



Unveiling The Economic, Social and Health Impact of cement Production in Rumuolumeni Community, Rivers State, Nigeria

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Abstract

The world is experiencing a rapid departure from the industrialisation era to embrace the information age fuelled by artificial intelligence (AI). This intended transformation has engendered the abandonment of secondary production activities in urban societies. The study assessed the social, economic and health impact on the host community during operation, after the decommissioning and eventual abandonment. The study area is located within the precinct of Rumuolumeni Community South-West of Obio/Akpor Local Government Area of Rivers State, Nigeria at 272929 Eastings and 532003 Northings (WGS 1984 UTM Zone 32N). However, SPOT24 is located precisely at 272000 Eastings and 530500 Northings (WGS 1984 UTM Zone 32N). The study employed a qualitative research approach and adopted a case study research design. There was a total of fourteen (14) interviews conducted; these included one permanent and two casual staff who worked in the cement industry (SPOT24). Two Community Development Committee (CDC) chairmen; one chairman while SPOT24 existed and the second chairman after the abandonment of SPOT24. Two youth leaders; one youth leader during the operation of SPOT24 and another leader after the abandonment of SPOT24. Similarly, two women leaders were also interviewed; one during and the other after SPOT24 was abandoned. Also, two Community Liaison Officers (CLOs); one before and the other after SPOT24 were interviewed. Besides, an academic, a farmer and a fisherfolk were also interviewed for this study. The study found that there are both positive and negative social and economic impacts after the decommissioning. The positive benefits include the maintenance of the access roads, employment opportunities and improved living conditions. The negative impacts identified are insecurity, massive unemployment, poor road maintenance, inadequate healthcare facilities and services, and abandoned and derelict properties. The study findings recommend that the government of Rivers State should step in and reinvigorate the benefits scheme especially the scholarship scheme for the host community to mitigate the adverse challenges faced by the host community; the community should ensure that the activity of the youth is brought under control to minimise the violent activities; there should be a two-pronged collaborative effort between the government and the host community to ensure that all the abandoned sectors be reinvigorated; and the government should make alternative arrangements with the community to ensure that the abandoned industrial site is being reacquired and put into proper use.

Keywords: Bouncing back, Cement production, SPOT24, Impact assessment

Introduction

The world is gradually moving away from the Industrial Era towards the Information Age and Artificial Intelligence. It has left behind relics of its former industrial sites abandoned and ageing.

Oftentimes, older industrial buildings and sites have become the epitome of pollution occasioned by either disused and abandoned manufactured materials are used and abandoned materials within the site. In most circumstances, these locations as time progresses become derelict and cannot be used for any other activity as they

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incrementally accumulate layers of dirt until they are either repurposed, demolished, or completely obliterated in the memories of all stakeholders. These abandoned industrial sites such as factories, mills and mines have served their useful lives and now stand silent.¹

Historically, the process of decommissioning industrial sites can be traced to the beginning of the 1970s when the term de-industrialisation became a popular lexicon at the emergence of the first global financial crisis. One fact remains unclear as government and industrialists do not take into consideration the implications of the de-industrialisation and decommissioning processes in the last fifty years as diverse phases of the de-industrialisation process have been identified. Each of these phases coincides with their invariant characteristics that have engendered an enormous decline in industrial production because of the quantum deterioration of spaces that had housed these industries.²

Industrialisation serves as a collective connotation for a set of social and economic processes related to the discovery of more efficient ways of value creation. These more efficient value-creation methods are categorised as "primary industry" and/or "secondary industry" (primary industry of economic activity refers to the mining industry, fishing, agriculture, and hunting. While the secondary industry connotes the transformation of raw materials into tangible finished goods and the tertiary industry refers to services.³ Industrialisation as a concept has brought significant changes in the lives of people from social interactions, quality of life, political consequences, and economic power.⁴

Cement production is one major industrial activity that has changed the townscape of most places where they are sited. Cement which is a powdery substance made with clay and calcined lime is the major ingredient used as a basic construction ingredient.⁵ It has a very high global demand due to massive infrastructural development taking place with a steady increase in the global consumption of cement.⁶ In the rendering of Hannah,⁷ the production and usage of cement in Africa rose remarkably from 1.5 billion tonnes per annum in 2005 to 2 billion tonnes per annum by the end of 2010.

