

Sustainability Performance Management in Nigerian Oil and Gas Companies – A Case Study of Chevron Nigeria Limited

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Abstract—This study investigates the Sustainability Performance Management (SPM) in Nigerian Oil and Gas companies using Chevron Nigeria Limited (CNL) as a case study. Semi-structured interviews were conducted with nine senior managers across Chevron Nigeria Limited from the Supply Chain: Procurement; Policy, Government and Public Affairs; Compliance and Human Resource Units and were selected based on experience, knowledge and years of service. The results were reached using a qualitative data analysis method known as the framework analysis to provide in-depth explanations for the Sustainability Performance Indicators (SPIs) and Sustainability Performance Management Practises (SPMPs) using a theoretical framework adapted from existing literature on Organisational Sustainability Performance Management. It was found that CNL map out and identify specific SPIs and partake in SPMPs that impact all three aspects of sustainability (Economic, Environment and Social) positively; However, some threats to sustainability performance from the community and government were identified. This study suggests that continuous improvement and supply chain traceability is key to maintaining corporate sustainability in CNL which enhances corporate longevity and competitive advantage.

Index Terms— Sustainability Performance Management, Sustainability Performance Indicators, Sustainability Performance Management Practices, Continuous Improvement, Traceability, Competitive Advantage.

1. Introduction

A. Research Background

Sustainability performance management is a newly emerging term which addresses the social, environmental and economic (performance) aspects of corporate management in general and of corporate sustainability management. (Schaltegger & Wagner, 2006: p. 1). It implies that socially and environmentally responsible materials and practices are not only good for the people and the planet but are also good for building positive brand awareness, supply chain risk mitigation and enhancing long-term profitability. Sustainability is an important approach to managing supply chains and has received little research attention. (Schaltegger & Burritt, 2014) with lesser research materials available within the Nigerian context compared to developed countries which is the main motivation for this study. Sustainability performance is mostly measured using indicators to evaluate the economic, environmental and social aspects (Keeble *et al*, 2003) and its effective management can help in maintaining a good business strategy (Figge *et al*, 2002) which is important for sustainable development and in the long term can prove to be a major route to overall development and stability in developing countries. Various literature as highlighted, emphasize the need for continuous improvement to yield high effectiveness and efficiency in supply chains and to boost overall organisational performance; which Sustainability Performance Management (SPM) enhances. This makes SPM highly significant to organisations.

B. Research Aim

The aim of the research is to investigate how sustainability performance is managed and monitored in Nigerian Oil and Gas companies using Chevron Nigeria Limited as a case study.

C. Research Rationale

This research is important as it investigates the sustainability performance in Chevron Nigeria Limited (CNL) and how it is managed as highlighted. The effect of proper management is sustainable development which sees the needs of today achieved without compromising the ability/capacity for future needs to be met (Brundtland Commission, 1987). This research will also be useful to various sectors in Nigeria other than the Oil & Gas industry which CNL belong, who are looking to achieve competitive advantage and uphold good business strategies with the help of effective sustainability performance management.

D. Research Problem Statement

According to George *et al*, (2016). The social and environmental effects of the oil and gas industry have intense implications. Therefore, the need for sustainable practises which must be managed and monitored. Embedding sustainability into companies is important in addressing these problems and involves the integration of sustainability into performance management systems.

The issue addressed in this study is the poor attention which Nigeria and many other developing countries have paid to

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sustainability over the years. Egwuonwu (2014) argued that the federal government of Nigeria so far have not put enough projects and initiatives in place to help sustainability and even corporate social responsibility (CSR) to thrive.

Because sustainability performance needs to improve in the Nigerian context, this study looks to achieve its effective management within the Oil & Gas sector, which is the major source of revenue to Nigeria (Abraham, 2016). Streamlining, determining and conveying unpredictable and muddled data, and the capacity to integrate the three pillars of sustainability to put the company in line with its strategies, goals and objectives remains difficult in developing countries. Also, the integration of sustainability and supply chain management provides a real way to evaluate corporate and societal development. This ranges from stakeholder integration and the implementation of standards in procurement and the development of appropriate performance measures.

Among future research needs, supply chain sustainability management in developing countries stands out due to necessity and is still hardly addressed. (Seuring & Gold, 2013). Therefore, to understand the sustainability performance management of Chevron Nigeria Limited, the author reviews existing knowledge, collects data, critically analyses and interprets data, discusses and puts out recommendations in other to achieve the objectives of this study.

E. Research Objectives

- 1) To investigate the advantages of sustainability to Nigerian Oil & Gas companies.
- 2) To identify the sustainability performance management practises performed by Chevron Nigeria.
- 3) To identify any key sustainability performance management practises not performed by the organisation.
- 4) To investigate why these practises are not being performed.
- 5) To recommend ways to improve sustainability performance and how it would be further managed and monitored.

F. Research Questions

- 1) Why do sustainable practises need to be performed by Oil & Gas companies in Nigeria?
- 2) How is Sustainability Performance managed in Chevron Nigeria Limited?

Sub-questions for #2:

- 1) What are the sustainability performance management practises performed by Chevron Nigeria?
- 2) Are there any key sustainability performance management practises not performed by Chevron Nigeria?
- 3) What factors affect the sustainability performance of Chevron Nigeria negatively?
- 4) How can sustainability performance in Chevron Nigeria be improved?
- 5) How would the recommended practises be managed and monitored for the long term?

G. Scope of the Study

The research studies present sustainability performance management techniques and recommend ways for improvement in Chevron Nigeria Limited. The study would focus on the identification and evaluation or analysis of indicators and NOT measuring or ranking sustainability performance indicators, due to unavailability of data and materials and time constraints.

H. Research Methodology

The method for the research is the Qualitative method. Data collection was by Semi-Structured interviews of members of staff of Chevron Nigeria Limited (face to face, skype, emails and phone calls). The interviews were booked through referrals. The interviewees are mostly managers in the supply chain, sustainability unit, administration/human resources, deep-water and delta operations. Data collected from interviewing the members of staff would help in analysing and benchmarking of the case findings

I. Limiting and Delimiting factors

As highlighted in *Section G*, the short time frame of 3 months for this project has limited this study to focusing on the managerial aspects of sustainability performance and not measuring and ranking using sustainability performance indicators.

Furthermore, most of the interviewees are in Nigeria and the author spent a major part of the 3 months for the project in the UK and so only few face-to-face interviews could be conducted, but with a semi-structured approach to interview questions, data was collected via skype and phone calls.

2. Literature Review

A. Introduction

According to Webster & Watson (2002), literature review is a structured evaluation of past literature within a given area of study to set the tone for new or more academic research.

Therefore, the aim of this chapter is to evaluate existing literature in sustainability performance management and how well the studies have impacted sustainability.

B. Review of Theory

Corporate sustainability is supported by the corporate accountability theory and the stakeholder theory (Wilson, 2003). According to Garvere & Johansson (2010), the stakeholder theory suggests that value creation to stakeholders is a way to attain long term sustainability. A stakeholder is one that is affected by organisational operations whether directly or indirectly. In other words, aligning the interests, requirements, rights and needs of customers, partners, communities, employees and suppliers effectively yields sustainable development. Corporate accountability on the other hand is the ability of the stakeholders to hold organizations responsible for their operations. It has over the years brought a need for transparency in business (Swift, 2001). In a bit to demonstrate transparency, organizations publish financial,

Research & Development and most notably Sustainability

Reports on annual or bi-annual basis. Gomes *et al*, (2014) suggests that sustainable management in supply chains, continuous environmental improvement, continuous health and safety improvement, corporate accountability and transparency with stakeholders and community development were related to corporate performance. It is therefore significant that the factor transparency with stakeholders and community engagement and development had the highest effects to business performance, revealing immense contributions to corporate performance.

C. Sustainability Performance Management (SPM)

Sustainability Performance management (SPM) entails a sound management system which integrates the environmental and social administration with the competitive strategy and managerial tactics of the business (Schaltegger & Wagner, 2006; Figge *et al*, 2002; PerezLopez *et al*, 2015) which means that a good approach to SPM is vital for achieving corporate sustainability.

In breaking down performance management which is a strategic approach used to monitor employee and general operations in other to achieve organisational goals and targets (Kloot & Martin, 2000), it is important to highlight that sustainability performance management (SPM) plays a major role.

Gadenne *et al* (2012a) studied the relationship between SPM and organizational performance. The study was conducted following the identification of key SPM goal factors which include Environmental, Customer Acquisition and Retention (CAR), New Product Innovation (NPI),

Information Systems Capability (ISC), Operational Profitability (OPP), Organizational Profitability (ORP), Employee Welfare (EW) and Community Engagement (CE). These factors were then regrouped to Customer Satisfaction Performance (CSP), Employee Satisfaction Performance (ESP), Sales from New Products Performance (SNPP), Profit from Operations Performance (PROP) and Environmental Budget Allocation Performance (EBAP). The case findings of the study showed that the Environmental, NPI, CAR and ISC goals were positively associated with SNPP. Environmental, ISC, EW and CE were positively associated with

EBAP. CAR, EW, CE and ORP were notably associated positively with CSP. Lastly, the ISC and EW and CE goals were positively related to ESP. The study shows that one SPMP can envelope one or more indicators and vice versa.

Gadenne *et al* (2012b) investigated the correlation between organisations' sustainability performance management practices and sustainability performance and suggests that the increment of a company's focus on its individual sustainability performance management practices (SPMPs) is positively related to its better performance under one or more Sustainability Performance Indicators (SPIs). The research approach was a qualitative one with data collection by from large to medium scale companies using questionnaires and personal interviews with executives from the companies. The study also matched various SPIs with related SPMPs.

According to Schaltegger & Wagner (2006), managing

sustainability performance entails an effective framework that primarily links the environmental and social aspects with the corporate and competitive strategy. Secondly, the framework must integrate environmental and social data with corporate information and sustainability reporting. The study addresses the association between the Sustainability Balanced Scorecard, sustainability accounting and sustainability reporting which are important for strategic information management, measurement and communication respectively.

A research paper by Schaltegger & Burritt (2014) developed a practical method to help managers in assessing sustainable supply chain performance management and measurement. The study recommends continuous improvement in supply chains played a vital role in sustainability and points out areas for further research in SPM and measurement.

