



Received: 21-02-2024
Accepted: 01-04-2024

International Journal of Advanced Multidisciplinary Research and Studies

ISSN: 2583-049X

Assessing NOSDRA Policy Mandate to Oil Spill: A Factor Analysis of Staff Training and Development

¹Michael Nwagbo Obiora, ²John Maduabuchi Agomoh

¹ Kingsley Ozumba Mbadiwe University, Ogboko, Imo State, Nigeria

² Department of Sociology, Kingsley Ozumba Mbadiwe University, Ogboko, Imo State, Nigeria

DOI: <https://doi.org/10.62225/2583049X.2024.4.2.2611>

Corresponding Author: Michael Nwagbo Obiora

Abstract

Training is that important part of organisational function that directly contributes to the development of human capital resources, which are directed towards maintaining and improving job performances. It is believed that training has positive impacts in protecting the environment under certain circumstances. This paper derives from an empirical perspective which descriptively presents a factorial account of training given to staff of National Oil Spill Detection and

Response Agency. Findings revealed a strong indication that various training given enable them work effectively and improves work efficiency when faced with disaster situation. It concludes that staffs perceive training differently, and that training has the implication for work improvement and recommends that timely training should be constantly reviewed to improve environmental protection.

Keywords: Staff Training, NOSDRA and Environmental Policy

1. Introduction

Globally, environmental impacts of exploration and production of crude oil has exposed both ecological system, specific society and management training, it has resulted to unpredictable outcome that is unfortunate with oil drilling, production and management, it has also disturbed and sometimes endured irreversible ruin, for instance; oil spillage, air pollution from natural gas flaring, artisanal refineries has produced smog and soot's in the region, obliteration of a few mangrove woodland, related species elimination, the annihilation of indigenous creatures networks, the defilement of water supplies, the removal of numerous native populaces and the executing of dissidents from both non-oil and host oil communities who are opposed to the proceed with contamination and debasement. Oil pollution has become an issue and concern to sustainable development.

In affirmation to the above, it is safe to adduce that environmental policy alongside staff training has a lot to do with the protection and sustenance of environmental development. The basis therefore as enshrined in the constitution of 1999 formulated law of the country to guide and update on the ecosystem and protect the water bodies, air and landscape, forest areas of Nigeria. In addition to this, it maintains that people in public or private sphere of the economy will not embrace or approve undertakings of any project without earlier thought of the impact on the climate.

In such manner, the Federal Legislature of Nigeria proclaimed a few laws and Guidelines to protect the Nigerian environment. Laws such as, Federal Environmental Protection Agency Act of 1988 (FEPA Act) repealed by the National Environmental Standards Regulation Agency (NESREA) Act 2007 ^[2], National Oil Spill Detection and Response Agency (NOSDRA) Act 2006 ^[3] among others. Okafor (2011) ^[4] affirms that these laws were set up to alleviate or forestall the compromising natural resources which streams from human activities in the quest for financial growth and development.

However, the issue of degraded environment consistently becoming a major issue not only in Nigeria but a global concern. The recognition of the hazard of environmental degradation has been factored into United Nation economic and sustainable development programs, and mandated member countries to comply with the principle and protocols. The eleven-point Sustainable Development Goals (SDG's) has been mandated for every member state to stick in their environmental policies.

Nigeria as a growing country is enthusiastically involved with economic activities for financial growth and development. One of such is the raw petroleum drilling and production which feature with it oil spillage, the reality of these could be traced all the way back to its discovery in 1957; specifically, is a significant oil licks and spills in Ogoniland in 1970 due to experienced trained manpower, which prompted thousand gallons of crude oil being spilt on farmland and waterways, eventually prompting

a £26m fine for shell in Nigeria court 30years later. Intrinsically, the Nigeria government have experienced in excess of 7,000 spills between 1970 and 2000. Different occurrences of oil licks and spills in Nigeria prompted the plan of natural strategies focused on reaction, recognizing and cleaning of oil licks and spills.