The intensive demand for cement in the building industry in Africa has led to the phenomenal rise in the prices of building materials as continuous importation of cement has led to the rapid development of cement factories.⁸ However, the production of cement has its attendant multiple negative impacts on human health and the environment in both developing and developed countries alike.^{9,10}

Over the years, industrialisation has posed a major threat to human economic survival and the environment. Industrialisation undermines the established order through the displacement of exist-

ing occupations and a shift of production from villages and homes to factories. These movements often engender migration and urbanisation, social mobilisation, contracted monetary relations, and promote both secular and rational perceptions.¹¹ Such changes often alter prevailing role arrangements such as class structure, fester status disintegration, gradual eroding of established norms and gradual transformation of traditional tastes to Blumer.¹²

Rumuolumeni town in Rivers State, Nigeria has experienced similar scenarios of abandonment of both state-owned and privately-owned industries. A case in point is the abandoned industrial site situated in Rumuolumeni Community that was operated by the former Eastern Bulkcem Cement Company Limited, the owners of Eagle Cement brand of Cement in Nigeria. The industrial site is located on 24 hectares of land which this study will be identified as **SPOT24**. While in operation, there were enormous social, economic and health benefits that accrued to the residents of the host community and other contiguous localities within the sphere of influence of the industrial site.

SPOT24 was established and located in the Rumuolumeni community, Obio/Akpor Local Government Area of Rivers State, Nigeria. While in operation, the Eastern Bulkcem Company created enormous social and economic benefits as well as challenges for the inhabitants. These challenges especially were evident in an increase in housing demand, elimination of traditional means of livelihood, an increase in crime and prostitution, and the emission of cement dust into the environment. The process of cement manufacturing requires that most of the raw materials or other additives be transported onsite. This continuous movement of goods and services increased the volume of vehicular and human traffic in the area including haulage trucks which led to traffic congestion and gradual dilapidation of the major access road to the site.¹³ This study aims to carry out a post-impact assessment of cement production and decommissioning *in spot24* in the Rumuolumeni community after decommissioning and eventual abandonment.

Study Area

The study area is located within the precinct of Rumuolumeni Community South-West of Obio/Akpor Local Government Area of Rivers State, Nigeria at 272929 Eastings and 532003 Northings (WGS 1984 UTM Zone 32N). However, **Spot24** is located precisely at 272000 Eastings and 530500 Northings (WGS 1984 UTM Zone 32N). Spot24 is bounded on the North by Aveon Offshore company, on the North-East it is bounded by the Ignatius Ajuru University of Education, while on the West, it has boundaries by New Calabar River, and South-East by Nigeria Navy Ship Pathfinder (NNS Pathfinder) Figures 1&2.

