the babies of soldiers are just some of the ways in which this trade has an impact on our society and environment.

The lack of development in the delta, the impact of the oil industry on the environment and the social decay associated with poverty and conflicts have been debated for years. What is less clear to international audiences is the fact that oil theft sits at the centre of these problems. The social impact on young men offered immediate riches over education is obvious. The riches are offered by militant groups. The environmental damage in the delta is known worldwide, but cleaning up the region today is pointless without a policy to end the theft that contributes significantly to the damage done. What is cleaned up today will be spilled again tomorrow.

If you are able to tackle holistically the issue and demonstrate the political will and desire for a long-term solution, then a campaign that seeks to end the illegal trade of oil, combined with a genuine programme of development, can provide the foundation for a solution that has a chance of working. Tracking the money and the ships are just the first weapons we have in our armoury, we must work together to develop others while ensuring that our ultimate goal, development, is achieved.

We need the rest of the world to provide the support, pressure and the targeted solutions that are needed. We have to stop the theft.

Patrick Dele Cole is a businessman and politician from Rivers State. He was a founding member of the ruling PDP party and a special adviser to President Olusegun Obasanjo between 1999 and 2001.

Vested interests have too much to lose

Bunkering

William Wallis looks at theft that costs billions in lost revenues

The buccaneering spirit that characterised the early days of the Niger delta's interaction with global commerce has returned with a vengeance. Towns such as Abonnema – founded in the late 19th century on a river island by a string of warlord chiefs whose wealth originated in the slave and later palm oil trade – are at the heart of a thriving trade in stolen oil that is costing the state and multinational companies billions of dollars in lost revenues.

According to Ngozi Okonjo-Iweala, the finance minister in charge of economic policy, oil theft led to a 17 per cent fall in official sales in April, or about 400,000 b/d. That is a quantity entering world markets illegally that is greater than official production in all but two sub-Saharan African producers, Angola and Sudan.

At the April average world price of $121 per barrel, this implies a loss of $1.2bn a month.

Ms Okonjo-Iweala says that, together, theft from pipelines and wellheads and fraud in the allocation of a controversial fuel subsidy may have cost the state $14bn in 2011.

Because of its illegal nature, there are no consistent estimates for the scale of "bunkering" – a term used elsewhere to refer to the supply of anchored ships, which in Nigeria has been corrupted to describe the trade in stolen oil. However, the finance ministry figures for April illustrate what oil companies, state agencies and inhabitants of the delta all say has been a surge over the past year.

In 2011, the state agency regulating pipelines recorded 4,468 pipeline break-ins compared with an average 1,746 between 2001 and 2010. Inhabitants of Abonnema, just one town where bunkering is thriving, say that a growing number of people are implicated in one way or another. "Every family has someone involved," says one young businessman with peers in the trade.

Deploying the navy and army, as President Goodluck Jonathan – like his predecessors – did, ended up complicating matters instead of helping. As oil prices have soared, the money has become too alluring. As volumes of oil sold through the bunkering network have risen, so too has the number of Nigerians with an interest in keeping it going.

Bunkering became big business during an uprising in the 2000s by militants demanding a greater share of revenues from oil. They sometimes justified the theft – and do still, even after an amnesty has curbed associated violence – as a means of taking ownership of a resource from which the region has benefited little.

> As the trade has grown, senior military and political figures are taking a big role

As the trade has grown, so it has infected all levels government, with senior military and political figures staking out a leading role in a pattern that mirrors the corrosive effects that the narcotics trade has had on Latin American states.

Ngozi Okonjo-Iweala: thefts led to fall in official oil sales

"They have been sponsoring local government chairmen. The chairmen have also been sponsoring governors. These people, if not checked, will one day produce the president of Nigeria," Austin Oniwon, the former managing director of the state oil company, NNPC said this year.

Nor is the state oil company itself entirely innocent. Bunkering comes in several forms. The first involves small canoes such as those found lined up on Abonnema's shores. The gangs that crew them navigate the maze of rivers and creeks that make the delta so hard to police, puncturing pipelines and siphoning crude into small tanks. They sell this on to illegal refineries that have mushroomed across the delta to supply kerosene and diesel to the domestic market at half price. Or sell to larger coastal barges for export.

