

**CONTRIBUTIONS OF MANUFACTURING INDUSTRIES ON SOCIO-ECONOMIC
DEVELOPMENT : A CASE OF TORORO CEMENT IN OSUKURU T|OWN
COUNCILS IN TORORO DISTRICT**

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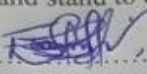


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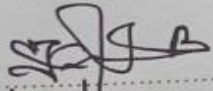
I OSILO BEN declare that this report is my original work and has never been presented to any other institution for award of any academic certificate or anything similar to such. I solemnly bear and stand to correct any inconsistency.

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Date. 10/05/2025.....

APPROVAL

This is to certify that the research was supervised and is now ready for submission for consideration and approval.

Signature.....
Date.....10/03/2025

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LIST OF ABBREVIATIONS

| | |
|------|---|
| LG | local government |
| MOLG | Ministry of Local Government |
| NEMA | national environmental management Authority |
| TCL | Tororo Cement Limited |
| UBOS | Uganda bureau of statistics |
| UN | United Nations |
| WHO | World Health Organization |

Abstract

This study evaluated the contribution of Tororo Cement Limited to the socio-economic development of families in Osukuru town council. The objectives were to find out the contribution of Tororo cement factory to the surrounding community, To establish the challenges faced by the families in Osukuru town council due to the presence of Tororo cement limited and to suggest strategies to address the challenges faced by families in Osukuru. This study used primarily utilize a mixed-methods approach employing both qualitative and quantitative approaches. A total of 250 were part of the study. The findings revealed that The factory has contributed to better roads and transport networks in the area, The company's support for schools and hospitals has improved community welfare, Local businesses have benefited from the factory's presence, Training programs by Tororo Cement have enhanced employable skills in the community, The challenges facing the community living near Tororo cement factory included Dust/emissions cause respiratory diseases (asthma, bronchitis), Industrial runoff pollutes groundwater, reducing clean water access , Noise from blasting/trucks disrupts sleep and quality of life. **The Strategies** to improve the lives of the community living near Tororo cement factory included Installations of electrostatic dust filters to reduce air pollution, Building water treatment plants to purify industrial runoff, Implement noise barriers and limit blasting to daytime hours land compensation framework

The study concluded that Tororo Cement Factory has played a significant role in the socio-economic development of its surrounding community by creating employment opportunities, supporting local businesses and therefore recommended Increase investments in education, healthcare, and vocational training to empower local residents and enhance skills development.

CHAPTER ONE

1.0 Introduction

This chapter presents the background of the study, statement of the problem, objectives of the study, scope of the study, conceptual framework, justifications of the study, significance, and definitions and operational terms

1.1 Background of the Study.

According to Ddumba-Sentamu (2004), high industrial growth is widespread across nearly all countries. This growth is crucial for developed and developing nations, where industrialization is often equated with overall development. Ddumba-Sentamu notes that developed countries typically experience a shift in their production structure from agriculture to industrialized techniques. As a result, many developing nations prioritize industrialization to increase per capita income and promote development. Established industrial economies like France, England, the USA, and Germany benefit significantly from high-quality services provided to their citizens.

In Africa, industrialization began in the 1940s, driven by improved economic conditions, such as the introduction of currency and the establishment of small-scale businesses. This led to rapid industrial growth and trade, particularly in West and Central Africa. However, Kennedy (1990, cited in Amin, 1972) observes that East and South Africa had limited European contact during this period, branding these regions as Africa's labor reserves. Unfortunately, Africa's industrialization has encountered severe challenges, including a lack of technical innovation and subpar machinery.

While countries such as South Africa and Egypt have prospered industrially, others like Sudan, the Democratic Republic of Congo, and Uganda have struggled. This disparity stems largely from the fact that machinery and technology in developed nations favor high market consumption, which many African countries do not possess (Ddumba-Sentamu, 2004).

Tororo Cement Limited, a leading cement manufacturer in Uganda, is located in Osukuru town council, Tororo district. Established in 1952, the company has significantly contributed to regional economic development by providing employment, enhancing infrastructure, and engaging in community development initiatives. This study aims to assess Tororo Cement Limited's contributions to the socio-economic development of families in Osukuru town council.

Tororo Cement Limited has been pivotal in creating numerous job opportunities, employing a diverse workforce of local residents. This reliable income source supports families and reduces the unemployment rate in the area. Kivumbi (2017) identifies Tororo Cement Limited as the region's leading employer, offering a range of skilled and unskilled positions, thereby improving living standards.

The company also invests in infrastructure within Osukuru sub-county, contributing to the construction of roads, water supply systems, and electrical infrastructure. This investment enhances local residents' access to essential services. A study by Ong'wen (2019) confirms that Tororo Cement Limited has facilitated road improvements, enabling families to reach markets, schools, and healthcare facilities more easily.

In addition to its employment and infrastructure initiatives, Tororo Cement Limited is dedicated to community development through various corporate social responsibility (CSR) projects, including educational scholarships, health programs, and agricultural training. According to Nangobi (2018), these efforts have significantly improved family well-being by enhancing access to education, healthcare, and livelihood opportunities.

1.2 Problem Statement

Tororo Cement Limited, a leading cement manufacturer in Uganda, is located in Osukuru town council, Tororo District. Established in 1952, it has been pivotal in creating numerous job opportunities and employing a diverse workforce of local residents. (Smith, A., 2023). While the presence of a large cement manufacturing company can be associated with various positive outcomes, existing literature does not adequately evaluate how job opportunities, infrastructure projects, and community initiatives translate into improved living standards for local families. This gap in research can lead to an incomplete understanding of the true socio-economic dynamics at play. Key questions remain at the forefront of this inquiry: How do employment opportunities influence household incomes and economic stability within the community (Liang, H., 2022) The ability of local residents to secure jobs at Tororo Cement Limited can significantly affect their economic situation, with direct implications for disposable income, spending power, and overall financial security. Furthermore, the ripple effects of increased household incomes can contribute to improved access to education, better nutrition, and enhanced quality of life for families.

It is therefore crucial to examine the long-term effects of infrastructure projects initiated by the company on access to essential services such as healthcare, education, and markets. Improved roads, transportation systems, and utility provision can directly impact a community's ability to access vital resources, facilitating greater economic activity and connectivity. However, without targeted research, it is challenging to assess whether such infrastructure developments have consistently benefited the residents or if they merely serve the company's operational interests. Moreover, it is vital to identify the company's challenges, including difficulties in meeting community needs or any potential adverse environmental impacts from its operations. The balance between economic development and environmental sustainability is a pressing concern. Understanding how Tororo Cement Limited navigates these challenges will provide insight into the company's overall impact on the community and its long-term viability in the region. This study seeks to fill this research gap by thoroughly analyzing Tororo Cement Limited's contributions to the socio-economic development of families in Osukuru town council. (Gupta, A., & Kumar, S., 2021). These insights will be essential for policymakers, community leaders, and the company itself, guiding effective collaboration and initiatives that enhance the socio-economic well-being of families in Osukuru town council. By fostering partnerships and aligning objectives, stakeholders can work towards creating an environment that not only supports corporate growth but also promotes the welfare of the local community.

