Stakeholder Engagement and Sustainable Environmental Management of oil contaminated sites in Nigeria

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Abstract

African nations are experiencing rapid economic growth and development, particularly within the energy sector; however, this growth has come at a cost to the environment and society. Nowhere have these impacts been felt more precisely than in the oil and gas producing regions of Nigeria where years of neglect and mismanagement have resulted in vast areas of hydrocarbon contaminated lands. In this chapter, we present a case study of the Niger Delta. We show how constructive stakeholder engagement can be used to integrate the values and perspectives of affected communities and how this information can be used to inform environmental regulation and sustainable development. Lessons learned are relevant to other countries seeking to develop their energy resources in a sustainable manner.

Keywords: stakeholder engagement; Niger Delta; Nigeria; oil pollution; policy transfer; contaminated land; environmental policy

Introduction

The extractive industries in Africa are experiencing a period of rapid growth and development, but progress comes at a cost both to the environment and society. In Nigeria, years of neglect and mismanagement have resulted in vast tracts of land being

contaminated by hydrocarbon pollution. Efforts to reverse these impacts and to prevent further harm have proved to be ineffective. Alternative methods that can address the limitations of regulation and integrate the values and perspectives of the multitudes of stakeholders who live with the pollution every day are needed to manage the environment.

Stakeholder engagement is a methodology that can collate the viewpoints of different stakeholders affected by a business's objectives. Stakeholder engagement is used by businesses to build trust, promote transparency, and to gain a social licence to operate. The literature has focused primarily on the role of the stakeholder relative to the development of private sector strategic plans. This book chapter aims to introduce the concept of stakeholder engagement and discuss how it can be used to assist the environmental management of oil contaminated land in Nigeria. Current challenges and opportunities for stakeholder engagement to support policy development are given and are illustrated through a case study.

What is Stakeholder Engagement?

A stakeholder can be defined as any individual, or group of individuals that might be affected by, or cause an effect on, the ability of an organisation to achieve their objectives (Cundy et al. 2013; Geaves and Penning-Rowsell 2016). In this context, a stakeholder can be any of the following: shareholders, employees, customers, suppliers, lenders, collaborators, and society.

Stakeholder engagement is a process by which an organisation informs, consults, involves, collaborates with, and empowers groups and individuals affected by a

decision, operation, or policy (Rowe and Frewer 2005; Ramirez-Andreotta et al. 2014; Benson et al. 2016). Stakeholder engagement emerged as a meaningful area of research in 1984, when Ed Freeman's seminal book *Strategic Management: A Stakeholder Approach* (Freeman 2010) popularised a practical pathway for implementing the concept. His work brought into focus the concept of the Stakeholder Approach and suggested a pragmatic framework for implementing and delivering on the concept.
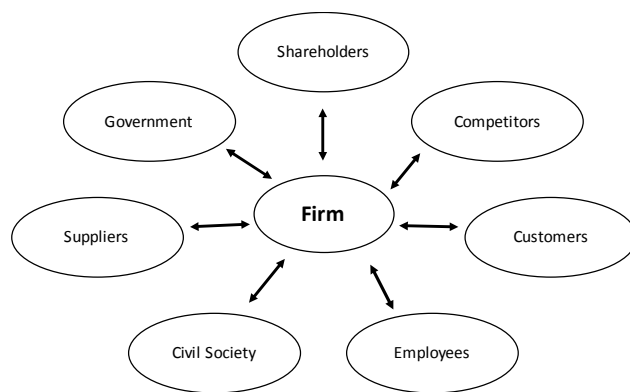

Figure 1. Adapted from *Strategic Management: A Stakeholder's Approach*. Source: Freeman (2010)

The Stakeholder Approach was conceptualized as a holistic methodology used by organisations to understand the concerns of shareholders, employees, customers, suppliers, lenders, and society. These concerns might be economic, social, environmental, or political in nature, and might relate to issues of fairness, trust, inclusion, or control. The Stakeholder Approach was developed to enable the organisation to learn and understand from the concerns of the stakeholders; information that could provide insight to help an organisation develop business strategies and objectives that stakeholders could support. By understanding these concerns and interactions, it was believed that a mutual benefit could be generated. Fundamental to this approach was the idea that stakeholders should be viewed as people, each with their own unique set of values and aims (Slinger 1999).