The imploring need of oil to the country, Nigeria, propelled government involvement in the regulation of the environment; prominent efforts from government have been made to put together legislation and institution to guarantee the security of the environment. On the contrary, before these efforts were made there were a few sectorial regulations pointed toward controlling natural degradation which were fruitless because of the shortfall of viable authorizations and trained manpower. Financial contemplations and critical absence of information on reliant linkages among improvement measures and ecological factors, as well as human factors, brought about an unmitigated attack on the environment. In any case, the environment and the requirement for its safeguarding became the overwhelming focus after the ground breaking and particular occasion of the mysterious unloading of toxic waste in Koko Port, Bendel State (presently Delta State) in May 1988 by outside involvements of foreigners. This was trailed by the promulgation of the Harmful Wastes (Special Criminal Provisions) Act 1990. This act gives the legitimate structure to the successful control of the removal of toxic and unsafe waste into any climate inside the environments of Nigeria.

This promptly propelled the making of a regulatory body, the Government Environmental Security Organization (FEPA) in 1988^[1], assigned of the general obligation of protecting and developing the Nigerian environment. To set this in motion a Public Strategy on the environment was created. This is the main working report for the conservation and assurance of the Nigerian environment. States and Local Government Councils were likewise urged to build up their own environmental regulatory bodies to maintain great environmental quality as it applies to their specific terrain. Environmental approaches as for oil and gas pollution were saved; Notice can be made of endeavors by the Nigerian government in protecting the government using sculptures date back to frontier times when the oil pipelines Act of 1956 was passed Fagbohun (2010)^[5]. Other environmental approaches regarding oil and gas include; Petroleum Regulations of 1967, Oil in Navigable Waters Act, 1968, Petroleum Act, 1969, Petroleum (Drilling and Production) (Amendment) Regulations 19, the Petroleum Refining Regulation, 1974, Federal Environmental Protection Agency Act of 1988, National Environmental Standards and Regulations Enforcement Agency (establishment) Act, 2007; the Impact Assessment Act of 1992, Oil and Gas Pipelines Regulation, 1995, the environmental Guidelines and standards for the Petroleum Industry 2002; and the National Oil Spill Detection and Response Agency (Establishment) Act, 2006. Fagbohun (2010)^[5].

Informed by the establishment of NOSDRA and the mandate been given, it has involved multiple stakeholders as well as mobilising centres to improve its capacity to manage and respond to oil spills in Nigerian land and waters, to develop formal verbal and written communication procedures between NOSDRA and the various stakeholders involved in oil spill response (NOSDRA-industry, NOSDRA command –NOSDRA field, NOSDRA-agencies).

These procedures are needed for notification and sharing of technical information; and the need to develop a clear communication procedure for industry to request the use of dispersant. This procedure should identify clearly who at NOSDRA will provide the authorisation and the information required by NOSDRA to analyse the request.

More so, NOSDRA has been taught to engaged its staff in Incident Management System (IMS) training, IMS training is a training required for the staff to better understand the principles of incident management and the roles of the various sections (planning, operations, logistics, finances); the need to develop reflex cards for all positions in IMS to remind staff of communication lines, expected tasks and deliverables and role. Continue capacity building training for NOSDRA staff on technical aspects of oil spill response (dispersants, response strategies, impacts); establishing a joint NOSDRA-industry exercise programme in order to continue to improve communication and understanding between government agencies and industry, and to establish a checklist of the necessary tools such as phones, computer, marine charts, sensitivity maps, etc. for NOSDRA staff to manage an oil spill. This is especially important if NOSDRA operates outside their office.

The Petroleum Technology Development Fund (PTDF) at so point funded and trained some professional staff of NOSDRA to receive specialised training aboard in order to consistently build competencies and capacities in the industry, as well check environmental contamination arising from operations in the oil and gas industry. The whole essence of the paper, is to narrow down on the essence of staff training for all rank of NOSDRA staff, it's preparedness to the task ahead.

2. Literature Review

2.1 National Oil Spill Detection and Response Agency (NOSDRA) Act 2006^[3] Protection Law

The National Oil Spill and Response Agency, (NOSDRA) was establish to have the obligation regarding the security, detection and clean-up of any oil spill in the Nigeria, it likewise includes coordination and liaising with significant partners within and outside Nigeria on issue of enforcement of environmental standards, regulations, rules, laws, strategies and guidelines. Other administrative organizations with oversight capacities and obligation over explicit industries have additionally given guidelines to control the effect of such industries on the clime like the Environmental Guidelines and Standards for the Petroleum Industry in Nigeria (EGASPIN) 2002^[6], as distributed by the Department of Petroleum Resources (DPR).