Adams & Frost (2008) proposed a process for developing key Sustainability Performance Indicators (SPIs) for determining Sustainability Performance and how the SPIs are used in decision-making, preparation or scheduling and performance management. To achieve this, interviews were conducted with employees from Australian and British organizations. The results specified that the organizations are integrating environmental indicators and social indicators, into strategic planning, performance measurement and decision-making including project and supply chain risk management. Nevertheless, the sustainability issues on which the research data focuses on and the management operations in which they affect vary substantially. Therefore, this has suggestions for the development of practises, intended procedures and legislation. Data from the study also reveal that the organizations as at 2008 were not integrating economic indicators into their strategic planning and decision-making procedures as they let the economic aspect stand on its own which is not necessarily the case for many organisations today.

Additionally, business managers and employees over the years have understood their role in the contribution to sustainability performance and several initiatives have and will help in its engagement. Sustainability is important at every part of a supply chain beginning with research and development, procurement and planning through operations up until distribution (Lozano, 2012). The complexity and broadness of sustainability led to the proposition of a framework, the Corporate Integration of Voluntary Initiatives for Sustainability by Lozano (2012). The purpose was to help company managers to better understand how to continually improve corporate sustainability performance and to adopt a holistic tactic that embeds sustainability into company operations with little efforts and effective results.

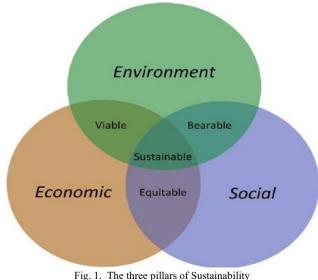
Labuschagne *et al* (2005) carried out a study to evaluate sustainability performance in industries. The study agrees with Figge *et al* (2002) and Basu & Kumar (2004) regarding the integration of the economic, social and environmental aspects into the operational practises of an organization highlighting the need for multinational corporations competing worldwide to increasingly commit and show transparency regarding total sustainability performances of initiatives. Furthermore, the paper added that the indicator frameworks available to evaluate corporate sustainability did not effectively address all aspects. Also, the social aspect was notably left out in developing countries (a South African case) which reflected poor Employee Welfare (EW) and Community Engagement (CE).

Furthermore, an Innovation and Technology Driven Sustainability Performance Management (ITSPM) framework was developed by Basu & Kumar (2004). Developing standards for evaluating SPIs, employee training and general stakeholder awareness are vital for the control and effective implementation of sustainable development (Basu & Kumar, 2004). Also, companies should make SPM an important part of corporate planning and strategic management to achieve fully functioning market presence, competitive advantage and the said sustainable development (Krechovska & Prochazkova, 2014).

SPIs are gaining wide recognition for being a powerful tool used in policy making and communication for providing information on business performance. In mapping out trends, sustainability performance indicators streamline, quantify, examine and convey the complex information. The initiatives and practises for sustainable development exist on SPIs (Singh *et al*, 2012).

D. The Three Pillars of Sustainability

As mentioned in 1.4 above, sustainability entails three aspects; the Economic, Environment and Social aspects. The effective implementation and management of these three arms yields sustainable development which is important for organizations globally.



Source: von Keyserlingk *et al* (2013)

1) Economic Sustainability

Economic Sustainability at corporate level is the ability for an organization to use value adding assets (whether tangible or intangible) efficiently to allow it to achieve continuous profitability over time (Anand & Sen, 2000). It takes a huge step in putting value creation into action which can also be actualised by recognizing interdependence. With most corporate organizations setting out to be profit oriented; with major goals to provide resources, goods or services to customers, it is important that all companies pay attention to being sustainable economically; although neglecting the social and environmental aspects may be a hinderance to longevity (Doane & MacGillivray, 2001). Economic Sustainability is a phenomenon which cannot be fully understood without examining the micro and macro environments in which companies operate (Doane & MacGillivray, 2001).

According to Gadenne *et al* (2012a), assessing economic sustainability is done by few indicators; New Product Innovation (NPI), Customer Acquisition and Retention (CAR), Information Systems Capacity (ISC), Operational and Organizational Profitability (OPP & ORP).

New Product Innovation and Development has been used by companies to stay relevant in very competitive markets over the years. It involves the development of entirely new products or improvements of an old one which was redeveloped (Bhuiyan, 2011). NPI enhances organizational growth, profitability and plays a key role in overall business planning as it brings about employment, technological advancement and improved living standards. Bhuiyan (2011) suggests that NPI and development is among the riskiest projects for companies because companies have so far continued to develop products that have failed in specification or market competition. It is therefore important that in gaining economic sustainability, organizations should identify and exploit critical success factors for the project phases.

Thomas (2001) argues that Customer Acquisition and Customer Retention should be merged due to the financial implications for businesses who do not retain their customers. Following sales promotions, advertising and marketing and various pricing strategies which help to attract customers; retention procedures should also be in place to build loyalty and long-term brand reputation. Customer Relationship Management (CRM) is widely regarded as the ultimate customer maintenance and retention procedure which is effective for profit maximization (Thomas, 2001; Becker *et al*, 2009).

ISC is the ability or how well a company uses software systems for simplification and standardization of data which enhances profitability and competitive advantage. The utilization of Enterprise Resource Planning (ERP) systems, Electronic Data Interchange (EDI) systems, Omni-channels, Big data analytics and internet of things (IoT) helps organizations attain an effective flow of supply chains. It is also vital in managing business partnerships with contractors or suppliers (Karkkainen *et al*, 2007). Gadenne *et al* (2012a) suggests that ISC also increases employee satisfaction. The extent or applicability in developing countries is still unknown.

As highlighted by Gadenne *et al* (2012a), OPP and ORP are the categories of profitability in which a business faces. OPP is the profit generated by business operations without considering or deducting taxes or interests. On the other hand, ORP is the final profit a business possesses after operations (Selladurai, 2002). Clearly, a good balance in operations productivity and performance would yield good profitability for the business. Selladurai (2002) argues that Total Quality Management and Business Process Re-engineering (BPR) would not enhance organizational profitability and therefore proposed a profitability, productivity and performance (PPP) model which emphasized on quality, stakeholders, paying customers, business processes and leadership; which are mostly in agreement with the ISO 9001:2008 and ISO 9001:2015 Quality Management Systems (QMS) principles by the International Organization for Standardization (ISO). The ISO 9001 Quality Management Systems focuses on the following principles; Customer, Community Engagement (CE), Process and System tactic, Leadership skills and orientation, Continuous improvement, long-term mutually beneficial supplier relationships and decision making based upon facts.

From the above literature and as mentioned in Section C (Lozano, 2012), it is significant to note that in achieving economic sustainability at corporate level, the research and development, procurement, supply chain, logistics, operations, production and marketing departments of an organization must integrate appropriately.

2) Environmental Sustainability

Environmental sustainability is the condition whereby the demands placed on the environment are achieved without jeopardizing the quality of life in the planet presently and in the future (Saysel *et al*, 2002). Its goal is to protect the environment by decreasing the negative impact caused by corporate operations.

According to Dangelico & Pujari (2010), Green product innovation is one factor that plays a key role in attaining business growth, environmental sustainability and improved quality of life. In understanding green product innovation due to the interaction between innovation and sustainability has well become highly significant for theory and practise. Dangelico & Pujari (2010) suggest three crucial environmental sustainability indicators which are energy minimization, materials reduction and pollution inhibition. Assessing the indicators revealed low to medium motivations by firms with regards to developing and marketing green products as well as meeting environmental policies and therefore emphasized the need for environmental sustainability management.

Environmental sustainability is the maintenance or enhancement of the integrity of the planets life supporting systems (Moldan *et al*, 2012). Identifying indicators, setting targets and evaluating the degree of environmental sustainability is of utmost significance (Moldan *et al*, 2012; Keeble *et al*, 2003).

Furthermore, Sustainable supply management focuses on environmental practises. Overall environmental performance and human resource practises bring about improvements in quality performance which then enhances cost performance as well although the advantages of improved performance from environmental sustainability programmes may be difficult to observe. (Pullman *et al*, 2009). This implies that environmental sustainability can be a precursor for economic growth.

On the other hand, Goni *et al* (2015) argues that the number of research in sustainability is growing with the relevance of sustainability suggesting that water research and need for conservation and general pollution control and prevention and key indicators which organizations consider. This agrees with Dangelico & Pujari (2010) about pollution prevention being a key factor to environmental sustainability with practises like waste management, recycling and reuse and producing using biodegradable materials.

Lastly, The ISO 14001 standard of requirements for Environmental Management System (EMS) helps companies improve environmental performance through conservation and waste reduction as well as gaining competitive advantage and trust of stakeholders and customers. It also encourages compliance to environmental performance for suppliers by system integration (Source: ISO).

3) Social Sustainability

Social sustainability is managing the positive and negative impacts in which organizations have on the social well-being of people. It has so far been the most disregarded pillar of sustainability by businesses even though its widely recognized as a significant aspect (Dempsey et al, 2009) and so the pressure to adhere to the social impacts throughout supply chain continues to increase (Hutchins & Sutherland, 2008). It is an evolving discipline of urban planning and practise. (Dempsey et al, 2009; Woodcraft, 2012). Many studies of social sustainability have focused on defining and conceptualizing interpretations which could be philosophical and political ideas of human rights, general equality, social wellbeing and justice and empowerment; thus, better attention should be given to the operational aspects of social sustainability and in-depth understanding to facilitate decision making. (Dempsey et al, 2009; Woodcraft, 2012).

Ghahramanpouri *et al* (2013) reviewed various studies and came up with social sustainability indicators which agreed with Dempsey *et al* (2009). The social indicators include physical and non-physical. The physical factors are refinement, good housing, local environmental quality, sustainable urban design and accessibility. The non-physical factors are education & training, participation, good health, improved quality of life and social wellbeing, social inclusion, social capital, safety, community engagement (CE), turnover, social order, social cohesion by among various groups, cultural traditions and active local community organisations.

E. Corporate Social Responsibility (CSR)

Corporate social responsibility is business system which envelopes the ethical behaviour of an organization towards its stakeholders which goes beyond policy compliance but also the practise of adding substantial benefits (McWilliams *et al*, 2006). It integrates the ethical system with sustainable management practises (Porter, 2008). From various literature, organizations have different approaches to CSR which are; for supply chain risk management, for corporate philanthropy and as a means of value creation (Porter, 2008; Lindgreen & Swaen, 2010). It impacts strategy and overall business processes by promoting innovation, supporting business partnerships and enabling community engagement.