1.3 Objectives

The objectives of the study include both the general objectives and the specific objectives

1.3.1 General objectives

To evaluate the contribution of Tororo Cement Limited to the socio-economic development of families in Osukuru town council.

1.3.2 Specific objectives

To find out the contribution of Tororo cement factory to the surrounding community

To establish the challenges faced by the families in Osukuru town council due to the presence of Tororo cement limited.

To suggest strategies to address the challenges faced by families in Osukuru.

1.4 Research questions

What are the contribution of Tororo cement factory to the surrounding community in Osukuru town council?

What are the challenges faced by families living around Tororo cement limited?

What are some of the strategies to address the challenges facing families in Osukuru?

1.5 Significance of study

The study findings may be relevant to the scholars and other researchers on this topic or related phenomena. And at the same time, the study will be helpful since the information obtained herein may be used by environmentalists in combating industrial related problems. Furthermore, this information can help policymakers, community leaders, stakeholders, and other development agencies like NGOs make informed decisions about future development initiatives in Osukuru-county and Tororo district as a whole.

Sustainable Development: By assessing the long-term impacts of Tororo Cement Limited's activities on the environment, society, and economy of Osukuru town council, the study may contribute to discussions around sustainability and responsible business practices. This can inform efforts to create sustainable development strategies that benefit both the company and the local community.

1.6 justification of the study

The study's topic is chosen because despite the fact that many scholars have conducted research on industrialization and its contributions to socio-economic development, many areas have not been fully explored. As time passes, the available data loses credibility, and hence, the need for updated information arises.

It is in line that the study was conceived to evaluate the contributions of the Tororo cement limited to the socio-economic development of families.

1.7 Scope of study

This study entails; the content scope, geographical scope, and time scope

1.7.1 Content scope

This study will focus on determining the role of Tororo Cement Limited in uplifting the families' socio- economic development in Osukuru town council in Tororo district. This will include examining the company's employment practices, community development initiatives, infrastructure investments, to suggest possible strategies to address the challenges faced by families.

1.7.2 Geographical scope

The study will be done in Osukuru town council in Tororo district, and its located south east of Tororo town, bordering sub counties of Buteba to the south, Iyolwa to the west and Rubongi to the northeast. The town council is predominantly a hilly area covered by the famous osukuru hills which is 3,819 feet above the sea level. The study would specifically look at the effects of the company's operations on the families and communities living in this particular area.

1.7.3 Time scope

The study will vary depending on the research objectives and the availability of data. The study will examine the contributions of Tororo Cement Limited over a specific period of time, such as the past decade, or could take a more longitudinal approach and analyze the company's impact on the social and economic development of families in Osukuru town council over a longer period.

1.8 Definition and operational terms

The research study on the contributions of Tororo Cement Limited to the social economic development of families in Osukuru town council in Tororo district aims to investigate and evaluate the impact of the company's activities on the local community. Specifically, the study seeks to assess how Tororo Cement Limited's operations have influenced the social and economic well-being of families residing in the Osukuru town council.

Socio-economic development

This refers to a situation relating to the people in general living together and the commercial activities they are involved in. Economic is connected with the way people trade and own money.

Development

Refers to multidimensional process involving major changes in social structures, popular attitudes and national institutions as well as the acceleration of economic growth, reduction of inequality and eradication of poverty.

Industries

An industry is a classification that refers to groups of companies that are related based on their primary business activities.

Family

A family is a group consisting of two parents and their children living together as a unit or a group of people related by blood or marriage.

Cement.

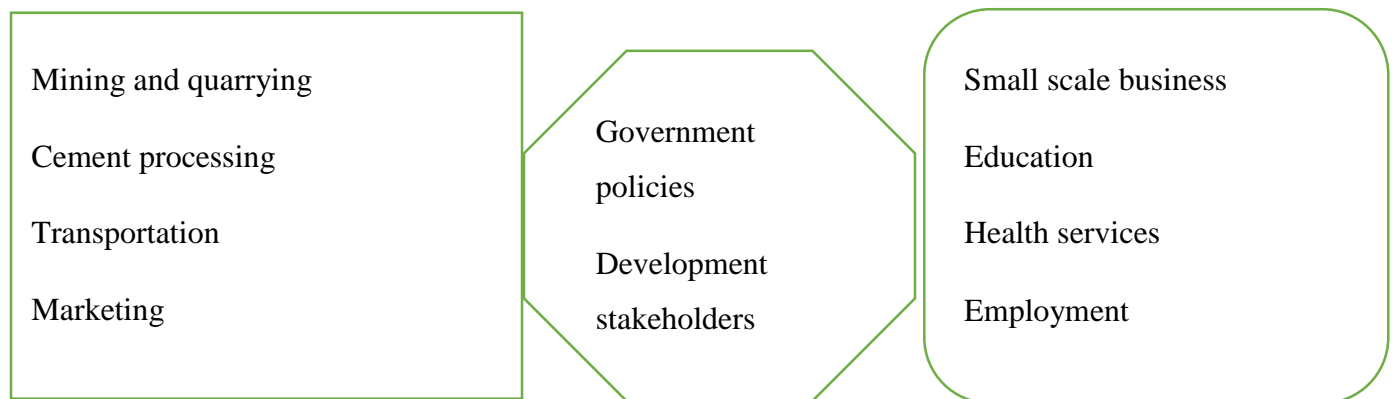
This refers to essentially a mixture of silicates and aluminates of calcium. In modern times it is one of the important silicon products, due to its multipurpose nature.

1.9 Conceptual Frame Work

Independent Variables

Moderating variables

Dependent Variables



Source: researcher

The conceptual framework above shows the relationship between the variables of the study which is independent variables and the dependent variables. The independent variables are the activities of Tororo cement limited such as transportation of raw materials and the products, cement

processing, marketing, mining and quarrying. These have a direct impact on the dependent variables which is the socio-economic activities that lead to development like small scale businesses, provision of health services, education and employment. However much as the independent variables greatly influences the socio-economic activities, there are also moderating variables such as government policies, NGOs, stakeholder, local authorities, and local government, which help to see to it that families fully gain from the activities of Tororo cement limited.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents the relevant literature on the Contributions of Manufacturing Industries on Socio-Economic Development in line with the study objectives which are to find out the contribution of a cement factory to the surrounding community. To establish the challenges faced by the families and strategies to address the challenges faced by families neighboring cement factories as follows.

2.1 The theoretical framework

Environmental justice theory

The study was guided by the environmental justice framework, The Environmental Justice Framework is a critical approach focused on addressing the equitable distribution of environmental benefits and burdens across different social groups. It originated in response to the disproportionate impact of environmental hazards such as pollution, waste disposal, and resource extraction on marginalized communities, particularly low-income and minority groups (Bullard, 2005). This framework emphasizes the interconnection between social justice and environmental issues, asserting that all individuals, regardless of race, ethnicity, income, or geography, have the right to a healthy environment (Schlosberg, 2007). At its core, the Environmental Justice Framework is rooted in principles of equity and fairness. It demands that environmental policies and practices must not disproportionately harm marginalized communities while ensuring that these communities also benefit from environmental resources and protections (Patterson, 2019). Equity in this context involves recognizing and rectifying historical injustices, such as systemic racism and economic inequality that have led to environmental degradation in specific regions inhabited by vulnerable populations (Bryant & Mohai, 2000). Active participation of affected communities in environmental decision-making is a cornerstone of environmental justice. The framework advocates for inclusive processes that allow marginalized voices to be heard in policy formulation, project planning, and regulatory processes. Empowering communities ensures they have an influence on decisions that affect their health, environment, and overall

Sustainable livelihood theory

Sustainable livelihood theory .SLA places people and their livelihoods at the heart of development and environmental initiatives. It recognizes that people's livelihoods depend on their access to and use of various assets. It considers the multiple factors that influence livelihoods, including natural, physical, human, financial, and social capital. SLA acknowledges that livelihoods are constantly evolving in response to various internal and external factors.