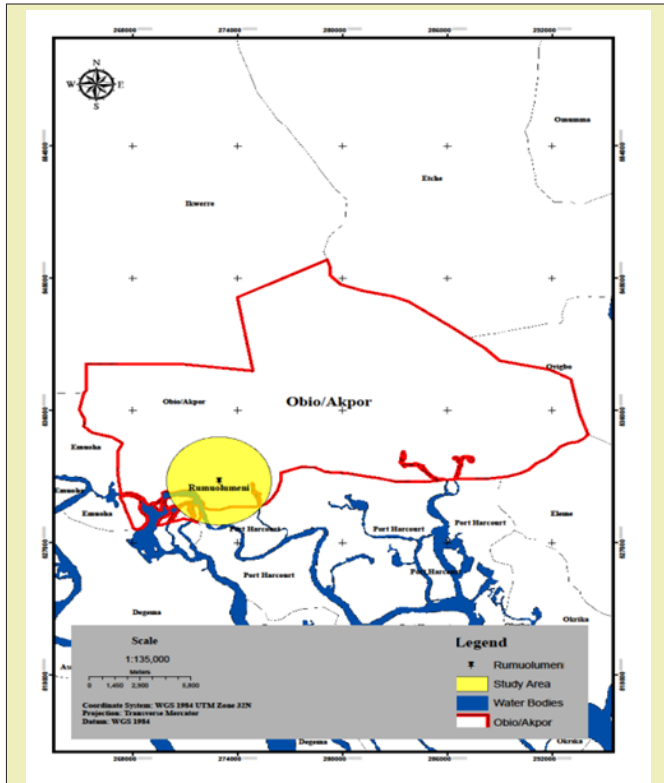


Figure 1: Map of Obio/Akpor local government area locating rumuolumeni town.
Source: Department of urban and regional planning, Rivers state university, 2023.

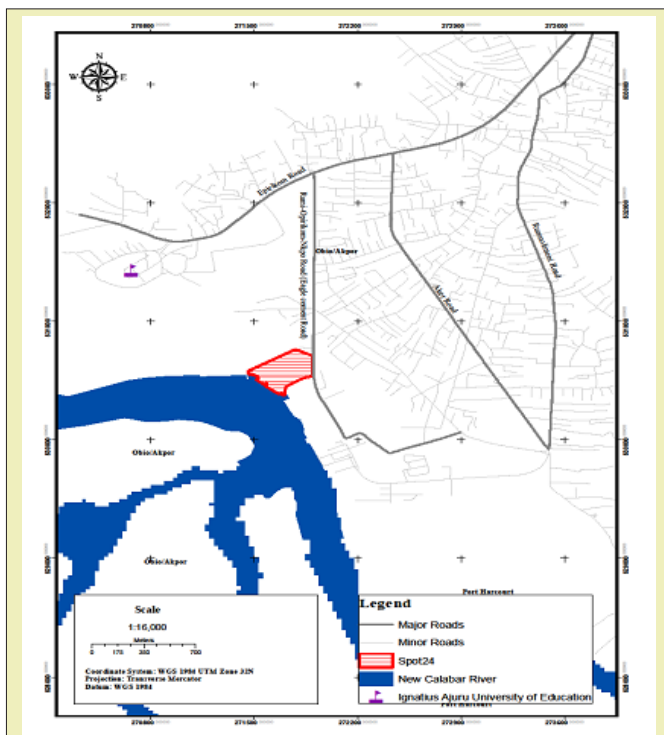


Figure 2: Map showing the location spot24 in rumuolumeni town.
Source: Department of urban and regional planning, Rivers state university, 2023.

Literature Review

Concept of industrialisation

Industrialisation is a process of social and economic change whereby a human society is transformed from a pre-industrial to an industrial state Lathan (2003). The concept of industrialisation was viewed by James¹⁴ to imply the movement of the economy from a primary agricultural basis to a mixed industrial/service basis with an accompanying increase in input and output per capita. Pan-African Voices for Freedom and Pan-African Voices for Freedom and Justice (2009) assert that industrialisation connotes an evolution of a society from rural agro-based activities to urban-based manufacturing. Similarly, Hamilton¹⁵ classified industries into four sectors based on their operational processes. These are the extractive industry, processing industry, assembling industry and service industry. Since this study focuses on the processing of limestone, it deals with the processing industry. However, industry as an activity should be differentiated from industrialisation, which is a process.¹⁶