McWillams *et al* (2006) explained various perceptions on CSR which were used to develop a framework for considering the strategies of CSR. The perspectives were regarding stakeholder expectations, competitive advantage, economic grounds, philosophical grounds and global corporate citizenship. The study also suggested that the governing laws and stakeholder demand for CSR is different in various countries and industries.

Furthermore, Baron (2001) argues that utilising CSR to attract and retain socially responsible consumers is Strategic Corporate Social Responsibility which implies that the organization provides social benefits with their marketing or business strategy. This agrees with the resource based theory of McWillams et al (2002), which adds that CSR strategies being supported politically would help organizations achieve sustainable competitive advantage due to value generation.

From an organisational theory perspective, Fedderson & Gilligan (2001) suggests that campaigns and Non-Governmental Organizations are significant in attaining a decrease in information asymmetry with regards to CSR from the customers point of view. Also, McWilliams & Siegel (2002) claims that the near perfect level of CSR can be derived by cost benefit analysis with the supply and demand perspective put forward.

The issue of strategic leadership which also supports the organisational and resource-based theories with regards to CSR was considered by Waldman et al (2004) which argues that many aspects of chairmanship in leadership can affect the willingness of the organization in CSR engagement. Hence, the more intellectually sound the chairman or board is, the higher the chance of strategic CSR implementation.

Surprisingly, Sen & Bhattacharya (2001) argues that CSR initiatives in some cases can reduce customers desire to purchase a company's products or services. The study evaluated the CSR initiatives of companies in balancing customer purchasing behaviour. However, the applicability of this study wasn't well defined. Becker-Olsen et al (2006) took this further suggesting that low fit CSR initiatives also negatively impacted customer perceptions but the high fit proactive initiatives had positive impacts on customer perception. In addition, customers view image fit and functional fit in different ways (Bigne et al, 2012).

According to the ISO, the ISO 26000 standard offers direction on how organizations can function in a socially responsible manner. CSR is increasingly used to assess overall corporate performance. Corporate performance demands longterm excellence and stakeholder orientation and CSR is always a prerequisite for sustainability (Zink, 2005).

F. Sustainability Management in Developing Countries

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al (2015) to carry out a study with 18 developing countries from Africa, Asia and South America on life cycle sustainability assessment. The study proposed a framework to develop life cycle sustainability management through capacity building and highlighted the need for continuous improvement. Also, it was suggested that capacity building has continued to enhance performance for some of the countries but changes in existing practises in other to enhance corporate sustainability performance has so far been insufficient.

According to Kemmler & Spreng (2007), many sustainability problems are closely linked to energy usage and therefore energy indicators can be used to assess sustainability performance in developing countries. The energy system framework by Kemmler & Spreng (2007) was put forward to be used to make lead SPIs. The framework also focused on poverty measurement while integrating the social pillar of sustainability with the economic and environmental.

Zhen & Routray (2003) argue that the development and analysis of SPIs in developing countries need to meet certain criteria such as; Availability of data for indicator illustration, system stress sensitivity, predictability, identification of threshold standards and strategies, identified responses to disturbance, integration and collaboration; in other to bridge the gap in sustainability performance between developed and developing countries. The study also points out that the identification of SPIs for each pillar of sustainability should be prioritized regarding spatial and time-based properties.

Furthermore, various studies were examined and interpreted by Nkhata et al (2012) which led to the conclusion that collaborative, equal and market- oriented benefit sharing arrangements in governance were essential for sustainability in developing countries.

G. Sustainability in the Oil & Gas Industry

The pressure on organisations to frame up guidelines and strategies for sustainability asset performance has continued to increase in recent years. Asset integrity management problems within the oil & gas context seems unsustainable and so must be integrated with sustainability performance (Ratnayake & Liyanage, 2009). Ratnayake & Liyanage (2009) put forward an approach for the integration of the asset integrity management and sustainability performance. The study provided in-depth knowledge of performance information for operations and decision making and the introduction of SPMPs in an organisation.

According to Sadaghiani et al (2015), Operations in the Oil and Gas industry have adverse impacts on the environment and society which George et al (2016) agrees with as stated above.

As mentioned above, developing countries have paid little	an
ention to sustainability in general. This prompted Valdivia et	so
Table	e 1

Pillar of	Performance Indicators
Sustainability	
Environmental	Green product development, materials reduction, energy conservation, pollution prevention, waste management, water conservation.
	environmental policy compliance.
Economic	New Product Innovation (NPI), Customer Acquisition and Retention, Information Systems Capacity, Operational
	Profitability, Organizational Profitability.
Social	Empowerment, social wellbeing, improved quality of life, social cohesion, active participation, education and training, community
	engagement.

Ghahrampouri et al, 2013)

Sadaghiani *et al* (2015) suggests that sustainable supply chain management in the Oil & Gas industry context is still lacking regarding the knowledge of the issues that enable or inhibits its implementation. A study was carried out to address the problem by evaluating the importance of the external factors within the Oil & Gas operating environment that have significant effects on its sustainable supply chain management strategies. The study identified six factors; economic stability, political stability, stakeholder pressure, corporate rivalry, energy evolution and legislation; and their importance levels were measured using the multiple criteria decision-making method called the Best Worst Method. Therefore, strategies can be developed by Oil & Gas companies by employing their value adding resources and capabilities to address these factors and boost sustainable supply chain performance.

Oil and gas exploration and development are very high technology-based activities and the adoption of sustainable technologies in the oil and gas industry help to decrease adverse environmental effects and enhance social wellbeing while helping organizations remain profitable. Technological development sustainability in oil and gas can be achieved effectively provided offshore seismic operations are fully considered (Khan & Islam, 2008).

In a bid to enhance oil recovery, Theeyattuparampil *et al* (2013) proposed that carbon capture and storage is very vital for oil sustainability. Oil recovery brings about high economic value. As high carbon emissions continue to damage the ecosystem, capturing and storing is a good mitigation procedure which helps to achieve environmental sustainability. Although Theeyattuparampil *et al* (2013) argue that carbon capture and storage is very important, the absence of national policies for companies and limited human capital resources have so far made carbon capture and storage unachievable.

Furthermore, Miidom *et al* (2016) investigated how operations management practises helped to attain corporate sustainability in Oil & Gas companies. It was discovered that the management practises significantly affected corporate sustainability and so effective aggregate planning for the pillars of sustainability and the implementation of cost and waste reduction strategies were recommended. The study also highlighted that the findings are industry specific and overall corporate competence to maximize performance could be achieved by human capital development to ensure corporate sustainability.

H. Theoretical Framework

In this section, the Author proposes a framework that would help organisations achieve proper Sustainability Performance Management (SPM). Fig. 2 below shows the SPM framework adapted from Gadenne *et al* (2012a). Following the review of literature, the author adapts concepts and ideas from Gadenne *et al* (2012a) due to similarity regarding scope and research direction. Other closely related frameworks by Schaltegger & Burritt (2014) and Schaltegger & Wagner (2006) haven't been employed because as highlighted above, this paper doesn't measure or rank indicators.



Fig. 2. Proposed steps for Sustainability Performance Management. Adapted from Gadenne et al (2012a).

1) Step 1

Although it has been clearly stated that this simple framework can be used by all organizations for SPM, it is vital to note that the SPIs are company specific which means that various companies might not use to same indicators to manage sustainability performance. The first step is when affected actors or manager identify the SPIs that are concerned with company operations.

2) Step 2

This step is about simplifying the SPIs identified in step 1. This reduces complexity by rearranging SPIs into groups so that they are easily understood.

3) Step 3

The implementation of Sustainability Performance Management Practises (SPMPs) occurs in this step. The practises are strategic procedures in which the organization puts in place to organise and help the SPIs and management goals run smoothly.

4) Step 4

This final step is when the SPMPs are reviewed and monitored from time to time. It is important due to changes which could occur within the internal or external environment of the organisation and for cases when the SPMPs are not as effective as they should have been. Reviewing and monitoring helps managers to fix such arising problems.

I. Conclusion

It is evident from literature that stakeholder expectation, political and economic stability, legislation, social wellbeing for community and employees and environmental policies all contribute significantly to corporate sustainability which must be managed by identifying SPIs and employing SPMPs. The author indicates that this literature review has given insights on the three pillars of sustainability, SPM in developing countries and in Oil & Gas companies which are specific to the research case study, identifying SPIs and implementing SPMPs to add value to organisations which led to a theoretical framework adapted from Gadenne *et al* (2012a). The review of literature has therefore provided theoretical support for the investigation of the SPM in Chevron Nigeria Limited.

3. Research Methodology

A. Introduction

Research methodology is the organised analysis of methods in a theoretical manner used in acquiring and interpreting data retrieved for research purposes (Kothari, 2004). This chapter explains various research approaches and methods while highlighting their advantages and disadvantages and not leaving out detailed justification for the choice of methodology used by the author.

B. Research Approaches

From review of literature, research could be either Quantitative or Qualitative (Welman *et al*, 2005; Kumar, 2014). These approaches have individual pros and cons and are both very effective means to conduct research but various factors including scope and objective determine the choice of research approach.

1) Quantitative Approach

This entails the collection of data in a measurable or quantifiable form and usually subjected to rigorous analysis in a formal manner. The quantitative approach can be sub-divided into experimental, inferential and simulation research approaches (Kothari, 2004).

The experimental approach sees variables deployed to ascertain the effects they pose on the environment. It is a scientific method which sees the variables demonstrating theories or testing hypothesis. The inferential approach from its name infers the characteristics of population. Here, a sample is studied to reach conclusions regarding relationships of the given population.

The simulation approach is the generation of an environment in which relevant data and information can be gotten. It permits the observation of the active behaviour of a wellcontrolled procedure and represents this procedure over time. Furthermore, this approach also helps in constructing models to enhance understanding of forthcoming activities. (Kothari, 2004).

Pros:

- 1) It is easy to measure and analyse collected data using this method.
- 2) The author shows objectivity about the case findings using the quantitative approach.
- 3) Hypothesis testing is done easily because of the collected measurable data.
- Cons:
 - 1) Requires a large sample of population to improve accuracy in generated results.
 - 2) Does not support individual opinion regarding research questions.
 - 3) Can ignore the context or background of the study sometimes.
- 2) Qualitative Approach

This is more of a subjective evaluation of human opinions and behaviour and not variables which act on it. (Kothari, 2004). It is a function of the participants perceptions and impressions in a bid to acquire in-depth knowledge. It examines the What, Where, When, Why and How of the research. It is difficult to measure qualitative data mathematically or statistically (Neumar, 2013).