Evidence suggests that when the various views of different stakeholders are considered, the overall quality of a decision is enhanced (Garmendia and Stagl 2010; Cundy et al. 2013; Sardinha et al. 2013). Stakeholder engagement has become an integral element of decision making both in the public and private sectors. It is used to inform, consult, and create dialogue among stakeholders and therefore empower interested parties to participate in the decision processes that might impact on them (Reed 2008). For complex issues, stakeholder engagement is also used to identify gaps in knowledge, reveal perceptions of risk, build trust, promote transparency, and seek social licence (Reed 2008; Péry et al. 2013; Prpich et al. 2011) .

As stakeholder engagement began to gain traction, a number of proponents and detractors simultaneously emerged. A common criticism levied against the inclusion of stakeholders in business strategy development was the presumption that the sole purpose of the firm was to act in its own calculative self-interest to maximise profits for the benefit of the shareholders. When the self-interests of the firm differed from those of the stakeholders, it would not be possible to maximise the benefits of everyone. Critics thus viewed the inclusion of stakeholder interests as a logical impossibility, particularly if those benefits were multidirectional (Slinger 1999).

Proponents of the stakeholder approach argued that calculated self-interest missed the point of the concept. The aim was not solely to maximise benefits to all stakeholders, but rather is a gesture of moral commitment to all stakeholders whereby the firm provides an opportunity for stakeholders to receive benefit by the promotion of business practices that enable the realisation of opportunities. Other arguments against

stakeholder engagement, e.g. stakeholders do not want to be involved in business decisions; knowledge about how a mineral is extracted will make stakeholders oppose the process; the entire activity is too resource-intensive; have since been dismissed. Involving stakeholders in the decision-making process through stakeholder engagement is now accepted to be an effective means for building mutually beneficial relationships (Devin and Lane 2014).

Stakeholder engagement needs to be more than an instrumental management tool (Wheeler et al. 2002). Wheeler suggests that engagement should be integrated within a business's strategy and that appropriate resources (e.g. time) must be committed to address the complexity of socio-environmental problems. To be effective, engagement with the community must occur at all levels of the business. The firm must commit to listening, understanding, and acting upon information they receive, even if that information pertains to perceived risks (e.g. environmental or societal risk, organisational or government behaviour). Any point of contention or misunderstanding could lead to conflict. Cursory stakeholder engagement is therefore not sufficient for understanding and communicating the impacts of complex social and environmental issues (Mzembe 2016). Good practice in stakeholder engagement means that firms are committed to the process and that engagement should continue to occur throughout the development process, and the lifetime of an operation.

Corporate Social Responsibility

Corporate Social Responsibility (CSR) broadly encompasses a firm's efforts to address the social and environmental issues which result from their operations that extend beyond the efforts that comprise their normal pursuit of profits (Vogel 2007). More

recently, CSR has come to be defined as the "triple bottom line" of financial, environmental, and social responsibility and is rapidly becoming the norm regarding sustainable business practices (Jha and Cox 2015).

CSR is likely to have begun as a voluntary, charitable pursuit; however, the adoption of CSR by the extractive industries could also be a response to the sector's history of various economic, environmental, and social issues. Though the sector provides employment and creates wealth, it has also been plagued by environmental disasters, land disturbances, depletion of non-renewable resources, and threats to the health and safety of workers and citizens (Azapagic 2004). In this context, engagement with stakeholders could be an invaluable mechanism for organisations to communicate the risks and benefits associated with various extraction practices. Recent empirical evidence supports this idea and shows that CSR can be a mechanism for increasing profits, engendering trust, and securing a social licence to pursue business (Henisz et al. 2014; Jha and Cox 2015; Wang and Sarkis, 2017).

CSR is underpinned by a commitment to recognise, internalise, and respond to societal concerns and expectations by means of stakeholder engagement. Its use has become so commonplace that many regions now view stakeholder engagement as a regulatory and political imperative, without which trust and access might not be granted (Moomen and Dewan 2017). A review of CSR reports for mining companies illustrates the commitment that organisations have made to develop good community relationships nurtured through stakeholder engagement (Jenkins and Yakovleva 2006). Firms that increase their commitment to stakeholder support have been shown to be more likely to increase the financial valuation of their firms (Henisz et al. 2014).