Cement production in nigeria

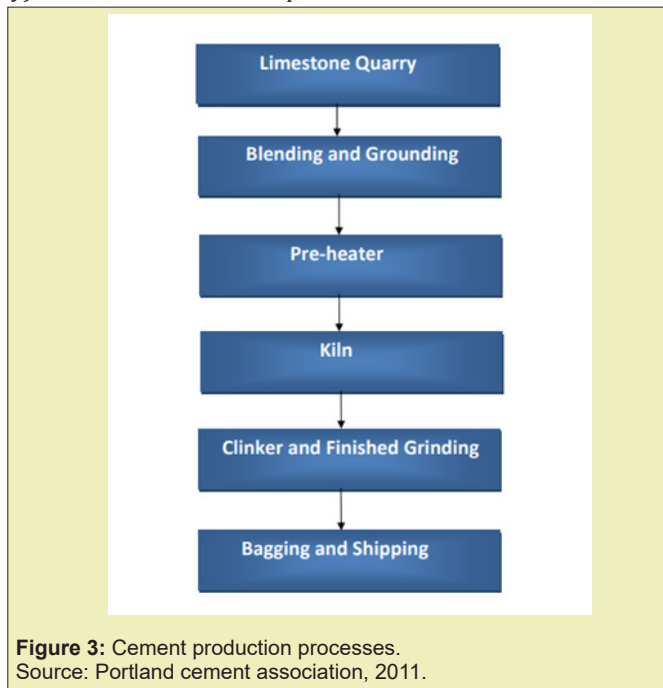
The history of cement production in Nigeria can be traced back to the Pre and immediate Post-independence eras that witnessed the emergence of development plans and import substitution policies. These dual developments impacted the cement requirement for the development of civil infrastructure in Nigeria. For the manufacture of cement, the basic inputs are Limestone, Red alluvium, Shale, and Gypsum Figure 3. Apart from gypsum which occurs in Nigeria in thin vein layers, Nigeria is abundantly endowed with all the other inputs. Limestone, the major input occurs in all the six geopolitical zones of the country. Another major requirement for cement production is the fuel which Nigeria is endowed with such as oil, gas, and coal as alternative fuel.¹⁷

Effects of abandoned industrial sites in nigeria

It is such that, whenever a project is abandoned, there are always negative effects associated with such abandonment. Irrespective of the cause(s) that might have led to the project abandonment, it has overall negative effects on the construction industry and the economic growth of a country. One of such palpable effects of project abandonment is the waste of human and material resources.¹⁸

The wastage associated with abandoned projects involves enormous resources in the form of economic capital, manpower and material resources. Apart from the abandonment of the industrial site and buildings to rot away, it also attracts illegal activities that affect the well-being and safety of the host community. When there is an abandoned industrial site, it becomes unsightly and defaces the aesthetic value of the site and adjoining environment. Besides, the socio-economic sphere of the neighbourhood is overwhelming considering the humongous resources (time, manpower and mon-

ey) invested and lost on the part of the investor.



Olusegun and Michael¹⁹ assert that the abandonment of industrial sites in Nigeria comes with phenomenal negative consequences such as:

- i. Employment opportunities become lower
- ii. Lowering of the living standard
- iii. The population of users getting disappointed with the proposed project
- iv. Wastage of valuable resources
- v. Economic activities decrease
- vi. Decrease in the revenue accruing to the government
- vii. Wastage of equipment on site
- viii. Vandalism of project sites due to project abandonment
- ix. Illegal activities are carried out at abandoned sites

Socio Economic Impact Assessment (SEIA)

In the rendering of Ramanathan and Geetha,²⁰ socio-economic impact assessment (SEIA) is a study for assessing in advance the social and economic consequences of the initiation of any industrial activity to the human population. SEIA forms a part of the mandatory environmental impact assessment (EIA) report before the commencement of some categories of industrial projects within Nigeria. SEIA of large industrial projects assumes special importance because these projects are likely to affect the socio-economic fabric of a section of people, generally called the project-affected people (PAP). Impacts occur at all the four stages:

- I. Pre-construction (planning/ policy development)
- II. Construction (implementation)
- III. Operation (maintenance)
- IV. Decommissioning (abandonment)

