

# **DETERMINANTS OF SUSTAINABILITY OF DONOR-FUNDED HEALTH INFRASTRUCTURE PROJECTS IN NYAMIRA COUNTY, KENYA**

**Jared Onserio Ototo.**

Kisii University, Kenya.

**Dr. Maendo Densford (PhD).**

Lecturer, School of Business and Economics, Kisii University, Kenya.

**Dr. Yussuf Motari (PhD).**

Lecturer, School of Business and Economics, Kisii University, Kenya.

©2024

**International Academic Journal of Economics and Finance (IAJEF) | ISSN 2518-2366**

**Received:** 6<sup>th</sup> August 2024

**Published:** 1<sup>st</sup> October 2024

Full Length Research

**Available Online at:** [https://iajournals.org/articles/iajef\\_v4\\_i3\\_139\\_163.pdf](https://iajournals.org/articles/iajef_v4_i3_139_163.pdf)

**Citation:** Ototo, J. O., Densford, M., Motari, Y. Determinants of sustainability of donor-funded health infrastructure projects in Nyamira County, Kenya. *International Academic Journal of Economics and Finance*, 4(3), 139-163.

## **ABSTRACT**

For a long time now, stakeholders in the Global South have grappled with the challenge of sustainability of donor funded projects, particularly at the termination of the funding period. When such projects fail, beneficiaries are exposed to danger and become much more vulnerable. As a result, there is need to address the determinants of sustainability of donor funded health infrastructural projects in Nyamira county. Specific objectives of this study were to assess the effect of financial management, and technology adoption on the sustainability of donor-funded projects in Nyamira County. It was anchored on the Dependency and Stewardship theories. The study targeted 378 respondents including the County Executive, Project Implementation Boards, and Program Officers across the five sub-counties. A

sample of 277 was identified using Yamane 1979. The study adopted a stratified random sampling technique. Simple random sampling was then used to choose respondents from the various strata. A structured questionnaire in the form of a Likert scale questionnaire was self-administered to the respondents. Findings revealed there is a significant relationship between financial management, technology adoption and sustainability of donor funded projects. The study recommends the development of a policy framework to manage project financing among the donor funded projects.

**Keywords:** Financial Management, Technology Adoption, Sustainability Of Donor-Funded Projects, Nyamira County.

## **INTRODUCTION**

### **Background of the Study**

In a bid to develop the Global South, developed countries have, over the years, provided donations in different forms, including Aid and grants to projects. The history of funding projects in Africa dates back to 1960 when the continent received billions of dollars in Aid. During this time, African economies developed, life expectancy and populations increased dramatically, and absolute poverty fell, Radelet (2015). However, the rise in living standards has been relatively meager, and few African countries achieved the rapid economic growth seen in much of Asia – in South Korea, China, Vietnam, Indonesia, India, or Bangladesh – in the same period, McMillan, Rodrik and Sepúlveda (2017). Over this period, stakeholders have grappled with the sustainability of funded projects, particularly at the termination of the funding period Thondhlana and Ruwanza (2021).

Several determinants have been identified as causes of failure of donor-funded projects, including stakeholder participation, which can occur at the initiation and implementation phases of projects and support in resource mobilization, collaboration, and citizen control (Temba, 2015).

Financial management practices are another determinant of the sustainability of donor-funded projects, as observed in the study by Cheluget and Wamuyu (2020). Other scholars have observed

that technology predicated the sustainability of donor-funded projects. Sustainability refers to an approach to business that balances the social, economic and environmental aspects of project-based working to meet the current needs of stakeholders without overburdening or compromising future generations.

The sustainability of donor-funded funding has been a domain of practice since the 20th century. In 2012, the United Nations developed 17 Sustainable Development Goals (SDGs) covering the environment, politics, and economics (Halkos & Gkampoura, 2021). These are less similar to the scope and understanding of sustainability as envisaged in the current study. Under the SDGs, stakeholders, including the government, civil society and professionals, are expected to collaborate and develop relevant policies and regulations that could support the sustainability agenda. In Kenya, the aspirations of the sustainable goals are evident in grants and donations to diverse projects, including health projects in Nyamira County.

### **Sustainability of Donor Funded Projects in Kenya**

Donor projects have long been a predominant feature in developing countries like Kenya, addressing various social, economic, and environmental challenges. These projects have, however, failed to achieve long-term sustainability. Understanding the donor landscape in Kenya is essential for policymakers, government officials, researchers, and development practitioners to leverage resources and partnerships to achieve sustainable development outcomes effectively. The donor landscape in Kenya is a dynamic and complex ecosystem that plays a crucial role in supporting the country's development goals. Both multilateral and bilateral donors provide financial assistance, capacity building, and technical expertise to help address key challenges facing Kenya, such as poverty, inequality, and environmental degradation.

Kenya has a diverse range of donors, including international organizations such as the World Bank, the United Nations, and the African Development Bank, as well as individual donor countries such as the United States, Japan, and the United Kingdom. These donors provide financial assistance through grants, technical assistance, and loans and focus on education, health, agriculture, infrastructure, and governance. Donors also support programs promoting gender equality, environmental sustainability, and social inclusion.

One of the key features of funding is the presence of many non-governmental organizations (NGOs) and civil society organizations that receive funding from international donors to implement development projects at the grassroots level. These entities are crucial in promoting good governance, strengthening community resilience and advancing human rights and social justice. Donors often work closely with organizations that ensure that their funding is effectively utilized and that development projects are responsive to the needs of the most marginalized populations. Organizations such as the Ford Foundation, the Bill and Melinda Gates Foundation, and Oxfam have been notable players in this space (Gates Foundation, 2021; Ford Foundation, 2021; Oxfam, 2021). These organizations complement government efforts and fill gaps in service delivery, particularly in marginalized communities.