The main objective of the Agency is to co-ordinate and implements the National Oil Spill Contingency Plan for Nigeria. In implementing this plan, the NOSDRA is mandated to carry out about eleven major activities, which are;

- a. "Establish a viable national operational organization that ensures a safe, timely effective and appropriate response to major or disastrous oil pollution;
- b. Identify high risk areas as well as priority areas for protection and clean up;
- c. Establish the mechanism to monitor and assist or where expedient direct the response, including the capability to mobilize the necessary resources to save lives, protect threatened environment, and clean up to the best practical extent of the impacted site;

- d. Maximize the effective use of available resources of corporate bodies, their international connections and oil spill co-operatives that is Clean Nigeria Associates (CAN) in implementing appropriate spill response;
- e. Ensure funding and appropriate and sufficient pre-positioned pollution combating equipment's and materials, as well as functional communication network system required for effective response to major oil pollution.
- f. Provide a programme of activation, training and drill exercises to ensure readiness to oil pollution preparedness response and the management and operational personnel";

Co-operate and provide advisory services, technical support and equipment for purposes of responding to major oil pollution incident in the West African sub region

- a. upon request by neighbouring country, particularly where a part of the Nigerian territory may be threatened;
- b. Provide support for research and development (R & D) in the local development of methods, materials and equipment for oils spill detection and response;
- c. Co-operate with International Maritime Organization and other national, regional and international organizations in the promotion and exchange of results of research and development programme relating to the enhancement of the state of the art of the oil pollution preparedness and response, including technologies, techniques for surveillance, containment, recovery, disposal and clean up to the best practical extent;
- d. Establish agreements with neighbouring countries regarding the rapid movement of equipment, personnel and supplies into and out of the countries for emergency oil spill response activities;
- e. Determine and preposition vital combat equipment at most strategic areas for rapid response"
- f. NOSDRA has over the years beefed up its readiness in responding to oil spill by repeated activation drill exercise carried out from time to time. The essence of this exercise is to ensure the preparedness of oil facility owners in the event of any spill. The climax of this whole exercise is the issuance of an assessment report which reflects the level of preparedness by the company.
- g. Section 5(f-j) of the NOSDRA Act 2006 emphasized the need for international collaborations, drill exercises, researches and interactions with a view to ensuring adequate preparedness for oil spillages in high-risk areas. These provisions of the Act were given a profound expression following the appointment of Nigeria as the host country for spill response in West Africa by the GIWACAF. In order to effectively monitor and manage trans-boundary oil spills, Nigeria and its West African counterpart, Cameroon commenced a two-day bilateral drill exercise geared towards testing communication between the two countries officials from various government establishments, including the Nigerian Army, Customs, Navy, and other relevant stakeholders in oil spill management in both countries.
- h. NOSDRA Act 2006 Sections 6 and 7 also provides specifies functions for the Agency. Some of which are;

- i. " Being responsible for surveillance and ensure compliance with all existing environmental legislation and the detection of oil spills in the petroleum sector;
- j. Receive reports of oil spillages and coordinate oil spill response activities throughout Nigeria;
- k. Co-ordinate the implementation of the plan as may be formulated from time to time by the Federal Government;
- l. Co-ordinate the implementation of the Plan for the removal of hazardous substances as may be issued by the Federal Government;
- m. Perform such other functions as may be required to achieve the aims and objectives of the Agency under this Act or any plan as may be formulated by the Federal Government pursuant to this Act".

Of recent the bulk of the NOSDRA's sanction letters and cases in Court have being on account of the failure of owners of facilities or operators to report incidences of oil spillages. Whenever a spill occurs, the operator or facility owner is duty bound to inform the Agency about the spill then fill and submit FORM A (Oil Spill /Leak Notification Report form). The Act is educational on this situation, as the drafters of the Acts considered it fit to punish any default with respect to administrators. An oil spilled is by this Act to report an oil spill to the Organization recorded as a hard copy not later than 24 hours after the event of an oil spill in default of which the inability to report will draw in a punishment in the amount of 500,000 Naira (N500, 000.00) for every day of inability to report the event.