In the next section, we ask the questions; How might Government organisations benefit from these stakeholder concepts, and how might stakeholder engagement be used to support the transfer of environmental policy to manage the impacts associated with petroleum hydrocarbon extraction?

Can the Government operate like a firm?

Stakeholder approaches are well established at the firm level and are solidly embedded within the CSR framework, yet the practice of stakeholder engagement within government institutions is not as well established. Flak and Rose (2005) conceptualise the institution of government as a firm, where the management of relationships and interests of societal stakeholders is paramount. It is possible to imagine a government using stakeholder engagement to similar ends as a firm, given that democratic political models used by governments are motivated to balance the legitimate competing interests in society (Flak and Rose 2005). Though governments are not motivated to maximise the profits of shareholders, such as in a firm, there is a strong desire to operate as a business insofar as optimising budgets and managing change (Scholl 2004). Though the concept of stakeholder engagement remains the same across public and private sectors, the tools and instruments for implementing stakeholder engagement might differ (Bingham et al. 2005).

Specific to the environment, governments can use stakeholder engagement to understand and communicate the impacts (past, present, and future) of petroleum hydrocarbon industrial activities, and to secure a social licence to support development (Moomen and Dewan 2017). Stakeholder engagement enables social legitimacy and,

when accompanied by social programmes to enhance the social welfare of affected populations, governments could increase their capacity to intervene and support side-lined communities (Bawole 2013). Too often, stakeholder engagement is bundled into the Environmental Impact Assessment (EIA) process where it becomes little more than a cosmetic tick box exercise done for the purpose of meeting legal requirements (Bawole 2013).

In the pursuit of a stakeholder engagement framework, government should avoid the adoption of a single, overarching strategy for community involvement, which may not be helpful in regions such as Nigeria where communities' structures and situations differ greatly. Building engagement within communities that struggle with weak local government entities and a large, illiterate local population requires tailored communication responses (Bawole 2013). In the following case study, we outline an approach intended to assist governments to engage with different stakeholder communities affected by the impacts of oil extraction in the Niger Delta region. The case study seeks to understand how different stakeholder communities value certain socio-cultural, economic, and environmental values, how decisions to prioritise these values are made, and how engagement might inform contaminated land management policy.

Case Study: Stakeholder engagement to support contaminated land management policy in the Niger Delta, Nigeria

A legacy of crude oil pollution

Situated in southern Nigeria, the Niger Delta sits at the apex of the Gulf of Guinea and encompasses an area of 112,110 km^2. Divided into nine states, the region is home to a population of approximately 31 million people (NDDC 2014). Much of the population relies on the land and natural resources for their livelihood, which largely comprises subsistence farming and fishing (Chinweze et al. 2012).

Oil was discovered in the region in 1956 and vast reserves have been exploited consistently since. Nigeria has generated considerable wealth from this resource and oil exports were valued at \$89b USD per annum (OPEC 2015). These values have contributed up to 35% of Nigeria's gross domestic product, and over 90% of its foreign exchange wealth (OPEC 2015). Yet despite this boom in petroleum wealth, Nigeria remains a distinctly poor nation that ranks 156th out of 216 countries in terms of Gross National Income and Purchasing Power (World Bank 2016).

The Niger Delta region has been the hub for oil extraction and processing in Nigeria for the past 50 years (OPEC 2015). Over this period, oil spills caused by engineering failure, oil theft, pipeline vandalism, and natural factors have resulted in considerable land contamination (Fentiman and Zabbey 2015; Kadafa 2012) that has impacted on human health, groundwater, soil functionality, and ecological systems (Pegg and Zabbey 2013; UNEP 2011). For example, in 2008 a major pipeline failure in Bodo City led to an oil spill that affected over 69,000 households (Pegg and Zabbey 2013). In

addition to these larger spills, smaller spills occur frequently, adding to the cumulative pollution in the environment (Nwilo and Badejo 2006).

Costs to clean up watercourses, groundwater, and soil in the region was estimated to range between US $500 million and US $1 billion (UNEP 2011). Although the scale of land contamination in the region is difficult to quantify, over 2000 sites that require remediation were estimated to exist as of 2008 (Ite et al. 2013), and confirmed in 2011 by the United Nations Environment Programme (UNEP) (UNEP 2011). Despite widespread crude oil contamination there is no evidence to date to indicate that clean-up has commenced in the region.