### **An overview of Donor-funded Projects in Nyamira County**

Nyamira County is one of the 47(Forty-Seven Counties) in Kenya and is located in the country's southwestern part. It covers an area of approximately 912 KM<sup>2</sup> and has a population of approximately 605,576 people, according to the 2019 census. It was established in 2010 following the promulgation of the new constitution, which devolved power and resources to the county level. The county is named after Nyamira, which means a place of beehives in the local dialect, and it has a rich history and a diverse cultural heritage. Its development has been shaped by various factors, including geographical location, governance structures, resources and socio-economic dynamics. The struggle for independence culminated in the 1963 declaration of Kenya's sovereignty. After this period, the country's reconstruction started with the injection of funds from development partners, including the United States of America and the United Kingdom. This was meant to cure inequalities, political instability, and economic dependence. These projects included the construction of schools, health facilities, roads and introducing agricultural programs to improve food security and boost rural livelihoods (Government of Kenya, 2009; Nyamira County Government, 2013). However, these programs faced implementation challenges due to corruption, bureaucratic inefficiencies, and the limited capacity of local institutions (Mutiga, 2015; Nzioka, 2017).

A highlight of the funding to the county shows that agriculture has received several projects, including aggregation of data from the Kenya Agricultural Value Chain Development Program (KAVCDP) with over \$100 million disbursed by World Bank between 2015-2020 (World Bank, 2023; KAVCDP, 2020). The International Fund for Agricultural Development (IFAD), on the other hand, has also funded various projects, including the "Smallholder Commercialization and Agribusiness Development (SCAD)" project with \$15 million between 2018-2023 (IFAD, 2023). The United Nations Food and Agriculture Organization (FAO) also provided an \$8 million fund under the "Climate-Smart Agriculture Project" between 2017-2022 (FAO, 2023).

In education, the United Nations Children's Fund (UNICEF) supported education projects in Nyamira County with \$10 million to support the "Early Childhood Development (ECD)" program from 2017-2022 (UNICEF, 2023). The project aimed to improve access to quality ECD services, including early learning centers and teacher training (UNICEF, 2023). The British Council, on the other hand, funded projects to improve English language teaching in Nyamira County under the "English for All Project" with over \$5 million from training teachers and providing resources to improve English language skills among students (British Council, 2019).

In health, the Global Fund to Fight AIDS, Tuberculosis, and Malaria funded projects to combat HIV/AIDS in Nyamira County. The project received \$30 million in funding from 2015 to 2020 (Global Fund, 2023). The projects significantly expanded access to HIV testing, counseling, and treatment services (Global Fund, 2023). Furthermore, the United States Agency for International Development (USAID) has been a key partner in strengthening the country's healthcare system. USAID's Maternal and Child Health Program, which received \$50 million in funding from 2018-2022 (USAID, 2023) contributed to a notable reduction in maternal and child mortality rates in Nyamira, with a significant increase in skilled birth attendance and access to essential health services (USAID, 2023; USAID Kenya, 2018).

### **Statement of the Problem**

In its ideal form, project sustainability refers to a project's capacity to carry on and accomplish its goals for as long as feasible after donor funding has ended. Although sustainability is intuitively recognized, it cannot be easy to put into practical, operational form (Briassoulis, 2001). When financial resources, technology adoption, stakeholder involvement and sociopolitical involvement are implemented, they will enhance the sustainability of donor-funded projects.

One of the biggest global challenges facing the health industry, particularly in Kenya, is project sustainability. This issue needs to be resolved to preserve donors' progress in funding health initiatives, which have improved the nation's health indices and helped realize Vision 2030. Gilbert (2021), for instance, observed that 36% of donor-funded projects in Kenya fail at the end of the funding period. These findings collaborate with the observations made by the Organization for Economic Cooperation and Development (OECD) in 2014. Many health projects in public hospitals encounter significant obstacles over their life cycle and rarely make it past the implementation stage, even with the best of intentions from development partners. Most of the initiatives have been unsuccessful, and those remaining fight to maintain the jobs they have created (World Bank 2013). There is evidence of studies on determinants of the sustainability of donor-funded projects in Kenya, although the literature is highly fragmented. Alkaabi and Nobanee (2019) studied the effect of financial management on the sustainability of business enterprises, while Chepkemoi (2021) studied the role of financial management practices as a determinant of the sustainability of donor-funded projects for poverty reduction programs in non-governmental organizations in Mombasa County, Kenya. On technology, Cieslik and Foggin (2022) investigated the effect of technology adoption on the sustainability of community-based projects in Naryn, Kyrgyzstan, whereas Li, Sun, Song and Ding (2022) sought to gain an understanding of the relationship between digital technologies and sustainability in the construction projects industry. On stakeholder participation, Chigozie (2017) examined the role of community participation in the sustainability of church-funded projects, emphasizing the catholic diocese of Isiolo, Kenya, while Michieni (2023) studied the effect of stakeholder participation on the sustainability of donor-funded projects in the health sector in Kenya. There is limited evidence on this subject about donor-funded projects in Kenya.

### **General Objective of the Study**

The general objective of this study will be to examine determinants of sustainability of donor-funded health infrastructure projects in Nyamira County, Kenya

### **Specific Objectives of the Study**

The specific objectives were to;

- i. To assess the effect of Financial Management on the Sustainability of Donor-Funded Health Infrastructure projects in Nyamira County, Kenya.
- ii. To assess the effect of Technology Adoption on the Sustainability of Donor-Funded Health Infrastructure in Nyamira County, Kenya.

### **Research hypothesis**

The following hypotheses were tested.

- H0<sub>1</sub>:** There is no statistically significant relationship between Financial Management and the Sustainability of Donor-Funded Health Infrastructure projects in Nyamira County
  
- H0<sub>2</sub>:** There is no statistically significant relationship between Technology Adoption and the Sustainability of Donor-Funded Health Infrastructure projects in Nyamira County

## **LITERATURE REVIEW**

### **Theoretical Review**

#### **Stakeholders Theory**

Stakeholder theory is one component of a larger endeavor that sees the relationship between an organization and its members as both a standard and a foundation. Stakeholder theory has emerged as the main topic of discussion in numerous discussions (Regagetswe Mashigo, 2020).