Pros:

- *1)* It provides knowledge and understanding as for unquantifiable data or information.
- 2) It is effective for generating hypothesis.
- 3) It helps the researcher practise originality.
- *4)* More complex attitudes and behaviours of humans are examined.

Cons:

- 1) Validity or transparency in data collection could be an issue.
- 2) Data analysis is mostly subjective.
- 3) A lot of information could be retrieved making it time consuming and difficult to analyse.

3) Qualitative Approach in Sustainability Performance Management (SPM)

Qualitative research is suitable for this study because SPM is a very wide and evolving discipline which many managers, academics and authors view differently. From the differences in SPIs to corporate policies and stakeholder expectations, different individual perceptions must be considered, hence the need to deploy the quantitative approach.

As highlighted by Neumar (2013), not all data can be measured or quantified, and the scope of this study outlines that SPMPs would not be measured or ranked, making the deployment of the qualitative approach inevitable. SPM in organisations which must be continuous, fits in well with the qualitative approach in the sense that; Kumar (2014) argues that change is constant and updated views and perceptions from people directly involved with an organisation, place or group is important. The author considered this factor in deciding the research method to employ.

Furthermore, from the review of literature in 2.0, closely related papers have used the qualitative approach of research suggesting that the approach of research chosen depends majorly on the scope of the study as observed from Keeble *et al* (2003), Gadenne *et al* (2012a), Schaltegger & Burritt (2014), Schaltegger & Wagner (2006), Perez-Lopez *et al* (2015) and

Figge *et al* (2002). The review of literature also shows that SPM has not been active at corporate level for more than three decades which means it is a new phenomenon in organisations in developing countries and so qualitative data collection from the managerial actors is the most effective research approach.

Lastly, keeping in mind that the research philosophy that is selected for any study is vital because it guides the research process from start to finish and has a significant effect on the results. Hence, if the wrong approach is deployed, the results of the research would be affected negatively and vice versa. The author was able to acquire detailed knowledge of qualitative data collection which led to better interpretation.

C. Research Design

The research design is the approach in which a researcher chooses to integrate all measures of research to address the stated problem and achieve the aim and objectives. They are specific to research approaches. The research designs for qualitative approach are Ethnography, Action Research and Case Study (Gill & Johnson, 2010).

1) Ethnography

According to Gill & Johnson (2010), this is the scientific description of the culture and habits of a given community or organisation. It may entail repeated observations for the researcher to discover traits and so is not feasible for this study due to its time-consuming nature.

2) Action Research

This is achieved by a researcher working with a practitioner

or actor and provides an authorizing experience for the practitioner. This research design is always applicable to the participants due to direct focus and always ends with action planning thereby building the practitioner and specialised philosophies (Gill & Johnson, 2010; Putman & Rock, 2018).

However, this research design is not suitable for this study as the researcher is not a direct practitioner or actor in Chevron Nigeria.

3) Case Study

A case study refers to the exploration of a group, organisation, team or even individual and provide detailed contextual analysis. it is about the in-depth study and understanding of the entity. This research design provides flexibility as quantitative and qualitative data can be retrieved. Case studies enables the researcher to examine the concept under investigation from various points of view but on one entity (Gill & Johnson, 2010). Because case study is an explanatory research design and this study is about Sustainability Performance which must be about an existing situation or organisation, the Author therefore finds this suitable for this study.

D. Research Instrument

Having highlighted that the author used the Qualitative approach, it is noteworthy that the research instrument used has a qualitative orientation. A research instrument is a tool used to obtain data and information for research purposes (Kothari, 2004; Neumar, 2013). Research instruments for the Qualitative approach are questionnaires, interviews, focus group and observation.

1) Questionnaire

According to Kumar (2014), a questionnaire is a group of questions mostly with choice of answers shared to participants to retrieve data for a survey or study. It usually involves a large sample size for analysis to yield best results and is always a good research instrument as far as the questions are well drafted. Questionnaires can also be highly practical with responses in timely fashion. It is evident that the use of questionnaires is highly advantageous.

However, the author suggests that the questionnaire is not the most suitable instrument for the study because SPM being a newly emerging discipline can only have few experts who are qualified to be sources of data in the case study as this research topic affects a few people in few departments of the company. Also, the issue of skipping questions and participant behaviour of selecting an answer before reading the questions could have a huge significance on the results.

2) Observation

Participant observation in qualitative research is the instrument which enables a researcher to get data or information from participants in a naturally occurring manner (Kothari, 2004).

Observation involves a continued relationship with participants in the given conditions. Guilianotti (1995) suggests that this instrument is highly effective for research as it helps the researcher view things from the participant perspective and not from an external or casual source by gaining access to participants in real life conditions which brings valid results and more in-depth understanding on the research topic.

On the other hand, the author regards this as not suitable for the study because it would be difficult to achieve due to time constraints as it requires long periods to fulfil. Secondly, it would take a lot to gain consent from the case study to observe it's SPM. The observation instrument can also be subjective as it doesn't take many views into consideration. Hence, results are based solely on the experience and interpretation of researcher.

3) Interviews

Interviews in research is a method used by a researcher (interviewer) to retrieve data and information from a participants (interviewees). It entails intensive conversations with a small number of participants to discover their perceptions on the research topic (Kothari, 2004; Welman *et al*, 2005). Interviews should be conducted with open minds by researchers even though responses aren't in line with the beliefs of the researcher. Timing, scheduling and environment should be considered for the effective use of interviews in qualitative research (Kothari, 2004; Neumar, 2013)

Interviews for research are advantageous as they give the researcher full control of the flow of the research process and therefore has time for clarifications during the study. Also, it enhances the collection of in-depth information about the research questions (Welman *et al*, 2005). On the other hand, interviews require longer periods for execution compared to questionnaires. It may also be difficult to arrange a suitable time to meet up with the participants for data collection. There is also a possibility of participant bias which could affect the validity of the results (Welman *et al*, 2005).

Because interviews involve a small number of participants and SPM experts in Chevron Nigeria are few as highlighted above, the author regards interviews as the most suitable for this study. The author also looked to have full control of the research process to cut participant bias.

According to Kothari (2004) & Neumar (2013), there are three types of interview questions namely; Structured, Unstructured and Semi-Structured.

Structured Interviews:

These consist of a series of planned questions which the participants answer in the interview process; that is, all questions asked would have been designed and arranged prior to the interview session and all participants take part following the same sequence. It can be regarded as an oral questionnaire. Here, the data interpretation and analysis are forthright because participant views can be easily compared (Neumar, 2013). However, the author didn't use this sort of interviews as there was a need to be a little spontaneous keeping in my mind that some answers give rise to few more questions.

Unstructured Interviews:

Neumar (2013) & Welman *et al* (2005) regard these as the least formal type of interviews. In Unstructured Interviews, the researcher interacts with participants with no planned questions. Although this type of interviews is conducted in very relaxed atmospheres without pressurizing participants, it also has a risk of participant bias. Also, it is important to highlight

Unit	Designation	Experience with Chevron Nigeria Limited	Method of Data Collection
Policy, Government and Public Affairs- PGPA Unit	Senior Officer	15 years	Semi-Structured interviews
Policy, Government and Public Affairs- PGPA Unit	Senior Officer	11 years	Semi-Structured Interviews
Policy, Government and Public Affairs- PGPA Unit	Senior Officer	7 years	Semi- Structured Interviews
Supply Chain Management and Logistics	Manager	10 years	Semi-Structured Interviews
Supply Chain Management and Logistics	Supervisor	8 years	Semi-Structured Interviews
Procurement	Category Manager	15 years	Semi-Structured Interviews
Marine Compliance Unit	Senior Manager	7 years	Semi-Structured Interviews
Delta Operations	Mooring Master, I	17 years	Semi-Structured Interviews
Human Resources	Senior Officer	12 years	Semi- Structured Interviews

Table 2 verview of interview participants

that comparing data from Unstructured Interviews are difficult because of the differences in how questions were formulated

during the process.

Semi-Structured Interviews:

According to Kothari (2004), this type of interviews envelope both the structured and unstructured types of interviews. Here, the researcher plans a series of questions to be answered by the participants but few more questions could be asked during the process to elucidate or expatiate some responses. Although Semi-Structured interviews can also be flexible, the researcher has full control of the process and therefore address any deviations during the process.

As this type of interviews has structured or planned questions and gives room for a bit of spontaneity which was highlighted as important for the research topic above, the author therefore regards this as the most suitable for this study. Another reason for using Semi Structured interviews by the author is because of the possibility of a question causing a standstill during an interview due to the inability of a participant to answer because of issues of comprehension. This type of interviews allows the researcher to rephrase a question or the participant to consider the question further or from a different perceptive.

E. Selection of Participants

While selecting participants the author sought expert perceptions which would have positive impacts on results as it is impossible to interview all members of staff in the case study. It is significant to sample effectively such that the participants selected are a true representation of the population directly related to the research topic. If this is conducted rightly, the results can then be generalized (Gill & Johnson, 2010).

The author selected participants based on experience and knowledge in Sustainability

Performance Management and because of long periods of affiliation with Chevron Nigeria Limited and Sustainability. The participants selected were senior managers in the supply chain, sustainability unit, administration/human resources, deep-water and delta operations unit of Chevron Nigeria.

F. Gaining Consent

The author ensured the use of best practise before, during and after the interview process. It is imperative to seek consent from the participants. This builds trust and a more-friendly atmosphere which also had positive effects on the responses from the participants. The author was able to achieve this by issuing consent forms to participants which gave an overview of what to expect during the interview and stating the possibility of anonymity and confidentiality of retrieved data as many participants wished to be anonymous. Therefore, participant names were not published in this paper.

G. Analysing the data

Data retrieved from interviews were analysed as soon as collection began with reviews in other to look out for themes, trends or patterns. According to Kothari (2004), qualitative data analysis supports the notion of examining and explaining or interpreting meaningful points of qualitative data.

To analyse the data, firstly, the researcher organized and grouped the data by structuring, filtration and familiarization of concept. Secondly, the data was then sorted to align with the theoretical framework in section 2.8 and then used for a framework (thematic) analysis following coding and charting. In framework analysis, the researcher identified and organized the interview responses and interpreted them in more simplified ways.

