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FINANCE

# ENVIRONMENTAL CORPORATE SOCIAL RESPONSIBILITY AND FINANCIAL PERFORMANCE OF TELECOMMUNICATION COMPANIES IN KENYA

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## ABSTRACT

**Purpose of the study:** The purpose of the study was to examine the effect of environmental Corporate Social Responsibility programs on financial performance of telecommunication companies in Kenya.

**Statement of the problem:** The telecommunication industry in Kenya is highly volatile and competitive, and the financial performance of telecommunication companies has witnessed a decline in recent years. For example, Safaricom reported a decrease in profit from 68,676.2 million in 2021 to 67,496.1 million in 2022. Additionally, Airtel Networks Kenya Limited experienced losses of 24,822,606,000 in 2020 and 30,662,525,000 in 2021.

**Methodology**: The research design employed in this study was correlational research design. The population scope comprised a total of 6,597 employees from the three major telecommunication companies in Kenya: Safaricom, Airtel Kenya, and Telkom Kenya, with 3,859, 1,694, and 1,044 employees respectively. The sample size was determined using Yamane's formula, resulting in 353 employees from top and middle-level management. Data collection employed semi-structured questionnaires, enabling the collection of quantitative and qualitative data. The collected data was analyzed using SPSS version 29 software.

**Findings:** The study found there is a positive and significant association between environmental CSR programs and financial performance ($r=0.633$, $p=0.000$). environmental CSR programs can explain 40.1% of the variations of financial performance of telecommunication companies in Kenya. The regression results showed that environmental CSR programs are positively and significantly related to financial performance of telecommunication companies in Kenya ($\beta = .573$, $t(1, 324) = 14.667$, $p<.05$).

**Conclusion:** The study concludes that environmental CSR initiatives serve as a means for corporations to allocate resources towards environmental conservation efforts, thereby contributing to a favorable ecological outcome. These programs may manifest in various formats, with notable instances encompassing the allocation of resources towards renewable energy initiatives, the implementation of waste reduction strategies, and the preservation of biodiversity. Environmental CSR programs offer numerous advantages.

**Recommendations:** The study recommends that telecommunications companies in Kenya should allocate investments towards renewable energy initiatives, specifically those pertaining to solar and wind farms. Furthermore, organisations have the capacity to incorporate renewable energy sources into their own operational activities. Companies to contribute to the conservation of biodiversity through the implementation of measures aimed at safeguarding endangered species.

**Keywords:** *Environmental CSR programs, Financial Performance, Telecommunication Companies, Kenya*

## BACKGROUND OF THE STUDY

A strong financial performance is characterized by consistent growth, profitability, and the capacity to meet financial obligations and achieve long-term Corporate Social Responsibility (CSR) (Muchiri, Erdei-Gally & Fekete-Farkas, 2022). Investors, stakeholders, and management rely on financial performance as a vital tool to evaluate the financial viability and soundness of a company, enabling them to make informed decisions regarding investment, expansion, and strategic planning (Marita & Marita, 2019). CSR can be fundamental to a business by enhancing its reputation, fostering stakeholder trust, and creating a positive impact on society and the environment, thus increasing financial performance (Amahalu & Okudo, 2023). CSR programs provide organizations with opportunities to make a positive impact on society and the environment. The study focused on environmental CSR programs.

Environmental CSR programs aim to reduce the organization's environmental footprint through CSR noble practices, resource conservation, or investments in renewable energy (Rehman, Zahid, Rahman, Asif, Alharthi, Irfan, & Glowacz, 2020). Environmental Corporate Social Responsibility (CSR) programs have gained increasing attention due to their potential impact on financial performance. Hsu (2019) highlights that such programs often focus on reducing a company's environmental footprint through initiatives like waste reduction, energy efficiency, and sustainable sourcing. Munyi and Waruguru (2020) emphasize the role of environmental CSR in building a positive corporate image and reputation, which can enhance brand loyalty and ultimately contribute to higher revenue. Al-Abdallah and Ahmed (2019) point out that companies engaged in environmental CSR can benefit from cost savings through resource efficiency and waste reduction, positively affecting their bottom line. Additionally, Derila, Evana, and Dewi (2020) argue that environmental CSR can help companies comply with environmental regulations, reducing legal risks and potential fines.

