

**ENVIRONMENTAL SUSTAINABILITY, SOCIAL SECURITY AND RESILIENCE AT WORK PLACE:
(THE CASE OF INDORAMA IN ELEME LOCAL GOVERNMENT AREA)**

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ABSTRACT

It is certain that environmental sustainability, social security and resilience in any organization is key in promoting and strengthening workers and employees relationships, improves productivity, enhances safety, customers satisfaction and income generation. The aim of the study is to examine how company's policy on social security and environmental sustainability can develop, build and extending good hand of magnanimity to the unemployed retired staffers and host communities. The methods applied by the researchers in this study consist of the primary and secondary sources which includes: personal interview, distribution of questionnaire consulting relevant company bulletin and newsletters. Ten (10) copies of questionnaire were distributed to twenty one (21) plants and departments in the company, amounting to two hundred and ten (210) copies altogether. At the point of collection only one hundred and eighty (180) was recovered. Table and percentage method Including SPSS was employed for the analysis. The study found out that, there is good relationships between environmental sustainability, social security and resilience at work place and recommending that, environmental matters be given to only environmental experts.

Keywords: *Environmental sustainability, social security, Resilience, work place.*

Introduction

Current global attention has been drawn to environmental protection and ecological values. Therefore, it is a huge responsibility, for companies to carry out their operations in a socially responsible

manner as it does not only affect the society but also the consumers' opinion concerning the products of such organizations. According to Zhu, Lu, Hao, He & Shao, (2008) suggesting the deep importance of environmental reporting that when firms are

unable to provide the community with valuable information for proper environmental assessment of the measures that they are taking towards preventing the destruction of the environment they work in, it is likely for the society to lower their demand for the firm's products and services; which results lower productivity and profitability (Akanfe, Michael & Bose, 2017). Therefore, in the current business world, it is highly important for companies to maintain environmental standards and also to keep track of their social performance. Environmental sustainability in this context defines a state in which demands placed on the environment can be met without reducing its capacity to allow all people live well, now and in future.

It is also explained as a responsible interaction with the environment to avoid depletion or degradation of natural resources and allow for long term environmental quality. However, it is better for companies to disclose strategies in handling gas emissions, waste management, environmental foot prints, health, safety of workers and customers, including elevating the standard of living of its host communities through the provision of infrastructural facilities and other basic amenities. Therefore, if these requirements are not met and as a result, the business environment becomes volatile and unconducive which can impede corporate image and adversely affect financial performance, growth and productivity at workplace. Social security refers to the collective measures taken by societies and companies to ensure well-being and protection of individuals and communities. It encompasses access to essential services such as healthcare, education, housing, and social protection systems that safeguard against poverty, inequality and vulnerability while resilience

refers to the ability of individuals, communities and systems to withstand and recover from shocks, such as natural disasters, economic crises, or social conflicts.

Statement of Research Problem

Industrial activities have culminated in altering environmental and biological components, leading to ecological damage, emissions of gasses that impact negatively on staff health, pollution of the environment, loss of biodiversity and land scape destruction. All these hampering environmental sustainability at work place. But today, some industries have taken cognizance of it and maintaining good and healthy environment for its employees, customers, visitors and contractors, operating within the company premises. The host communities where company's operations are carried out are also taken care of to avoid youth restiveness and militancy, that is the reason social security, social welfare and corporate social responsibilities are included in the company's policy. However, this study will examine thoroughly what environmental sustainability and social security symbolizes in Indorama as a company into the production of goods and services.

Aim and Objectives of the Study

The aim of the study is to examine environmental sustainability, social security and resilience at work place. Therefore, the following objectives shall be pursued:

1. To identify the association between environmental sustainability and resilience in the study area.
2. To identify the relationship between social security and sustainable development.
3. To evaluate the relationship between host communities and company performance.

Research Questions

1. How does environmental sustainability and resilience relates?
2. What is the relationship between social security and sustainable development?
3. What is the relationship between company's performance and host communities?

Hypotheses

H₀₁: There is no significant relationship between environmental sustainability and resilience at work place.

H₀₂: There is no significant relationship between social security and sustainable development.

H₀₃: There is no significant relationship between company's performance and host communities.