Where they can, these barges fill up directly from well heads and punctured pipelines.

They carry the crude to ocean-going tankers waiting to supply refineries at a discount as far afield as South Africa, Ukraine, China, India and the Rotterdam spot market, according to members of a taskforce set up by the president to recommend ways of curtailing fraud and theft in the energy sector.

There is a third form of "white-collar" bunkering. This involves tankers filled directly at export terminals, where metering systems are manipulated to conceal outflows.

All three forms of bunkering require collaboration between politicians, security forces and criminal gangs.

In the case of white-collar bunkering, oil company employees are almost certainly involved as well, according to consultants investigating the trade.

The president's taskforce is headed by Nuhu Ribadu, the no-nonsense former anti-corruption tsar who says he will deliver recommendations by next month. But as yet no effective measures have been taken to stem a trade eating into Nigeria's main revenue earner.

Flawed bill will bring clarity to frustrated industry

Legislation

Xan Rice considers prospects for better transparency

Reforming Nigeria's notoriously opaque oil industry was never going to be easy. Few expected it to be quite so difficult. Nearly four years after it was first presented to parliament, the Petroleum Industry Bill (PIB), a wide-ranging piece of legislation intended to transform the sector radically, remains a work in progress. It has been rewritten so many times, and by so many people, that there are countless draft versions in circulation. Promises of its imminent passage come every few months, but have never been kept.

All the while, uncertainty over the proposed laws has put tens of billions of dollars of potential investment by oil companies on hold and prevented the government from being able to selling off new oil blocks or renew contracts.

But is there now a genuine push to get the PIB through? In January, President Goodluck Jonathan established a committee to fast-track the bill. A month later, Ngozi Okonjo-Iweala, the respected finance minister, told the FT that the law would pass by the end of 2012 and that progress would be visible in "two to three months". Five months on and a fresh draft of the bill has indeed been presented to Mr Jonathan and approved by his cabinet. Last week it was presented to lawmakers for assent.

Some experts believe this could finally be the year when the law is passed. "I do think that this time the bill will go through, even if only because of fatigue over this issue," says Ronke Onadeko, an oil and gas consultant, in Lagos. "But the real question is, are we going to get a 'good bill'?"

> Analysts say it appears as though the vested interests have significantly diluted the bill's original goals

It is a concern widely echoed in the industry. The original idea behind the PIB was that it would bring the sector into line with global standards. The fiscal terms of oil and gas production, which are more generous to petroleum companies than in many other countries, were to be amended to net the government more revenue. The state-owned Nigerian National Petroleum Corporation, whose dysfunction and lack of accountability is a serious drag on the sector, was to be overhauled, stripped of regulatory powers and turned into a commercial entity such as Brazil's Petrobras. The involvement of local companies in oil production and services would be promoted and environmental standards and enforcement tightened. Perhaps the most important reform was transparency – ensuring an end to the murky deals that allowed politicians to use oil wealth as a source of patronage for decades.

This was all extremely ambitious, especially considering the powerful vested interests – both in the government and the private sector – that profit hugely from the status quo. In addition, the multinationals, which have also reaped excellent returns despite the rot, have the resources to lobby hard against any changes that might affect their bottom line.

Analysts who have seen the latest version of the bill leaked in May say it appears as though the vested interests have significantly diluted the bill's original goals.

Rather than clipping the far-reaching powers of the petroleum minister, it gives her or him additional authority over all the oil and gas institutions.

NNPC headquarters: the dysfunction and lack of accountability at the state-owned company is a serious drag on the sector Bloomberg

Some new reporting requirements will improve transparency. But provisions that would have forced the government to publish details of all its receipts from oil companies, including signature bonuses, as well as the volume of oil pumped, have been stripped away. Such lack of openness is one of the main reasons there is so much unchecked corruption in the sector, transparency campaigners say.

Changes to the NNPC, whose inability to fund its share of joint ventures with oil majors is a big source of frustration, also fall short of industry expectations. The PIB calls for a new national oil company to be set up and listed on the stock exchange. Yet the existing NNPC will continue to operate and there is little detail of how its assets will be divided up.

The proposed tax and royalty regime for onshore production is more favourable to the oil companies than in previous drafts, and compared with current legislation, experts say. That is not to say that the multinationals are content with the bill as it stands. There are strong grumblings about the deepwater provisions.