Moreover, Hasan, Singh, and Kashiramka (2021) highlight the importance of stakeholder engagement in environmental CSR, which can lead to stronger relationships with customers, investors, and regulators, further bolstering financial performance. Marita et al. (2019) emphasizes the potential for environmental CSR programs to attract socially responsible investors who consider a company's environmental performance when making investment decisions. Ahmad, Shattal, Rawashdeh, Ghasawneh, and Nusairat (2022) suggest that environmental CSR can drive innovation, leading to the development of eco-friendly products and services that can capture new market segments and generate additional revenue. Additionally, Luo and Qu (2023) argue that environmental CSR can contribute to long-term sustainability by mitigating environmental risks and ensuring the availability of resources for future operations, which can have a positive impact on financial stability and performance.

The telecommunications industry is undergoing rapid evolution and facing intense competition globally, leading to significant challenges. Many companies have reported losses and decreasing revenues, illustrating the difficulties in maintaining financial stability in this sector. For instance, Vodafone Idea Limited, a major telecom company in India, has faced significant financial hurdles, reporting a net loss after tax of 282.45 billion Indian rupees in the financial year 2022, following a net loss after tax of 442 billion Indian rupees in the preceding financial year (Statista, 2023). These losses underscore the economic difficulties telecom companies are encountering, even in one of the world's most populous nations with an immense market potential for telecommunication services. A similar trend can be observed in developed economies such as Canada, where the telecommunications services industry saw a decrease in revenues by approximately 800 million Canadian dollars in 2020, falling to 53.4 billion Canadian dollars from the previous year (Statista, 2023). In Africa, for instance, Nigerian telecom companies lost about 14,348,738 subscribers between September 2020 and September 2021 (Nigerian Communications Commission, 2023). This decline indicates that even in established markets with high telecommunication service penetration, companies are grappling with challenges that impact their revenues.

The study focused to examine the effect of environmental Corporate Social Responsibility programs on financial performance of telecommunication companies in Kenya. The telecommunication companies in Kenya used were Safaricom, Airtel, and Telkom. These companies were selected based on their significant market presence, influence, and market share in the Kenyan telecommunication industry, making them suitable candidates for examining the relationship between CSR and financial performance. The telecommunication industry in Kenya is characterized by volatility and intense competition, leading to a decline in the financial performance of telecommunication companies in recent years (Boruett & Musembi, 2022; Ramani, 2022; Mwangi & Mwanzu, 2023; Twalib & Kariuki, 2020). Safaricom reported a decrease in profit, Airtel Networks Kenya Limited experienced significant losses, and Telkom's market share decreased (Communications Authority of Kenya, 2022). Given these challenges and the importance of CSR, this study aimed to investigate the potential influence of environment CSR on financial performance of telecommunication companies in Kenya.

## STATEMENT OF THE PROBLEM

The telecommunication industry in Kenya is highly volatile and competitive, and the financial performance of telecommunication companies has witnessed a decline in recent years. For example, Safaricom reported a decrease in profit from 68,676.2 million in 2021 to 67,496.1 million in 2022 (Safaricom, 2022). Additionally, Airtel Networks Kenya Limited experienced losses of 24,822,606,000 in 2020 and 30,662,525,000 in 2021 (Airtel Networks Kenya Limited, 2022). Furthermore, in 2019, Telkom's market share significantly reduced after losing 600,000 customers, and its voice market share declined by 0.9 percent to 3.1 percent (Communications Authority of Kenya, 2019). Therefore, the current study aims to investigate the potential influence of CSR on the financial performance of telecommunication companies in Kenya. The volatile and competitive nature of the industry, along with the reported financial performance challenges faced by certain companies, creates a need to understand how CSR initiatives can potentially impact financial outcomes. The findings can inform telecommunication companies in Kenya about the potential benefits and implications of adopting CSR practices, helping them make informed decisions regarding their CSR strategies.

The study was mainly focused on environmental CSR programs. The focus of this study on environmental CSR programs was justified by the growing recognition of environmental sustainability as a critical global concern and its direct relevance to the telecommunication industry in Kenya. There is a need for telecommunication companies to align with global sustainability goals and demonstrate their commitment to mitigating climate change and reducing environmental impacts. By concentrating on environmental CSR, this study aimed to provide a specific and targeted analysis of the potential influence of these programs on the financial performance of telecommunication firms, considering their industry-specific challenges and opportunities in Kenya.

## RESEARCH OBJECTIVE

The research objective was to examine the effect of environmental corporate social responsibility programs on financial performance of telecommunication companies in Kenya.