2.1 contribution of cement manufacturing factories on the social economic welfare of neighboring community residents

A cement plant can be a powerful factor in economic and social development, provided it integrates these objectives right from the design stage and that its owners are aware of their social responsibility. The cement industry is a long-term industry since an extremely high amount of capital is invested in the production equipment. For example, a new cement plant with a capacity of 1.5 million tons established in an emerging country might cost USD 250 million.

The cement industry supports the creation and development of local job-creating companies, just as it does in developed countries. It is in this spirit that the Sococim Foundation has just been set up in Senegal: to create and develop VSEs.⁴

It is also recognized in developed countries that one job in the cement industry creates ten times more indirect jobs in both upstream and downstream economic sectors. This figure may be four to five times higher in developing countries. A cement plant does, therefore, have a real impact on employment in a given region. The activities that are consequently boosted locally do not only concern services; they also concern technical fields such as the boiler making industry, electromechanical engineering and automatic systems.

They allow skills and know-how to be developed that are useful for the establishment of other industries; they contribute to the general development of the region concerned. This knock-on effect is by no means insignificant. The cement industry is also a powerful vehicle for social progress in these countries. It offers a wide range of employment for all types of skills. It very often helps educate its employees or future employees by supporting the development of schools or higher education establishments.

In Rufisque, Vicat Group is supporting Senegal's first private multimedia library; in Egypt, it grants scholarships to students registered at El-Arish University, which is located near its Sinai Cement Company cement plant. Similar programs are currently being implemented in Kazakhstan and India.

It would also lead to the development of export, and therefore to a greater carbon footprint due to transport, whereas cement is a material with a low value-to-weight ratio. Moreover, in the medium term, establishments that could no longer manage to break even would be forced to close down and this would discourage private investors. Sustainable construction, employment, education, health: the impact that the cement industry has on the countries where it is established is consequently not restricted to simply manufacturing building materials which is, moreover, essential. This is where its strength lies, as well as its legitimacy to be present on these markets.

In Tanzania for the Tanzanian economy to grow, needs infrastructure development through the construction of major means of transport such as roads, bridges, railways as well as main telecommunication network towers. All these infrastructural development requires cement product. Other important features are such things like residential properties, commercial buildings, hospitals, fibre optic cables, service centres etc. are also important for national development. In 2007, Tanzanian industrial production comprising of construction and manufacturing grew by 9.2 % compared with 8.5 % in 2006. Whereas in 2007, the construction industry contributed 7.9 % to the country's Gross Domestic Product (GDP), this is an increase of over 2 % compared with 5.8 % in 2006 (Onyango, 2009).

2.3 The challenges faced by families living around cement factories

What are some of the strategies to address the challenges facing families in Osukuru

Cement factories are significant sources of air pollutants, including particulate matter (PM10 and PM2.5), nitrogen oxides (NOx), sulfur dioxides (SO2), and heavy metals. These emissions can lead to the formation of smog and contribute to respiratory conditions, cardiovascular diseases, and even cancer (Kumar et al., 2019). Children, the elderly, and individuals with pre-existing health conditions are particularly vulnerable to the adverse health effects of air pollution (WHO,

2018). Studies show increased hospital admissions for respiratory issues in populations living near cement plants (Johnson et al., 2021).

The cement production process can involve the use of chemicals that, if improperly managed, may leach into nearby water bodies. Heavy metals such as cadmium and lead can contaminate local water supplies, impacting both drinking water quality and local ecosystems (Mehta & Clebowitz, 2018). Water used for irrigation can carry pollutants from nearby cement factories, affecting local crops and food safety. This contamination not only poses health risks but can also threaten the livelihoods of farmers dependent on clean water for their agricultural practices.

Cement manufacturing involves heavy machinery, transportation of materials, and grinding processes, all of which generate significant noise. This constant exposure can lead to stress, sleep disturbances, and other health-related issues (Tzeng et al., 2022). Persistent noise can result in community dissatisfaction and strain relationships between residents and factory operators, potentially leading to social unrest.

Cement factories often require significant natural resources, such as limestone, which may lead to the depletion of local resources and displacement of local communities who rely on these for their livelihoods (Popescu et al., 2021). While these factories can create jobs, they often do not provide stable employment or fair wages, leading to economic uncertainties for local workers and their families. Moreover, the jobs may not offset the losses experienced by displaced local businesses.

Communities near cement factories face multi-dimensional challenges that require integrated approaches for effective resolution. By addressing environmental, health, and economic issues through regulatory measures, community engagement, health monitoring, and sustainable practices, these challenges can be mitigated. The balance between industrial growth and community health is crucial for fostering sustainable development and improving the quality of life for those living nearby.

The extraction of raw materials (like limestone and clay) for cement production often leads to significant land degradation. This process can result in habitat destruction, loss of biodiversity, and changes in land use patterns, making it difficult for local ecosystems to recover (Gizaw et al., 2020). Improper or insufficient rehabilitation of mined land can lead to long-term environmental

issues, such as soil erosion and desertification, further limiting agricultural productivity and affecting local livelihoods.

Cement factories typically lead to an increase in heavy vehicle traffic, which can contribute to road congestion and pose safety hazards for local residents. The movement of raw materials and finished products often results in large trucks operating on local roads, increasing wear and tear on infrastructure and elevating the risk of accidents (Santos et al., 2021). The transportation of materials also introduces additional noise pollution and emissions, exacerbating the air quality issues already faced by nearby communities.

The establishment or expansion of cement factories may require the resettlement of local communities. This can disrupt social networks and community cohesion, leading to a loss of cultural identity and support systems as families are forced to relocate (Bey et al., 2020). The stress and anxiety associated with displacement, coupled with uncertainty about future living conditions, can have significant psychological effects on individuals, affecting their overall well-being.

Dust from cement production can settle on agricultural land, compromising soil health and affecting crop yields. This contamination can lead to reduced agricultural productivity as well as concerns about food safety, particularly if pollutants leach into crops (Mehta & Clebowitz, 2018). Cement factories often compete for local water resources, which can further impact agricultural irrigation practices. This competition can lead to water scarcity, affecting farmers' ability to sustain their livelihoods and increasing tensions within the community (Nguyen & Lee, 2020).

2.4 Strategies to the challenges faced by communities living near cement factories

Governments can play a pivotal role by establishing and enforcing stricter emissions standards for cement manufacturing. These regulations can include limits on particulate emissions and the use of cleaner production technologies (OECD, 2020). Encouraging adopting sustainable practices, such as energy-efficient technologies and alternative raw materials, can reduce pollution and conserve resources.