One critical issue very fundamental to NOSCP, the Act and regulators of the oil industry is the issue of clean up. The NOSCP adequately provides for different clean up specifications for varying geographic terrains. The Act on its own clearly sanctions failure on the part of the operators to clean up and remediate impacted site. The Acts gives that inability to tidy up the affected site, to all useful degree including the remediation, will draw in a further fine of 1,000,000 naira. It is even more dangerous to leave impacted sites untended, as in the case of the recent spill at Kom Kom community at Oyigbo in Rivers state that led to explosion and death of many lives. It stands to reason that the Act should have determined a term to the 1,000,000 naira fine as it accomplished for the inability to report or successfully fix a spilling pipeline. A judicial interpretation to this arrangement of the law or a by and large revision of this part of the Act will help harden the approval. In addition to the above outlined functions of NOSDRA, there are other special functions ascribed for by the Act in section 7 of the Act. These functions are thus;

- a. "The Agency shall ensure the co-ordination and implementation of the Plan within Nigeria including within 200 nautical miles from the baseline for which the breath of the territorial waters of Nigeria is measured;
- b. It shall undertake surveillance, reporting, alerting and other response activities as they relate to oil spillages;
- c. Encourage regional co-operation among member states of West African sub-region and in the Gulf of Guinea for combating oil spillage and pollution in Nigerian contiguous waters;
- d. Strengthen the national capacity and regional action to prevent, control, combat and mitigate marine pollution;

- e. Promote technical co-operation between Nigeria and member States of the West African sub region”.

It is worthy to note that NOSDRA in discharging these aforementioned functions usually request for and approve from time-to-time companies internal oil spill contingency plans (OSCP) and their Spill Prevention, Control and Counter Measure Plan (SPCCP). This is done in a bid to strengthen the nation’s preparedness for effective management of oil spillages.

At this juncture it is relevant we mention that there are three tiers of spills recognized by the National Oil Spill Contingency Plan. They are;

Tier 1: “Operational type spills of volume is between 0-25 barrels to inland waters or 0-250 barrels to land or coastal/offshore waters that may occur at or near a company’s own facility as a consequence of its activities”.

Tier 2: “A larger spill volume of 25-250 barrels to inland waters or 250-2500 barrels to land or coastal/offshore waters in the vicinity of a company’s facilities”.

Tier 3: “This is a major spill volume greater than 250 barrels to inland water ways or above 2500 barrels to land or coastal/ offshore waters where substantial further resources will be required and support from a national (Tier 3) or international co-operative stock pile, like the Oil Spill Response Limited (OSRL), may be necessary. The essence of this distinction is to determine the kind of response to be deployed into a particular spill incidence. For a tier one spill is expected that the operator should be able to deploy its internal safety measures to contain and clean up the particular spill. For that of tier 2 spill, the response is expected to be mobilized from more than one operator in collaboration with other industries and possible government agencies on a mutual aid basis”.

However, where it is a tier 3 spill or a major tier 2 spill, the National Control and Response Centre shall for this purpose activate the NOSCP and through the office of the Director General of the Agency, “co-opt all Government Ministries and Agencies specified in the Second Schedule to the Act”. The Agencies and Ministries are;

1. “Nigerian Institute of Oceanography and Marine Research
2. The Federal Ministry of Works
3. The Federal Ministry of Health
4. The Federal Ministry of Transport
5. The Federal Ministry of Information
6. The Federal Ministry of Water Resources and the Federal Ministry of Agriculture and Rural Development
7. The Ministry of Communications
8. The Federal Ministry of Aviation (NIMET)
9. The National Emergency Management Agency
10. The Oil Producers Trade Section/Lagos Chamber of Commerce (OPTS)
11. Ministry of Science and Technology
12. Ministry of Defense
13. The Nigerian Police Force”

It must be stated here that each of these Ministries and Agencies of the Federal Government are required to play specific roles in the management of such a massive spill in the event there is one. For example, the Nigerian Institute of Oceanography and Marine Research would be expected to give crucial technical assistance with information on oil spill direction for spillages in saline and sea waters and

furthermore screen the degree of impact in the seaside and marine climate. The Ministry of Defense is required to deploy all skill in emptying casualties or abandoned occupants to assigned territory and render help to upset vessels. The OPTS is relied upon to give the operational and ESI guides of the spaces influenced or prone to be influenced by an oil spill.

In 2013, a drill exercise was carried out by the Agency in Port Harcourt. The NOSCP was activated and the response readiness of almost all stakeholders in the industry was tested. The Director-General of NOSDRA Sir Peter Idabor, said the exercise was in collaboration with Shell Nigeria, adding that the essence of the drill was to x-ray the effectiveness of collaboration by stakeholders. He added that the stakeholders in the spill situation include the Army, Navy, Customs and all parties that need to be called up in the case of oil spill.