## LITERATURE REVIEW

Hsu (2019) studied the impact of CSR on corporate image, customer satisfaction, and customer loyalty in the telecommunication industry. Using a questionnaire to collect data and regression analysis to test hypotheses, the study found that the implementation of CSR within this sector had a positive effect on corporate image, customer satisfaction, and loyalty. Dlamini (2016) conducted a study on the impact of CSR on company profitability, focusing specifically on listed telecommunication companies in Zimbabwe. The researcher used a Vector Auto Regression (VAR) model and Stata as statistical tools, with secondary data collected from the annual reports of EconetWireless Zimbabwe Limited. Correlation and regression analyses were employed to investigate the relationship. The findings suggested that there is no causal relationship between CSR and profitability, indicating that CSR does not significantly impact a company's profitability.

The study by Munyi and Waruguru (2020) examined the effect of environmental CSR on the financial performance of mobile telecommunications companies in Kenya. The study aimed to examine how environmental CSR practices impact companies' financial performance, considering the importance of environmental consciousness in attracting customers and promoting product uptake. The target population consisted of employees from Safaricom Plc, Airtel Kenya, and Telkom Kenya, specifically those working in the CSR, finance, and marketing departments at the companies' headquarters in Nairobi. The researchers employed a descriptive design and collected data through questionnaires, which were then analyzed using Statistical Packages for Social Sciences. The findings, both descriptive and inferential, indicated a significant relationship between environmental CSR and the financial performance of mobile telecommunications companies. Reducing environmental impacts, such as through emission reduction, product innovation, and efficient resource use, enhances the reputation, thereby increasing demand for products and ultimately improving financial performance (Yumei, Iqbal, Nurunnabi, Abbas, Jingde & Chaudhry, 2021; Abdullahi & Matanda, 2020).

Al-Abdallah and Ahmed (2019) investigated the impact of CSR on customer loyalty in the Qatari telecommunication sector. In order to accomplish this, the study utilized a descriptive analytical methodology and a quantitative research approach utilizing survey strategy. Using personally submitted questionnaires, 476 filtered and screened questionnaires were analyzed using SPSS software. The study revealed that customers perceived CSR activities as an essential element for them and for the operating organizations as well, moreover their awareness of such activities was salient through their responses to the questionnaire in place, and as a result, CSR activities were found to have a positive direct significant impact on customer loyalty.

The study by Derila, Evana, and Dewi (2020) examined the effect of environmental performance and environmental costs on financial performance with CSR disclosure as an intervening variable. The focus of the research is on mining companies listed on the Indonesian Securities Exchange that participated in the 2015-2018 Program for Pollution Control, Evaluation, and Rating (PROPER). The objective of the research is to provide insights that can be used as material considerations in policymaking related to environmental performance. Additionally, the study aims to offer a tool for measuring financial performance and assist in making investment decisions for evaluating companies. As a conceptual paper, the study does not involve empirical data collection or analysis. Instead, it presents a theoretical framework and discusses the potential relationships between environmental performance, environmental costs, financial performance, and CSR disclosure. The research holds potential value in guiding policymakers in considering environmental performance and its impact on financial performance. It also offers a perspective for evaluating companies based on their environmental practices and CSR disclosure, which can assist investors in making informed investment decisions.

Hasan, Singh, and Kashiramka (2021) explored the relationship between CSR and Corporate Financial Performance (CFP) in the context of Indian firms. This investigation aims to fill a gap in the literature, as most studies have been conducted focusing on American and European firms, leaving the developing economies underexplored. The study uses an ESG (environmental, social, and governance) score as a proxy for CSR, analyzing its connection with both market-based and accounting-based financial performance measures. The sample includes 287 companies over the financial years from 2014-2015 to 2018-2019, with data analysis conducted via pooled ordinary least squares (OLS), fixed effect, and random effect model. The findings demonstrate a varying effect of CSR disclosure on CFP metrics depending on the industry and the financial performance indicator type. Specifically, consumer goods, consumer services, and heavy engineering industries showed a positive relationship between CSR and CFP, while the relationship was negative for healthcare, energy, and utility firms (Adamkaite, Streimikiene & Rudzioniene, 2023).