The three main elements of stakeholder theory are descriptive accuracy, instrumental power, and normative validity. Descriptive accuracy is utilized to describe the actions of the businesses. A framework for observing the relationship between managing stakeholders and the sustainability and success of the project is established by instrumental power. The use of normative validity determines the project's goal. Normative validity thus becomes the central theme of stakeholder theory. The goal of a project is crucial when it comes to corporate management (R. Edward Freeman, 1984). Stakeholder philosophy and social responsibility are intertwined. It draws attention to each participant's potential. Stakeholder theory also seeks to accomplish the objectives of the firm while respecting morality and sound business practices. Stated differently, the company should be managed to maximize value for the firm's stakeholders, and directors should answer to them. This implies that businesses cannot take advantage of stakeholders for their own long-term gain. Maximizing earnings for stakeholders should be the primary goal instead. Directors are viewed as intermediaries. This suggests that in reporting to stakeholders, they must weigh their competing interests. Directors must cooperate with stakeholders and provide them with all pertinent information in order to include them in company operations. A body of case law has recognized the theory of stakeholders. It allows directors to disregard shareholder interests when compared to the needs of stakeholders (Mwang 2013). The concept of stakeholders isn't a rigid framework that defines an organization's objectives. It also considers matters of finance and morality. It also provides a goal for the directors and promotes justice for all project participants. They have to put in labor if they are to benefit the stakeholders.

As a result, everyone is pushed to produce social riches. Stakeholder theory effectively integrates ethics and economics. If an initiative's primary objective is to benefit its investors financially, it will not be able to endure and grow. It is necessary to accept input from creditors, clients, workers, suppliers, and other parties. Ultimately, a stakeholder's investment has a direct impact on the project's profitability and success. Stakeholders will gain from and be backed by the project if directors keep them in mind at all times.

The argument against the Investors Theory is that other parties besides shareholders also play a role in a project's viability and success. The operations and sustainability of a project are directly impacted by its stakeholders. According to the stakeholder theory, directors are accountable to both shareholders and stakeholders for the ongoing achievement and long-term viability of projects. They are to benefit from the project's management. It may be argued that a concentration on shareholders first and foremost shows some bias in favor of shareholders. This might harm interested parties and go against moral and ethical standards. Businesses are beginning to embrace stakeholder theory and move away from the shareholder primacy. Stakeholder idea isn't flawless, though. Many will really continue to argue against it. According to the stakeholders' theory, the active participation of stakeholders in projects is crucial for the benefiting community since it helps identify the goals of the locals as well as the obstacles and limitations facing the project. Harvey and Reed (2007) discovered that the active participation of the project's recipients is crucial as it strengthens the residents' sense of ownership. This idea is centered on the residents' active participation in the process of identifying, creating, organizing, carrying out, overseeing, and assessing the projects. Adopting cooperative or joint participation by project beneficiaries along with other relevant entities is how community engagement is accomplished. To put it another way, a project ought to benefit not just shareholders but all parties involved.

Stakeholder theory is still important today since stakeholders are essential to a project's success or failure. Labor is supplied by employees as well as internal stakeholders in order to produce commodities and services. Project operations would stop completely in their absence. Clients and other outside parties provide the money required for an endeavor to stay afloat. Project managers must be committed to it and engage with it consistently. Stakeholder theory principles can guide your projects toward a more engaged workforce and enhance the sustainability and returns of your corporate social responsibility initiatives.

## **Empirical Literature Review**

### **Financial Management and Sustainability of Projects**

Alkaabi and Nobanee (2019) studied the effect of financial management on the sustainability of business enterprises. The study analyzed the Islamic and Western financial model systems. Being a systematic review paper, areas of interest included carbon emissions, adopting renewable energy sources, investment in environmental research programs, conformity and adoption of environmental accounting or reporting, and the link between environmental reporting or disclosure and financial management. The study emerged as the necessity of disclosing sustainability reports, basing financial decisions on corporate sustainability in capital budgeting and related aspects, and measuring and mitigating sustainability risks continues to increase and affect business globally. Findings showed a link between financial management and sustainability. It also elaborated a predictive model guideline for distress identification and evaluation in various firms for various interest parties as a function of non-financial and macroeconomic elements.

Jimmy-Akinpitan, C. I. (2023) sought to address the impact of donor funding and internal control on the financial sustainability of NGO in Jos Metropolis. The study was guided by the main objective; examining the extent of donor funding on sustainability of NGOs in Jos metropolis, self-

administered questionnaire was used while the collected data was based on 285 respondents from five NGOs in Jos metropolis. The SAQ were distributed within the Finance and Accounting department, Human resource department, Administrator and Field officers. Data was analyzed using frequency table, charts and graphs, three hypotheses were formulated and tested using Statistical Package for the Social Sciences (SPSS) analysis tool with Multiple Regression, one way ANOVA and Krukal statistical tools were employed to test the hypothesis, The result of the study revealed that poor management of financial control, the inconsistency of donor funding, and poor community involvement are among factors that affect the sustainable funding of NGOs in Jos. The study concluded that funding in NGO is a challenge and that proactive community involvement, diversification of income sources, good donor relationship management, capacity building, and government involvement are among the best practices to ensure sustainability of NGOs in Nigeria. Theoretical Implication goes in line with the role of donors as a mechanism in impacting on the NGOs especially in financial sustainability of their projects as a mechanism to explain this relationship covers the knowledge gap hence a contribution to the body of literature exploring this relationship.