H. Summary

This section explained the advantages and disadvantages of the quantitative and qualitative research methods and provided justification for the adoption of the Qualitative approach which is a function of the participants perceptions and impressions which are then interpreted and analysed by the researcher through structuring, filtration, sorting and aligning to framework and explanation. Also, it was stated with validation by the author that interviews were more suitable than questionnaires or observation with regards to the type of primary data required for SPM, accessibility, authenticity and feasibility and chose the Semi-Structured interview type.

Lastly, the chapter details how research participants were selected based on knowledge, experience and affiliation with CNL with the information presented in Table 2 and how the Author employed best practise in gaining consent to conduct the interviews.

4. Results

A. Introduction

This section looks at an overview of Chevron Nigeria Limited as the research case study. It also provides results from the data collected from conducted interviews. In other to achieve the research aim of investigating how the sustainability performance in Chevron Nigeria Limited is managed and monitored, the author using the qualitative approach; conducted semi structured interviews with senior officers and managers in CNL.

S.No.	Research Objectives	Research Questions	Findings	Literature Review
1	To investigate the advantages of sustainability to Nigerian Oil & Gas companies	Why do sustainable practises need to be performed by Oil & Gas companies in Nigeria?	 Profitability Corporate longevity Operational productivity/efficacy. Positive environmental implications Good Social reputation 	Schaltegger & Burritt, 2014; Gadenne <i>et al</i> , 2012a; Gadenne <i>et al</i> , 2012b; Lozano, 2012
2	To identify the sustainability performance management practises performed by Chevron Nigeria.	What are the sustainability performance management practises performed by Chevron Nigeria?	 Economic SPMPs- financial audits, budget adherence, quality control, continuous flow, asset management, performance reviews and cost of quality Environmental SPMPs- Environmental Policy Compliance, HSE Administration. Social SPMPs- employee development, workers bonuses/ salary reviews, free utilities for employees, stakeholder engagement, CSR. 	*
3	To identify any key sustainability performance management practises not performed by the organisation	Are there any key sustainability performance management practises not performed by Chevron Nigeria?	Author found that Chevron strives to be one worldwide. No key SPMPs missing although threats to Sustainability were detected.	-
4	To investigate why the key sustainability performance management practises in #3 above are not being performed.	What factors affect the sustainability performance of Chevron Nigeria negatively?	 Disputes/ riots Militancy/terrorism Long government approval process time Economic instability Currency fluctuations Reactive attitude and less attention to detail 	*
5	To recommend ways to improve sustainability performance and how they would be further managed and monitored.	How can sustainability performance in Chevron Nigeria be improved?	 Improving risk assessment and management* Behavioural Changes*, effective communication, imbibing supply chain trends Detailed Sustainability reporting Close coordination with all tiers of government Mutually beneficial contracts and streamlined operations 	APM (2017), Bowersox et al (2000), Kouvelis et al (2006), Schaltegger & Wagner (2006), Adams & Frost (2008), Perez-Lopez et al (2015)
6	To recommend ways to improve sustainability performance and how they would be further managed and monitored.	How would the recommended practises be managed and monitored for the long term? 35	 Continuous improvement Traceability Eradicating corruption 	Schaltegger & Burritt (2014), BSR (2014), Germani <i>et al</i> (2015), Gomes <i>et al</i> (2014)

Table 3 Research objectives with matching research questions and case findings

Table 3 restates the research objectives with its matching

lable 3 restates the research objectives with its matching research question, case findings and linking findings with literature where applicable.

B. The Case Study: Chevron Nigeria Limited (CNL)

Chevron Nigeria Limited is the Nigerian faction of Chevron Corporation, which are a Multinational Oil & Gas Company. CNL operates the Agbami Field, Usan Field, Aparo Field, Bonga SW Field as well as sites in Escravos, Warri, Port Harcourt and Lagos which is its corporate office. As part of the Nigerian policy for international energy companies, CNL operate a 40%-60% Joint-Venture with the Nigerian National Petroleum Corporation (NNPC). As of 2016, the average daily production of CNL was 204,000 barrels of crude oil, 159 million cubic feet of natural gas and four thousand barrels of liquefied petroleum gas making them the third largest oil producer in Nigeria in competition with the likes of Shell Petroleum and Development Company of Nigeria, ExxonMobil and Total Nigeria (Source: Chevron Nigeria).

CNL implemented the Global Memorandum of Understanding (GMoU) as a new method to Community Engagement (CE) in the Niger Delta in 2005, thereby granting these communities better roles in selecting, executing and managing development. The GMoU is based on the values; Transparency, Corporate Responsibility, Compliance, Monitoring and Evaluation as well as Sustainability assurance.

In 2011, CNL joined the Agency for International Development and the Niger Delta Partnership Initiative (NDPI) Foundation to create awareness and tackle the socioeconomic problems of the region putting in \$50 million for the course with the aim of building a good environment for equitable growth. (Source: Chevron Nigeria). CNL have also been involved in combating HIV/AIDS and malaria in Nigeria.

CNL funds the Lekki Conservation Centre, a 190-acre (0.8sq-km) sanctuary that protects the flora and fauna of the Lekki Peninsula by encouraging comprehensive environmental practices through research and education.

Chevron are committed to the Nigerian government's policy on local content development. CNL continue to maintain good business partnerships with indigenous service providers and product suppliers and works to increase their professional capabilities. The Local Community Content Development team of Chevron Nigeria promotes trade with the local businesses as an economy boosting strategy (Source: Chevron Nigeria) and so have become a company admired for its people, performance and partnerships. CNL strives to achieve corporate sustainability, self-sufficiency and address local needs through participatory partnership and stakeholder engagement and have also invested millions of dollars for health interventions, scholarships and economic empowerment (Source: CNL CR Report, 2016).

C. Research Findings

This section provides the details of data collected from the interviews conducted by the members of staff of CNL. The interview questions were generated from the research questions as well as the theoretical framework.

1) Familiarity

With sustainability being a newly emerging concept globally especially with developing countries (Nigeria) which CNL operates in, it was significant to get to know how the members of staff understood the concept of sustainability at corporate level. The concept of sustainability is looked at from different perspectives with the interviewees from CNL having the general idea that sustainability is essential for long term relevance.

Sustainability was viewed with regards to supply chain management.

"Sustainability in supply chain management ensures a continuous effective flow of materials, goods and services by checking cost, quality and time. The most important word here is continuous as it must be never-ending."- (Supply Chain & Logistics Manager).

Sustainability viewed as a holistic corporate strategy.

"Sustainability is a concept which is embedded in Chevron's corporate strategy"- (PGPA Unit Senior Officer A)

"Our Corporate Sustainability has to do with everything that we do to ensure we stay in the market. Keeping track of our wide scheme of affairs with a sort of real-time satellite"-(Category Manager)

"Corporate Sustainability is the way a company like ours create value to people and planet"- (PGPA Unit Senior Officer B)

"Achieving Sustainability is to continually maintain a good flow of company operations from inception till the very end. It provides a good approach in balancing demand and supply"-(Supply Chain & Logistics Supervisor)

"Corporate Sustainability is sustaining the bridge from procurement to distribution without harming the goods, environment, customers or stakeholders during this process time.

Achieving this repeatedly is the major route to sustainability"- (Senior Manager Compliance Unit)

The senior members of staff of CNL demonstrated good familiarity with sustainability and did not necessarily confuse it Corporate Social Responsibility (CSR) even though the two concepts are deployed into CNL's strategy. Also, sustainability was a known concept across many units of Chevron Nigeria Limited.

2) Importance of Sustainability

The researcher asked the interviewees for the advantages and disadvantages of corporate sustainability and the responses were mostly advantages as all members of staff of Chevron Nigeria considered sustainability as a strategic means to achieve profitability.

"Sustainability is one of those things that I would say do not have disadvantages because it is generally for the good of everyone. A vibrant and self-determinant company like ours understand that without sustainability there is no profitability. And if we aren't profitable then we wouldn't be here"- (PGPA Unit Senior Officer A).

The CNL senior staff also highlighted productivity and the longevity of a company as key advantages of corporate sustainability.

"Because Sustainability causes a continuous state of productivity, it brings high financial returns as well as a good brand image to the public"- (Supply Chain and Logistics Manager)

"Sustainability is key for the long-term survival of a company in the very competitive and aggressive market of today"- (PGPA Unit Senior Officer C)

The issue of the capital-intensive nature of adopting sustainable practises were raised but the advantages outweighed the disadvantages

"Corporate Sustainability is what helps companies to have that edge over its competitors at all levels. It would cost a lot of money but then you spend money to make money and add value"- (Category Manager)

"Going green is capital-intensive, engaging community and stakeholders or doing research and product development is expensive too. But when we look at the advantages more we have no choice than to give in"- (Delta Operations Mooring Master I)

3) Identifying Sustainability Performance Indicators (SPIs)

As discussed earlier from the review of literature, SPIs are important tools in achieving effective Sustainability Performance Management (SPM). Identifying SPIs was highlighted as the first step in the proposed method for SPM in organisations. Therefore, how SPIs are identified in Chevron Nigeria were investigated during the interview sessions with the CNL members of staff. The interview responses suggest that CNL is not an exception to the notion that SPIs are company specific.

"We identify key performance indicators for Sustainability from our strategy. We know what must be done and when, so we set the indicators with respect to that. It is very straightforward"- (PGPA Unit Senior Officer B).

"Identifying our SPIs is part of our Core Performance Management Process (PMP) which has a sustainability category. The performance indicators must always be in line with Chevron's Sustainability requirements. We basically identify gaps and then identify or build up indicators that would help fill those gaps"- (PGPA Unit Senior Officer A)

"I would say we have three steps to identify our key Sustainability Performance Indicators.

The first is by tracking. With this we know what we have done well and what we haven't done well or what we have failed to do. The second step is the agreement phase where everything is brought forward, and the right approach and time frames are set. And finally, matching the Performance Indicators to the concerned units."- (Category Manager).

"SPIs in Chevron are always planned annually and targets are set. We know what is key. We know our business drivers. We assess our product and service lines and measure productivity from time to time by reviewing what has been done. The total analysis of the situation pinpoints the SPIs which need to be used."- (Supply Chain & Logistics Manager)

The responses also show similarities with how the interviewees viewed the identification of SPIs in CNL after comparing the data.

Economic Sustainability Performance Indicators:

The Economic pillar of Sustainability shows that organizations have the main economic goal of reaching and maintaining profitability. This can be achieved by using strategic procedures or company resources.