The Study Area

The Indorama petrochemical company is built in Eleme Local Government Area. Eleme Local Government Area was created in 1996 geographically located on latitude 5' 05' N and longitude 6' 39' E, having its administrative headquarters at Ogale with a landmass of 53 sqm (138km²) and a total population of 190,884 during the 2006 census in Nigeria. The local government area has such communities as Eteo, Ekporo, Onne, Ebubu, Ogale, Alode, Alesa, Aletto, Agbonchia and Akpajo, etc. On the North, the Local Government Area is bounded by Obio/Akpor Local Government Area, on the West by Okrika Local Government Area, on the East is Oyigbo Local Government Area and on the South is Tai Local Government Area. Two seasons exist in the area which is dry and rainy season. The rainy season start from March to October and the dry season begin from November to March but not entirely free from occasional rainfall even in the peak

of August break based on its proximity to the coast. The vegetation of the area consists of mangrove forest, tropical rainforest, Indian banboos and Nippa palm. The available soils include red mud, loamy, clay and alluvial soil due to water encroachment areas. For growth and economic viability, the local government houses multinational companies such as Nigerian Ports Authorities (NPA), one of the best sea Ports Authority (Warf), Oil and Gas Free Zone Authority, Mobil, NNPC, Notore, Indorama and a host of other companies. In the area, other activities are schools, churches, commercial business, hospitals, trading and agriculture.

Literature Review

According to Uwem (2016) Social sustainability is concerned with equity in the distribution of wealth, resources and opportunity to all citizens at all levels. It implies access to minimum standards of security, human rights social benefits such as food, health, education, shelter and opportunities for self-development in the words of Smriti (2008) Environmental sustainability allows for the needs of man to be met without jeopardizing the ability of future generations to meet their needs. Environmental sustainability sits within the three dimensions of sustainability namely economic, ecological and social sustainability (Deudney, 1990). Nishitani, Kaneko, Fujii, & Komatsu, (2011) aver that environmental sustainability ensuring the conservation and sustainable use of natural resources, protect ecosystems and mitigate climate change impacts. This involves reducing greenhouse gas emissions, promoting renewable energy, implementing sustainable land and water management including the preservation of biodiversity. Resilience enhances the ability of companies, communities, organizations and systems to withstand and recover from

shocks and stresses, whether natural or man-made.

This involves improving disaster preparedness. Strengthening infrastructure and integrating climate change adaptation strategies (Juhmani, 2014). Many societies, individuals, and industries are grappling with social security challenges, including poverty, inequality, inadequate access to education, healthcare, unemployment and social exclusion. These issues undermine the well-being, stability of individuals and communities, leading to social unrest, increased crimes rates and diminished overall quality of life (Sharma, 2009). Amiolemen, Uwaigbe, Uwaigbe, Osiregbemhe, & Opeyemi (2018). Stated that, to foster sustainable development at work place, several solutions can be implemented. These include environmental conservation and management, renewable energy transition, social safety nets, education and skill development, disaster risk reduction, collaboration and partnerships (governance, institutions and communities). However, none of these extant studies investigated environmental sustainability and resilience at work place in the context of sustainable development as this study intends to bridge the gaps and making valuable contributions to knowledge.

Benefits of Social Security at Work Place

- Provision of cash to the sick and disability
- Poverty eradication
- Access to quality education and health care
- Employment generation
- Disaster reduction
- Monetary support for loss of marital partners and maternity
- Rendering medical support to the elderly (old age)

- Support for accident at work and family
- Support for retirees from work and pregnant women (Chong, Qin & Ye (2017)

Benefits of Environmental Sustainability at Work Place

- Conservation and sustainable use of natural resources (Eyadat, Kelly, Roche & Eyadat, 2008).
- Biodiversity conservation and ecosystem management.
- Pollution prevention and waste management
- Reduced business cost
- Increased productivity
- Compliance with regulations
- Increased profit (Matsumura, Prakash, & Veramunoz, 2014).
- Expanding customer base and satisfaction.
- Improve quality of life.
- Provide hope for a better future.
- Protect natural resources.

Indorama Social Security Provision to Host Communities

- Employment of junior and senior staff into the company.
- Giving contracts to indigenes of host communities
- Scholarships awards to children in these communities
- Building and reconstruction of schools.
- Renovation of Eleme General Hospital and the donation of medical equipment.
- Construction of 33 KVA power sub-station at Akpajo Community to enhance rural electrification.
- Construction of road in Agbonchia – Njuru and Okerewa communities.

- Provision of micro-credit scheme for women (Widows) in the host communities for poverty alleviation and empowerment (cooperative societies)
- Purchase of buses for the council of chiefs, and the youth bodies.
- General welfare of staff and host communities during festive periods.

Barriers to Environmental Sustainability and Social Security

- Lack of knowledge and awareness education
- Insufficient resources for implementing sustainable practices.
- Weak regulations and low enforcement can hinder sustainability efforts.
- Lack of political will.
- Financial constraints.
- Infrastructural limitations.

- Inadequate incentives and resistance in change.