A contaminated land management policy that needs to be strengthened

Policy to manage contaminated land has developed over the last five decades and can be classified into three distinct periods (Figure 2): no legislation; non-specific legislation; and specific legislation. Prior to 1968, regulations were limited and emergent, e.g. Oil and Pipeline Act, 1956, Mineral Oils Regulation, 1963, Petroleum Regulations, 1967, and Oil in Navigable Water Decree, 1968; addressing concerns about licensing, safety, and transportation. These efforts were generally considered to be reactive and fragmented, and failed to manage contaminated land (Ite et al. 2013). Oil production, and oil contamination incidents, increased after 1968, which elicited a response from the Nigerian authorities in the form of the Petroleum Act (1969). An overarching legislation, the Petroleum Act aimed to prevent pollution in water, air and soil, and was complemented by the Harmful Waste Act 1988 and the Environmental Impact Assessment Act 1992 in later years (Ajayi and Ikporukpo 2005).
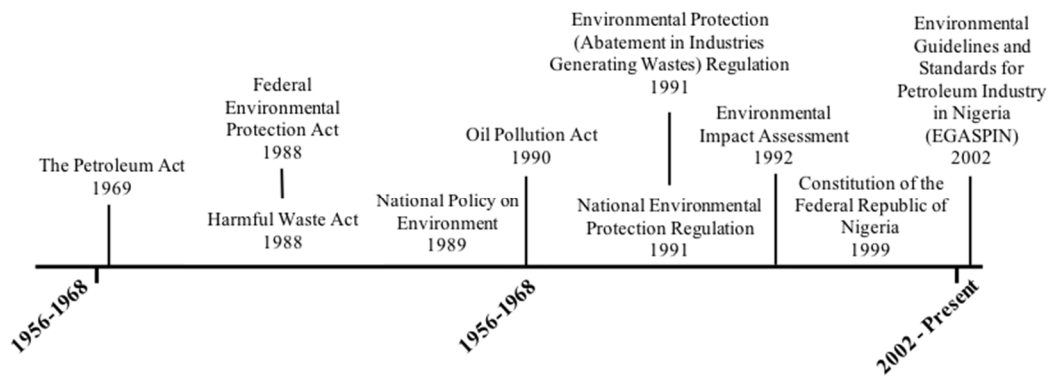
Figure 2: Contaminated land policy development from 1956 to the present. 1956-1968 – period of no legislation; 1969-2001 – period of non-specific legislation; 2002-present – period of specific legislation.
Source: Sam et al. 2017b

In the late 1980s, continuing contamination events in the Niger Delta led to community protests that forced the Government to act, resulting in the development of the Environmental Guidelines and Standards for the Petroleum Industry (EGASPIN). Published in 1991 and enacted in 2002, the EGAPSPIN provided specific regulations for the management of contaminated land; regulations that remain the basis for environmental management in Nigeria to this day.

It is acknowledged that Nigerian environmental governance has been ineffective and reasons for this include: lack of adequately trained and experienced personnel, lack of expertise, inappropriate screening values, and misaligned socio-economic expectations (Ajayi and Ikporukpo 2005; Eneh 2011). Ineffectiveness might also stem from Nigeria's approach to policy development, which is to adopt/transfer policies from other countries (e.g. USA) (Sam et al. 2017a, 2017b). Policy transfer is a common practice for governments that lack the technical capabilities or expertise to develop a policy on their own (Ajayi and Ikporukpo 2005). A flaw with this approach is that the adopted policy is likely to lack contextualisation: socio-cultural, environmental,

economic, or otherwise, and this will impact on the appropriateness and efficacy of the policy to serve its purpose.