The responses show that cost minimisation is an economic SPI used by Chevron Nigeria Limited to achieve profitability. It is fair to highlight prudence and the ability to spend less that the projected profit is key to economic development in CNL

"Watching what you spend is very key to the economic stability and sustainability of any company and we are very aware of this so we everything possible to make sure we get the job done at the lowest possible cost without compromising quality and integrity as they are very important"- (Supply Chain & Logistics Manager)

"We always try to minimise cost in everything we do. For example, if we need two heads to work at a time, there is no need to have three. No need to keep extra Just in Case, as we have also been proactive to ensure that breakdowns and change overs are minimised"- (Category Manager)

"The first way we ensure we remain profitability at the end of each fiscal year and beyond is by cutting cost or spending less throughout operations." - (PGPA Unit Senior Officer A)

"We will always embrace cost minimisation because the only way to grow financially is to spend less than you make."-(Supply Chain & Logistics Supervisor)

Also, few responses highlighted that profit maximisation was essential for economic sustainability and so CNL have implemented the concept in their financial operations.

"Making profit is our goal and should be the goal of any company that want to remain in business for the long run."-(PGPA Unit Senior Officer C)

"It is Chevron tradition. Profit maximisation is very important. We always check how profitable we have been over time especially when we finish a project. Before that, we assess financial capabilities and know the financial risks before phases begin."- (PGPA Unit Senior Officer B).

Environmental Sustainability Performance Indicators:

Environmental sustainability which is achieving earthfriendly operations by companies as highlighted in 2.4.2 is important in keeping the environment in which people and organizations dwell. The data collected from the interviews reflect CNL's commitment to Environmental Sustainability.

Firstly, responses from the interviewees illustrate good waste management in CNL. Waste management implemented in their corporate buildings, onshore and offshore fields. The recyclables are recycled, and the general wastes are burnt up.

"Waste handling and disposal is measured here. We ensure that anyone who produces waste disposes of it properly whether they are in Lekki, Agbami, Port Harcourt or Escravos. If you come into any of our sites you will see that they are posters and boards encouraging proper waste disposal."- (Senior Manager, Human Resources).

"The first thing that any company should use to assess their environmental consciousness is how they manage waste. In Chevron, we make it a priority and we allocate some funds for it yearly. We make sure we dispose wastes properly and professionally; especially drilled wastes"-(Category Manager)

"The first indicator I would have to mention is our waste management. It is our policy that all burnable wastes are transferred to our incinerator. The ones we can recycle are recycled, there are people responsible for that in every work station"- (Delta Operations Mooring Master I)

"We make sure that we are not in anyway damaging the environment or atmosphere by polluting it which is attainable by proper waste management."- (Supply Chain & Logistics Supervisor)

Energy conservation and pollution control were also mentioned as environmental SPIs in Chevron Nigeria.

"Making sure that pollution is kept to its minimum. We measure sometimes, and we can also set targets. For example, we always target zero spills every year."- (Supply Chain & Logistics Supervisor)

"Our environmental sustainability is fairly better than the smaller companies here in Nigeria. We always monitor our energy conversation, onshore and offshore pollution and of course recycling."- (PGPA Unit Senior Officer B).

Social Sustainability Performance Indicators:

Social Sustainability in corporate level was described as achievable when humans directly involved with the organisation develop interest, satisfaction and loyalty for that company; mostly because of its values, contributions, projects or initiatives.

The responses indicate CNL views human engagement from various angles; employee satisfaction, community and stakeholder engagement and Corporate Social Responsibility (CSR).

The findings reflect employee satisfaction as a means of achieving Social Sustainability in the sense that because employees are the major actors in a company, making them fulfilled is a step in the right direction to achieve social sustainability.

"A performance indicator for Social Sustainability would be employee satisfaction. We have well trained human resource officers in Lekki who take care of our employees. We understand that happy workers work more effectively and efficiently."- (Senior Manager, Human Resources)

"Our human resource department have the responsibility to cater for all of us. It is key because the employees play a vital role in whatever Chevron turns out to be. In Escravos, workers are allowed six months leave in a year to spend time with their families and the overall strategy is to ensure that workers are well catered for and not overworked in any way"- (Delta Operations Mooring Master I)

"Diversity... there are targets in diversity in our recruitment schemes. We believe in diversity and inclusion which means all tribes and geopolitical zones of the country are well represented here so no worker feels cheated or alone."- (Senior Manager, Compliance Unit) "It is what we call networks. We have the employee networks, women networks and so on. The network strengths are checked from time to time, it is what then gives us an idea of the corporate responsibility project to initiate."- (Category Manager)

Although, human needs/wants are insatiable and it is impossible to support all needs of a community; the responses from the CNL staff show CSR, Community and Stakeholder engagement as a means of achieving Social Sustainability.

"Our Social Sustainability and Corporate responsibility is one of the best in Nigeria with multiple awards to show for it. We try to give back to the community as much as we can. We have impacted the standard of living by giving scholarships to university and secondary school students and equipped many schools in the Niger Delta and beyond."- (Supply Chain & Logistics Manager)

"The catch is to be involved in community projects. We have also developed some that were purely supposed to be handled by the community. We have built schools, science laboratories and provided electricity by powering our generators to these regions. On so many occasions, whenever there is a demonstration or protest for us to leave the community, they change their minds because they feel if we leave we would leave with our facilities."- (PGPA Unit Senior Officer C)

"The major indicators that help us improve Social performance are; firstly, developing good partnerships which are actually home-based partnerships with suppliers and local contractors. Secondly, stakeholder engagement which is clearly to develop better relationships with the stakeholders."- (PGPA Unit Senior Officer A).

The findings from the interviewees emphasize that the Social Sustainability Performance Indicators highlighted in this section have effects on the social performance of Chevron Nigeria Limited.

4) Identifying the Sustainability Performance Management Practices (SPMPs) in CNL

SPMPs ensure that positive results are observed during the evaluation of the SPIs. The interview participants demonstrated very good understanding of the concept and gave responses with regards to the three pillars of sustainability.

Economic Sustainability Performance Management Practises:

The interview participants highlighted financial audits,

budget adherence, quality control, asset management, performance reviews and cost of quality as management practises which help to monitor cost minimisation and profitability in CNL

"We implement an approach called cost of quality which helps us to get the best quality in production, materials and service. Spending money to be top in quality production is important for our corporate sustainability"- (Supply Chain and Logistics Manager)

Budget Adherence as an economic SPMP;

"A key practise for us is spending within our financial capabilities and making sure we aren't putting more than required into certain projects." - (PGPA Unit Senior Officer C)

"Project teams understand that we must adhere strictly to budget allocations. We must always see that we don't go above the budget we have made. If there is any need to review the budget, we could but it must be for a very important reason. But we rarely review out budgets because we can find a way around it somehow."- (Category Manager)

Financial audits as an economic SPMP;

"Our financial audits help us project our growth" - (PGPA Unit Senior Officer A)

"Audits help us know how well we are doing. Internally, it is by our management audit systems and we also have external auditors come through to check target delivery; that is the likes of KPMG, Deloitte and so on."- (Supply Chain & Logistics Supervisor)

"The profitability of the company is checked by conducting routine audits. The results of this play a major rule in our decision making"- (PGPA Unit Senior Officer B)

Additionally, the responses from the participants mention quality control and effective flow of materials as economic SPMPs in Chevron Nigeria Limited.

"Quality standard checks help us ensure we deliver quality in all that we do so we don't have to spend extra money remobilizing for a project due to failed specification or bad project delivery."- (Supply Chain & Logistics Supervisor)

"The clockwise and continuous flow of materials through our supply chain provides us with the right framework to use in noting timelines and finances."- (Category Manager)

Asset management as an economic SPMP

"And for us, asset management is another. We make show all assets and resources are well secured and reach full potential. Here, I don't mean physical things only, I am also talking about human assets as well."- (Supply Chain & Logistics Manager)

"Looking after what you have acquired or built is important for us. No one wants to spend every time and on anything. Utilising resources is important for economic growth."- (Delta Operations Mooring Master I)

Environmental Sustainability Performance Management Practises:

Furthermore, the CNL senior staffs suggest that the company ensures that environmental and Anti-Pollution international standards are adhered to. The regulatory bodies include; DPR-

Department of Petroleum Resources, NESREA- National Environmental Standards and Regulations Enforcement Agency and FEPA- Federal Environmental Protection Agency. Interviewee responses show that CNL ensure that compliance to government policies is key, which makes it a major environmental SPMP.

"We check that all the environmental policies have been complied with. Compliance is everything for us."- (PGPA Unit Senior Officer C)

"The government agencies have laid down rules regarding these things and they are all calculated. It is mandatory that we don't go below or above whatever the case may be."- (Category Manager)

"For us the best management practise to improve environmental performance is complying with the environmental standards. It might differ from country to country or industry to industry and so we are particular about what concerns Chevron as a group and make sure we obey them, so we don't get into trouble."- (Senior Manager Compliance Unit).

"HSE Case Management is a signature activity by Chevron. It ensures good health of workers, safety of workers and assets and good state of the environment."- (Delta Operations Mooring Master I).

"We must comply with the Environmental Standards set by DPR which is the Nigerian Department of Petroleum Resources. There is NESREA and FEPA was well. We could be fined or even blacklisted for non-compliance, so we make sure that we set out to operate under the policies."- (PGPA Unit Senior Officer A).

Social Sustainability Performance Management Practises:

Social SPMPs in Chevron Nigeria as identified by the participants are practises which ensure that the SPIs are controlled. Interview responses show that CNL Social SPMPs are targeted towards employee satisfaction, community, partnership and stakeholder engagement.

Results highlight that employee development, bonuses/ salary reviews and free utilities play major roles in achieving employee satisfaction.

"For many years our social performance has been affected positively because we develop our own. Training courses and seminars for employee development."- (Category Manager)

"What adds good value to us is understanding money motivates workers and so the company gives lots of huge bonuses for housing, holidays, car and so on. Another notable one is the thirteenth month which is paid as a Christmas bonus. And again, salary reviews which encourage workers especially the young ones. Salary increments no matter how small."-(Delta Operations Mooring Master)

"A lot of units come together to achieve Social Sustainability I think I must mention. Chevron cares for employees by providing free health services in Gbagada, Lekki, Warri, Port Harcourt, Abuja and in the offshore fields. Free land and air transportation, free lunch, free Lekki toll passes. The basic needs are provided to us on a platter. We have to give our best for the company in return"- (Senior Manager Human Resources).

The SPMPs used to monitor Community Engagement in CNL are procedures which ensure that CSR projects are

actualised.