AIKhoury and Arouri (2019) study found that through donor relationship management, sustainable funding for non-profit organizations will be achievable. Donor relationship management is regarded as the relationship between donor and non-profit organizations for the funding strategy. The study focused on NGOs in UK and collected primary data with an aid of structured questionnaires. The study concluded that the relationship with donors is significant for the development of nongovernmental organization activities and enhances the growth leading to the long-term sustainability. In addition, non-governmental organizations need to have a good financial management system, good leadership with integrity, educated staff with experience and implementation of strategic planning in achieving a significant of donor relationship management

Sepey, M., Ridde, V., Touré, L., & Coulibaly, A. (2017) explored Donor-funded project's sustainability assessment: a qualitative case study of a results-based financing pilot in Koulikoro region, Mali. Sustainability was examined through its different determinants, phases, levels and contexts. These were explored using qualitative interviews to discern, via critical events, stakeholders' ideas regarding the project's sustainability. Data collection sites were chosen with the participation of different stakeholders, based on a variety of criteria (rural/urban settings, level of participation, RBF participants still present, etc.). Forty-nine stakeholders were then interviewed in six community health centres and two referral health centres (from 11/12/15 to 08/03/16), including health practitioners, administrators, and those involved in implementing and conceptualizing the program (government and NGOs). A theme analysis was done with the software © QDA Miner according to the study's conceptual framework. The results of this project show a weak level of sustainability due to many factors. While some gains could be sustained (ex.: investments in long-term resources, high compatibility of values and codes, adapted design to the implementations contexts, etc.) other intended benefits could not (ex.: end of investments, lack of shared cultural artefacts around RBF, loss of different tasks and procedures, need of more ownership of the project by the local stakeholders). A lack of sustainability planning was observed, and few critical events were associated to phases of sustainability. Conclusions: While this RBF project aimed at increasing health agents' motivation through different mechanisms (supervision, investments, incentives, etc.), these results raise questions on what types of motivation could be more stable and what could be



the place of local stakeholders in the project; all this with the aim of more sustained and efficient results.

Chepkemoi (2021), on the other hand, studied the role of financial management practices as a determinant of the sustainability of donor-funded projects for poverty reduction programs in non-governmental organizations in Mombasa County, Kenya. The study was conducted against the backdrop of the failure of donor-funded projects in the county. It was anchored on two theoretical foundations: participatory and sustainability theories. The study adopted a descriptive research design. Findings show that financial management affected the sustainability of donor-funded poverty alleviation projects in various ways. This implies that when resources were put to good use it enhanced project sustainability. The study, however, focused on poverty reduction programs instead of the Health Sector.

Chigozie (2017) sought to examine the effect of financial management on the sustainability of church-funded projects with emphasis on the catholic diocese of Isiolo, Kenya, with specific emphasis on budgetary allocations. The study used a census sample design with a population of 50 Key informants. Data was collected through a structured questionnaire. The study used a descriptive survey design. Data was collected through a structured questionnaire and analyzed using descriptive statistics such as percentages and frequencies. Findings showed that the lack of reliable funds influenced the church's budgetary allocations and the timely disbursement of monetary resources to various projects. The study was, however, conducted on church-funded projects, which differ from Health Sector projects, which are mostly owned and financed by the government and its partners.

Another study by Muthaura and Mburugu (2019) examined the effect of financial management on the sustainability of community-based projects in Meru, Kenya. The study was conducted against the backdrop of increasing debate on the failing sustainability of projects initiated by Community Based Organizations. A sample size of 112 drawn from a target population of 502 comprised community development project officials was taken. Respondents comprised County officials, community leaders, project leaders, and managers. The study was cross-sectional and used stratified and simple random sampling techniques. Primary data was obtained using self-administered questionnaires. The questionnaire was made up of both open-ended and closed-ended questions. Data obtained was analyzed using Descriptive and Regression analysis using Statistical Package for Social Sciences (SPSS Version 25.0). The study established a significant relationship between financial management and sustainability. The study recommended for accountability and transparency in the management of projects.

On the other hand, Manaf, Mukhyi, Veronica, Ahyar, and Timisela (2024) studied the effect of financial management and sustainability of business enterprises. Risk assessment and investment strategies were used as intervening variables. A qualitative research method was adopted using a comprehensive literature review, case studies, and interviews with industry experts. Findings showed that effective financial management is crucial for optimizing resource allocation and maintaining liquidity, essential for sustainability. However, the study observed that maintaining a balance between short-term financial performance and long-term sustainability goals remains

challenging. The insights provided can guide businesses in developing robust financial strategies that support sustainable development and competitive advantage in an increasingly volatile economic landscape.

### **Technology Adoption and Sustainability of Projects**

Cieslik and Foggin (2022) investigated the effect of technology adoption on the sustainability of community-based projects in Naryn, Kyrgyzstan. The study compared stakeholders' viewpoints regarding the future use of the project equipment, showing how technological objects attract new actors into the project's network, change its course, and enhance its impact. The study used actor-network theory to explain how development objects shape development processes by generating their networks and transforming social relations of power. Its methods comprised unstructured individual and group interviews (with a translator) with representatives of all the stakeholder groups (park rangers, school personnel, herders, village leaders, and park authorities). Interviewees were selected through purposive sampling method followed by convenience sampling. Ethnographic observation was also applied. All interviews were conducted in situ language as they were informal and resembled relaxed conversations. The questions included casual inquiries about the project experience and the informants' perceptions concerning the future of the project, as well as observations and informal interaction. Interviews with the M-EVO project researchers were performed via Skype in the months following fieldwork. It was observed that technological objects can facilitate and hamper sustainability of projects including network construction depending on the differences in problem framing and corresponding priorities of the stakeholders. The study recommended a dynamic view of sustainability to include the continuation of delivery of the project's goods and services, durability of the achieved changes, and feasibility of independent growth.

Li, Sun, Song and Ding (2022) sought to gain an understanding of the relationship between digital technologies and sustainability in the construction projects industry. The study examined the mediating role of stakeholder collaboration based on organizational information processing theory (OIPT). Survey data were collected from members and managers of Chinese construction projects. The partial least squares structural equation modelling (PLS-SEM) method was used to test the hypothesized relationships. The results show that digital technology adoption directly affects environmental, economic and social sustainability and how stakeholder collaboration can directly influence these forms of sustainability. Additionally, stakeholder collaboration partially mediates the relationship between digital technology adoption and economic and environmental sustainability. These findings enriched literature on digital transformation and project sustainability management and provide managerial implications for realizing the benefits of adopting digital technology in projects.

In India, Sharma and Ray (2019) studied the effect of technology adoption on the sustainability of government-funded projects. Focus was on financial sustainability in developing countries, given that e-governance initiatives in these countries largely depended on the financial sustainability. The study observed that technologies used for delivering e-government services was gradually shifting from a PC-based to a mobile-based model. The study used exploratory research methodology in the context of Common Service Centers in India. The study suggested that there

was a link between technology and the sustainability of projects. As a result, it would be difficult for the CSCs to be sustainable in the future unless technology is effectively adopted.