The stakeholder engagement method

The stakeholder engagement framework used (Figure 3) was modified to overcome potential barriers related to communication style, language, and understanding. Cultural preferences include contact and discussion (Idemudia 2014), therefore engagement was designed to incorporate face-to-face interviews and workshops. Workshops conducted with community members made use of postcards to graphically depict social values. Participants felt that a combination of graphics and text would overcome the challenges of language and comprehension (Zhao et al. 2016). Similar data obtained from experts and industry were collected via phone interviews, reflecting the needs of those stakeholders. Open ended questions were combined with structured prioritisation exercises to identify important issues as well as capture information about perceived risks held by the participants.
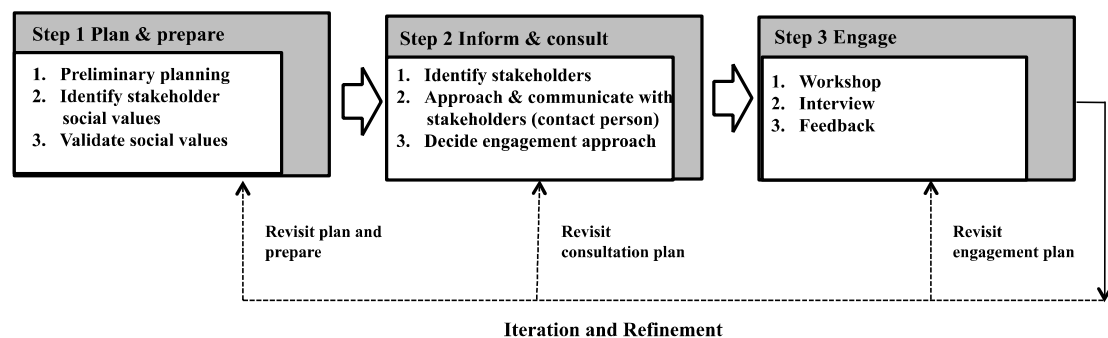

Figure 3. Stakeholder engagement framework applied by Sam et al. (2017a) to collect information about socio-cultural values relative to petroleum hydrocarbon pollution and contaminated land policy in Ogoniland, Nigeria. Source: Sam et al. 2017a

The developmental stage in the stakeholder engagement was underpinned by three activities: preliminary planning; development of values; organisation and validation of values.

1) Preliminary planning: At this stage, it was defined who should be engaged, how they should be engaged, what they would engage with, and to what extent they would be engaged. Objectives were clearly stated and resources to conduct the engagement were assessed (Cundy et al. 2013; Rangarajan et al. 2013). Stakeholders for this study were selected from areas highly impacted on by petroleum hydrocarbon pollution (Kadafa, 2012). Four categories of stakeholders were identified: community members, experts, regulator, and operators (Idemudia 2014; Kadafa 2012; UNEP 2011). Stakeholders were initially identified from previous reports, e.g. the environmental assessment of Ogoniland (UNEP 2011), and peer-reviewed literature. Community participants were selected through a process led by community leaders.

2) Development of a list of values: Socio-cultural, economic, and environmental values were determined and defined relative to the region prior to the workshop using literature searches. Development of a list of social values where socio-cultural, economic and environmental issues were identified via a critical review of the academic databases (e.g. Science Direct, Scopus) and online databases (e.g. Google Scholar) using key phrases and words, such as values, impacts, oil spills, land contamination, socio-economic and environmental impacts, stakeholder values, stakeholder concerns, contaminated land concerns, Niger Delta, Nigeria. Values represented the perceived concerns of the stakeholder, and although the provided list was not exhaustive, it did provide stakeholders with a starting point for richer discussion.

3) Organisation and validation of the identified values: Before values were used in the workshop they were validated by unofficial discourse with contaminated land experts from Nigeria. This was done to ensure that the identified values represented the actual values of stakeholders in the study area. This review provided a layer of feedback that helped to accurately contextualise the issues (Table 1).

Table 1: Stakeholder values as identified from literature and validated by experts.
Source: Sam et al. 2017a

Values	Elements	Description
Socio-cultural	Communal crisis	Communal crisis refers to a crisis that exists between communities, oil companies and government.
	Cultural places	Cultural places include places of worship and cemeteries.
	Family and household	Children, parents and relatives.
	Drinking water quality	The water used to provide drinking water to communities.
	Loss of biodiversity	Loss of variety of flora and fauna in the local environment.
Environmental	Resource conservation	How you use, allocate and protect your natural resources such as fish and mangrove habitats.
	Soil quality for agriculture	Maintenance of soil quality to enable agriculture for nutritional and economic value.
	Food and local supply chain: farming and fishing	Sources of local food supply such as farming and fishing, and nutrition.
	Legacy for future generations	Natural resources you wish to transfer to your grandchildren are in decline.
Economic	Human health/wellbeing	Health and wellbeing (sickness and diseases).
	Financial issues/income security	Financial health, the ability to sustain an income.
	Reputation	The reputation of your community or institution.