Implementing participatory governance models that involve community members in decision-making can enhance transparency and accountability. This can include public consultations and stakeholder meetings to address community concerns and suggestions (Smith, 2023). Establishing formal grievance mechanisms enables residents to express concerns and seek redress, fostering a sense of ownership and cooperation between the cement industry and local communities.

Regular monitoring of air and water quality can help identify pollution sources and their health impacts. Collaboration with local health departments can facilitate access to health data related to pollution exposure (Johnson et al., 2021). Educating communities about the health risks associated with cement production and promoting healthier practices can empower residents to protect themselves and advocate for their rights.

Investing in alternative forms of economic activity can help communities become less dependent on industries like cement manufacturing. Examples include promoting eco-tourism, organic agriculture, and small-scale manufacturing (Nguyen & Lee, 2020). Cement companies can develop CSR initiatives aimed at supporting local community development, such as funding education and vocational training programs, infrastructure improvements, and healthcare services. This can help offset negative impacts and enhance community well-being.

In Nigeria, the Tororo cement factory as a whole makes significant contributions to the Tanzanian economy through government taxes, employment, technology improvements, international business standards, community development programs, and by performing its core activity: making available cement for building the country. Since imported cement was zero-rated in 2008 to meet shortages, it is estimated that at least 30,000 tones were being imported into the country per month, coming from Pakistan, India and China. Stakeholders estimate that a total of 3.6 million tons of cement freely imported on an annual basis, in contrast to domestic demand of 1.9 million tones. Local producers, including TPCC want the Government to intervene and increase protection to local producers from losing businesses to cheap imports. Cheap impons have grown from a mere 2 % to more than 20 % in 2009 (Onyango, 2009).

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter focuses on the methods that were used to conduct the study, it outlines the study area, the population sampled, the subjects on which the research is conducted, and the instruments used for data collection. Additionally, it describes the criteria for subject sampling, methods employed for data analysis, and the procedures followed during the study.

3.1 Research Design

This study used primarily utilize a mixed-methods approach employing both qualitative and quantitative approach to investigate the contributions of cement factories to the economic, social, and environmental aspects of nearby communities in Tororo. This design allows for a comprehensive understanding of both the positive impacts (such as job creation and infrastructure development) and the negative impacts (such as pollution and health issues) associated with cement production (Nguyen & Lee, 2020).

3.2 Study Area and Population

The study was conducted in Tororo, an area characterized by several operational cement factories. The population in Tororo includes diverse ethnic groups and socio-economic backgrounds. The study population will include Community members, Politicians Factory staff Employees, The presence of cement factories has influenced local development, and the community's responses to these industrial activities were explored (Bey et al., 2020).

3.3.1 Sample Size

A total of 250 were interviewed. This sample included community members from various demographics, such as local residents, business owners, and workers employed at the cement factories. The aim was to capture a wide range of perspectives regarding the contributions and challenges posed by the cement industry.

Sample Size Qualitative the study will focus on understanding complex phenomena rather than generalizing findings to a larger population. The research followed the fundamental principle in qualitative research of data saturation, the point at which no new information or themes emerge

from the data. Here sample size was determined by the anticipated point of saturation rather than set numbers.

Sample Size Quantitative

Sample size determination in quantitative research were more structured and mathematically driven. This was done using morgan and kriej table of sample size determination. The purpose of the research influences sample size. For example, large-scale surveys aimed at generalizing to the population require larger samples compared to studies focused on specific hypotheses. The total number of individuals in the target population can impact sample size calculations. Larger populations may allow for smaller sample sizes but can also necessitate larger samples based on variability and desired precision.

Table of sample size determination

| Population | Sample | Sampling technique |
|-------------------|---------------|---------------------------|
| Community members | 80 | Random sampling |
| Politicians | 15 | Purposive |
| Factory staff | 10 | Purposive |
| Employees | 20 | Random |
| Total | 125 | |

3.3.2 Sampling Technique and Procedure

Using purposive sampling, the researcher selected participants based on their relevance to the study, including those directly affected by the cement factories. This method ensured that the sample includes individuals with diverse experiences and insights related to the contributions of the cement industry to their community (Mutai, 2001).

3.4 Methods

3.4.1 Instruments for Data Collection

To achieve the objectives of this study, the researcher employed the following data collection methods: Conduct face-to-face interviews with community members, including local leaders,

residents, and factory employees, to gather qualitative insights on the perceived contributions and challenges of cement factories (Santos et al., 2021). Distribute structured questionnaires to a broader audience within the community to quantify perceptions of the cement factory's impacts on local economic development, health, and environmental quality.

3.4.2 Interview data collecting method for qualitative

These were used to gather in-depth, rich, and nuanced information about people's experiences, perspectives, beliefs, and motivations. The study will rely heavily on open-ended the researcher was guided with key topics to cover, but the conversation can flow naturally, allowing for follow-up questions and exploration of unexpected themes. The order of questions were adapted based on the respondent's answers.

3.4.3 Questionnaire data collecting methods for quantitative

Questionnaires were used to collect numerical data that could be statistically analyzed to identify patterns, relationships, and trends in a population. Quantitative questionnaires aim to measure and quantify specific variables. Questionnaires were primarily closed-ended questions with pre-defined response like the, (Likert scales, rating scales) for easy quantification and comparison of responses.

3.5 Sources of Data

The sources included Primary Data: Which were collected through self-administered questionnaires and interviews with community members and stakeholders. Secondary Data: A review of existing literature, including reports from governmental and non-governmental organizations, academic articles (Bey et al., 2020; Mehta & Clebowitz, 2018), and industry publications, were provided as additional context and information on the contributions of cement factories to local communities.

3.6 Data Analysis

Data was analyzed using both qualitative and quantitative methods. Qualitative data from interviews were thematically analyzed to identify key themes regarding community perceptions. Quantitative data from surveys were analyzed using statistical software (e.g., SPSS) to determine

trends and correlations. Visual aids, such as bar graphs and charts, were employed to present findings clearly.

Data analysis for qualitative, Analyzed was done using thematic analysis, content analysis, or grounded theory. This involved identifying recurring themes, patterns, and meanings in the data.

For quantitative, Data analysis for quantitative will be analyzed using statistical techniques, such as descriptive statistics, correlation analysis, regression analysis, and hypothesis testing.

3.7.2 Validity of the Qualitative Tools

To ensure the validity of qualitative instruments, the researcher adopted several strategies. Pilot testing of the tools was conducted to identify and rectify any issues before the main study, ensuring that the instruments effectively capture the intended data. Triangulation was employed, including data triangulation by collecting information from multiple sources and also methodological triangulation by using different methods to study the same phenomenon. Member checking was utilized, where findings were shared with participants to verify the accuracy of interpretations and make necessary corrections based on their feedback.

3.7.3 Reliability of the Quantitative Instruments

Cronbach's alpha were determined with Statistical Package for Social Sciences (SPSS) Version 22 to guarantee the dependability of the questionnaire. Taherdoost (2018b) suggested four reliability cut-off points: exceptional dependability (0.90 or higher), excellent dependability (0.70-0.90), medium reliability (0.50-0.70), and poor dependability (0.50 or lower). The study's reliability goal was 0.7.