Methodology

The design adopted is the descriptive survey design, because is aimed at collecting data on environmental sustainability, social security and resilience at work place and describing the data collected through questionnaire in a systematic manner. Further, the choice of descriptive survey design is appropriate since the number of element (population) under study is known, within the short period of time, production plants and departments identified in the company was 21 and 10 copies of questionnaire was distributed to each plant and department which amounted to two hundred and ten (210) copies, at the point of retrieval, one hundred and eighty (180) copies were retrieved or realized. The statistical models for analysis and testing of hypotheses is the tabular method and SPSS version 25.0.

Table 1: Questionnaire Distribution, Retrieved and Response Rate

Units/Departments	Quest. Dist.	Quest. Retrieved	% Response
Olefins plant	10	10	5.56
Nitrogen plant	10	8	4.44
DM plant	10	8	4.44
Power plant	10	9	5.00
FCU Plant	10	10	5.56
Ammonia plant	10	10	5.56
Urea plant	10	10	5.56
Bagging plant	10	6	3.33
P. E. plant	10	7	3.89
PP plant	10	5	2.78
PET Plant	10	10	5.56
MMD Department	10	8	4.44
HR Department	10	8	4.44
Fire safety Department	10	8	3.33
Project D Department	10	6	3.33
Instrumentation Department	10	8	4.44

Transport Department	10	10	5.56
Mechanical Department	10	9	5.00
Security Department	10	10	5.56
Environment/Analysis Depart.	10	10	5.56
CRO Department	10	10	5.56
Total	210	180	100

Source: Author’s Field Work, 2025

Analysis and Results

Research Question one:

Identify the association between Environmental Sustainability and Resilience at work place

Hypothesis one

Ho₁: There is no significant relationship between Environmental Sustainability and Resilience at Work Place.

Table 2: Summary of analysis concerning research question one and hypothesis one

Variable	n	Σ	\bar{X}	SD	R	Decision
ES	180	3548	19.711	4.246	0.715	Reject H ₀₁
RW	180	4560	25.333	3.426		

Source: obtained from SPSS output

$\alpha = 0.05$, $df = 178$, $t_{tab} = 1.96$

$t_{cal} = 10.254$. highly Related

Table 2: Shows that result obtained in respect of research question one and hypothesis one. The result reveals that the correlation coefficient is 0.715, which is highly correlated. This implies that there is a high relationship between ES and RW.

Evaluate the relationship between Social Security and Sustainable Development?

Hypothesis Two

H0₂: There is no significant relationship between Social Security and Sustainable Development.

Research Question Two

Table 3: Summary of analysis Concerning research question two and hypothesis two

Variable	n	Σ	\bar{X}	SD	R	Decision
SS	180	4150	23.055	3.946	0.567	Reject H ₀₂
SD	180	4478	24.877	3.885		

Source: obtained from SPSS output.

$\alpha = 0.05$, $df = 178$, $t_{tab} = 1.96$ $t_{cal} = 10.455$

Moderately related.

Table 3 shows the result obtained in respect of Research Question two and Hypothesis two

The result reveals that correlation coefficient is 0.5672, which is high. This implies that

there is a moderate relationship between Social Security and Sustainable Development.

Research Question Three

There is no relationship between Company Performance and Host Communities
Hypothesis three

Table 4: Summary of analysis Concerning research question 3 and hypothesis three

Variable	n	Σ	\bar{X}	SD	R	Decision
CP	180	3946	21.922	4.014	0.677	Reject H_{03}
HC	180	4089	22.717	3.424		

Source: Obtained from SPSS output

$\alpha = 0.0$, $df = 178$, $t_{tab} = 1.96$ $t_{cal} = 13.894$

Highly Reject

Table 4 shows the result obtained in respect of research question three and hypothesis three. The result reveals that the correlation coefficient is 0.677, which is high. This implies that there is a high relationship between Company Performance and Host Communities.

Discussion of Findings

From the data collected and analyzed, on the research questions and the tested hypothesis, the following findings were deduced from the study:

1. There is a high significant relationship between Environmental Sustainability and Resilience at Work place.
2. There is a moderate significant relationship between Social Security and Sustainable Development.
3. There is a high significant relationship between Company Performance and Host Communities.

Conclusion

The issue of environmental sustainability, social security and resilience at work place has become a serious one. Hence, environmental management practices have gathered great momentum in recent years. In the light of the above, the result of the tested hypotheses indicates that all the variables of interest are highly sensitive and related to one another.

Recommendations

1. Security of life, property and sustainability of the environment should not be left in the hands of the

employer alone, employees should imbibe or inculcate the habits of safeguarding whatever property entrusted to him.

2. Company policies concerning environmental management should be in line with that of the Federal or State ministry of environment.
3. Issues relating to the environment should be given to environmental experts not quacks, and the person must be a registered member of a professional body preferably Nigerian Environmental Society (NES).

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