	Collaboration/co-existence	Collaboration and cooperation among operators, regulators, community members and government.

The Inform and Consult stage was used to identify participants and to communicate with them the intention and purpose of the engagement process. Stakeholders might include community members, contaminated land experts, regulators, and operators from, or working within, oil-impacted regions. Communication with stakeholders requires an understanding of preference and technical capability. Whereas contaminated land experts, regulators, and operators might prefer, and have the capability, to communicate by email or telephone, community participation is more likely to be face-to-face communication, and knowledge about events will rely on effective word of mouth or a town crier (Noy 2008; Rizzo et al. 2015).

The Engage stage describes the approach used to interact with participants. Sam et al (2017a) conducted workshops for community members (n = 35), and telephone/in-person interviews for operators (n = 7), regulators (n = 8), and experts (n = 6). To enable comparison between groups, it was important to base engagement on a common framework of questions. For example, probing questions can be used to explore participants' depth of knowledge and to reveal perceptions of risk. Data analysis depends on the type of data collected. Qualitative data can be analysed using, for example, thematic content analysis methodology (Krippendorff 2012), whereas statistical analysis can be used to analyse quantitative data.

What do participants value?

Stakeholder engagement provides insight into the perspectives, values, and knowledge held by different stakeholders. A key finding from Sam et al. (2017a) was that the different stakeholder communities prioritised values similarly. All stakeholder groups shared an acute awareness of the extent and impact of hydrocarbon pollution in the region, as well as the effect that pollution had on the health and livelihood of local communities (Figure 4).
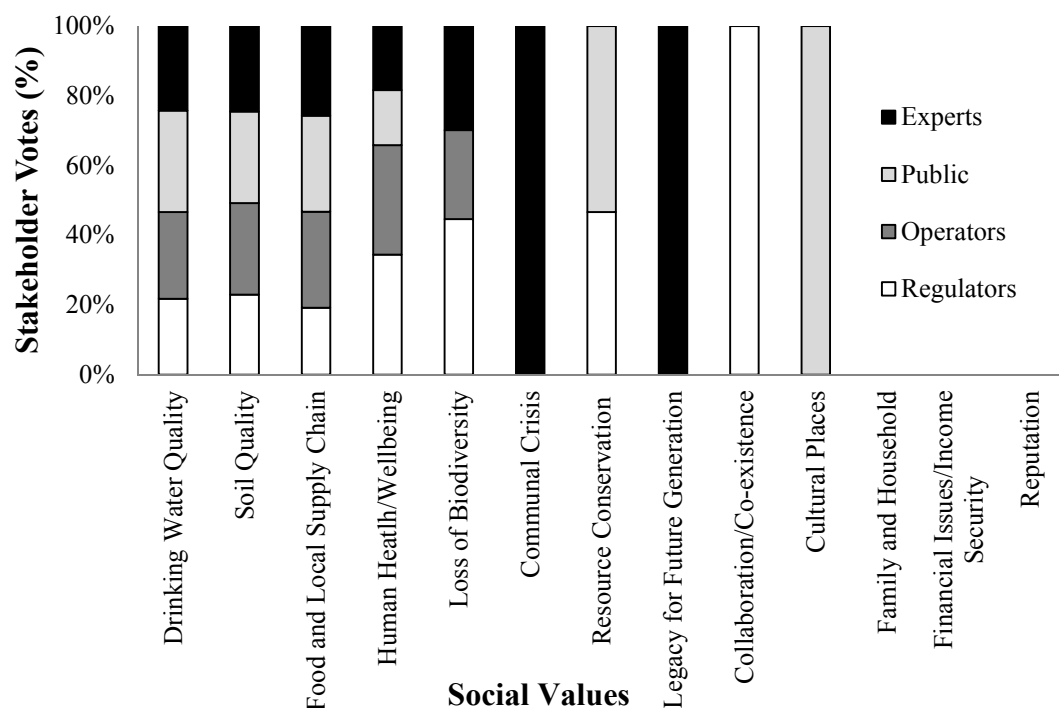