Marita et al. (2019) examined the effect of Corporate Social Legal Responsibility on customer loyalty, specifically within telecommunication firms in Uasin Gishu County, Kenya. The study was built upon Carroll's CSR model and Stakeholder theory, and aimed to examine how legal responsibility affects customer loyalty. An explanatory research design was utilized, and data was collected from 400 customers of telecommunication companies through structured questionnaires. The data was quantitative and was analyzed using both descriptive and inferential statistics. The study found that CSR legal initiatives have a positive impact on customer loyalty. As a result, the authors suggest that telecommunication firms should strictly adhere to laws and regulations, prevent all forms of discrimination, and engage in CSR in order to foster a positive attitude among their customers and enhance loyalty.

Ahmad, Shattal, Rawashdeh, Ghasawneh and Nusairat (2022) studied the impact of four dimensions of CSR - workplace, marketplace, environment, and community - on the brand equities of telecoms operating in Jordan. They also considered the mediating effect of brand reputation. The study utilized a purposive sampling technique and collected data through e-mail and phone interviews from experienced professionals in the fields of CSR, human resources, public relations, and marketing in the telecom sector. A total of 246 valid questionnaires were returned. The findings affirm that there are positive correlations between the CSR dimensions and brand equity measures of the operating telecoms, and that brand reputations are favorably augmented. These results can provide guidance to strategists, marketers, and business owners on ways to further enhance the brand equity and brand reputation of their businesses.

The study conducted by Luo and Qu (2023) studied the impact of environmental CSR on a firm's performance, with a particular emphasis on the mediating role of corporate image and pro-environmental behavior. The authors highlight the growing environmental consciousness and the increasing pressure on businesses to comply with international treaties and regulations. In response to these environmental concerns and societal expectations for CSR, firms have recognized the significance of environmental protection as part of their CSR initiatives. Based on the Green Theory (GT), the study proposes that environmental CSR positively influences a firm's environmental performance. Data for the study were collected from 314 employees of various international corporations operating in China, using a standardized questionnaire and a suitable sampling strategy for empirical investigation. The findings of the study indicate that environmental CSR has a beneficial effect on a company's environmental performance. The results also reveal that pro-environmental behavior and green corporate image mediate the relationship between environmental CSR and a firm's environmental performance. Additionally, the data demonstrate that the CEO's environmental commitment moderates the association between pro-environmental behavior and the firm's environmental performance. However, the CEO's environmental commitment does not moderate the relationship between green corporate image and environmental performance. The study has substantial implications for practice, theory, and management. It contributes to the existing literature by adding empirical research on the relationship between environmental CSR and business environmental performance.

## RESEARCH METHODOLOGY

The research design employed in this study was correlational research design. The utilization of a correlational research design in this study enabled the examination of the relationship between health CSR and the financial performance of telecommunication firms in Kenya. The target population in this study were employees from Safaricom, Airtel Kenya and Telkom Kenya. The justification for picking only Safaricom, Airtel Kenya and Telkom Kenya as the unit of analysis was because they controlled more than 95% of the market share with Safaricom (65.4%), Airtel Kenya (21.4%) and Telkom Kenya (8.9%) (Communications Authority of Kenya, 2023). The population scope comprised a total of 6,597 employees from the three major telecommunication companies in Kenya: Safaricom, Airtel Kenya, and Telkom Kenya, with 3,859, 1,694, and 1,044 employees respectively. The unit of observation was employees in top and middle-level management positions due to their pivotal roles in strategic decision-making processes within organizations. The sample size was determined using Yamane's formula, resulting in 353 employees from top and middle-level management. A primary data was collected using semi-structured questionnaires. The qualitative data obtained from the semi-structured questionnaires were subjected to content analysis and afterwards presented in a narrative format. The coding, analysis, and generation of the quantitative report were performed using version 29 of the

Statistical Package for the Social Sciences (SPSS). The data was subjected to analysis using both descriptive and inferential statistics. The descriptive statistics included measures such as means, standard deviations, and percentages. The inferential statistics included both correlation analysis and regression analysis

## RESULTS AND FINDINGS

### Response Rate

The study encompassed 353 participants in total, comprising employees in both top-level and middle-level management positions. Out of the total sample size of 353, a substantial portion, with 324 questionnaires completed adequately, were used for the analysis. Table 1 presents a summary of the response rate.