Socio economic effects of industrialisation on society

Industrialisation engenders social inequality and even differentiation among families in the locality. This social inequality has brought out the challenges and benefits of industrialisation on the social and economic aspects of host communities. Adopting the Functionalist perspective highlights the benefits and disadvantages of industrialisation in most host communities, and the proffered solutions come in the form of social policies that would ameliorate the situation and foster sustainability. It hinges on the government to create and enforce policies that are environmentally friendly to protect the interests of host communities and enhance living conditions. Industries should be made to provide social amenities in society such as boreholes, health centres, and schools to enhance their socio-economic development. The industries should have a good rapport with the host communities by providing a significant number of inhabitants with permanent employment as a motivating factor for the host communities. The government should make industries compensate for the damages done to the community.⁴

Health and environmental impacts of cement production

It is a given that the cement production process has significant environmental and economic impacts on host communities because raw materials are continuously drawn up to keep production functioning. This process engenders the release of toxic waste material back into the natural environment as in the case of cement production by Lafarge WAPCO on local inhabitants of Ewekoro, Nigeria where the factory is domiciled. Findings indicate that cement production is a significant factor responsible for several environmental, physical, and economic challenges in Ewekoro, Nigeria with impacts on farmlands (75%), marine life (52%), roofs on houses (91%), water (77%) and air quality (68%).¹¹

Instances of discharging pollutants into the physical environment engendered by the activities of heavy-duty industries Dangote Cement Industry encompasses the settlement of the entire host community Obajana, Kogi State, Nigeria. Causes of these pollutants include extensive incidence of land, air, and sound pollution, asthma, carcinoma, and heart diseases over and above the recommended minimum acceptable limits. It also discovers a lack of considerable compliance with the principle of environmental integrity sustainability and the National Environmental Standard Regulation Authority (NESRA) in terms of environmental resource protection. For Nigeria to maximise the benefits of industrialisation and mini-

mise its negative effects, a tripartite arrangement that involves the industry, the community and the government must be involved in environmental monitoring and protection.²¹

Manufacturing activities contribute and discharge significant toxic wastes to the environment due to the intense use of plants and machinery. As such, a study was conducted to investigate the effect of industrial activities on neighbourhoods bounding the Atonsu-Kaase-Ahinsan industrial/residential area in the Ashanti region of Ghana. The findings of that study indicate that air and water pollution as the most predominant types of pollution and it has close association between the pollutants and certain types of diseases plaguing residents of that area. Besides water pollution which is associated with waterborne diseases was evident as one of the widespread diseases reported by the Atonsu-Agogo health office. Such waterborne disease was occasioned by the continuous discharge of pollutants into the water table and aquifer. The study also indicates that the industries adopted inadequate measures for solving environmental problems. The study recommends that industries should conduct environmental impact assessment (EIA), apply the polluter pays principle, and mount educational campaigns on how to prevent environmental pollution.²²

Methodology

The study is qualitative research that adopted the in-depth case study approach to understanding the complex phenomenon associated with the social and economic impacts of industrial abandonment in the study area. The application of the case study approach, according to Flyvbjerg,²³ aims to generate contextually reliant knowledge. The case study represents an adaptive method of research to develop a nuanced understanding of reality as constructed by local actors. The complexity of the study area involved several actors from diverse social, political, and economic backgrounds. To understand the dynamics associated with this complexity, and get an in-depth perception of the people, a case study was deemed the best for the study.

Primary data was collected using semi-structured interviews with all the principal actors during the existence of the industry and after its shutdown and eventual abandonment was successful. These actors include workers (permanent and casual), community leaders, youth leaders, women groups, and community liaison officers (CLOs). The interview method was adopted to get the intricate stories behind the experiences of the participants. It was instrumental in the data collection, gathering opinions and information which specifically involved questions being asked by an interviewer to the interviewee. The use of interviews in this research was to get detailed experiences and explore the perceptions, nuances and motivating factors of the respondents concerning their experiences during and after the cement industry. The interviews created the

avenue to explore sensitive matters which respondents may not say in a group setting.²⁴ The semi-structured interview was carried out with the aid of a set of prearranged open-ended questions coupled with further questions that would emerge during the discourse between the interviewee and the interviewer.²⁵ Using the semi-structured interview in this research enabled:

- i. The researchers had unrestricted access to probe the interviewee(s) further to elucidate some facts and details which ordinarily would not be said by applying a questionnaire,
- ii. The researcher to identify the collective understandings of the participants.
- iii. Focused on the specific areas of the research interest of social and economic benefits of *SPOT24* with sequences of open-ended questions that are specific to the research aim; and
- iv. Enabled the researcher to function effectively to cover most areas of the research interest by interviewing several people on the subject matter to get their varied opinions.