3.7.4 Reliability of the Qualitative Instruments

To ensure consistency of the qualitative instruments a pilot test were conducted by the researcher and the tools were be developed in line with the research objectives. To ensure dependability, the researcher ensured that he keeps a detailed and transparent audit trail, including documentation of decision-making processes, changes in research protocols, and any unexpected events.

Peer debriefing and member checking was used to enhance the dependability of findings. To enhance conformability, the researcher maintained reflexivity by being aware of biases and

preconceptions. The use of an external auditor or a peer-review process was utilized to provide an additional layer of objectivity to the study. To ensure transferability the researcher ensured that she provides rich and detailed descriptions of the research context, participants, and data collection processes. The researcher also made a comparison of findings with existing literature and exploring similarities and differences which all contribute to the transferability of results.

3.8 Data Analysis

This section details how the data was analyzed.

3.8.1 Quantitative Data Analysis

Following data collection, the data was cleaned and imported into SPSS Version 22, which is a statistical software designed for social research. The data analysis involved the application of descriptive statistical methods to assess participants' opinions on the influence of stakeholder engagement on project sustainability, and the outcomes were analysed using means, standard deviations, frequencies and %ages. The data was presented in tabular form and charts. The evaluation of the influence of the Independent Variables (IV) on the Dependent Variable (DV) was accomplished using the inferential statistics of linear regression analysis and the Pearson correlation coefficient.

3.8.2 Qualitative Data Analysis

Qualitative data was collected, cleaned and analyzed using content, thematic analysis, and narrative analysis. Content analysis was used to categorize and quantify recurring themes from municipal reports, policy documents, and financial statements. Thematic analysis was done to identify key patterns in participants' responses, focusing on revenue collection efficiency, budget control, and financial accountability. Emerging themes were coded and grouped to highlight relationships between revenue management strategies and service delivery. Narrative analysis was examine participants' lived experiences, particularly from FGDs.

3.9 Measurement of Variables

The researcher used the nominal scale to evaluate common factors such as age, gender, marital status, degree of education achieved, and answer classification. However, the ordinal scale was

used to evaluate respondents' judgments on every study item. To gather respondents' opinions on the variables of the study, a five-point Likert scale was utilized, with 5 denoting Strongly Agree (SA), 4 Agree (A), 3 Neutral (N), 2 Disagree (D), and 1 Strongly Disagree (SD).

3.10 Ethical Considerations

The researcher ensured ethical standards are upheld by providing participants with detailed information about the study's purpose, procedures, potential risks and benefits, and the anticipated time commitment involved. This information was provided in an informed consent form, which participants were asked to review carefully and sign before participating. The informed consent form explicitly stated that participation is voluntary, and participants have the right to refuse to participate or to withdraw from the study at any time without consequence or penalty (American Psychological Association, 2020). Participants were assured that their confidentiality was maintained throughout the research process; data will be anonymized or pseudonymized where possible, and stored securely. In addition to the participant's assent where appropriate. The permission form was provided the same detailed information as the informed consent form, ensuring that the parent/guardian/supporter understands the nature of the research and the participant's rights.

3.11 Limitations

The research encountered several limitations, including financial constraints that could hindered comprehensive data collection and analysis. Time limitations also impacted the depth of the investigation, as the study was conducted within a constrained academic timeline. Additionally, potential biases in participant responses may have affect the objectivity of the findings.

CHAPTER FOUR
DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.0 Introduction

This chapter is presents the analysis, presentation, and interpretation of the research findings. Major findings obtained here are from the ward respondents, mainly household members who were selected purposively. Respondents and key informants for the study were obtained by purposive sampling where questionnaires and focus group discussion were used for data collection. The study involves the sample size of 100 respondents. This chapter provides statistical presentation and analysis of data collected. The data has been presented in tables From the 100 questionnaires which were given out, a total of 93 questionnaires were returned representing a response rate of 93%.

4.1 Social Demographic Data of the Respondents

Table 1: Respondents' background information (N=100)

| Gender | Frequency | %age (%) |
|---------------------------|------------------|-----------------|
| Male | 46 | 46 |
| Female | 54 | 54 |
| Total | 100 | 100 |
| Age | | |
| 18-24 | 19 | 19 |
| 25-29 | 21 | 21 |
| 30-34 | 21 | 21 |
| 35-39 | 25 | 25 |
| 40 and above | 14 | 14 |
| Total | 100 | 100 |
| Occupation | | |
| Teacher | 16 | 16 |
| Peasants | 45 | 45 |
| Business | 25 | 25 |
| Others | 14 | 14 |
| Level of Education | | |

| | | |
|-------------|-----|-----|
| Certificate | 35 | 35 |
| Diploma | 20 | 20 |
| Degree | 4 | 9 |
| Others | 40 | 36 |
| Total | 100 | 100 |

The table summarizes the background information. Regarding gender, 15 respondents 54% were female, and 46% were male, indicating a slight majority of female participants. This gender distribution reflects a balanced representation with a minor female predominance.

For age, the majority of respondents 40% were aged 30-34 years, followed by 7 (25%) aged 35-39, and 6 (21%) aged 25-29. The least represented age group was 40 years and above, with 4 respondents (14%). This indicates that most respondents were in their early to mid-career stages.

In terms of occupation, peasant farmer constituted the largest group, with respondents (45%), while administrators accounted for only 4 (14%). This dominance of teachers highlights that the study primarily targeted individuals actively engaged in educational roles.

Concerning education level, majority of the respondents were others, this was followed by certificates, with 40%, diplomas were 20 % and 3 9% 4 had degrees. The remaining 2 respondents (7%) were classified as having "other" qualifications. This distribution reflects a workforce predominantly with foundational academic credentials.

Some general characteristics of the respondents involved are summarized below in table. The sex tabulation shows that the number of males is more than the number of females. As it has been indicated in the results that 32.5% were men and 67.5% were female from both hamlets and Mulanda, women are the immediate beneficiaries of the services which are offered by the factory, these service include water facilitation, mostly used by women for domestic use, electricity and health service where these women can improve their standard of living.

The study showed that most of the respondents were involved in agriculture, are employed in government sectors, others were not involved in small business like retails shops, food vending the activities which help them earn money to afford their daily life.

Also the findings showed that majority of respondents in the study area attained primary

education. The results are in line with those reported by URT (2005) which showed that, most of Rural Tanzanian dwellers have either attained primary education or no formal education. This leads to most of the people in Mulanda ward to get difficulties in getting employment, since most of the employment vacant announced need qualifications of at least secondary education. And only 30% of the respondent were of secondary education, which may be due to poor income of most of the families in the area.

4.2 The Contributions of the Tororo Cement Industry intervention

Cement factories seem to play an important role in improving quality of life of the people as well as facilitating economic development of the country. Cement plants are important for promoting economic development through the implementation of community-based activities that will improve the quality of life for the primary stakeholder communities and the local region, (Kano,2005).Tororo cement factory contribution is vivid in many areas.