It is also apt to state that Section 18 of the NOSDRA Act provides for establishment of a National Control and Response Centre. The Centre is expected to act as a report processing and response coordinating centre for all oil spillage incidents in Nigeria. The Centre is to receive reports of oil spillages from the zone offices and control units of the Agency. They are also saddled with ensuring compliance monitoring of all existing legislation on environmental control, surveillance for oil spill detection monitoring and coordinate responses required in plan activation.

Section 19 of the NOSDRA Act 2006 saddles the Agency with a further set of responsibilities in the management of oil spillages in the country especially as it relates to major or disastrous oil spills. The summary of these functions are:

1. “In collaboration with other Agencies co-opt, undertake and supervise all those provisions as set out in the Second Schedule to the NOSDRA Act.
2. Assess the extent of damage to the ecology by matching conditions following the spill against what existed before (reference baseline data and Environmental Sensitivity Index maps.)
3. Undertake a post spill impact assessment to determine the extent and intensity of damage and long-term effects;
4. Advise the Federal and State Governments on possible effects on the health of the people and ensure that appropriate remedial action is taken for the restoration and compensation of the environment.
5. Assist in mediating between the affected communities and the oil spiller.
6. Monitor the response effort during an emergency, with a view to ensuring full compliance with existing legislation on such matters;
7. Assess any damage caused by an oil spillage.
8. Expeditiously process and grant approval for any request made to it by oil spiller for the use of approved dispersant or the application of any other technology considered vital in ameliorating the effect of an oil spill.
9. Advise and guide the response efforts as to ensure the protection of highly sensitive areas, habitats and the salvation of endangered or threatened wild life.
10. Monitor the clean-up operations to ensure full rehabilitation of the area”.

In a bid to discharge these functions effectively the Agency deemed it fit to make specific regulations to address issues touching on oil spill recovery, clean-up, remediation,

damage assessment and oily waste management.

Section 19(3) of The NOSDRA Act mandates the Agency to co-work with the oil spiller in the assurance of suitable measures to forestall unnecessary harm to the climate and networks. They are also mandated to mobilize internal assets and furthermore help to acquire any external human and monetary assets that might be needed to battle any oil slick and furthermore help with the evaluation of harm brought about by an oil spillage. However Madumere (2006) [7] posited that the degree of implementation of existing environmental laws as a measure of government commitment is lacking, he concluded that the government of Nigeria does not have the required commitment to drive or implement sustainable environmental development in Nigeria.

Nonetheless, the difficulties and possibilities of environmental approaches and Laws in Nigeria include, inadequate coordination leading to inefficiency of the controllers, poor environmental information base, duplication, and covers of regulator's capacities. Anyway, the possibility of environmental strategies in Nigeria is for the most part viewed as splendid, given the way that the industry is as yet evolving.

2.2 Staff Training

Staff training by National Oil Spills Detection and Response Agency (NOSDRA) is a major priority of the agency to facilitate the agency's efficiency in the organisation, thus, it has receives specialised training from the Petroleum Technology Development Fund (PTDF) to enhance the agency's mandate. The fund had trained many environmental scientists at Masters and Doctoral levels under the overseas scholarship scheme and has extended the training to the staff of the agency that is already on the job.

The essence here is to build competencies and capabilities in the oil and gas industry and as part of its mandate to offer short term training for key staff of NOSDRA. According to Oluleye (2019) [8], he observed that oil spills is a major form of environmental contamination arising from operations in the oil and gas sector. As such, staff training should be directed at containing the effects of pipeline vandalism, and the use of poor construction materials in building petroleum storage facilities which results in contamination of the food chain, due to the release of heavy metals and carcinogens into the eco system. NOSDRA as the agency's strategically makes conscious effort at seeking collaboration with relevant government stakeholders like PTDF, it is on record that PTDF has over the years contributed immensely to the institutional and human capital development in the petroleum sector of the country and NOSDRA has tap from this mandate.

The National Oil Spill Detection and Response Agency (NOSDRA) have also collaborated with Ghana-based Kofi Annan International Peace and Training Centre (KA IPTC) to strengthen the capacity of its staff. The collaboration had culminated in a staff member of the agency undergoing a rewarding training programme at the centre in 2019 on maritime security and transnational crimes. The key issues that raised from that training was the need for inter-agency synergy, this synergy was applied during the multi-stakeholders' operation involving NOSDRA, Nigerian Maritime Administration and Safety Agency (NIMASA), Nigerian Navy and others against maritime crimes in Nigeria in 2019, tagged: "30 Days at Sea".