Abdoh (2024) studied the role of technology adoption on the sustainability of art-based projects. The research material included interviews with professors, artists, gallerists, curators, and art historians. The study observed that sustainability had become a goal that all sectors strive to achieve to preserve the planet as much as possible, especially in the field of art, which is closely related to the environment. The study observed that countries that had developed digital technologies and applied the same in art achieved sustainability; in contrast, developing countries could not achieve sustainability through digital technologies due to their limited resources.

Akeju, D., Okusanya, B., Okunade, K., Ajepe, A., Allsop, M. J., & Ebenso, B. (2022) sought to evaluate whether the expected project outcomes that were achieved at the end-line evaluation of 2019 were sustained 12 months after the project ended. From March 2017 to March 2019, digital innovations including VTR and data digitization interventions were delivered in 62 healthcare facilities in Ondo State, southwest Nigeria, most of which lacked access to a 3G mobile network. Data collection for the evaluation combined documents' review with quantitative data extracted from health facility registers, and 24 of the most significant change stories to assess the longevity of the outcomes and impacts of digital innovation in the four domains of healthcare: use of eHealth technology for data management, utilization of health facilities by patients, the standard of care, and staff attitude. Stories of the most significant changes were audio-recorded, transcribed for analysis, and categorized by the above domains to identify the most significant changes 12 months after the project closedown. Findings showed that four project outcomes which were achieved at end-line evaluation were sustained 12 months after project closedown namely: staff motivation and satisfaction; increased staff confidence to perform healthcare roles; improved standard of healthcare delivery; and increased adoption of eHealth innovations beyond the health sector. Conversely, an outcome that was reversed following the discontinuation of SatCom from health facilities is the availability of accurate and reliable data for decision-making. Digital technology can have lasting impacts on health workers, patients, and the health system, through improving data management for decision-making, the standard of maternity service delivery, boosting attendance at health facilities, and utilization of services. Locally driven investment is essential for ensuring the long-term survival of eHealth projects to achieve sustainable development goals (SDGs) in LMICs.

Otundo (2022) studied the role of strategic technology adoption practices on the sustainability of community water supply projects in marginalized Kenya. The study adopted a descriptive research design. A total of 302 water project officers were targeted. A sample of 169 respondents was picked based on Krejcie and Morgan's 1970 table. The data was collected using a Likert-rated structured questionnaire, and a simple random sampling procedure was applied to identify respondents. Descriptive and inferential statistical analyses were employed. Findings showed that strategic technology adoption practice had a positive and fair relationship with the sustainability of community water supply projects in marginalized Kenya. Additionally, the study established that strategic technology adoption practice significantly affected the sustainability of community water supply projects in marginalized Kenya. The study recommended that there should be a strategic team that deals with ICT in the water sector to update the existing technology for general sustainability in areas of water production, supply, and management process.

### Conceptual framework

Conceptual framework shows the relationship between project determinants of sustainability of donor funded projects in Nyamira County.

#### Independent variable

#### Dependent Variable

##### Project Determinants

##### Sustainability

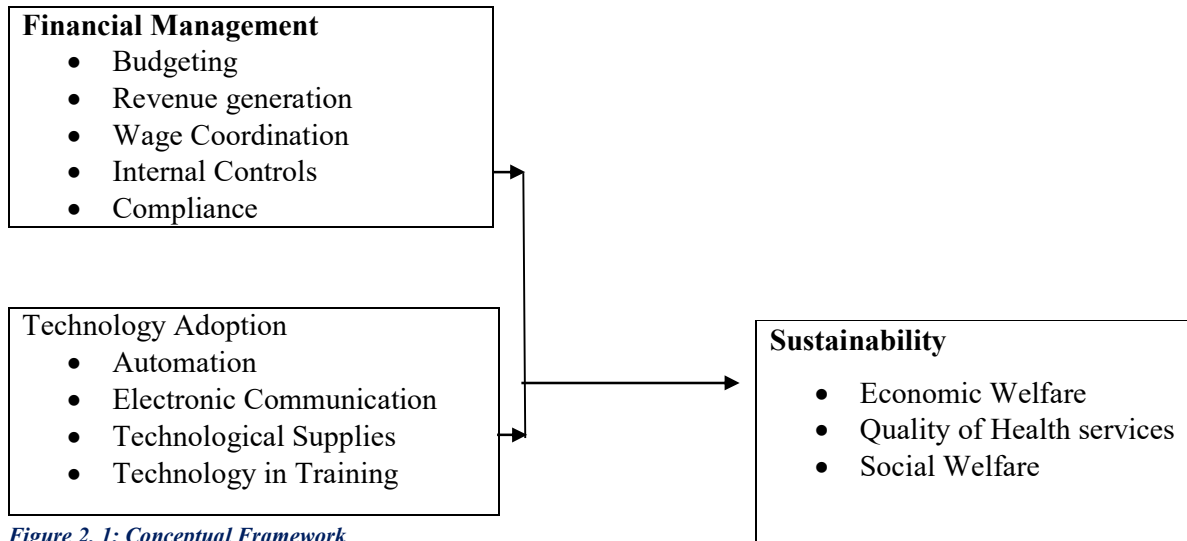


Figure 2. 1: Conceptual Framework

Financial resources are one of the donors funded project sustainability variable.it comprises of sub constituents, namely; growth, profitability, liquidity and leverage. Technology adoption as a constituent of donor funded project sustainability independent variable comprises of five components. The major application of technology adoption includes access to information, problem solving, financial feasibility, technical feasibility and operational activities. It consists of relationships, accountability, trust and goodwill and project accomplishment. The dependent variable of the study is performed of sustainability of donor funded projects in Nyamira County-Kenya. This study will measure sustainability in terms of financial resources and sustainability, technology adoption and sustainability, stakeholders’ involvement and sustainability and socio-political involvement and sustainability

## RESEARCH METHODOLOGY

### Research Design

This study employed a descriptive research design. This design enabled the study to analyze and describe the current status of the phenomena (Ochieng, 2016). A descriptive research design accurately and methodically determines features, frequency, trends and situations of the population, situations and phenomena. It enabled the study to describe project determinants and the longevity of programs supported by donors.