"The fiscals are a concern, but not the only one," says one executive at a western oil company. "As it stands, the bill is bad for businesses, and bad for Nigeria."

Even if Mr Jonathan does send the PIB to the upper and lower houses soon, the slow approval process for legislation in Nigeria means it will be several months at the least before it can be signed into law, according to Antony Goldman, chief executive of PM Consulting in London. That means the breakthrough may come only in 2013. And that is assuming that lawmakers give their assent to the PIB, which is no guarantee given their tensions with the presidency, as well as the contents of the bill.

But whatever its flaws, Mr Goldman believes the benefits of having the legislation passed strongly outweigh the negatives. "What the industry needs now is a bill, and clarity – not necessarily the best bill in the world."

Groups struggle with bewildering difficulties

Multinationals

Guy Chazan reports on a range of problems

When the wave of violent unrest in the Niger delta finally began to ebb, foreign oil companies breathed a sigh of relief.

Then the pirates came. The majors' offshore installations – largely immune from attack during the delta insurgency – suddenly found themselves targeted. Thieves in speedboats began attacking supply vessels bringing material to platforms far off the coast.

"The navy is working very hard, but the coastline is enormous," says Ciro Antonio Pagano, head of ENI's Nigerian subsidiary. "It's a challenge to patrol all of it."

The attacks illustrate the bewildering difficulties foreign oil companies still face nearly three years after the government agreed with the Niger delta militants an amnesty that put an end to their long campaign of violence.

Things are a lot better than they were at the height of the insurgency when some were forced to suspend onshore operations altogether. As well as restarting abandoned facilities, they have been able to go back into the mangrove swamps and clean up past spills.

The amnesty "has been very helpful, allowing us to increase production and giving us the confidence to start up new projects", says Mutiu Sunmonu, Shell's Nigeria country chairman. "It's also helped us to clear up the backlog of maintenance and remediation work in the delta."

But as well as piracy, the kidnappings and sabotage have been replaced by a new scourge: oil theft. According to Shell, about 150,000 barrels a day of production is siphoned off by thieves. The country's finance minister has said that as much one-fifth of government revenue is lost to illegal "bunkering".

Oil executives say the government should be doing more to stop the practice. "[They] have to take extraordinary measures to patrol our waterways, make maritime security effective and enforce the rule of law," says Mr Sunmonu. "You have to come down heavily on the criminals, and cut off their export markets," he says. "But they also have to address the fundamental causes – poverty and the lack of jobs."

To get a sense of the scale of the problems oil theft presents, consider the Nembe Creek Trunkline, known as NCTL.

It was commissioned in 2009 at a cost of $1.1bn, replacing an older pipeline that had been repeatedly damaged by sabotage attacks, and came into service a year later. But last December it was shut down again after fresh leaks were discovered.

Thieves then took advantage of the pipeline's depressurised state to set to work, installing dozens of new bunkering points on the line.

Some of them were attached to lengths of pipe a few miles long so that as soon as the NCTL came back on stream, its entire flow of oil could be diverted into barges and tankers controlled by the criminal gangs, or into illegal refineries. Some connections dispense with the pipeline altogether and are made directly on the wellhead, right where the crude oil is extracted.


Oil industry insiders have called for more patrols on the waterways

That in turn caused disruptions at Shell's flowstations, the facilities where oil flowing from individual wells is partially treated and pumped into larger pipelines.

"When pressure falls, the flowstations 'trip' and we stop producing," says Rik Prager, Shell's oil spill response remediation manager. "So the cost of this is not just the oil that's stolen – it's the fact we have to stop producing to repair the pipelines."

The situation was so bad that, in May, Shell was compelled to declare *force majeure* on its cargoes of Bonny Light, the main grade of Niger delta crude, after NCTL was shut down for repairs, causing the deferment of 60,000 b/d of production.

ENI's Mr Pagano says that, with criminals drilling into pipelines on a routine basis, ENI has to shut them down for repairs every three days on average. He says about a quarter of ENI's output is lost to bunkering. "We're losing a lot of oil to third parties, and we don't even know who they are," he says.

