
Fire Mitigation and Recovery in the Selected Strategic Organizations in Port Harcourt Metropolis, Rivers State, Nigeria

Akiojano, A. S., Obafemi A.A. and Ogoro M.
Centre for Disaster Risk Management and Development Studies; Faculty of Social Sciences University of Port Harcourt

Corresponding Author Email: shadrack.akiojano@yahoo.com

Abstract

Fire mitigation and recovery in three selected strategic organizations in Port Harcourt Metropolis is a comprehensive assessment to know the level of fire mitigation and recovery in Indorama Petrochemical Industries Eleme, Notore Chemical Industries PLC Onne and Shell Petroleum Corporation at Etche all in Obio/Akpor axis of Port Harcourt Metropolis. This research is prompted by the proximity of these Organization areas to the community's settlement. The study analyzed the ability and capacity of the organizations to build back better, mitigate and recover from fire inferno. The research design is abductive reasoning carried out by observation, interview and checklist to compare the organizations' performances. The sample size for each organization cut-across ten (10) sources of personnel from management and supervisory level according to each organization as stipulated in the questionnaire for four years (2017 – 2020) with Indorama having working population over 5,000 while Shell and Notore over 2000 respectively. Data collection was achieved through Primary and secondary sources. Primary data source is derived through structured questionnaire, interview, observation and checklist designed to cover the objective of study. Secondary data source is achieved from information that is secondary in nature and are derived from Organization journals such as Notore Tribe and Shell Info, Board publications as well as office and site posters. Descriptive tool parameter measurement method is in percentages, frequency, tables Analysis taking decision to be Strongly agreed, Agreed, Disagreed and Strongly disagreed with weighted average. Finding reveals that in Organizational commitment and robust maintenance to safety culture; Shell organization with 31% and weighted average 3.2; Indorama with 30% and weighted average 3.0 and Notore with 32% and weighted average 3.1 all strongly agreed to the standard of safety. Also to the objective of adherence to New technology plan and implementation/ Network and resource generation establishment; Shell with 38%, Indorama with 34% and Notore with 39% and weighted averages of 2.8, 2.9 and 2.6 respectively. All the organizations' performances met weighted averages and are recommended to be consistent and make improvement for further changes.