The study targeted 378 respondents in the Health Department, including the County Executive, Project Implementation Boards, And Program Officers across the five sub-counties (i.e., Manga,

Nyamira South, Nyamira North, Borabu & Masaba North) and the county headquarters. Table 1 presents the Target Population.

*Table 1: Target Population*

<b>Cadre</b>	<b>Executive</b>	<b>Board Members</b>	<b>Program officers</b>	<b>Total</b>
CECs Office	20	11	15	46
CHMT	30	11	15	56
Nyamira County Hospital	20	11	15	46
Manga	20	11	15	46
Nyamira South	20	11	15	46
Nyamira North	20	11	15	46
Borabu	20	11	15	46
Masaba North	20	11	15	46
<b>Total</b>	<b>170</b>	<b>88</b>	<b>120</b>	<b>378</b>

*Source: HR department Nyamira County (2023)*

The Yamane’s 1967 formula was used to calculate the sample size.

$n = \frac{N}{1 + N(e)^2}$  where n is the number size, N is the population target and (e) is the marginal error.

To cater for non-respondents, 30 percent was provided in line with the recommendations by Fosnacht, Sarraf, Howe and Peck (2017).

$$n = \frac{N}{1 + N(e)^2}$$

Where N=Target population

E = Marginal error

$$N = \frac{378}{1 + 378(0.05)^2}$$

$$= \frac{378}{1.945} = 194$$

$$= 194 \times \frac{100}{70} (\text{Catering for non-response}) = \frac{378}{0.7}$$

$$= 277 \text{ respondents}$$

The sample was then distributed within the strata as shown in Table 2

**Table 3.2: Sample Size Distribution**

Cadre	Executive		Board Members		Program officers		Total
	Population	Sample	Population	Sample	Population	Sample	
CECs Office	20	27	11	11	15	11	49
CHMT	30	15	11	6	15	11	32
Nyamira County Hospital	20	15	11	6	15	11	32
Manga	20	15	11	6	15	11	32
Nyamira South	20	15	11	6	15	11	32
Nyamira North	20	15	11	6	15	11	32
Borabu	20	15	11	6	15	11	32
Masaba North	20	15	11	6	15	11	32
<b>Total</b>	<b>170</b>	<b>132</b>	<b>88</b>	<b>54</b>	<b>120</b>	<b>93</b>	<b>277</b>

Source: Author (2023)

The study adopted a stratified random sampling technique. The respondents were divided into departments, including county executives, project implementation boards, and program officers. Simple random sampling was then used to choose respondents from the various strata.

## RESEARCH FINDINGS AND DISCUSSION

### Financial Management within Donor-Funded Projects

Table 4.1 presents descriptive statistics for Financial Management within Donor-Funded Projects. The statistics contain the mean, standard deviation, skewness, and Kurtosis used to understand the data's properties.

**Table 4.1: Financial Management within Donor-Funded Projects**

	N	Mean	SD	Sk.	Kr.
Budgets are required for the project to start	244	4.7746	0.53133	-2.982	12.112
The projects have guaranteed revenue streams to the county	244	4.4262	0.78482	-1.582	2.977
Wages coordination improves the result of project execution	244	4.4385	0.7203	-1.681	4.424
Internal controls are well-measured in project management	244	4.2951	0.74468	-1.141	1.925
There is compliance on fund management and financial reporting	244	4.0984	0.95072	-1.154	1.317

According to the findings, respondents agreed (M=4.77, SD=.53, SK=-2.98, Kur= 12.112) that a budget is required for the project to start. They also agreed (M=4.43, SD=.785, SK=-1.582, Kur=2.977) that the projects have guaranteed revenue streams to the county. It was also established

that respondents agreed (M=4.44, SD=.720, SK=-1.681, Kur= 4.424) that wage coordination improves the result of project execution and (M=4.295, SD=.745, SK=-1.141, Kur=1.925) that internal controls are well measured. Lastly, it was likewise reputable that respondents agreed (M=4.098, SD=.950, SK=-1.154, Kur= 1.317) that there is compliance on fund management and financial reporting. On skewness and Kurtosis, the high peakedness shown by values in the kurtosis (i.e., 1.317-12.112), the study observes extreme perceptions among respondents on Financial Management Practices in donor-funded projects. The negatively skewed data ranging from -1.141 to -2.982 show a high possibility of floating financial policies and procedures on budgeting, internal controls, and cash-flow management in donor-funded projects in Nyamira County.

### **Technology Adoption within Donor-Funded Infrastructure Projects**

Table 4.2 presents descriptive statistics for Technology Adoption within Donor-Funded Projects. The statistics contain the mean, standard deviation, skewness, and Kurtosis.

**Table 4.2: Technology Adoption within Donor-Funded Projects**

	<b>N</b>	<b>Mean</b>	<b>SD.</b>	<b>Sk.</b>	<b>Kr.</b>
Automation promotes project execution	244	4.668	0.70305	-2.799	9.485
Electronic communication (i.e., emails, messages, calls, and WhatsApp) promotes the projects	244	4.4508	0.81753	-1.823	3.806
Project technological supplies meet the required standards	244	4.6516	0.71258	-2.336	5.661
Documentaries and tutorials promote project execution	244	4.5451	0.73843	-1.764	3.212
Technology is deployed in Training participants	244	4.3443	0.68818	-1.334	3.941

According to the results, respondents (M=4.668, SD=.703, SK=-2.799, Kur=9.485) agreed that automation promotes project execution. They were, however, undecided (M=4.450, SD=.818, SK=-1.823, Kur=3.806) on whether electronic communication (i.e., emails, messages, calls, and WhatsApp) promotes projects and (M=4.344, SD=.688, SK=-1.334, Kur=3.941) whether technology is adequately deployed in training during project implementation. Respondents agreed that (M=4.65, SD=.713, SK=-2.336, Kur=5.661) that technological project supplies met the required standard and (M=4.545, SD=.738, SK=-1.764, Kur=3.212) that documentaries tutorials were used to improve project execution. With the high peakedness shown by values in the kurtosis (i.e., 3.212-9.485), the study observes extreme perceptions among respondents of the subject of Technology adoption in donor-funded projects. The negatively skewed data ranging from -1.334 to -2.799 show high possibilities of poor application of Technology in donor-funded projects in Nyamira County.