"Overseeing our Corporate responsibility projects is how we are able to support communities. Whatever we have built or donated is checked occasionally. For instance, if we build a clinic we have to inspect it sometimes, we also provide guidance for our scholars and so on." - (PGPA Unit Senior Officer A)

Lastly, the responses show partner and stakeholder engagement in CNL is done by effective communication, trainings and workshops

"Our support to local producers is massive. We communicate with them and consult with communities before we begin any projects"- (PGPA Unit Senior Officer C)

"We always sponsor trainings, workshops and conferences like this one to help build knowledge for our stakeholders so that they can know more about how we operate and also about the industry in general. That way we know we can achieve sustainable development."- (PGPA Unit Senior Officer A). 5) Threats to Sustainability Performance in CNL

From indications, CNL as a part of the Chevron Corporation which are a multinational company as mentioned in 4.1, have maintained good management practises and sustainability performance and so do not necessarily miss out any key SPMPs.

"In my opinion, there is no way we can have it all. I would not say any practise is key as they are all important but whichever one is required must be done."- (Supply Chain & Logistics Manager)

"No matter what it is still Chevron and we are a world class organization with the same strategies worldwide."- (Senior Manager Human Resources)

"There are no different standards in Chevron Nigeria compared to other parts. Our processes and practises are the same whether it is Chevron Aberdeen or Angola or US, we are one across the globe."- (Senior Manager Compliance Unit)

However, operating in Nigeria has posed some threats for CNL which hinders Sustainability Performance. The first threat highlighted by participant responses is dispute with communities which occurs due to a disagreement or misunderstanding between CNL and the communities in which they operate.

"We have recurring riots and disputes with communities. We can get to work on a Monday morning and see youths led by chiefs in front of our gate blocking everywhere and demanding for money claiming we haven't fulfilled promises which we have. And then we do what we call BUY PEACE agreements where we pay to settle the dispute for peace to reign.

You would never hear of a thing like that in the UK or other parts of the western world."- (Delta Operations Mooring Master I)

Militancy or piracy was also mentioned as a threat to CNL's Sustainability Performance with acts of terrorism and vandalization causing medium to high-level mutilation to corporate sustainability.

"The issue of militancy has been going on for many years now and it has affected us negatively. Pipelines vandalized here and there causing harm to us, to the environment and even people living in the communities. For me, it is a very big issue which the government must fix once and for all."- (PGPA Unit

Senior Officer A).

Another threat stated is the government of Nigeria allowing long periods to approve or give feedback on projects before they can be undertaken. This makes it more difficult make concrete plans during project execution.

"Sometimes there are delays in approvals from the government which can affect our plans and decision-making processes."- (Senior Manager Compliance Unit).

"It takes too long for the federal government to approve applications."- (Delta Operations Mooring Master I)

Also, Economic Instability and Currency fluctuations were highlighted as major threats to achieving and maintaining Corporate Sustainability.

"Firstly, I would mention economic instability or uncertainties as one because if the price of crude oil per barrel is unfavourable then that would definitely affect us no matter how hard we try. We would only continue to do our best to ensure that we measure up."- (Category Manager)

"Also, look how unstable our Naira is. Let me say there is a pay out or whatever in dollars. Today it is 320 Naira to a dollar and then in 3days time, it becomes 300 Naira to a dollar.

And in two days again it is 350 Naira. Very difficult to operate that way."- (Category Manager)

Finally, the peculiar Nigerian environment has seen CNL to engage in more reactive than proactive activities occasionally which basically tests how well they respond to problems arising and not basically making conscious efforts to prevent the problems from occurring. Additionally, a participant highlighted a lack of meticulous behaviour before contractual agreements are made.

"Even though we know we must be proactive, some of these factors affect that and sometimes we do lots of damage control"- (Category Manager)

"I think it's a bad habit of ours not to go through contracts thoroughly. We mostly look at the monetary aspects and ignore most of the rest and never even go back to it until something goes wrong."- (Supply Chain & Logistics Manager).

D. Conclusion

This section presented the responses from the interview participants providing insights on the

CNL staff familiarity with Corporate Sustainability and its three pillars. The CNL SPIs and SPMPs were mentioned after their identification processes were specified. Furthermore, the importance and threats to sustainability performance in CNL which the members of staff detailed were also presented.

Lastly, the chapter provides answers to the first four research questions; why sustainable practises need to be performed by Oil & Gas companies in Nigeria, SPMPs performed by CNL, SPMPs not performed by CNL and factors which affect the Sustainability Performance in CNL.

5. Discussion

A. Introduction

This section provides detailed explanations of the results to give in-depth knowledge of the Sustainability Performance

Indicators (SPIs) and Sustainability Performance Management Practises (SPMPs) in Chevron Nigeria. Also, highlighting ways in which the gap in Sustainability Performance between developed and developing countries can be bridged.

This section addresses the last two objectives which are how Sustainability in CNL can be improved and further managed and monitored

B. Sustainability Performance Indicators (SPIs) in Chevron Nigeria Limited

According to Keeble *et al* (2003), SPIs are a type of performance indicators which helps a company to evaluate effectiveness in achieving corporate sustainability. CNL track previous and present projects or operations to identify gaps to know what SPIs to deploy. Following the identification of gaps, the decision-making and matching process is conducted which basically ensures that all units of CNL are aware of their various tasks. SPIs just like many sustainability related issues are based on the Economic, Environmental and Social perspectives.

1) Economic SPIs in CNL

Chevron Nigeria uses two major SPIs; cost minimisation and profit maximisation. These two go hand in hand as they focused to enhance the flow of cash with lessened spending while generating more revenue from increased production. CNL evaluate how well they have been able to be cost effective (minimise cost) throughout their supply chain as a financial strategy. Cost minimisation is an effective way to achieve operational profitability (Nwaogbe et *al*, 2013); and CNL make sure that value creation is still actualized with the right funds in place, right quality and right time frames.

2) Environmental SPIs in CNL

Waste control, Energy Conservation, Pollution Control and adherence to Environmental Policies are the SPIs that Chevron Nigeria have implemented to help gauge environmental performance. According to Dangelico & Pujari (2010), waste, energy conservation and pollution control have major positive impacts on the environment which is the habitat of companies in the first place; signifying CNLs contribution towards achieving a healthy planet.

Adhering to the environmental policies by the Department of Petroleum Resources (DPR), National Environmental Standards and Regulations Enforcement Agency (NESREA) and Federal Environmental Protection Agency (FEPA) is a key SPI for environmental consciousness in CNL with high measurable points in evaluating the extent to which they are embraced.

However, it was observed that CNL have not incorporated recycling and water conservation in their corporate buildings even though waste management and control is top notch. These two indicators would reduce the amount of biodegradable wastes and loss of groundwater over time as specified by Goni *et al* (2015) and Dangelico & Pujari (2010).

3) Social SPIs in CNL

Employee Satisfaction, Community and Stakeholder engagement and Corporate Social Responsibility (CSR) are CNL Social SPIs which sees them carry out immense contributions to the communities in which they operate while developing and engaging for their employees and stakeholders in other to add value to the company while building a good brand reputation.

CNL have demonstrated high desire to satisfy and develop employees and engage communities which they work in which are similar to the SPIs stated by Gadenne *et al* (2012a).

C. Sustainability Performance Management Practises (SPMPs) in Chevron Nigeria Limited

SPMPs are activities or events which are deployed by organisations to control and enhance SPIs (Gadenne *et al*, 2012a). As mentioned in 4.3.4, these practises ensure that positive results are observed while assessing the SPIs. In CNL, different practises are used to improve the various pillars of sustainability.

1) Economic SPMPs in CNL

In the pursuit of organisational profitability, CNL implements Financial Audits, Budget adherence skills and policies, Quality Control, Cost of Quality and Asset Management.

Financial audits:

A financial audit is an independent evaluation of the financial reports and reporting procedures of a company (Brad *et al*, 2015) with the main purpose being to guarantee regulators, investors, partners and directors that financial statements are accurate. Audits are either first (internal) or third party (external). CNL apply the first and third-party audits with the first used to enhance their financial management systems.

Budget Adherence:

This is a part of budget management which entails proper management of budgeted funds and expenditure through the implementation of reasonable policies, procedures and decisions (Golenko-Ginzburg *et al*, 2006) to achieve project objectives effectively and efficiently. CNL accomplishes this by financial planning and budget analysis.

Quality Control:

According to the International Organisation for Standardisation (ISO), quality control is that part of quality management focused on fulfilling quality requirements. It is very significant for CNL as it keeps the quality of oil produced and services rendered on the high. This continually adds value and enhances profitability for the long term.

Asset Management:

Asset Management is a strategic process of developing, operating, maintaining and improving assets in a cost-effective manner. It refers to any scheme that monitors valuable resources of an organisation. These resources can be tangible; which may include buildings, vessels and machinery; or intangible which may include information technology, intellectual property and finances (Reyes, 2015). CNL achieve this by implementing security measures and linking this to the social aspect of human (employee) development.

Cost of Quality:

Cost of quality is a practise that organisations use to determine the extent which its assets/resources are used for tactical steps that eliminate poor quality production to enhance the quality of products or services and inhibit internal and external failures. Keeping such information allows the organisation to determine the potential savings to be gained by implementing process improvements (ASQ, 2018). Activities linked to Cost of quality for CNL are divided into prevention costs, appraisal costs, and internal and external failure costs.

Prevention costs are incurred to prevent quality problems and are related to the planning and design, deployment and maintenance of the quality management system while the Appraisal costs are related to the measuring and monitoring activities related to quality. The internal failure costs occur when production fails to reach quality standards and are detected before reaching customers while the external failure costs occur when production defects are detected by customers. (ASQ, 2018). This SPMP is significant to CNL as it helps to reach and maintain high quality standards in oil production and achieve sustainable competitive advantage.

2) Environmental SPMPs in CNL

Environmental Policy Compliance in CNL:

In 2016, CNL were given the Green Label Award by the Nigerian Environmental Society (NES) to recognise the company's creditable projects on sustainable development, proper environmental management and conservation practises in the last five years (Source: CNL CR Report 2016).

According to Allen (2010), Environmental practice of the Nigerian government generally entails priorities given to issues of environment by the government and its concern for the prevention of pollution of the environment by corporate bodies. In the Oil & Gas industry which CNL belong, the priority of maintaining and replacing oil equipment such as corroded pipelines to avoid leakages is principal. Since 2016, CNL have been implementing of the Leak Detection and Repair (LDAR) programme intended for the identification and eradication of leaks from equipment (Source: CNL CR Report 2016). These priorities are observed in the implementation of policies that are meant to prevent pollution or provide remediation in the event of pollution.