Figure 4. Stakeholder voting preferences as a percentage of total votes cast for each social value presented in the study. Values are ordered according to rank of importance from left to right. The first four social values: Drinking Water Quality, Soil Quality, Food and Local Supply Chain, and Human Health/Wellbeing, were similarly ranked for all stakeholder communities. (Source: Sam et al. 2017a)

Drinking water

Access to safe drinking water was the highest ranked value by all stakeholders. This result was not unexpected because the majority of the local population lacks access to safe drinking water (Etim et al. 2013). Community members commented that

contaminated drinking water presented a daily challenge, caused sickness, and was unavoidable. Community members unable to access clean drinking water are forced to buy bottled water, which is expensive and can sometimes be unsafe for consumption (Akpabio et al. 2015). Without access to safe drinking water a stakeholder's health might deteriorate, their ability to create economic wealth might diminish, and frustration and desperation might become established. If an individual begins to feel that control has been lost they might seek out the only recourse that they believe is available to them (e.g. conflict, sabotage), which might further exacerbate the problem that initiated the cycle (Fentiman and Zabbey 2015). Operators and regulators are aware of the water contamination issue, yet have been unable to remediate the problem. Although Nigeria possesses a national water policy (FGN 2004), it has not achieved its goals of providing equitable and safe water resources due to weak enforcement and implementation (Nwankwoala 2014). Weak enforcement and implementation are central tenets of environmental policy in Nigeria. Transferring a good policy to overcome a bad policy will not remedy this issue, but integration of contaminated land management policy that works in concert with a national water policy to meet societal need might begin to address the complexity of the problem.

Soil Quality

The economy of the Niger Delta region is reliant on agriculture. Soil impacted on by hydrocarbon contamination suffers from reduced quality (Okeke and Okpala 2014), which has translated into lower agricultural yields (Oyebamiji and Mba 2013). As with drinking water, there exists an intrinsic link between soil quality, agriculture, and livelihood. Operators acknowledge the hardship in the area and regulators are frustrated by their inability to help local communities restore their agricultural vibrancy, even

after remediation has occurred. It is clear that the contaminated land policy has failed to address the issue of contaminated land, whether due to inadequate generic soil standards, poor enforcement, a lack of funding, expertise, or institutional coherency (Ajayi and Ikporukpo 2005; Sam et al. 2017b). Findings suggest that policy should integrate a method to prioritise the treatment of those soils that are vital for agricultural production. Prioritisation targets sites that pose the greatest harm to local populations, and provides a mechanism for efficient allocation of limited resources (Sam et al. 2017c). Nigeria would also benefit from prompt responses to new spills. Mechanisms for reporting spills in the UK, USA and Canada could serve as exemplars, but these approaches are expensive. More economically relevant lessons could be gleaned from nearby countries, such as Cameroon (Forton et al. 2012). If Nigeria were to adopt the reporting protocols of wealthier nations, they could reduce costs by integrating a stakeholder approach such that citizens become the mechanism for reporting and identifying spills that inform prioritisation (e.g. see Sam et al. 2017c).

Food supply

The health of the local population has suffered due to the hydrocarbon pollution that has affected the local food chain (Nriagu et al. 2016). Community members know that oil contaminated food will make them ill, but they must continue to eat fish from contaminated waters and crops from contaminated lands as a means of survival. Similarly, farmers and fishers continue to practice their operations in the presence of hydrocarbon contamination because they have no viable alternatives to sustain themselves. Regulators comment that a lack of timely spill response prevents them from stopping the public's consumption of contaminated food. Time to response could be improved through local involvement to identify and report spill incidents, similar to

practices in the US (CERCLA 2002), but adoption of this practice will require broad public support and the development of trust, both of which can be generated through stakeholder engagement.