### **Regression Analysis**

Simple linear regression was used for data analysis. This method models the relationship between one independent variable and one dependent variable.

### Effect of Financial Management on Sustainability of Health Projects in Nyamira County

As shown in this section, the study sought to test the relationship between Financial Management and Sustainability. Table 4.3 presents a model summary.

**Table 4.3: Model Summary of Financial Management and Sustainability**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.512 <sup>a</sup>	.262	.259	.44603

Source: Field Data (2024)

Table 4.3 presents a model summary of the financial management and sustainability of donor-funded health projects. The outcome shows that the coefficient of determination (R square) was 0.262. The model explained 26.2% of the change in sustainability, with the remaining 73.8% being explained by exogenous factors. This means that effective financial management practices such as Budgeting, Internal Controls, and Cash-flow Management can enhance project Sustainability.

**Table 4.4: ANOVA Table on Financial Management and Sustainability**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	17.083	1	17.083	85.868	.000 <sup>b</sup>
	Residual	48.145	242	.199		
	Total	65.228	243			

Source: Field Data (2024)

ANOVA table 4.15 shows that with Financial Management as an independent variable, the model is fit to predict the Sustainability of Donor Funded Health Projects (F= 85.868, P<0.05). As a result, the study tested the hypothesis as presented in Table 4.16.

**Table 4.5: Coefficients of Financial Management and Sustainability**

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	T	
1	(Constant)	2.059	.273		7.548	.000
	Financial Management	.559	.060	.512	9.266	.000

Source: Field Data (2024)

The results ( $\beta = .559$ ,  $t=9.266$ ;  $p<0.05$ ) show a significant relationship between Financial Management and Sustainability of donor-funded projects. Therefore, one unit increase in financial management leads to a 0.559b change in the sustainability of donor-funded health projects. The findings concur with those of Chepkemioi (2021), Chigozie(2017), and Alkaabi and Nobanee(2019), who also found that financial management significantly affects the sustainability of projects. On this basis, the null hypothesis is stated as follows:

**H<sub>01</sub>:** There is no statistically significant relationship between Financial Management and the Sustainability of Donor-Funded Health Infrastructure projects in Nyamira County



was rejected. Therefore, a statistically significant relationship exists between Financial Management and the Sustainability of Donor-Funded Health Infrastructure projects in Nyamira County.

From the foregoing discussion, the Financial Management and Sustainability model can now be presented as follows:

$$Y = 2.059 + 0.559X_1$$

### **Effect of Technology Adoption on Sustainability of Health Projects in Nyamira County**

The study sought to test the relationship between Technology Adoption and Sustainability. Table 4.6 presents the Model Summary.

*Table 4.6: Model Summary on Technology Adoption and Sustainability*

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	.538 <sup>a</sup>	.290	.287	.43751

*Source: Field Data (2024)*

Table 4.6 presented presents a model summary on Technology Adoption and Sustainability of Donor Funded Health Projects. The outcome shows that the coefficient of determination (R square) was 0.290. The model explained 29.0% of the change in sustainability, with the remaining 71.0% being explained by exogenous factors. This means that effective Technology Adoption practices such as automation, electronic communication such as email, calls, and WhatsApp, and Video Tutorials enhance project Sustainability. The study then sought to test the goodness fit of the model as presented in Table 4.7

*Table 4.7 ANOVA on Technology Adoption and Sustainability*

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	18.906	1	18.906	98.770	.000 <sup>b</sup>
	Residual	46.322	242	.191		
	Total	65.228	243			

*Source: Field Data (2024)*

ANOVA table 4.7 shows that with Technology Adoption as an independent variable, the model was fit to predict the Sustainability of Donor Funded Health Projects (F= 98.770, P<0.05). As a result, the study tested the hypothesis as presented in Table 4.8.

*Table 4.8: Coefficients of Technology Adoption and Sustainability*

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.116	.249		8.504	.000
	Technology adoption	.545	.055	.538	9.938	.000

*Source: Field Data (2024)*

The results ( $\beta = .545$ ,  $t=9.938$ ;  $p<0.05$ ) show a significant relationship between Technology Adoption and the Sustainability of donor-funded projects in Nyamira County. Therefore, a one-unit

increase in technology adoption leads to a 0.545 change in the sustainability of donor-funded health projects. On this basis, the null hypothesis was rejected. The findings concur with those of Masika(2020), Mulwa(2023), and Ochieng(2020), who also found that Technology Adoption significantly affects the sustainability of donor-funded projects.

On this basis, the null hypothesis is stated as follows:

**H<sub>01</sub>:** There is no statistically significant relationship between Technology Adoption and the Sustainability of Donor-Funded Health Infrastructure projects in Nyamira County

was rejected. Therefore, a statistically significant relationship exists between technology adoption and the Sustainability of Donor-Funded Health Infrastructure projects in Nyamira County.

From the foregoing discussion, the technology adoption and Sustainability model can now be presented as follows:

$$Y = 2.116 + 0.545X_2$$

## **CONCLUSION AND RECOMMENDATIONS**

Financial management practices were measured using budgeting, internal controls, cash Flows, and wages. The study concluded that all the financial management measures were important and could enhance the sustainability of donor-funded projects. This result implies that the county government can sustain donor-funded projects if finance policies and regulations are adhered to. There is, therefore, evidence that these variables jointly and independently affect some sustainability of donor-funded projects. This implies that Nyamira County should effectively adopt appropriate regulations and policies on financial management.

Technology was deployed at various phases of the project. The deployment of technologies in training, project execution, and communication was assessed. It was observed that technology was important in project execution and could lead to the sustainability of funded projects. Therefore, Nyamira county was expected to deploy the forms of technology effectively to sustain donor funded project. There is, therefore, evidence that these variables jointly and independently affect to some extent the sustainability of donor-funded projects.

