

## Case Study From



## Environmental Catch-22 in Nigeria<sup>1</sup>

*In the course of more than 40 years of oil and gas operations in Nigeria several multinationals have built an extensive network of pipelines, production, processing, and storage facilities. The environmental damage that results from oil and gas production and transportation activities can devastate the nearby environment, and thus the economy of oilfield regions. The government and blame political agitators and commodity thieves for sabotage of the lines. The companies and affected communities, in turn, blame the government for inadequate security or effective environmental monitoring and enforcement. The affected community and the government blame the*

*companies for not maintaining Western-quality safety and environmental standards. All claim that the others have frustrated their attempts to make long-term improvements in the pipeline system.*

- *What are the incentives for each of the parties – the government, the multinational and the affected community – to work together to resolve environmental problems?*
- *What sort of fiscal regime and contract provisions would help build the mutual trust among the parties necessary to resolve these issues?*
- *What practical steps can the government, multinationals and affected communities take independently to improve compliance with environmental standards, contractual obligations and related laws and regulations?*

### Background

Nigeria is the seventh largest exporter of oil. Like in many former African colonies, independence forced disparate peoples into a common nation – here, northern Islamists and southern Christians and animists. In addition, the strong central government in Nigeria retains control over 60 percent of natural resource revenues, distributing only 30 percent to the state. Uneven distribution, corruption and pork fuel internal ethnic conflicts, making Nigeria one of the world's 20 poorest countries, though it is the seventh largest oil exporter.

The Nigerian government's allocation of \$3.2 billion to NNPC's share of its joint ventures with the multinationals operating in Nigeria was less than in its 2001 budget, and substantially less than the amount requested by the multinationals. In 2002, government budget constraints and OPEC quota restrictions reduced SPDC's production levels by 14 percent as compared to 2001 levels.

Since 1996, Shell Petroleum Development Company of Nigeria (SPDC) has issued an Annual Report on People and Environment. The 2002 Report indicates that progress has been made in:

- Finding additional outlets for associated gas, keeping the company on course to meet its flares down target of 2008;

<sup>1</sup> This case study was prepared using publicly available information.

- Receiving ISO 14001 certification covering production facilities, and major operations and services; and
- Attracting more participants to its annual Stakeholders' Workshop.

Some funding derived from petroleum operations is allocated to development and infrastructure needs of states in the Niger Delta, but according to Shell, people in the affective communities generally are dissatisfied with the lack of transparency and efficiency in the deployment of these funds.

Shell reports a 15 percent increase in community incidents – from 245 in 2001 to 282 in 2002 – mostly at construction sites. Some 39.4 million barrels of oil were deferred through these incidents and sabotage in 2002, as compared to 35 million barrels deferred in 2001. Shell also reports losing 6 million barrels of crude oil through 34 incidents of theft by increasingly sophisticated operations.

On March 23, 2003, Shell – along with ChevronTexaco and TotalFinaElf – withdrew their staffs in response to violent election season protests by the Ijaw tribe complaining of inadequate economic and political representation for its people. Among other things, the Ijaw are demanding that a Memorandum of Understanding regarding future operations be signed by the multinationals before they resume. Shell and ChevronTexaco, nevertheless, warily began returning to their Nigerian operations following a March 26 truce among the multinationals, Nigeria's military, and the Ijaw and Itsekiri. Many hoped this was a sign that the violence curtailing Nigeria's marketable oil production has ended. Production cutbacks and unaccounted for losses from all producers reduced the country's marketable oil production of 2 million barrels per day (bpd) by an estimated 40 percent. On April 5, however, a pipeline carrying oil from ChevronTexaco's Escravos terminal to a refinery in Warri was attacked, at significant cost to the environment.

### **Destructive Cycle**

Some of the pipes and related facilities may have been installed with the best technology that existed 40 years ago. Many Nigerian citizens subject to the consequences of pipeline leaks and spills contend, however, that onshore operators are not maintaining the same pipeline safety and environmental standards in Nigeria that it adheres to in the United States and Western Europe. In addition, immediate host communities are violently protesting their inability to effectively participate in the oil fields' economic benefits. Often these protests take the form of sabotage. The government, for its part, contends that it does not have the money, technology or expertise that the multinationals do to effectively monitor environmental impacts and secure the pipelines from saboteurs. Oil that does not make it to market either ends up polluting surface land, water and air or remains in the ground delaying realization of its development potential by all parties.

The absence of an effective framework for resolving these differences results in a persistent cycle of negligence and violence, which among other things, exacerbates the adverse environmental consequences of petroleum operations. For illustrative purposes, consider Summer 2002. While pipeline workers were on strike in the Niger River Delta, a pipeline sprung a leak and began spewing thousands of barrels worth of oil, which flowed into every crevice and indentation of the local landscape, including many creeks and ponds. Then this oil began to burn, which speeded clean up of the spill, but filled the air with dark, toxic gases. Nigerian environmental activists claim the fires had a devastating impact on wildlife and livestock, and thus the local economy. A rabbit breeder lost his entire herd, and many local fishermen simply abandoned their nets. In an effort to breed good will, Shell hired some of the displaced fishermen to patrol the pipeline for leaks and sabotage. Given their displacement by Shell, and limited access to legal energy supplies, this local security force

likely lacks the will – not to mention the capacity, given its limited training, equipment and supplies – to effectively prevent future leaks and spills.