According to Ulrich (2019) [9], the leader of the KA IPTC team, he posited that the invaluable contribution of NOSDRA to exchange of vital information on maritime security, especially with regard to crude oil theft and illegal refining was delightful. The training opportunities he added was daunted with the challenges of capacity building, working tools and public sensitisation.

Other critical stakeholders NOSDRA has been involved with in a number of collaborations on crude oil theft and spills include National Central Bureau of Interpol, Nigerian Navy, Military Joint Task Force (JTF), NIMASA and Marine Police in staff training to contain and constrain criminal enterprises in Nigeria's oil industry.

According to NOSDRA (2013) [10], Shell Companies in Nigeria (SCiN) organised a training exercise where NOSDRA had the opportunity to test recent changes made to its NOSCP. The training simulated a major oil spill in Nigerian waters escalating to Tier 3. In this scenario, NOSDRA's Director General became the National Incident Commander responsible for the overall coordination of response involving industry and government resources. Shell in collaboration with Oil Spill Response (OSR) designed this training exercise, which involved multiple stakeholders as well as mobilising four command centres. At the request of NOSDRA an IPIECA/IMO representative participated to this exercise. This report describes the exercise as well as providing recommendations to further improve Nigeria's NOSCP and the overall objective for this training exercise was to test the activation of NOSCP Tier 2 to Tier 3 incident.

More specifically, the various organisations like NOSDRA, DPR and SCiN that participated in this training exercise had set their own specific objectives. They are as follows: National Oil Spill Detection and Response Agency (NOSDRA): Aimed at assessing the industry preparedness capabilities to respond effectively to a worst-case scenario oil spill;

- To appraise the effectiveness of interagency collaboration as a necessary ingredient for a successful Tier 3 oil spill response. The Department of Petroleum Resources (DPR): Aimed at appraising and confirm readiness of SCiN to implement actions as stated in their Oil Spill Contingency Plans in the event of an oil spill incident. Exercise Eagle Port Harcourt, Nigeria – 26 -28 November 2013 organised by Shell Petroleum Companies in Nigeria (SCiN): Was aimed at self-assuring the preparedness of other response agencies (CAN, OSR) as Response Service provider at the different tier levels as agreed in established Service Level Agreement (SLA);
- To provide refresher training opportunity for SCiN Emergency Response Team (ERT) members and other relevant stakeholders that will be involved in responding to major oil spill but in a controlled environment;
- To test effectiveness of communication protocols between intra/inter agencies and spiller involved in the response.

3. Theoretical Background

Human Capital Theory has been adopted as a theory for this study; though there are many theories regarding training and development, but in this research the theory Human Capital theory is best suited. The idea is that humans increasing

their productivity and efficiency through a greater focus on education and training. Becker (1962)^[11] and Rosen (1976) formulated this theory, they argued that individual workers have a set of skills or abilities which they can improve or accumulate through training and education. Al-Mughairi (2018)^[12], mentioned that, training indicates plans and programs that provide employees with new skills, to improve professional development opportunities and perceived organizational performance. Therefore, it will usually be necessary to provide individual employees with the skills necessary to be able to work fully within the organization.

As companies change, individuals must be trained to improve so that they can continue to work efficiently. Training is considered as the way towards enhancing current skills, information, presentation, and capacities in a person. Therefore, Akugri (2017)^[14] demonstrates that training is a composed increment from the know-how aptitudes and sensations required for staff individuals to execute effectively in the offered procedure, and, to work in underlying circumstance. Besides that, it additionally upgrades the capacities of board of employees in extremely compelling path by inspiring them and changing them into well arrange and very much mannered, that at least influences the execution of association.

Laing (2009)^[15] characterize training as a marker to upgrade predominant aptitudes, learning, capacities and viewpoint of the representatives that outcomes in viable execution of the labourers. Nonetheless, he includes one thing progressively that it (training) expands the generation of the association. Training is a functioning way to empower individual to make utilization of his capacity and his potential ability.