There was a total of fourteen (14) interviews conducted; these included one permanent and two casual staff who worked in the cement industry (*SPOT24*). Two Community Development Committee (CDC) chairmen; one chairman while *SPOT24* existed and the second chairman after the abandonment of *SPOT24*. Two youth leaders; one youth leader during the operation of *SPOT24* and another leader after the abandonment of *SPOT24*. Similarly, two women leaders were also interviewed; one during and the other after *SPOT24* was abandoned. Also, two Community Liaison Officers (CLOs); one before and the other after *SPOT24* were interviewed. Besides, an academic, a farmer and a fisher folk were also interviewed for this study.

To get the data for this study, interviewees insisted on being anonymous for reasons best known to them. The analysis of the field data was done using deductive thematic analysis (top-bottom), but the process entails going through several stages. It started with several stages of reduction (coding) along the lines of the theoretical framework. The stages involve compressing the data before coding them to fit into the existing deduced themes of social and economic benefits of *SPOT24*.

Findings and Discussions

The study found that while the Eastern Bulkcem Company (Eagle Cement) was in operation, several persons benefitted socially and economically. They also had attendant social, economic, physical, environmental and health challenges associated with the benefits they experienced during the boom.

Social impacts of eastern bulkcem company (Spot24) during operations

Some palpable social benefits accrued directly to members of the host communities while **SPOT24** was fully functional. Most of the interviewees agreed that they had several social benefits while the cement industry was functional.

'I still remember when Eagle Cement was still working, as a young man, I used to work there, and the company provided us with a lot of things especially scholarships for our children. That was a great relief for us then as young parents because even our relatives also benefited ...' **(Interviewee 1, Former permanent staff).**

Another interviewee states that the company ensured that the roads were always in good condition because of the heavy-duty trucks coming in and out of the industrial site.

'You see that road leading to the company? Eagle Cement did not joke with it at all. They made sure it was always in a good state because trucks came around from nearly every part of the country to buy and carry cement from there. So, they always ensure that trucks coming in and out of their premises move on a good road....' **Interviewee 2, Former Youth Leader**

Similarly, a former Community Liaison Officer (CLO) listed some of the social benefits that accrued to the community in his time there interfacing between the community and the company.

'As the CLO then, I was a witness to the numerous benefits the community got from the company. Some of these benefits include the Provision of security within the community... Provision of potable water to the community. Provision of electricity supply within the community. Initiation of health care outreach programme. Engagement of our youths in sports activities and several other things I cannot remember to mention....' **Interviewee 3, Former Community Liaison Officer (CLO).**

On the flip side the social benefits that accrued to the host community while the Eastern Bulkcem Company (Eagle Cement) was fully functional, and other social vices came with those benefits. According to the former Chairman of the Community Development Committee (CDC), the community witnessed a lot of negative social changes as the company attracted people from all over the country.

'I was the CDC Chairman when Eagle Cement was functioning well, I saw a lot of things happen around here in the community. If you come around the company premises on a good day when they are operating, you will see people from nearly every tribe in Nigeria especially trailer drivers and their motor boys (conductors). They came with their troubles as well... shanties were built around the community, especially along the major road to the company where women of all ages, shapes and sizes come around to do their businesses (prostitution). You will also see youngsters buying and selling hard drugs,

and pockets of criminals around trying to steal from innocent people. I could go on and on....' **Interviewee 4- Former Chairman of the Community Development Committee (CDC).**

Economic impacts of eastern bulkcem company Spot24 during operation

Besides the social benefits that accrued to the host community while the Eastern Bulkcem Company was operational, there were also some economic benefits enjoyed. These benefits according to some of those interviewed, made significant positive impacts on their lives and by extension the community while the company was fully functional.