**Table 1: Response Rate**

| Company | Respondents Categories | Targeted respondents | Response (Those responded) | Percentage |
|---|---|---|---|---|
| Safaricom | Senior Management | 41 | 38 | 0.9268 |
| | Middle level Management | 174 | 162 | 0.9310 |
| Airtel Kenya | Senior Management | 16 | 14 | 0.8750 |
| | Middle level Management | 69 | 65 | 0.9420 |
| Telkom Kenya | Senior Management | 14 | 13 | 0.9286 |
| | Middle level Management | 39 | 32 | 0.8205 |
| **Total** | | **353** | **324** | **0.9178** |

The study results presented in Table 1 indicate that the average response rate was 91.78%. A response rate of 91.78% is considered to be adequate for the analysis since it is above the 60% threshold recommended by Ahmad and Halim (2017) and Hendra and Hill (2019). The high response rate not only boosts the confidence in the survey's findings but also increases the study's impact, as stakeholders are likely to consider its conclusions to be credible. Overall, the high response rate provides a strong backbone for the study, setting the stage for meaningful analysis and valuable insights.

### Diagnostic Tests

In statistics, diagnostic tests are used to assess the quality and validity of a statistical model. These tests can identify any issues with the model, such as overfitting, underfitting or lack of fit. It is essential to use diagnostic tests to ensure that the conclusions drawn from a statistical model are valid and trustworthy. To ensure the requirements for regression are met, the following diagnostic tests were carried out.

### Normality Tests

The study employed the Kolmogorov–Smirnov test to examine whether the data is normal. The normality test was used to determine if the sample data was collected from a population with a normal distribution. The study results of the normality tests are presented in Table 2

**Table 2: Normality Test**

| | Kolmogorov–Smirnov test. | | |
|---|---|---|---|
| **Variables** | **Statistic** | **Df** | **Sig.** |
| Environmental CSR programs | 0.081 | 324 | 0.439 |

The findings presented in Table 2 indicate that the data exhibited a normal distribution, as evidenced by the respective p-values exceeding 0.05 for environmental CSR programs. A normality test is a statistical procedure utilized to assess whether a given sample of data is derived from a population that follows a normal distribution.

### Linearity Test

The linearity test is essential for ensuring the validity of a regression model, improving the accuracy of predictions, interpreting coefficients, and avoiding spurious relationships. Therefore, it is crucial to conduct a linearity test to ensure that the regression model is appropriate and valid for the data. The scatter plot of environmental CSR programs against financial performance is summarized in figure 1

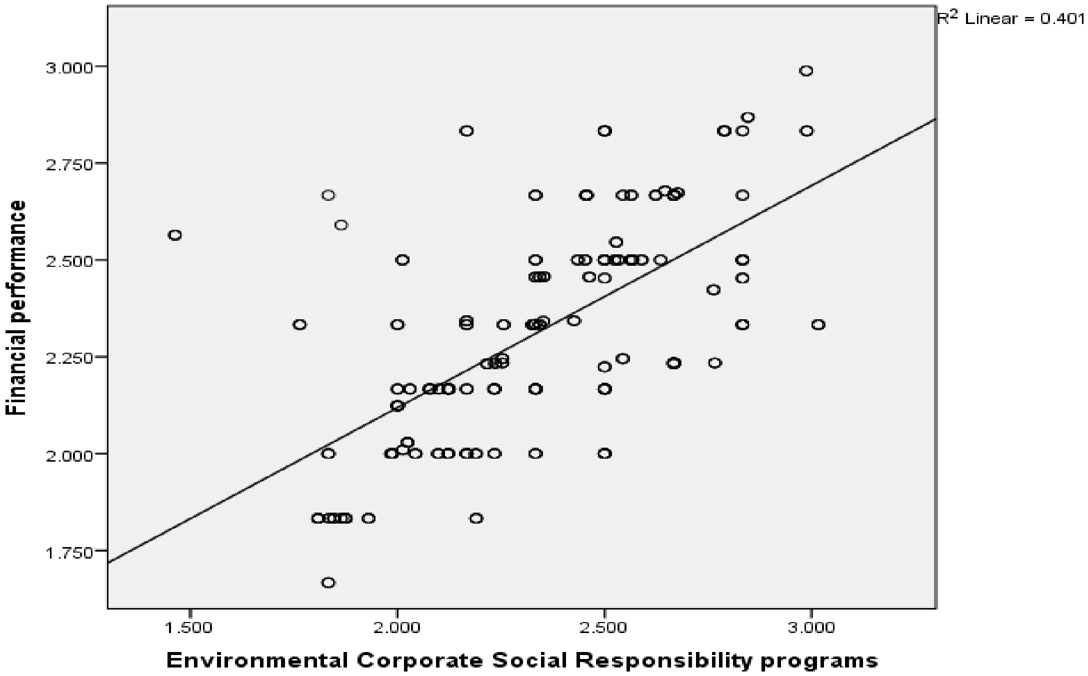


**Figure 1: Scatter Plot of Environmental CSR Programs against Financial Performance**

Figures 1 shows that environmental CSR programs depicted a straight-line relationship with financial performance. In addition, the r-squared showed the percentage of the dependent variable variation that a linear model explains.