Chevron Nigeria have continued to comply with the waste management and conservative policies of the Nigerian regulatory bodies by building an Operational Excellence (OE) culture believing that environmental damaging incidents are avoidable. CNL have also continued to implement projects to reduce routine related gas flaring which helps in reducing the negative effects of climate change. The company strives to achieve environmental excellence by decreasing waste production and pollution as well as conserving biodiversity. Additionally, CNL started a strategic phase development for commercialization of produced gas throughout their operations. Examples of such development projects; Escravos Gas Projects, the Sonam Field Development project and West African Pipeline Projects (Source: CNL CR Report, 2016).

3) Social SPMPs in CNL

The CNL Social SPMPs are aimed towards employee satisfaction, community and stakeholder engagement and partnerships.

Employee development, bonuses/ salary reviews and free utilities have positive impacts on employee satisfaction and social performance. These practises are actualised by the Human Resource Team to retain and build human assets to continually add value.

Corporate Social Responsibility in Chevron Nigeria Limited:

CNL envelopes community engagement, stakeholder engagement and partnership initiatives into CSR. These practises include many events and approaches towards social investments (HIV/AIDS campaign, scholarships, building schools, equipping laboratories, Roll Back Malaria Program), social performance and planning, economic empowerment, Partnership Initiatives in the Niger Delta (PIND), engaging stakeholders and local content development.

Chevron Nigeria offer support to aquaculture, cassava and palm oil farmers through the Best Management Practices (BMPs) programme to improve agricultural practises. Beyond support for farmers in the region, PIND's economic development drive also extends to Niger Deltabased small and medium-scale enterprises (SMEs) through a Technical Assistance Fund aimed at improving the performance of SMEs.

CNL continue to focus on building joint, productive, trusting and win-win relationships with all tiers of the Nigerian government and have sustained partnerships with government stakeholders by:

- Organising frequent engagement sessions with the government partners
- Facilitating visits to help stakeholders get familiar with company operations.
- Sponsoring stakeholder participation in oil and gas conference and seminars to enhance knowledge of operations
- Involving communities and seeking their views on the planning of programmes, initiatives and projects
- Engaging the tiers of government in the implementation of Chevron's social investment and development programmes (Source: CNL CR Report 2016).

D. Improving Sustainability Performance in Chevron Nigeria

This section discusses how improving the Sustainability Performance in CNL as a means of bridging the gap in Sustainability Performance between developed and developing countries (Nigeria which CNL operates). From the review of literature, results and most especially threats highlighted. This study suggests that CNL looks to improve on the following; 1) Improved Risk assessment and management

Risk management is a process that allows individual and overall risk events to be understood and managed proactively, improving success by minimising threats and maximising opportunities (APM, 2017). Improving the risk management in CNL would therefore increase proactivity making the company anticipate and contain corporate issues before they begin.

Being more proactive than reactive would also aid proper strategy deployment for CNL.

2) Behavioural Changes, Effective communication and Imbibing Supply Chain trends

According to Bowersox *et al* (2000) & Kouvelis *et al* (2006), trends continue to shape the global supply chain. Imbibing trends is important for CNL in achieving sustainability as it helps the company meet current expectations of individuals.

Behavioural changes, Effective communication and educating contractors and service providers also play vital roles in tackling the community disputes and achieving efficient and effective supply chains for CNL.

3) Detailed Sustainability Reporting

A Sustainability report is a report which provides detailed information about the economic, social and environmental sustainability performance of a company and plays a role in the SPMPs to be implemented from reviews and feedback. (Schaltegger & Wagner, 2006; Adams & Frost, 2008; Perez-Lopez *et al*, 2015).

However, Chevron Nigeria have not been providing detailed sustainability reports with the three pillars of sustainability. The company have covered a bit of all pillars with major concentration on the social performance only. Reports on economic and environmental performance have not been indepth. Improving Sustainability Reporting for CNL would also build transparency and assist the company in effective decision making especially regarding projects that require community or third-party input.

4) Close Coordination with All Arms of the Nigerian Government

The Nigerian government threatens Sustainability Performance in CNL by allowing long process times for approvals which affects the effectiveness of the company. This can be controlled by engaging and establishing closer relationships and communication with the arms of government.

Also, CNL should allow longer time frames between project proposition and execution to accommodate the long process approval times.

5) Mutually Beneficial Contracts and Streamlined Operations

Kache & Seuring (2014) suggest that collaboration and integration increase operational performance in companies. With this concept, win-win agreements for CNL and vendors are important to improve Sustainability Performance; and streamlined practises would create a balance and manage the

Matching the SPIs and SPMPs of Chevron Nigeria limited				
Pillar of	SPIs	SPMPs		
Sustainability				
Economic	Cost Minimisation	Budget Adherence, Quality Control		
	Profit Maximisation	Asset Management, Cost of Quality, Internal and External Financial Audits		
Environment	Waste Management	Local and International Environmental Policy Compliance		
	Conservation & Pollution			
	Control			
Social	Employee Satisfaction	Employment development (trainings), Bonuses, Salary reviews, Free utilities		
	Community Engagement	CSR programmes and initiatives towards social investments, health & wellbeing, social performance,		
	Stakeholder Engagement	partnerships and local content development.		

 Table 4

 Matching the SPIs and SPMPs of Chevron Nigeria limite

Source: Author, 2018

partnerships effectively.

E. Maintaining Sustainability Performance in CNL

Engaging in practises that enhance Sustainability Performance is key; However, maintaining and monitoring the performance promotes corporate longevity.

Gomes *et al* (2014) and Schaltegger & Burritt (2014) suggest that continuous improvement in supply chains is important for sustainability in the ever-changing business world. CNL must make continuous efforts towards total improvement and consider recycling in corporate buildings, creating a centralised Sustainability unit, Management planning processes, Discipline, growing net oil production, cyber security for software and improving information systems capacity (Abraham, 2016; Gadenne *et al*, 2012a; Gadenne *et al*, 2012b)

Furthermore, According to BSR (2014), traceability is an approach which advances sustainability in global supply chains. Traceability is the identification and tracking of a products path from procurement to distribution. It is important for companies and stakeholders to understand. (BSR, 2014; Germani *et al*, 2015). CNL should embrace its knowledge and implement using best practise in other to deal with supply chain complexity and maintain sustainability. This would further assist CNL to drive collaboration, maintain stronger partnerships and constantly meet stakeholder demands (BSR, 2014).

Eradicating corruption would also maintain CNL's sustainability through just and transparent practises involving the company, stakeholders, employees and third-party contractors.

6. Conclusion and Recommendation

This section highlights the research objectives and how they were achieved with reflections and recommendations for further research. The aim of the research was to investigate how sustainability performance is managed and monitored in Nigerian Oil and Gas companies using Chevron Nigeria Limited as a case study. The aim begot research objectives which were stated earlier. The research objectives and research problem evaluation led to the formulation of research questions and sub-questions which were matched with findings and literature in Table 3.

A. Conclusion

This section highlights the research questions and subquestions and how the author was able to answer them from the analysis of responses from semi-structured interviews conducted with the senior staff of CNL.

1) Why Do Sustainable Practises Need to Be Performed by Oil & Gas Companies in Nigeria?

With productivity, longevity and profitability being key answers. The Author found that the CNL Senior Staff viewed sustainability to be highly important and key to profitability which is essential for corporate financial growth. It was also highlighted that a continuous state of productivity and the longterm existence of a company can be achieved by embracing sustainability

B. How is Sustainability Performance Managed in Chevron Nigeria Limited?

What are the sustainability performance management practises performed by Chevron Nigeria?

These were listed and discussed in Chapter 4 and 5 respectively with practises grouped into the three pillars of sustainability. Economic SPMPs in CNL- Budget Adherence, Quality Control,

Financial audits, maintaining effective flow of materials and asset management. The Environmental SPMPs in CNL-Environmental Policy Compliance and the Social SPMPs in CNL- Employment development, stakeholder engagement and CSR aimed at partnership management and community engagements. CSR in Chevron Nigeria has so far been a good strategy to community engagement which has brought about wide acceptance and good company reputation.

Are there any key sustainability performance management practises not performed by Chevron Nigeria?

The author found that CNL embraced all practises from the mother company Chevron Corporation so no key SPMPs were missing although threats to Sustainability Performance were detected.

What factors affect the sustainability performance of Chevron Nigeria negatively?

These are threats due to the peculiar Nigerian environment which CNL operates. The threats arose from the lack of proactive measures from CNL, long duration for government approvals, community disputes and terrorism due to militancy or piracy causing vandalization and danger to life.

How can sustainability performance in Chevron Nigeria be improved?

This was achieved following the analysis of the results and study of available literature and was discussed in section 5.4. with risk management, detailed sustainability reporting, effective communication internally and externally, imbibing supply chain trends and close coordination with the Nigerian government as vital points which would help CNL in better strategy implementation, effective decision making as well as averting conflicts.

How would the recommended practises be managed and monitored for the long term?

The study highlights continuous improvement, corruption eradication and traceability would ensure positivity in the Sustainability Performance of CNL. The ongoing and longterm approach in enhancing processes provides a major path to corporate longevity.

C. Reflection

The Author found that CNL carry out SPM with the framework; CNL identify and map out the SPIs specific to the company and then regroup the indicators before implementing SPMPs. Reviewing the SPMPs and monitoring overall performance progress occasionally is the final and very important step which the Author found to occur but can be improved. Many other organisations should consider using this theoretical framework due to its simplified nature while also capturing the relevant steps for SPM.

ALL research objectives were achieved; However, the Author feels that a sample size of 15 would have been more appropriate for the study even though project duration, willingness and schedule of participants played a huge role in securing 9 participants.

The Author also found the interview processes interesting and would be willing to engage in more research work in the nearest future. The data analysis, embracing different views and perceptions of the concept and comparing responses to extract meaning and provide in-depth explanations was a good and continuous learning process for the Author.

D. Recommendation for Further Research

Scoring and Rating of Sustainability Performance in the Nigerian context is an area which has been ignored as available literature indicate; Therefore, more academic work can be achieved in this field to look well into scoring, rating and sustainability reporting to evaluate transparency levels within the Nigerian context. These would also help to demonstrate to what extent organisations in Nigeria have embraced SPMPs.

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