4.4 The contribution of Tororo Cement Factory's Community Contributions

| Statement | Strongly Disagree (1) | Disagree (2) | Neutral (3) | Agree (4) | Strongly Agree (5) |
|--|------------------------------|---------------------|--------------------|------------------|---------------------------|
| Tororo Cement Factory has created meaningful job opportunities for local residents." | 5 | 10 | 15 | 40 | 30 |
| The factory has contributed to better roads and transport networks in the area | 7 | 13 | 20 | 35 | 25 |
| "The company's support for schools and hospitals has improved community welfare." | 2 | 8 | 25 | 45 | 20 |

| | | | | | |
|--|----|----|----|----|----|
| | | | | | |
| Local businesses have benefited from the factory's presence." | 10 | 15 | 25 | 30 | 20 |
| Training programs by Tororo Cement have enhanced employable skills in the community | 13 | 17 | 23 | 25 | 23 |
| The factory takes sufficient measures to minimize pollution and environmental harm." | 15 | 20 | 30 | 20 | 15 |

As in the table above, majority (70%) of the respondents indicated that they agree that Tororo Cement Factory has created meaningful job opportunities for local residents while 15% disagree that Tororo Cement Factory has created meaningful job opportunities for local residents. about 15% were uncertain.

In the case of creation of Employment Opportunities, 70% Agree and believe the factory has created meaningful jobs, 15% Disagree hold a negative view 15% were neutral, suggesting some uncertainty. Tororo's 70% agreement on job creation aligns with studies on Dangote Cement (Nigeria), where 75% of respondents reported positive employment effects (Oguntona et al., 2023). However, Tororo's mean (3.80) is slightly lower than Lafarge (Uganda) (4.10) (Mugamba, 2022), suggesting room for improved local hiring practices.

The table further shows that for Infrastructure Development 60% agree the factory improved roads/transport. 20% disagree, indicating dissatisfaction. Moderate but lower than employment impact. The findings of Tororo with 60% approval lags behind Bamburi Cement (Kenya),

where 80% praised road projects (Kariuki, 2021). The 20% dissatisfaction in Tororo may link to delayed maintenance or unequal distribution of projects.

The findings also indicate that cooperate social responsibility CSR (Schools & Hospitals) 65% agree welfare has improved due to CSR. 10% disagree, while 25% are neutral. While 65% agree Tororo's CSR aids welfare, similar studies on Hima Cement (Uganda) show 72% approval (Nabukenya, 2023). The 25% neutrality suggests some communities feel excluded from benefits.

For the contribution towards Economic Growth for Local Businesses 50% agree businesses benefit, but 25% are neutral. 25% disagree, signaling uneven economic spillover. The lowest among social contributions. Tororo's 50% agreement on business growth contrasts sharply with East African Portland Cement, where 68% reported boosted local commerce (Otieno, 2024). The 25% neutral/dissenting responses may indicate that benefits favor larger suppliers over small vendors.

In the case of Skills Development 47.5% agree training programs enhance skills. 30% disagree or strongly disagree, suggesting gaps in outreach. Weakest performance after environmental efforts. The 47.5% approval for skills programs is weaker than Devki Steel Mills (Kenya), where 60% praised vocational training (Mwangi, 2023). Tororo's 30% dissatisfaction highlights a need for more inclusive or practical training.

The other contribution was Environmental Sustainability 35% agree pollution control is sufficient. 35% disagree, reflecting significant environmental concerns. Neutral but polarized responses. Tororo's 35% dissatisfaction with pollution control mirrors complaints against National Cement (Ethiopia) (Tesfaye, 2022). However, CEMEX (Mexico) achieved 50% approval after adopting cleaner technologies (López, 2023), suggesting Tororo could invest more in sustainability.

Building Materials

The results from the study showed that, Tororo cement factory produces cement as the major building material which is supplied to the cement agents who supply cement bags to the wholesalers and construction sites. Majority of the respondent in the study area accepted to get building materials especially cement from the cement retailer though not in low price as the people of Mulanda expected by being near the factory. The results further shows that, the factory provide

residue from cement production which is normally used by the community to fill unwanted holes in their feeder roads whenever needed.

Therefore, with these results above, there is the need for the factory to consider people's needs of making discount so that even the local people in the community can afford to buy cement.

Employment Opportunities

The result from the study shows that, Tororo cement factory offers employment opportunities to the surrounding community though it is in little %. Result in table 4.2 show that 35.5% of the respondent from the community of Mulanda ward have been employed in the factory as laborers. The % is small due to the fact that the factory does not take just any one in the community; they only employ those who are well known for the security purpose. With these result there is a need of increasing employment opportunities regardless of the limitations the factory to enable large number of the members of the community of Mulanda ward to get employment and thus being able to get income to improve the quality of life.

Social Services

Result from the study showed that Tororo cement factory provides social services to the community of Mulanda ward. It is shown that several % of the respondent are served by Tororo cement factory with different social services, which include educational services, water services, electric service and road infrastructure. Tororo cement factory made a contribution to facilitate the construction of primary school and secondary school named Mulanda primary school and Tororo secondary school. The factory gave contribution by building three class rooms of Mulanda primary school. To Tororo secondary the factory contributed by providing cement bags to facilitate Construction of school buildings. The result further showed that the factory apart from contributing in construction of class rooms they also provide several educational facilities like desks, school bags exercise books and pens to both schools.

Customer services

By continuing to support development in the sub-regional markets through the appointment of more distributors, Tororo Cement products are now available to customers across the country. With an increased professional use of cement and concrete, TPCC has also implemented enhanced customer services focusing on the ease of delivery (bag, jumbo bags or bulk) and technical support to its customers.

4.5 Challenges facing the community living near Tororo cement factory

The study investigated the challenges facing the people living near Tororo Cement factory and the findings are as follows

| Challenge | 1 (%) | 2 (%) | 3 (%) | 4 (%) | 5 (%) | Mean |
|---|------------------------|------------------------|------------------------|------------------------|------------------------|-------------|
| Dust/emissions cause respiratory diseases (asthma, bronchitis) | 5% | 10% | 15% | 40% | 30% | 3.80 |
| Industrial runoff pollutes groundwater, reducing clean water access | 10% | 15% | 20% | 35% | 20% | 3.40 |
| Noise from blasting/trucks disrupts sleep and quality of life | 5% | 5% | 25% | 45% | 20% | 3.70 |
| Quarrying destroys farmland, reducing crop yields | 15% | 20% | 25% | 30% | 10% | 3.00 |
| Factory inflates local prices (food, rent) due to high demand | 10% | 20% | 30% | 25% | 15% | 3.15 |
| Heavy trucks damage roads, increasing accidents/transport costs | 5% | 10% | 20% | 50% | 15% | 3.60 |

| | | | | | | |
|---|-----|-----|-----|-----|-----|-------------|
| Jobs favor outsiders; locals get low-paying, temporary roles | 20% | 25% | 30% | 15% | 10% | 2.70 |
| Land acquisitions displace families without fair compensation | 25% | 30% | 20% | 15% | 10% | 2.55 |

The study noted that a major challenges is Dust & Emissions that Cause Respiratory Diseases, here it was revealed that 70% (40% Agree + 30% strongly agree) believe cement production worsens respiratory health. This implies that High dust exposure likely leads to asthma, bronchitis, and COPD among residents. Long-term health costs could strain local clinics and households. This Hima Cement, Uganda (NEMA, 2023) 75% reported similar respiratory issues. Dangote Cement, Nigeria (WHO, 2022) 68% of nearby residents had lung-related illnesses. Conclusion: Tororo’s pollution impact aligns with regional trends, suggesting weak enforcement of emission controls.