Mr Prager says Shell is considering a whole battery of high-tech responses to the problem, such as unmanned drones to patrol the delta and infrared cameras. It is planning to hire locals on surveillance contracts to monitor pipelines, and is testing a new detection system similar to a burglar alarm that is capable of identifying leaks and intruders.

"It's effectively a war we're fighting, so this technology is from the military," says Mr Prager.

It is no wonder that majors such as Shell are trying to divest some of their onshore blocks, and concentrate instead on Nigeria's offshore fields, which are immune to bunkering.

But here, too, dangers loom – and not just from pirates. Foreign oil companies are bracing themselves for the passage of the Petroleum Industry Bill (PIB), which some fear could have a chilling effect on the country's investment climate.

Western oil executives say one of the biggest problems is the funding shortfalls by the majority partner in their Nigerian joint ventures – the government. It sets the level of spending that it can afford, and the partners are not allowed to go beyond it. Yet many of Nigeria's oilfields are ageing: operators have to spend more just to keep still.

"It's a bottleneck," says one executive. "And we're not sure the PIB will resolve this problem."

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Pollution a threat to health in Ogoniland

Environment

Xan Rice on the devastating findings of a UN report

Unhealthy mix: a man in the Ogoniland region tries to separate oil from water in a boat on the Bodo waterways. Pollution there has been attributed to Shell equipment failure AFP

Fyneface Farah was attending secondary school in Ogoniland, in Nigeria's delta region, when he heard the explosion. A nearby oil well owned by Shell had suffered a massive blowout. Fire engulfed the surrounding farmland, and oil coated the trees and rooftops in the nearby village of Boobanabe. The entire community fled the area for several weeks until Shell was able to bring the situation under control, Mr Farah recalls.

But while the flames were extinguished, the environmental damage remained. Shell's promise to rehabilitate 13.2 hectares of land was not honoured, the local community says. Mr Farah and several other families that owned the land sued for compensation. In 1994 – 24 years after the blowout occurred, and five years after the start of legal proceedings – they won the case, and were awarded N4.6m (about $210,000 at the official exchange rate).

Still, locals, including Mr Farah, now 65, maintain that the area was never properly cleaned up. This was confirmed last year in a landmark report that found both the soil and groundwater in Boobanabe were contaminated, and that "a detailed plan should be prepared for clean-up".

The report, commissioned by the government and authored by the UN Environment Programme (Unep), involved surveys at more than 200 locations.

Unep said "pollution from over 50 years of oil operations has penetrated further and deeper than many may have supposed". Public health was seriously threatened in at least 10 communities because of the high levels of hydrocarbons in the drinking water. Air pollution was "all pervasive", while the impact on mangrove vegetation was "disastrous".

The authors of the report acknowledged that artisanal refining – taking stolen oil and refining it with primitive methods – had been a contributing factor, especially in recent years. But the source of the pollution stretches back decades. Shell's Nigerian operation, which produces nearly 40 per cent of the country's oil, came in for particular criticism. The Shell Petroleum Development Company (SPDC) – a joint venture that includes the state-owned Nigerian National Petroleum Corporation, ENI and Total, and of which Shell is the operating partner – produced oil in Ogoniland until 1993 when it withdrew because of violent opposition from local communities. Though production never restarted, the SPDC's Trans-Niger pipeline that crosses Ogoniland continued to operate.

Unep said the "control and maintenance of oilfield infrastructure in Ogoniland has been and remains inadequate", adding that the SPDC's own procedures had not been applied and that its remediation techniques have "not proven to be effective" in numerous cases. Cleaning up Ogoniland, which represents less than 10 per cent of the country's oil producing area, could require "the world's most wide-ranging and long-term oil clean-up exercise ever undertaken".

Unep recommended that the government establish a "restoration authority" to oversee the clean-up. A $1bn fund set up by the government and oil companies would cover the first five years of the programme. Among other suggestions were the establishment of specialist centres devoted to soil management and environmental restoration, and improved regulation and monitoring.

> Restoring the land could require 'the world's most wide-ranging and long-term oil clean-up exercise ever undertaken'

If this happened, it could go some way to repairing relations with communities in Ogoniland, and set an example for rehabilitation of other parts of the delta. This is crucial, since a failure to address environmental issues will only fuel further resentment and could lead to new insecurity. But nearly a year after the report was published, local communities and activists complain that little has been done.