Mzimela, *et al* (2017)^[16], stated that, providing the training, development, and education for employees at the right time provides significant rewards for the organization in

increasing their productivity, knowledge, loyalty, and contribution. In order to serve the employees to do their work as wanted, the organizations should provide pieces of training to improve staff capabilities. When employees realize their organizations' interest in their capabilities by offering training programs, they will do their best to achieve organizational goals and display better performance in their work Elnaga & Imran (2013)^[17]. In this direction, employee performance improves. Consequently, training and development help organizations to continue competitively on the market Ford *et al.* (2010)^[21]. In their view, posited that, organizations should create a professional environment that stimulates employees' knowledge of their organization, as well as their competitiveness Huselid & Becker (2011)^[22].

4. Methodology

Quantitative research method was adopted to assess factors impacting on oil spill. The respondents targeted were NOSDRA employees; the choice of using them was informed by their involvement in the clean-up of oil spills. Hence, a closed-ended questionnaire was designed in line with variables from the extant literature. A five-point Likert scale was used: 1 = strongly disagreed (SD), 2 = Disagree (D), 3= Neutral (N), 4 = Agree (A), 5 = strongly agree (SA). The data was collected from the employees of oil NOSDRA; therefore, the unit of analysis of the study were individuals. The sector of the study was the oil and gas industry, data collected from their employees related to training, and employee performance. The nature of the study is cross-sectional, which means that only one time data is collected from the employees. The employees of NOSDRA are the population of the current study, and the sample selected from a large population that represents the overall population.

Table 1: To investigate the effectiveness of NOSDRA management in relation to the staff training given to manage oil spills impacted site. N =405

S. No	A	NA	SA	D
1. NOSDRA organizes training for its staff regularly	202 (50%)	6 (1%)	30 (7%)	167 (41%)
2. The training given to NOSDRA staff is in response to the nature of oil spillage (Tier 1, 2, 3.)?	119 (29%)	100 (25%)	84 (21%)	102 (25%)
3. Tier 3 oil spillage training involves the Navy, Air force and the Army?	238 (59%)	23 (6%)	57 (14%)	87 (21%)
4. Pre-mobilization and repairs, oil spill management and clean ups are some of the various trainings given to NOSDRA staff to enable them work effectively when faced with disaster situation.	230 (57%)	31 (8%)	77 (19%)	60 (15%)
5. The training given to NOSDRA staff corresponds to the terrain in respect to the impacted communities.	185 (46%)	19 (5%)	14 (3%)	187 (46%)

Source: Researchers fieldwork 2020

Table seeks to investigate the effectiveness of NOSDRA management in relation to the staff training given to manage oil spills impacted site. The result for the analysis to examine showed that 50% of the respondents “agreed”, that NOSDRA organizes training for its staff regularly, 41% of the respondents “disagreed” that that NOSDRA organizes training for its staff regularly. Even as 29% of the respondents “agreed” that the training given to NOSDRA staff is in response to the nature of oil spillage (Tier 1, 2, 3.).25% of the respondents disagreed that the training given to NOSDRA staff is in response to the nature of oil spillage (Tier 1, 2, 3.).59% of the respondents agreed that Tier 3 oil spillage training involves the Navy, Air force and Army.

21% of the respondents “disagreed” that Tier 3 oil spillage training involves the Navy, Air force and Army. More so, majority of the respondents representing 57% of the population “agreed” that Pre-mobilization and repairs, oil spill management and clean ups are some of the various trainings given to NOSDRA staff to enable them work effectively when faced with disaster situation. Although 15% of the respondents “disagreed” that Pre-mobilization and repairs, oil spill management and clean ups are some of the various trainings given to NOSDRA staff to enable them work effectively when faced with disaster situation. The training given to NOSDRA staff corresponds to the terrain in respect to the impacted communities. This is as 46% of

the respondents “agreed” to this.

5. Result and discussion of Findings

The study showed that NOSDRA staff training and policy implementation has helped to curtail oil spillage through its trained personnel by mobilizing important and enabling resources to save lives and protect threatened environment. Multinational Oil companies do not abide to NOSDRA policy on sustainable development. This is in contrast to the mandate of NOSDRA in discharging their functions to usually request for and approve from time-to-time company’s internal oil spill contingency plans (OSCP) and their Spill Prevention, Control and Counter Measure Plan (SPCCP). This is done in a bid to strengthen the nation’s preparedness for effective management of oil spillages.