### Multicollinearity

The multicollinearity test was done using the Variance Inflation Factor (VIF). Table 3 presents the multicollinearity results.

**Table 3: Multicollinearity Results**

| Variables | VIF |
|---|---|
| Health CSR programs | 1.615 |
| Education CSR programs | 1.658 |
| Environmental CSR programs | 1.407 |

The findings presented in Table 3 demonstrate the absence of multicollinearity, as evidenced by the Variance Inflation Factor (VIF) value for environmental CSR programs being below the threshold of 10. Katrutsa and Strijov (2017) have posited that variables with VIF values below 10 demonstrate an absence of multicollinearity. Multicollinearity is a statistical phenomenon characterized by the presence of high correlation between two or more predictor variables in a regression analysis.

**Descriptive Statistics of Environmental CSR programs and Financial Performance**

Table 4 presents the descriptive statistics results.

**Table 4: Percentage Distribution of Environmental CSR programs and Financial Performance**

| Statements | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | Mean | Standard deviation |
|---|---|---|---|---|---|---|---|
| In our company, we have implemented renewable energy initiatives to reduce our carbon footprint and promote sustainable energy sources. | 14.20% | 57.10% | 6.50% | 15.70% | 6.50% | 2.43 | 1.11 |
| Renewable energy initiatives are a core part of our environmental CSR programs, and we actively invest in clean energy technologies. | 5.60% | 60.80% | 10.20% | 13.60% | 9.90% | 2.61 | 1.10 |
| The renewable energy initiatives that we have implemented are cost-effective | 30.90% | 41.40% | 8.00% | 12.00% | 7.70% | 2.24 | 1.23 |
| Our company is committed to transitioning to renewable energy sources to contribute to a greener and more sustainable future. | 27.20% | 51.50% | 6.50% | 11.40% | 3.40% | 2.12 | 1.04 |
| Our company has comprehensive waste management practices in place to minimize our environmental impact and promote recycling. | 21.90% | 53.10% | 5.90% | 15.10% | 4.00% | 2.26 | 1.09 |
| Waste management is a top priority in our environmental CSR programs, and we continuously seek innovative | 29.60% | 47.20% | 4.00% | 17.00% | 2.20% | 2.15 | 1.02 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| solutions to reduce waste generation. | | | | | | | |
| In our company, we actively promote waste reduction, recycling, and proper disposal practices to minimize our ecological footprint. | 16.70% | 54.90% | 5.60% | 20.40% | 2.50% | 2.37 | 1.06 |
| We believe that effective waste management practices play a vital role in protecting the environment and preserving natural resources. | 15.70% | 38.30% | 11.10% | 25.00% | 9.90% | 2.05 | 1.11 |
| In our company, we are actively involved in biodiversity conservation efforts to protect and preserve the natural ecosystem. | 15.10% | 46.60% | 5.60% | 20.70% | 12.00% | 2.08 | 1.29 |
| Biodiversity conservation is a fundamental pillar of our environmental CSR programs, and we support initiatives to safeguard local flora and fauna. | 18.20% | 52.50% | 4.30% | 18.20% | 6.80% | 2.43 | 1.18 |
| Our company is committed to protecting biodiversity hotspots and natural habitats to promote ecological balance and sustainability. | 13.00% | 53.70% | 8.00% | 14.20% | 11.10% | 2.57 | 1.21 |
| Our commitment to biodiversity conservation is reflected in our business practices. | 6.50% | 60.50% | 8.60% | 14.80% | 9.60% | 2.06 | 1.14 |
| **Average** | | | | | | **2.28** | **1.13** |

The results presented in Table 4 reveal some compelling insights into how employees perceive their company's commitment to environmental CSR programs. Starting with renewable energy initiatives, 71.3% of the respondents (14.2% strongly disagree and 57.1% disagree) are not convinced that the company has implemented substantial measures to reduce its carbon footprint and promote sustainable energy. The mean score here is 2.43, with a standard deviation of 1.11, underscoring that the prevailing sentiment leans towards disagreement rather than neutrality or agreement. Moving on to the cost-effectiveness of these renewable energy initiatives, 72.3% (30.9% strongly disagree and 41.4% disagree) feel that the initiatives are not cost-effective. The mean score is 2.24 and the standard deviation is 1.23, indicating that the responses vary but largely skew towards disagreement.