### *Nigerian Government*

The Nigerian government revised its Environmental Guidelines and Standards for the Petroleum Industry in 2002, and the Rivers State government published Interim Guidelines and Standards on Environmental Pollution Control and Management. The government has limited resources for monitoring and enforcement, however. The environmental protection unit of the Niger Delta Development Commission says it wants to build a lab for technical analysis of petroleum industry impacts on land and water, but the Nigerian government currently has no labs to test for oil pollution.

Some in the affected communities believe that the government is more concerned with production losses than environmental compliance because, to the extent production losses reduce the government's oil revenues, the Nigerian treasury suffers as well. So to protect its own assets the government deploys security police with orders to shoot pipeline vandals on sight.

### *Affected Communities*

It was this type of strong-arm tactics by government security in response to environmental protests by the half-million-member Ogoni tribe – and claims of Shell's complicity in that violence – that led to Shell's departure from its production in the Ogoniland region in 1993. Nigerian activists point to the differences between Shell's Western and African surveillance technology as evidence that Shell believes it can use economic blackmail against the government to avoid responsibility for any harm to Nigeria's poor, black population. They also note that only the oil companies have the technologists to conduct sophisticated environmental tests. Nigerians depend on foreign environmentalists to fund scientific studies, but local activists say the violence in the region keeps them from coming.

Saboteurs do contribute to the problem, however. A government construction worker can sell a 25-foot section of pipe for about \$87, which is 25 percent more than his monthly salary. When they slice into a pipeline with a hacksaw or blowtorch, they can create the leak and provide the spark to ignite a fire that can burn for months.

Moore reports that Shell executives say they are concerned for the safety of nearby residents and want to clean up the fields they left behind in Ogoniland. Leaders of the Movement for the Survival of the Ogoni People, however, worry that Shell is using the dangerous consequences of the pipeline vandalism to pressure the Nigerian government into resuming its strong-arm security tactics to protect the company's remaining 300 billion barrels of reserves and 245,000 barrels in daily pipeline flows through the region. They also fear that government security might allow Shell to resume production in Ogoniland.

### *Shell*

Shell may be reluctant to resume operations in Ogoniland – for clean-up or production – without effective government security because in Shell's experience local security forces often are insufficient to protect vulnerable facilities and equipment from sabotage. Since it abandoned its Ogoniland production – and began declining the protection of government security forces – Shell says it loses 8 percent of its production volumes in the Niger Delta every day. The manager of Shell's Nigerian oil operations estimates that 85 percent of these losses results from unauthorized tampering with its facilities. For example, in 2001, an Ughelli resident removed a chunk of an abandoned – but purportedly guarded – Shell pumping station. The resulting spill substantially polluted surrounding wetlands. While a Shell official opined that the saboteur probably paid the guards to abandon their posts, Shell

had installed no other security – a camera, an alarm, or an automated shutoff valve – at the site.

By contrast, in the United States and Europe, which subject Shell and companies like it to substantial environmental oversight and significant penalties for environmental harms, oil companies have invested substantial sums in designing, developing and deploying sophisticated pipeline surveillance technology. This technology includes fiber optic and harmonic sensors that monitor stress on the pipe. Very little of this technology makes it to multinationals' operations outside of North America and Europe, however

In 2001 and 2002, Shell reported compliance with 154 of the Department of Petroleum Resources' 157 regulatory items. The SPDC's 2002 Report also indicates that, although actual expenditures on flowline replacements, pipeline inspections, bed upgrades and manifold upgrades fell in 2002 because of joint venture budget constraints, the volume of oil spilled fell markedly from 2001 to 2002.

<b>SPILLS &gt; 100 KG (M TONS)</b>	<b>1999</b>	<b>2000</b>	<b>2002</b>	<b>2002</b>
<b>Excluding sabotage</b>	0.9	1.8	5.2	0.17
<b>Including Sabotage</b>	3.4	4.2	10.4	2.70

Shell attributes these volume reductions to “pipeline and flowline replacement, flowstation upgrade, improved wellhead control system and proactive inspection.”<sup>2</sup> In addition, Shell indicated that in 2003, it would deploy a comprehensive asset integrity program based on recommendations for prevention, detection and response from investigative reports on major spills in 2002.

### **Negotiation Strategies**

Last July, several hundred women – in two separate incidents – occupied several Chevron facilities – chanting protest songs and threatening to disrobe. For their trouble, they garnered commitments from Chevron to hire more locals, build more local infrastructure and fund microloans for local, women-owned businesses.

Following the April election, which opponents claim were marred by ballot rigging, about 100 Nigerian oil workers took over offshore oil rigs being operated by Transocean on behalf of Royal Dutch Shell and TotalFinaElf. The workers say they are protesting plans to transport Nigerian workers to rigs by helicopter – rather than by boat – and to dismiss five workers accused of theft. Because such incidents are commonplace, yet rarely end violently, company officials counsel for calm. There are signs, however, that patience with the protestors may be wearing thin, as the Nigerian navy sailed several ships toward the rigs. In response, union leaders threatened economic harm.

Other local leaders are calling for constitutional reforms that would lead to a confederation-style government – as opposed to the present federation – and reapportion the distribution of oil revenues. Proponents of the plan argue that strengthening local governments in this way would make them more responsible – and, thus, more accountable – for infrastructure, services and development.

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<sup>2</sup> THE SHELL PETROLEUM DEVELOPMENT COMPANY OF NIGERIA LIMITED, 2002 PEOPLE AND ENVIRONMENT ANNUAL REPORT 42 (March 2003)

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