Though, owners of pipelines (OMC’s) hardly report oil leakage to NOSDRA, they also do not abide to NOSDRA policy because NOSDRA has not enough political will to enforce some of its policies, this is an indication that NOSDRA has not done enough to discourage oil spillage through its policy enforcement to defaulters, just as it is certain that NOSDRA lacks the political will to ensuring sustainable oil spill free environment. Finally, in the course of clean up’s of the oil spills the study reveals that communities, funding and litigations were some of the factors that affected the smooth staff training and policy implementation.

6. Conclusion

Pre-mobilization, repairs, oil spill management and clean ups are some of the various trainings needed to give to NOSDRA staff to enable them work effectively when faced with disaster situation. This study has in-depth contribution to the existing body of knowledge as it emphasizes on timely response to disaster and management, which provides the basis and is important in reducing the adverse effects of oil spills.

NOSDRA also organizes timely training for its staff; the training given is in response to the nature of oil spillage (Tier 1, 2, 3.). Tier 3 oil spillage training involves the Navy, Air force and Army. This training serves as an effective tool in providing adequate and necessary skills and ability to understand issues of disaster.

7. Recommendation

Effective and right training is needed to manage oil spill impacted sites, partnership with relevant stakeholders to identify the right challenges in alleviating effects of oil spills degradation. More so there has to be synergy in planning and implementation of environmental policy for both public and private sectors.

8. References

1. FEPA Act, 1988. digitalcommons.law.ggu.edu/annlsurvey/vol15/iss1/2/
2. NESREA Act, 2007. nesrea.gov.ng https://www.nesrea.gov.ng/.../2020/04/NESREA-ACT.pdf · PDF file
3. NOSDRA Act, 2006. www.ecolex.org/details/legislation/national-oil-spill-detection- and-response-age...
4. Okafor O. Environmental laws and factors affecting them in Nigeria: Case study of gas flaring in Niger delta, Nigeria. Msc Degree Paper, 2011.
5. Fagbohun O. The Law of Oil Pollution and Environmental Restoration: A Comparative Review. Odade Publishers, Alagomeji, Yaba-Lagos, Nigeria, 2010.
6. EGASPIN. Environmental Guidelines and Standards for the Petroleum Industry in Nigeria (EGASPIN) 2002, 2002. Publish by DPR.://standards.lawnigeria.com
7. Madumere G. Governance and sustainable development in Nigeria, 2006.
8. Oluleye F. Nigeria’s Energy sector Privatization: Reforms, Challenges Prospects. South Asian Research Journal of Humanities and Social Sciences, 2019.
9. Ulrich D. Tends in Organisational Transformation. University of Houston, 2019.
10. NOSDRA. A 407 National Oil Spill Detection and Response agency: In this act referred to as “The Agency” with responsibility for formulation of policy, 2013.
11. Becker GS. Investment in Human capital: A Theoretical Analysis. Journal of Political Economy. 1962; 70:9-49. Doi: http://dx.doi.org/10.1086/258724
12. Al-Mughairi AM. The evaluation of training and development of employees: The case of a national oil and gas industry. Brunel University London, 2018.
13. Wart MV. Leadership in public organizations: An introduction. Taylor & Francis, 2017.
14. Akugri A. Examining the impact of training and development on employee’s performance a case study some selected national health insurance scheme offices within the Kumasi Metropolis. University of Education Winneba, 2017.
15. Laing IF. The impact of training and development on worker performance and productivity in public sector organizations: A case study of Ghana Ports and Harbours Authority, 2009.
16. Mzimela TC, Chikandiwa H. Tourism, and Leisure, Employee training and development practices in the tourism and leisure sector in KwaZulu-Natal, South Africa. 2017; 6(4):1-17.
17. Elnaga A, Imran B. The effect of training on employee performance. 2013; 5(4):137-147.
18. Shafiq SM, Hamza E. Learning, and Training. The effect of training and development on employee performance in private company, Malaysia. 2017; 2(2):7-12.
19. Monyoloc S. The Impact of Training on Employees’ Performance: The Case of Banking Sector in Lesotho. 2018; 8(2).
20. Ditta A. Assessment of Human Resource Management Practice in Ethiopian Broadcasting Corporation. Addis Ababa University, 2019.
21. Ford JK, Kraiger Merritt S, Kozlowski S, Salas E. Training and d.i. organizations. The multidimensionality of learning outcomes revisited, 2010, 135-165.
22. Huselid MA, Becker BE. Bridging micro and macro domains: Workforce differentiation and strategic human resource management. Ed: Sage Publications Sage CA: Los Angeles, CA, 2011.