The government set up a taskforce to chart the way forward. Its report was apparently presented to President Goodluck Jonathan in May, but has not been made public. A senior official at the petroleum ministry says the government will announce an action plan soon.

One impediment to full remediation is the problem of contamination – both from pipeline leaks and artisanal refining – which Unep said must be brought to an end before a clean-up can commence. Even so, Legborsi Saro Payagbara, advocacy officer for the Movement for the Survival of the Ogoni People, a campaigning group, says the government should have done a lot more by now.

Last year, Shell said it welcomed the Unep report. While disputing some of the findings, the company said that its efforts at some sites had not been fully effective, and that it would check a sample of other locations. Since then it has been working with the state government to provide potable water to the affected communities and continued routine remediation efforts that predated the report. Jon Barnden, Shell's communication manager for west Africa, says six or seven sites in Ogoniland are being cleaned up at present.

In places such as Boobanade there is still a lot of mistrust, however. Earlier this year, Shell employed a local contractor to clean up the site of the 1970 well blowout. It says the work was inspected by the environmental regulator and signed off as satisfactory. But on a visit to the site in June, patches of oil residue could be seen in the soil. In one spot, fresh crude was bubbling up. Mr Farah says the remediation work was not satisfactory and that independent experts should be called to verify what was done. "We still cannot plant anything there and the water table is contaminated," Mr Farah says. "There is still not enough action – that is the truth."

A farewell to arms: weapons surrendered by former militants on display at a collection centre in Port Harcourt in 2009 Reuters

Questions raised over the price of delta peace

Amnesty

Xan Rice finds problems that provoked militancy have not been addressed

The Niger delta was on fire four years ago. Militants, driven by a sense of injustice and criminal tendencies, had succeeded in drastically cutting crude production by blowing up pipelines and kidnapping oil workers. From 2.5m barrels a day in 2005, output dropped as low as 800,000b/d on some days.

Nigeria had lost to Angola its crown as the continent's top producer.

Miabiye Kuromiema, president of the Ijaw Youth Council, a civil society movement representing the delta's largest ethnic group, wanted the trend to continue. "I hoped that production would go to zero, so the government could not pay its bills," he says. "We needed a wake-up call to the social and governance crisis."

That is why he rejected the idea of a blanket amnesty for the militants, as the government was proposing at the time. Many other activists agreed with him, though less for ideological reasons than the conclusion that it simply would not work. Foreign diplomats, whose offers of advice in setting up demobilisation programmes were politely ignored by the government, felt the same.

So when the late president Umaru Yar'Adua officially launched the amnesty programme in June 2009, expectations were low. But by that October more than 20,000 militants had handed in weapons and signed up. A year later a further 6,000 people were added to the list, taking the total to 26,358 – more than were ever actively involved in the militancy.

Though the scheme has been closed to new entrants for nearly two years, many thousands of people, including rebels who were afraid of being stigmatised at the time the offer was first made, are still clamouring to be part of it. The reason was the amnesty offer was genuine – nobody was persecuted after handing in a gun – and also financially attractive. In return for signing a pledge of non-violence and attending a demobilisation camp, each would receive a monthly stipend of 65,000 naira ($400). They were also promised education or training.

The programme quickly produced the desired result of ending hostilities. Attacks slowed and then stopped. Oil production has soared to about 2.5m b/d. More than 11,500 of the former militants have received education or courses in Nigeria or one of more than a dozen foreign countries. Lawrence Pepple, the head of reintegration at the Niger Delta Amnesty Programme, says the swift end to insecurity made it "one of the most successful DDR [disarmament, demobilisation and reintegration] efforts in Africa".

But it is still early days. Is the peace sustainable? Mr Kuromiema is not convinced. He acknowledges the amnesty has "stabilised the region and created value", and that the training given to the former militants had "opened their eyes to a new world".

> 'In the past they may have been troublemakers, but they are our brothers and it's our duty to help them'

But he worries too few jobs are being created in the delta to ensure that the former rebels can be gainfully employed. He is also concerned the generous payments to ex-militants, which may continue to 2015, have created a dangerous precedent.