Regarding waste management practices, 75% of the participants (21.9% strongly disagree and 53.1% disagree) don't believe the company has effective systems in place. With a mean score of 2.26 and a standard deviation of 1.09, the consensus among employees is that the company needs to invest more in waste management as part of its environmental CSR programs. Focusing on biodiversity conservation efforts, 61.7% of respondents (15.1% strongly disagree and 46.6% disagree) are skeptical about the company's commitment to protecting and preserving the natural ecosystem. The mean score of 2.08 and standard deviation of 1.29 suggest a range of opinions but tilt the balance towards disagreement.

Lastly, in terms of the company's overall commitment to biodiversity conservation as reflected in business practices, 67% (6.5% strongly disagree and 60.5% disagree) are not convinced. The mean score is 2.06, with a standard deviation of 1.14, again reflecting more disagreement than agreement among the respondents. In summary, these findings point to a lack of confidence among employees in their company's environmental CSR programs, from renewable energy and waste management to biodiversity conservation. The mean scores are consistently below the neutral point, with high percentages of disagreement across all the statements. This could have implications for the company’s reputation and perhaps even its financial performance, given the increasing importance consumers and investors are placing on sustainable practices.

In addition, from the open-ended questions, the study found that environmental sustainability is becoming an increasingly crucial issue. Investing in renewable energy, for instance, is not just a matter of reducing the carbon footprint; it can also result in cost savings over the long term. Companies often spend considerable amounts on energy expenses, and switching to renewable sources could mitigate those costs. However, the data indicates that employees don't find these initiatives cost-effective, with a mean score of just 2.24. If employees are skeptical, chances are that this negative perception will also reach consumers, potentially affecting sales and revenue.

The waste management is an area where companies can both improve their environmental impact and save money. Efficient waste management systems can reduce the costs of disposing of waste or even generate revenue from recycling. The mean score of 2.26 suggests that employees believe there is room for improvement in this area. Poor waste management not only hurts the environment but can also result in fines and sanctions from regulatory bodies, adding unnecessary expenses and negatively affecting the bottom line. Biodiversity conservation is another critical area that could influence consumer perception and, thus, financial performance. A poor score in this domain (mean score of 2.08) points to missed opportunities for telecommunication companies to engage in public-private partnerships, perhaps earning them carbon credits or subsidies from the government. Such collaborations could also enhance their brand image, thereby increasing customer loyalty and market share. Thus, environmental CSR is not just a moral obligation but a financial imperative for telecommunication companies in Kenya.

**Correlation Analysis for Environmental CSR Programs and Financial Performance**

The correlation results are presented in Tabel 5

**Table 5: Correlation Analysis for Environmental CSR Programs and Financial Performance**

| | | Financial Performance | Environmental CSR Programs |
|---|---|---|---|
| **Financial Performance** | Pearson Correlation | 1.000 | |
| | Sig. (2-tailed) | | |
| **Environmental CSR Programs** | Pearson Correlation | .633** | 1.000 |
| | Sig. (2-tailed) | 0.000 | |

The study results of the correlation analysis indicate a positive and statistically significant association exists between environmental CSR programs and financial performance (r=0.633, p=0.000). This means that as environmental CSR programs increase, financial performance also tends to increase. This could be due to the fact that consumers are increasingly looking for businesses that are committed to environmental sustainability. When companies invest in environmental CSR programs, they signal to consumers that they are a responsible and ethical company. This can lead to increased sales and revenue for the company. Environmental CSR programs can help to improve the company's reputation. A good reputation can attract investors, customers, and employees. This can lead to increased financial performance for the company.

**Regression Analysis for Environmental CSR Programs and Financial Performance**

The regression analysis includes the analysis of model fitness, analysis of variance (ANOVA) and regression of coefficient. The study results of the model fitness are presented in Table 6

**Table 6: Model Fitness for Environmental CSR Programs and Financial Performance**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .633a | 0.401 | 0.399 | 0.219902 |

a Dependent Variable: Environmental CSR Programs

b Predictor: Financial Performance

The results presented in Table 6 established that environmental CSR programs are satisfactory in affecting financial performance of telecommunication companies in Kenya. The $R^2$= 0.401 (40.1%). This implied that environmental CSR programs could explain 40.1% of the variations of financial performance of telecommunication companies in Kenya. Nonetheless, 59.90% of the variation remains unexplained by this model. The results of the Analysis of Variance (ANOVA) are summarized in Table 7.