'I can tell you for free that most of us young and old then benefitted from Eagle Cement when they were working. Then, we (my friends and I) oversaw a string of small businesses such as secretarial services, food vending, stevedoring services, and large haulage companies. Most of us prospered, acquired properties, and changed the circumstances of our families....' **Interviewee 6 -**

Businesswoman in the community

Another interviewee who is an indigene of the community clearly stated that they had employment opportunities, sufficient disposable income and the price of cement was cheaper for them then.

'... back then, the price of cement was very cheap for us because we had access to the company as indigenes of the Rumuolumeni Community. They gave the youth employment chances and they made good money every month....' **Interviewee 9- Former women representative**

Health challenges of eastern bulkcem company Spot24

During the optimum operation years of the Eastern Bulkcem cement factory, besides the social and economic challenges faced by the host community, there were also health and environmental consequences prevalent in the host community. The emission of noxious fumes from the cement factory caused significant damage to the surrounding area as most people suffered grievous internal bodily harm from lung cancer, difficulty in breathing and other respiratory diseases.

A community member interviewed asserts that in the optimum operational years of the cement factory, some of the residents had health terrible challenges occasioned by the discharge of pollutants into the atmosphere. Such pollutants like cement dust caused significant lung and other respiratory diseases to some residents.

'...when the company was fully functional, each time they were bagging the cement, you would see a thick cloud of dust forming around the community coming out from the cement ship which

served as the factory. ... it settles around the community and our people inhale those dusts into their lungs and get infected. We had several cases of reduced visibility and lung infections for both staff of the company and residents.... **Interviewee 12- Chief in the community**

Another interviewee reiterated the poor quality of the potable water they consumed in the community while the cement factory was operational. And further asserts that most of the boreholes sunk near the cement factory in the community when it was operational had traces of contaminants like calcium carbonate, oxides of nitrogen and hydrogen sulphide. The water table and aquifer were contaminated and engendered by see pages from the pollutants discharged from the cement factory. Based on that, the water became poisonous and dangerous for consumption by humans, animals, and plants in the community.

As such, they could go to very distant buildings from the cement factory away from the source of the contaminants to get potable water for daily household needs while the animals were left to their fate in households where water is not adequate to satisfy the requirements of the family. The plants are left out to grow with deformities as they lack water components to complete the growth process.

'... those of us who reside very close to the cement factory, ...I still remember the experience we had with our drinking water... the water tastes like carbide dissolved in water while in some places, it tastes like rotten egg in water ... sometimes we see flies hover around water kept in the house due the presence of hydrogen sulphide in the water....' **Interviewee 10- an academic in the community**

Environmental challenges of eastern bulkcem company Spot24

Besides the health challenges experienced by some residents in the community while the cement factory was operational, there were also environmental issues that came with the operations of the cement factory. These environmental challenges were engendered by the release of hazardous substances into the environment such as waste oil from the company's plants and machinery, oil leaks from vehicles, lorries and trailers conveying bagged cement. These pollutants have significantly damaged the environment, especially farmlands and the water table. It was such that farming became relegated to the background as most farm lands experienced poor crop yields because of the presence of these hazardous substances introduced into the farm environment. Furthermore, the sources of potable water in the community became polluted as it has a foul taste and odour when the people try to drink from it.

This assertion was made by an interviewee who owned and operated a large farm proximate to the cement factory.