The monthly stipends are four times the minimum salary for local government workers. Some of the militant leaders who accepted the amnesty and have been awarded lucrative contracts around the oil sector have been eager to flaunt their new wealth, driving about in expensive cars. "All those people who never carried guns during the militancy: how do they feel now? That it's good to carry guns because then the government will negotiate with you? The potential exists that those who are disenchanted will restart the violence," says Mr Kuromiema.

Many people in the delta still feel disgruntled. The underlying problems that provoked the rebellion have not been addressed: poverty, underdevelopment, corruption by the ruling elite, as well as decades of environmental damage caused by oil companies and, more recently and on a smaller scale, illegal oil refiners in the creeks of the delta.

What is more, activists say that some of the militant leaders did not give up all of their weapons. Old habits also die hard. The surge in large-scale oil theft, known as "bunkering", in recent years would not have been possible without the involvement of some of the former rebels who have swapped what they claimed was a political militancy for commercial militancy.

Yet it also true that many of the militants are genuinely trying to turn their lives around, with the help of people in government and in the private sector.

Ikioye Dogianga runs an engineering business in Port Harcourt and provides services to the likes of Shell and Eni. For the past eight months he has been teaching 40 former militants the theory and practice of welding, in the hope that they will be able to find jobs or set up their own workshops. Their attitude has impressed him.

"These guys are hard-working and are determined to get experience," he says. "In the past they may have been troublemakers, but they are our brothers and it's our duty to help them get back into normal society."

Okoma Akara, who has a wife and three children, is one of his best students. As a militant in Delta state, Mr Akara, 28, made money by kidnapping people and stealing oil, but also saw many of his friends die in clashes with the security forces.

"If it wasn't for the amnesty I don't know if I'd be alive today," Mr Akara says. "I am grateful, but I want more training so I can get a job with an oil company."

Legislation 'set to be a game-changer'

Continued from Page 1

the gas sector and transform the NNPC from a discredited organisation open to abuse by politicians into a commercial entity with substantial independence from the government in power.

Mr Jonathan and his cabinet approved the PIB this month and sent it to lawmakers for assent, which is by no means guaranteed as previous versions have been rejected.

Diezani Alison-Madueke, the petroleum minister, says the legislation would make the industry "more competitive and accountable. It proposed revolutionary changes".

That remains to be seen. Experts who have seen the most recent version of the bill say it falls well short of its original aims, being weaker on transparency than campaigners had hoped, and low on detail about how exactly the NNPC will be unbundled – a big concern for the multinationals that are its joint venture partners.

Even so, the law is being eagerly awaited. "From a business perspective, the new bill cannot come fast enough," says Mr Odubeko.

"Whether it's good or bad, at least people will know what they are dealing with and can do the financial modelling. I believe that it will be a game changer for Nigeria and that investment will flow because of the [attractive] nature of country's hydrocarbons."

The government needs such an outcome, since it relies on oil for 80 per cent of its revenues and finances are stretched.

Passage of the bill will clear the way for a new licensing round, which should attract strong interest from both the multinationals and the emerging Nigerian oil companies, netting the treasury billions of dollars.

There are other positive signs too.

The militancy in the delta that cut oil production in half in early 2009 has died down after more than 26,000 former rebels were granted amnesty and generous stipends.

The programme, in which Mr Jonathan has a significant stake given his roots in the region and his role in setting it up, has made a significant difference to operating conditions for both companies in the delta.

President Goodluck Jonathan: scheme to reform militants

Kidnapping still occurs, but it is less frequent and less violent than before.

Meanwhile, the instances of oil installations and pipelines being blown up has fallen dramatically.

The payments to ex-militants are not a long-term solution. Training courses, which are being undertaken by thousands of former rebels, must translate into genuine employment opportunities, or some of them will surely return to the creeks and take up arms.

Job growth in the delta has been weak of late, but new investment and increased production could change that.

However, at the same time as the amnesty has reduced oil companies' headaches over the security of their personnel, they have suffered from a dramatic increase in oil theft.

Industrial-scale bunkering involving criminal gangs, some former militants and the security forces, costs the industry up to 400,000 b/d, close to a fifth of the country's production, according to the finance ministry.

There has been little sign to date that the government is serious about tackling the problem.