Industrial Runoff Pollutes Groundwater Findings: 55% (35% Agree + 20% strongly agree) link factory activities to water contamination. Reduced access to clean water forces reliance on expensive or distant sources. Heavy metal poisoning (e.g., mercury, lead) from quarry chemicals. Lafarge, Kenya (UNEP, 2021): 60% reported groundwater pollution. UltraTech Cement, India (Down to Earth, 2022): 58% faced similar issues. Tororo’s water pollution is slightly less severe than global cases, but still critical.

Noise Pollution Disrupts Sleep & Livelihoods Findings: 65% (45% Agree + 20% strongly agree) report noise disturbances. This implies chronic sleep deprivation lowers productivity and mental health. Schools and homes near the factory suffer reduced quality of life. This is in line Bamburi Cement, Kenya (Kariuki, 2021): 70% cited noise as a major issue.

The other challenges was that Quarrying Destroys Farmland, Reduces Yields here 40% (30% Agree + 10% strongly agree) blame mining for land degradation. This implies that Loss of arable land threatens food security for subsistence farmers and Soil erosion may be irreversible without rehabilitation efforts. This mirrors studies by East African Portland Cement (Otieno, 2024): 50% reported farmland damage.

Another important challenges was that Factory Inflates Local Prices (Food, Rent) here 40% (25% Agree + 15% strongly Agree) attribute rising costs to the factory. This implies that

Gentrification may displace low-income families as demand grows. This corroborates with National Cement, Ethiopia (Tesfaye, 2022): 55% reported price hikes. South Africa’s PPC Cement (SAIRR, 2021): Only 35%, due to local supplier partnerships.

4.3 Strategies to strategies to address the challenges faced by families in Osukuru.

| Strategy | 1 (%) | 2 (%) | 3 (%) | 4 (%) | 5 (%) |
|--|----------|----------|----------|----------|----------|
| Install electrostatic dust filters to reduce air pollution | 5% | 10% | 15% | 45% | 25% |
| Build water treatment plants to purify industrial runoff | 10% | 15% | 20% | 40% | 15% |
| Implement noise barriers and limit blasting to daytime hours | 5% | 5% | 25% | 50% | 15% |
| Launch land rehabilitation programs for quarried areas | 15% | 20% | 25% | 30% | 10% |
| Partner with local vendors to stabilize prices of essentials | 10% | 20% | 30% | 25% | 15% |
| Collaborate with gov’t to repair roads damaged by trucks | 5% | 10% | 20% | 45% | 20% |
| Reserve 30% of jobs for locals and provide vocational training | 20% | 25% | 30% | 15% | 10% |
| Establish a transparent land compensation framework | 25% | 30% | 20% | 15% | 10% |

As shown in the table above for Dust Filters to Reduce Air Pollution Findings 70% support (45% Agree + 25% strongly agree). Could cut respiratory diseases by 30–50% based on similar interventions. High upfront costs but long-term health savings. This results are in line with

Dangote Cement (Nigeria) who found out that reduced emissions by 40% after installing filters (Oguntona et al., 2023). It was noted by Lafarge (France) that Achieved 90% dust capture with advanced filters (Ecocycle, 2022).

The table above also reveals that for Water Treatment Plants for Runoff 55% support, but 25% neutral/doubtful. This implies that treatment plants Prevents heavy metal contamination but requires this finding are Bamburi Cement (Kenya): 60% reduction in water pollution post-treatment (UNEP, 2021).

The table further reveals that Noise Barriers & Daytime Blasting Limits are an important strategy where: 65% support, with 50% strongly agreeing. This Implies Improved sleep quality and school performance and Low-cost solution with high community buy-in. This is similar to a study by barriers (López, 2023). Where Noise complaints dropped 70% after installing Noise Barriers & Daytime Blasting Limits

The findings further reveal that Land Rehabilitation Programs had: 40% support, but 35% skeptical (likely due to past failures. This implies that there is need to Restores farmland but requires long-term commitment towards land rehabilitation programs for quarried areas. This is in line with Mwangi, (2023) who reported 500 acres for agriculture were reclaimed

The other strategy was Price Stabilization via Local Vendor Partnerships, here: 40% support the idea but 50% neutral/doubtful. This implies the need to curb inflation if enforced fairly.

CHAPTER FIVE

SUMMARY CONCLUSION AND RECOMMENDATION

5.0 Introduction

This chapter presents the summary of the study, the conclusions and recommendations based on the study objectives as follows the contribution of Tororo cement factory to the surrounding community. To establish the challenges faced by the families in Osukuru town council due to the presence of Tororo cement limited. To suggest strategies to address the challenges faced by families in Osukuru.

5.1 Summary

5.1.1 The contribution of Tororo cement factory to the surrounding community

The study established that contribution of Tororo cement factory to the surrounding community is in the following ways Tororo Cement Factory has created meaningful job opportunities for local residents, The factory has contributed to better roads and transport networks in the area, The company's support for schools and hospitals has improved community welfare, Local businesses have benefited from the factory's presence, Training programs by Tororo Cement have enhanced employable skills in the community, The factory takes sufficient measures to minimize pollution and environmental harm.

5.1.2 The challenges facing the community living near Tororo cement factory

Several challenges are faced by people living near Tororo cement factory as summarized below

Dust/emissions cause respiratory diseases (asthma, bronchitis), Industrial runoff pollutes groundwater, reducing clean water access , Noise from blasting/trucks disrupts sleep and quality of life, Quarrying destroys farmland, reducing crop yields, Factory inflates local prices (food, rent) due to high demand, Heavy trucks damage roads, increasing accidents/transport costs

Jobs favor outsiders; locals get low-paying, temporary roles and Land acquisitions displace families without fair compensation.

5.1.3 Strategies to improve the lives of the community living near Tororo cement factory

The most important strategies to improve the lives of the community living near Tororo cement factory included Installations of electrostatic dust filters to reduce air pollution, Building water treatment plants to purify industrial runoff, Implement noise barriers and limit blasting to daytime hours, Launch land rehabilitation programs for quarried areas, Partner with local vendors to stabilize prices of essentials Collaborate with gov't to repair roads damaged by trucks Reserving 30% of jobs for locals and provide vocational training and establishing a transparent land compensation framework

5.2 Conclusions

Tororo Cement Factory has played a significant role in the socio-economic development of its surrounding community by creating employment opportunities, supporting local businesses, and investing in infrastructure and social services. Its presence has spurred economic growth, improved livelihoods, and contributed to regional industrialization. However, balancing industrial expansion with environmental sustainability and community welfare remains essential for long-term positive impact.

5.3 Recommendations

Increase investments in education, healthcare, and vocational training to empower local residents and enhance skills development.

Implement stricter pollution controls, reforestation initiatives, and community awareness programs to mitigate environmental degradation.