Keywords: Fire, Mitigation, Organisation, Notore, Shell, Indorama

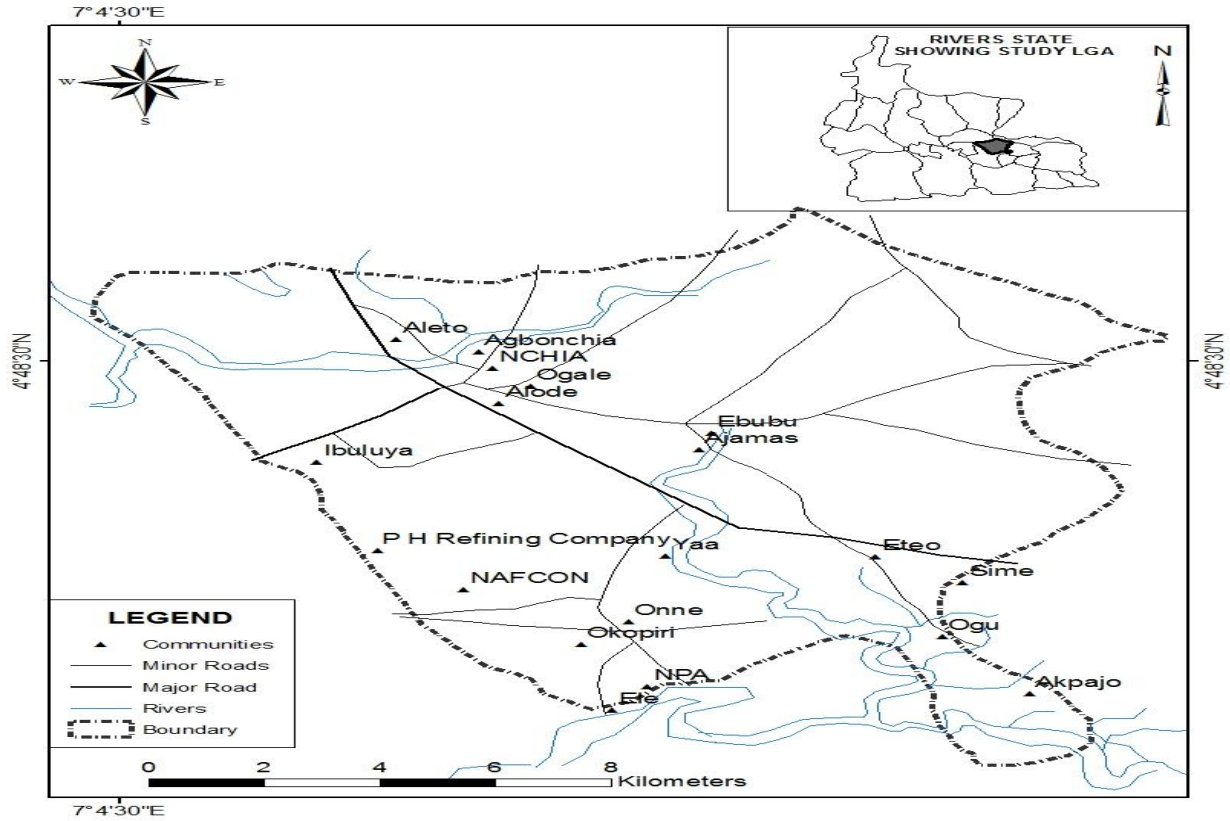
Introduction

Fires are adverse events with tangible costs to property and human life. The devastating impact of the loss provides a basis for evaluating the social and economic set back fire has caused too many organizations and this however, has pushed many organizations out of business. Incidences of fire outbreak in industrial organizations that are into production with various high level of temperatures and pressures, converting gases such as methane with massive heat exchangers carrying out processes chemically and physically should be at top of fire risk evaluation knowing the impact it has to human, society, economic, social and the environment if they occurred. The neglecting of ISO standards while pretending to abide by the frameworks enhances fire hazard making fire to be difficult to manage, hence except complete adherence to fire emergency preparedness, mitigation, recovery, plans and commitments to implement all it takes to combat new fire risks and bring them under control thereby averting massive loss and ensuring business continuity should be of primary concern to organization. These are essential steps towards the development of methods for measuring vulnerability and the systematic identification of relevant factors. The frameworks highlighted for this work include, the Occupational Safety and Health Administration Framework (2007) and the pressure release model by Wisner, Cannon and Davis, (2003). Steir (2010) revealed that some Nigerian companies do not disclose information about their Safety Equipment integrity management. Bayuk (2008) explained that leadership commitment to safety does not only involve establishing policy, providing direction and targets but also requires a strong focus on safety through communication, commitment, participation, providing resources and taking responsibilities for addressing safety issues. Therefore this work seeks to evaluate the fire preparedness and mitigation capacity of selected companies/organizations in Port Harcourt metropolis.

Material and Methods

Study Area

Location and Extent



Eleme Local Government showing Communities.

Sample and Sampling technique

Interviews: interview method will be adopted alongside observation and check list. The interviews were conducted from several (10) sources at management and managerial level according to each organization as stipulated in the questionnaire:

Observation: Data collection is physical or visual inspection on the infrastructures, the buildings and especially the conditions of Active and Passive Fire equipment.

Checklist: Checklist is used to evaluate or compare the actual condition of existing infrastructure, new technology introduced, trainings carried out, operation ability, education and the standard regulations.

Types and sources of Data

Both secondary and primary sources of data shall be deployed to address the research questions. The primary source of data included the use of structured questionnaire, interview, checklist and in-depth interview methods to collect data from the field. The instruments shall be designed to cover the objectives of the study. Secondary data shall be sourced from information that is secondary in nature and will be derived from official publication of

government and non-governmental agencies, project reports, published literature in Libraries alongside the internet, variety of books, articles, reports, and newspaper

Results

Table 1: Organization commitment to safety of the area and population

	Company		
	SHELL	INDOROMA	NOTORE
SA	31	30	32
A	29	30	28
D	20	20	20
SD	20	20	20
WA	3.2	3.3	3.1
REMARK	Agreed	Agreed	Agreed

Table 2: Adherence to new technology plan and implementation/network and resource generation establishment

	Company		
	SHELL	INDOROMA	NOTORE
SA	38	34	39
A	22	26	31
D	20	20	15
SD	20	20	15
WA	2.8	2.9	2.6
REMARK	Agreed	Agreed	Agreed

Discussions of Findings

All organizations of the area of assessment had weighted average of 3.2, 3.3 and 3.1 respectively from responses indicating that they all agreed to be committed to safety of the area and the population. They have mutual understanding with the communities in terms of employment, contract and provision of light and water as well as fire safety trainings / surveillance of area of study. Indorama often pay homage to even chiefs of the area showing loyalty and support whenever the need arises thereby having peaceful operations without disturbance.

Conclusion

The study concluded that the adaptation to new technology and planning in implementing certain technologies and measure to influence efficient safety across the organizations revealed that Indorama tend to move towards technologically driven safety approach with a weighted average of 2.9 compared to other companies under study. Shell with a weighted average of 2.8 and Notore with weighted average of 2.6 are old in business and are used to analog while Indorama is coming up digitally.

References

- Abrams, M., Hook, S. & Ramachandran, B., 1999. ASTER User Handbook, Version 2. NASA, Jet Propulsion Laboratory.
- Agha E. (2012), Nigeria: Pipeline Explosion hits Lagos Community, Daily Trust News
- ADPC (2003) Asian Urban Disaster Mitigation News quarterly Activity highlights
- Africa P. Dunne and G. Mhone (ILO, 2002-92-2-11356-0 [ISBN])
- Aifereshi : P (2011) Disaster Risk Assessment and Analysis Method. A Lecturer note, Univ.PH.
- Aldrich D.P. (2012). Building Resilience: Social Capital in Post – Recovery. University of Chicago Press: Chicago, IL USA.
- Amaize E and Ahon F (2013) Delta Pipeline Explosion, Vanguard News.
- Andreae, M.O. & Merlet, P., 2001.Emission of trace gases and aerosols from biomass burning. Global Biogeochemical Cycles, 15(4), 955–966
- Anifowosa, B, Lawler D.M. Vander Horse D and Chapman L (2012), attacks on oil transport in Nigeria
- API RP 2003 – 2011 “Fire Protection in Process Plants” – Candidate