'Before now, we usually produce... our farms were destroyed by the company because they kept pouring condemned oil from their equipment, heavy-duty generators, and lorries into a pit that they dug around a corner of their fence... when it got filled up, it spilt into our farmlands and destroyed the crops. We gradually lost all the crops in our farms as the farmlands became contaminated and the yields reduced to nothing The land became derelict' **Interviewee 7- A farmer in the community**

The fisher folks were not exempt from the environmental consequences of the operations of the cement factory while it was fully functional. Most of the fish stocks were affected due to the toxicity and turbidity of the water occasioned by the release of pollutants from the cement factory into the river in the community. Most times they discharge their wastewater and cooling water back into the river. This action increases the temperature of the water and affects the fish stock making them move away to cooler water to enable them to survive the onslaught from the cement factory. These fisher folks not only lost their sources of livelihood, but they also witnessed the distortion of the livelihood chain and ecosystem imbalance in the marine habitat. A fisher folk in the community complained about the loss of livelihood and income in the community as it has caused phenomenal dependency on aid and handouts from the government and other companies operating around the community.

'Years ago, before the cement company started its operations in our community, we used to have enough fish catch from our river... income was stable and increasing. But, during and after the cement factory was operational and decommissioned, we lost nearly all the fish stock because they discharged wastewater into the river,... most of the species of fish died in the river due to changes in the temperature of the water. This has led to a decline in our cash and income to sustain' **Interviewee 13- A fisherfolk in the community**

Post social and economic impacts of eastern bulkcem company Spot24

However, as the company became moribund and subsequently decommissioned, the fortunes of all the beneficiaries within dwindled as time went by because most of the threshold population that made SPOT24 flourish and thrive then disappeared. They tend to gravitate towards another source of a pull factor that could enhance their fortunes. These palpable changes in the population and activities around the community cause a sharp decline in every sphere of human endeavour.

Some of these challenges have lingered on for a while as residents now experience increased crime rates based on massive unemployment because most of those employed lost their jobs as the company was decommissioned. They also witnessed a high pover-

ty rate, poor health services, and insecurity in the community as there were urban gangs who contended to claim and expand their territories and low quality of life for the residents. The students also lost their scholarship opportunities. For the post-operational health and environmental challenges, most of the pollutants have worn off and the land is gradually coming back to normal but very slowly as there were no remediation plans or framework to streamline the process of recovery. Besides, most of those affected by the inhalation of cement dust and other noxious fumes never got any form of compensation nor treatment from the company and/or the Rivers State Government who were the highest shareholders in the company when it was operational.

Conclusion

The results from this study indicate that there were enormous positive social and economic benefits that accrued to the members of the host community when 'Spot24' (Eastern Bulkcem Company- Eagle Cement) was operational. At the end of the operational life span of *Spot24*, it was subsequently decommissioned and abandoned leaving members of the host community to face severe negative social and economic consequences that were fallouts of the closure of the company. These challenges range from insecurity, massive unemployment, poor road maintenance, inadequate healthcare facilities and services, and abandoned and derelict properties. The wave of benefits that once had changed the narrative in the positive direction also changed and skewed towards the negative side as the community had in recent times witnessed phenomenal gang-based violence unleashed on the inhabitants. However, the participant observation records from this study indicate that most of the members of the Rumuolumeni community have over the years learnt to bounce forward instead of bouncing back in the absence of the social and economic benefits that usually accrue to them in the past while the Eastern Bulkcem Company (Eagle Cement) was fully functional. They built their resilience capacities to bounce forward through concerted self-help paradigms by harnessing the minor perks emanating from other companies that are operating within the community even though they operate at a lower scale compared to what it was whilst *Spot24* was fully operational.^{26,27}

Recommendations

Going forward, the study recommends the following:

- i. The government of Rivers State should be able to step in and reinvigorate the benefits scheme especially the scholarship scheme for the host community to mitigate the adverse challenges faced by the host community.
- ii. The community should ensure that the activity of the youth is brought under control to minimise violent activities.
- iii. There should be a two-pronged collaborative effort between the government and the host community to ensure that all the abandoned sectors are reinvigorated such as the provision of healthcare, road rehabilitation, security, electricity, and hosting of sporting activities.
- iv. The government should make alternative arrangements with the community to ensure that the abandoned industrial site is being reacquired and put into proper use to avoid the threat of anti-social behaviours from the youth.

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Conflict of Interest

The authors declare that there is no conflict of interest.

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