**Table 7: Analysis of Variance (ANOVA) for Environmental CSR Programs and Financial Performance**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 10.403 | 1 | 10.403 | 215.134 | .000b |
| | Residual | 15.571 | 322 | 0.048 | | |
| | Total | 25.974 | 323 | | | |

a Dependent Variable: Environmental CSR Programs

b Predictor: Financial Performance

The results in Table 7 indicate that the overall model is statistically significant. This is supported by F (1, 324) = 215.134, p <.05. The F-statistic presented with a value of 215.134 and associated p-value of less than 0.05, indicates the overall statistical significance of the model used to assess the relationship between Environmental CSR Programs and Financial Performance. A high F-value suggests that the variance explained by the model (the difference in financial performance related to environmental CSR programs) is significantly greater than the unexplained variance, implying that the model is statistically significant. The study results of the regressions of coefficients is presented in Table 8.

**Table 8: Regression of Coefficient for Environmental CSR Programs and Financial Performance**

| | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|
| | B | Std. Error | Beta | | |
| (Constant) | 0.971 | 0.092 | | 10.552 | 0.000 |
| Environmental CSR Programs | 0.573 | 0.039 | 0.633 | 14.667 | 0.000 |

a Dependent Variable: Environmental CSR Programs

b Predictor: Financial Performance

Based on the results, the regression model thus becomes:

Y = 0.971+ 0.573X

Where: -

Y= Financial Performance; X = Environmental CSR Programs

Based on the results presented in Table 8, environmental CSR programs are positively and significantly related to financial performance of telecommunication companies in Kenya

($\beta$ =.573, t (1, 324) = 14.667, p<.05). This means that as environmental CSR programs increase, financial performance also tends to increase. The high t-value of 14.667, in comparison to the critical t-value of 1.96, along with a p-value (0.000), provides compelling evidence that environmental CSR programs are positively and significantly related to financial performance of telecommunication companies in Kenya. There are a number of possible explanations for this positive association. Environmental CSR programs can lead to increased employee productivity and morale. When employees are proud of their company's commitment to environmental responsibility, they are more likely to be productive and engaged in their work. This can lead to increased profits for the company. Environmental CSR programs can help to attract and retain customers. Consumers are increasingly looking for businesses that are committed to environmental sustainability. When companies invest in environmental CSR programs, they signal to consumers that they are a responsible and ethical company. This can lead to increased sales and revenue for the company. In addition, environmental CSR programs can help to improve the company's reputation. A good reputation can attract investors, customers, and employees. This can lead to increased financial performance for the company.

## CONCLUSION

The study concludes there is a positive and significant relationship between environmental CSR programs and financial performance of telecommunication companies in Kenya. Environmental CSR initiatives serve as a means for corporations to allocate resources towards environmental conservation efforts, thereby contributing to a favorable ecological outcome. These programs may manifest in various formats, with notable instances encompassing the allocation of resources towards renewable energy initiatives, the implementation of waste reduction strategies, and the preservation of biodiversity. Environmental CSR programs offer numerous advantages. These programs have the potential to enhance the reputation of companies, attract customers, and mitigate costs. These programs have the potential to contribute to environmental mitigation efforts, by addressing climate change, minimizing pollution, and safeguarding natural resources. The implementation of environmental CSR initiatives can contribute to the enhancement of employee morale and productivity, the attraction and retention of high-performing individuals, and the augmentation of customer loyalty.

## RECOMMENDATIONS

The study recommends that telecommunications companies in Kenya should allocate investments towards renewable energy initiatives, specifically those pertaining to solar and wind farms. Furthermore, organisations have the capacity to incorporate renewable energy sources into their own operational activities. Companies have the potential to mitigate waste generation through the implementation of recycling initiatives, composting practises, and the adoption of strategies aimed at minimising the utilisation of single-use plastics. In addition, an individual company can contribute unwanted materials to charitable organisations or engage in recycling practises. Companies to contribute to the conservation of biodiversity through the implementation of measures aimed at safeguarding endangered species and their respective habitats. In addition, they have to provide assistance for the advancement of research pertaining to sustainable agricultural practises.

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