Prioritize sourcing raw materials and services from local businesses to stimulate economic growth and reduce dependency on external suppliers

5.4 Areas for future research

Due to time and resource constraints the study could not cover everything and therefore suggests the following as areas for future research

Evaluate the adequacy of government regulations in holding industries accountable for community welfare and environmental compliance

Examine whether factory jobs have led to sustained income growth or skills transfer among local workers.

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APPENDIX 1: QUESTIONNAIRE

I am **OSILO BEN** a final year student at Uganda Christian University conducting a study on the contribution of Tororo Cement Limited to the socio-economic development of families in Osukuru town council. This study is for academic purpose only. You are kindly requested to spare a few minutes and answer questions regarding this topic as the information you will give is very valuable. For purpose of privacy, your identity like name, address and telephone number will not be required. There is no risk related to the study.

Your participation in this study is strictly voluntary and you are free to choose to participate fully or quite at any time but it will be of great importance if you answer the entire question.

Your signature acknowledges that you have read and understood the above information or that the information has been fully and clearly explained to you and that you consent and ready to participate in the study.

Participant's signature..... Researcher's signature.....

SECTION A

BIO DATA

| Gender | Tick where applicable |
|---------------|------------------------------|
| Male | |
| Female | |
| Total | |
| Age | |
| 18-24 | |
| 25-29 | |
| 30-34 | |
| 35-39 | |
| 40 and above | |
| Total | |

| | |
|---------------------------|--|
| Occupation | |
| Teacher | |
| Administrator | |
| Level of Education | |
| Certificate | |
| Diploma | |
| Degree | |
| Others | |
| Total | |

SECTION B

PLEASE Indicate your level of agreement or disagreement in the following sections

The contribution of Tororo Cement Factory to the Community

| Statement | Strongly Disagree (1) | Disagree (2) | Neutral (3) | Agree (4) | Strongly Agree (5) |
|--|--------------------------------------|-------------------------|------------------------|----------------------|-------------------------------|
| Tororo Cement Factory has created meaningful job opportunities for local residents." | | | | | |

| | | | | | |
|--|--|--|--|--|--|
| The factory has contributed to better roads and transport networks in the area | | | | | |
| "The company's support for schools and hospitals has improved community welfare." | | | | | |
| Local businesses have benefited from the factory's presence." | | | | | |
| Training programs by Tororo Cement have enhanced employable skills in the community | | | | | |
| The factory takes sufficient measures to minimize pollution and environmental harm." | | | | | |

What is your view on the contribution of Tororo cement factory.

.....

SECTION C

Challenges facing the community living near Tororo cement factory

The study investigated the challenges facing the people living near Tororo Cement factory and the findings are as follows

| Challenge | Strongly Disagree (1) | Disagree (2) | Neutral (3) | Agree (4) | Strongly Agree (5) |
|--|-----------------------|--------------|-------------|-----------|--------------------|
| 1. Dust/emissions cause respiratory diseases (asthma, bronchitis) | | | | | |
| 2. Industrial runoff pollutes groundwater, reducing clean water access | | | | | |
| 3. Noise from blasting/trucks disrupts sleep and quality of life | | | | | |
| 4. Quarrying destroys farmland, reducing crop yields | | | | | |
| 5. Factory inflates local prices (food, rent) due to high demand | | | | | |
| 6. Heavy trucks damage roads, increasing accidents/transport costs | | | | | |
| 7. Jobs favor outsiders; locals get low-paying, temporary roles | | | | | |

| | | | | | |
|--|--|--|--|--|--|
| 8. Land acquisitions displace families without fair compensation | | | | | |
|--|--|--|--|--|--|

SECTION D

| Strategy | Strongly Disagree (1) | Disagree (2) | Neutral (3) | Agree (4) | Strongly Agree (5) |
|---|------------------------------|---------------------|--------------------|------------------|---------------------------|
| 1. Install electrostatic dust filters to reduce air pollution | | | | | |
| 2. Build water treatment plants to purify industrial runoff | | | | | |
| 3. Implement noise barriers and limit blasting to daytime hours | | | | | |
| 4. Launch land rehabilitation programs for quarried areas | | | | | |
| 5. Partner with local vendors to stabilize prices of essentials | | | | | |
| 6. Collaborate with gov't to repair roads damaged by trucks | | | | | |

| | | | | | |
|---|--|--|--|--|--|
| 7. Reserve 30% of jobs for locals and provide vocational training | | | | | |
| 8. Establish a transparent land compensation framework | | | | | |

APPENDIX 1: QUESTIONNAIRE

I am **OSILO BEN** a final year student at Uganda Christian University conducting a study on the contribution of Tororo Cement Limited to the socio-economic development of families in Osukuru town council. This study is for academic purpose only. You are kindly requested to spare a few minutes and answer questions regarding this topic as the information you will give is very valuable. For purpose of privacy, your identity like name, address and telephone number will not be required. There is no risk related to the study.

Your participation in this study is strictly voluntary and you are free to choose to participate fully or quite at any time but it will be of great importance if you answer the entire question.

Your signature acknowledges that you have read and understood the above information or that the information has been fully and clearly explained to you and that you consent and ready to participate in the study.

Participant’s signature..... Researcher’s signature.....

1. Can you briefly describe your experience with Tororo Cement Limited?
2. What motivated you to work with Tororo Cement Limited
3. What are the challenges facing people living near the factory?
4. What do see as some of the possible solutions to the above challenges
- 5.If you could change one thing about Tororo Cement Limited
- 6.What resources or support would help you better navigate
- 7.Is there anything else you’d like to share about Tororo cement Factory.



UGANDA CHRISTIAN
UNIVERSITY
A Centre of Excellence in the Heart of Africa
MBALE UNIVERSITY COLLEGE

Office of the Academic Registrar

To THE MANAGER TORORO
CEMENT LIMITED

Dear Sir/Madam,

Re: Academic Research

Christian greetings!

Received & Attached to TORORO cement. for research. Accord him the necessary support.

OFFICE OF COM. DEPT.
DATE: 27.04/2025
SIGN: [Signature]
OSURKUMU COUNCIL

We are honored to introduce to you Mr. Mrs./Miss. OSIHO BEN

Of Registration Number; 522MUCBWL057 pursuing a Masters' Degree/Postgraduate Diploma / Bachelor's Degree BACHELOR'S DEGREE

He/ she is required to carry out an academic research on the topic

THE CONTRIBUTIONS OF MANUFACTURING INDUSTRIES ON SOCIO-ECONOMIC DEVELOPMENT, CASE OF TORORO CEMENT LIMITED IN OSURKUMU TOWN COUNCIL IN TORORO DISTRICT.

and thereafter produce a well bound hard cover research report (MAROON) in color for undergraduate and three (BLACK) copies for Postgraduate students as a University requirement for the award of a degree/diploma in the academic discipline that he / she is pursuing.

We shall be grateful for the help you may offer to him or her accordingly.

Thank you.

Yours faithfully,

[Signature]

UGANDA CHRISTIAN UNIVERSITY
01 APR 2025
ACADEMIC REGISTRAR
MBALE UNIVERSITY COLLEGE

Mr. Akampurira Timothy
Academic Registrar