Opportunities for Stakeholder Engagement to support policy development

The basis by which stakeholders assessed values differed, despite a shared prioritisation of the issues. Community members expressed concerns about the effects of contamination based on the impacts that pollution had on individual health and livelihood. Regulators expressed their concerns relative to how a value might prevent their organisation from meeting a strategic goal. Stakeholder engagement conducted across stakeholder groups could be used to share and communicate these differences, which might lead to improvements in trust, understanding, comprehension, and shared decision making (Snape et al. 2014). Stakeholder engagement also revealed valuable information about stakeholder perceptions of risk, which can be as salient as the risk itself. Changing perceptions is an immense challenge and stakeholder engagement provides a means for Government to learn and comprehend the base of those perceptions, and to raise awareness of the issues. Public awareness, generated through education, communication, and understanding, enables the public to actively participate in the management of contaminated land. When public awareness about the impacts of hydrocarbon pollution in a region are either misunderstood, or ignored, feelings of frustration, desperation, inequality and loss of control can emerge potentially leading to an individual committing acts that perpetuate pollution, e.g. pipeline vandalism (Nwilo and Badejo 2005). In contrast, public awareness in countries such as the US and

UK is high, largely due to media coverage and engagement during public consultations. Stakeholder engagement is a relatively inexpensive option for Governments to raise awareness, and educate residents, land developers, and the public about the issues associated with hydrocarbon pollution and land contamination.

Resource availability is a focal challenge for Nigerian policy makers. In the event of a contamination event in the UK or US, communities are granted the resources necessary to relocate, remediate, and rebuild affected areas. Those in the Niger Delta region are not afforded this necessity (Fentiman and Zabbey 2017). As an example, BP was penalised approximately $20b in damages to local and Federal Governments shortly after the Deep-Water Horizon accident, whereas only $1b has been allocated to the clean-up of the Niger Delta, a contamination catastrophe that is decades in the making and whose impacts affect a far greater number of people. Herein lies the challenge for Nigeria and its intent to develop an improved contaminated land management policy through policy transfer. When the conditions for which a policy was developed differ from the conditions for which it will be applied, it is not reasonable to expect the same degree of efficacy and success without some effort to contextualise.

Once a policy response has been adopted, stakeholder engagement activities must continue to ensure final delivery of that policy. For example, following the United Nations Environment Programme report on hydrocarbon pollution in 2011, the Nigerian government launched the Hydrocarbon Pollution Remediation Project (HYPREP) to implement the recommendations laid out in the report. HYPREP's responsibility was to undertake the clean-up and remediation of contaminated sites in the region. Such an activity required engagement and coordination; however, public awareness about the deliverables of the project remained low. This lack of engagement

has led to misunderstandings, whereby some stakeholders believe HYPREP will provide monetary compensation, not clean-up efforts. These types of misunderstanding can lead to mistrust and violence, yet can be mitigated through a structured stakeholder engagement process.

Conclusion

The issues of contaminated land in the Niger Delta are complex and the unintended consequences of contamination are often unimaginable. Local populations that are reliant on the land for agriculture or waterways for fishing are aware of the dangers that contamination presents, yet are unable to seek out alternative means to provide for themselves and their families. This can lead to frustration, and frustration can manifest in actions that lead to further contamination (e.g. sabotage). For policy to be effective, it must meet the needs of the population that it serves.

In Nigeria's quest to improve contaminated land management policies, it has chosen to adopt policies from the UK and the US, where acute concern about the impacts of contaminated land no longer remains an issue. It is unreasonable to expect wholesale transfer of contaminated land policy to be effective. Based on the findings described in the case study, Nigeria would benefit from a form of contaminated land management triage that integrates elements of reporting, avoidance, remediation, and education in a framework that lends itself to the cultural uniqueness of the region. Delivery of such a policy will require a deeper understanding of the socio-cultural priorities and needs of affected stakeholders, and this can be delivered by a commitment to effective stakeholder engagement.

In this chapter, we have shown that stakeholder engagement is an established methodology that has been practised extensively by business to develop relationships based on the trust and transparency that allows businesses the licence to operate. More than a means to inform strategic development, stakeholder engagement has become a means for improving company valuations and is the norm for generating legitimacy with governments and communities. Governments too can benefit from stakeholder engagement, particularly in the development of policy where the motivation to balance budgets, build relationships, and generate legitimacy does not fundamentally differ from that of the firm. Although stakeholder engagement is not a panacea, we believe it can be an effective tool of the Nigerian Government to support policy development informed by societal needs in order to break the cycle of contamination that currently plagues the Niger Delta.

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