As a result, the study recommends the development of a policy framework to govern county projects. Although some of these regulations are already enshrined in the Kenyan constitution, including the law of public participation and the Public Finance Management Act, weaknesses in observing such were evident, leading to failure in projects.

Arising from some of the implications and limitations of this study, recommendations has been made. Therefore, the study recommends a longitudinal investigation where an observation on sustainability of donor funded project can be made over a long period of time. Such an investigation can overcome limitations of cross-sectional research. Additionally, the study recommends the use of Structural equation model to enable the findings establish the strength of the determinants.

## REFERENCES

- Adams, D. W. (2018). The conundrum of successful credit projects in floundering rural financial markets. *Economic Development and Cultural Change*, 36(2), 355-367.
- Adenle, A. A. (2020). Assessment of solar energy technologies in Africa-opportunities and challenges in meeting the 2030 agenda and sustainable development goals. *Energy Policy*, 137, 111180.
- Akeju, D., Okusanya, B., Okunade, K., Ajepe, A., Allsop, M. J., & Ebenso, B. (2022). Sustainability of the effects and impacts of using digital technology to extend maternal health services to rural and hard-to-reach populations: experience from Southwest Nigeria. *Frontiers in Global Women's Health*, 3, 696529.
- Akuto, T. (2020). *Institutional factors influencing the sustainability of donor-funded dairy agricultural projects a case of Siyoi, west Pokot County, Kenya* (Doctoral dissertation, UoN).
- Alice, Micheni., Susan, Were., Gregory, Namusonge. (2023). Influence of Stakeholder Engagement on Sustainability of Donor Funded Projects in the Health Sector in Kenya. *International journal of entrepreneurship and project management*, doi: 10.47604/ijepm.2051
- Aryeetey, R., Harding, K., Hromi-Fiedler, A., & Pérez-Escamilla, R. (2020). Analysis of stakeholder networks for breastfeeding policies and programs in Ghana. *International Breastfeeding Journal*, 15, 1-11.
- Au-Yong, C. P., Ali, A. S., Ahmad, F., & Chua, S. J. L. (2017). Influences of key stakeholders'
- Baldwin, K., & Winters, M. S. (2020). How do different forms of foreign aid affect government legitimacy? Evidence from an informational experiment in Uganda. *Studies in Comparative International Development*, 55, 160-183.
- Batsukh, E., Issack, I. A., Batirov, M., Chivandire, P. S., Herath, S., & Enejo, S. (2019). Green Financing in Developing Countries: Experiences from Mongolia, Kenya and Nigeria. *Emerging Issues on Trade and Sustainability*, 37.
- Batsukh, E., Issack, I. A., Batirov, M., Chivandire, P. S., Herath, S., & Enejo, S. (2019). Green Financing in Developing Countries: Experiences from Mongolia, Kenya and Nigeria. *Emerging Issues on Trade and Sustainability*, 37.
- Brinkerhoff, J. M. (2013). Donor-funded government—NGO partnership for public service improvement: Cases from India and Pakistan. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 14, 105-122.

- Carlos, Martínez-Ávila., Stefan, Olander. (2024). Stakeholder participation in the implementation of urban property development projects. *Construction Management and Economics*, doi: 10.1080/01446193.2024.2361789
- Cieslik, K., Dewulf, A., & Foggin, J. M. (2022). Investigating project sustainability: technology as a development object in a community-based project in Naryn, Kyrgyzstan. *Oxford Development Studies*, 50(4), 289-306.
- Construction. *Construction Management and Economics*, 32(12), 1166-1182.
- Foster, A. D., & Rosenzweig, M. R. (2010). *Microeconomics of technology adoption* Chicago
- Fredrick, N., Muniu., Alice, Nder., Paul, Kiumbe. (2023). Multi-Stakeholder Collaboration and Sustainability of Community Water Resource Projects. *International Journal of Management Studies and Social Science Research*, doi: 10.56293/ijmssr.2024.5007
- Gilbert, D. K. (2021). Critical Success Factors in the Implementation of Donor Funded Projects in Tharaka Nithi County, Kenya. *A Submitted Research Project to Kenyatta University, Nairobi.*
- Hahn, R., & Kühnen, M. (2013). Determinants of sustainability reporting: A review of results, trends,
- Hofisi, C., & Chizimba, M. (2013). The sustainability of donor funded projects in Malawi. *Mediterranean Journal of Social Sciences*, 4(6), 705
- Hofisi, C., & Chizimba, M. (2013). The sustainability of donor funded projects in Malawi. *Mediterranean Journal of Social Sciences*, 4(6), 705.
- Ika, L. A., Söderlund, J., Munro, L. T., & Landoni, P. (2020). Cross-learning between project management and international development: Analysis and research agenda. *International Journal of Project Management*, 38(8), 548-558.
- Ilesanmi, O. S., Afolabi, A. A., & Aanuoluwapo, A. A. (2022). Sustainability of donor-funded health-related programs beyond the funding lifecycle in Africa: a systematic review. *Cureus*, 14(5).
- Involvement in maintenance management. *Property Management*, 35(2), 217-231.
- Jais, V., Thomas., Mallika, Sankar. (2024). Sustainable Technology Adoption in Public Organizations. *Advances in logistics, operations, and management science book series*, doi: 10.4018/978-1-6684-9833-0.ch012

- Jean, Claude, Ndikumana. (2024). Organization Stakeholders' Participation and Performance of Social Security Investment Fund Project: A Case of Rwanda Social Security Board, Kigali, Rwanda. doi: 10.53819/81018102t4249
- Kariuki, F. (2020). Sustainability in the financial sector in Kenya. *Available at SSRN 3646976*.
- Kassie, M., Fisher, M., Muricho, G., & Diiro, G. (2020). Women's empowerment boosts the gains in dietary diversity from agricultural technology adoption in rural Kenya. *Food Policy, 95*, 101957.
- Khambule, I. (2020,). A question of capacity and funding: The role of local economic development agencies in South Africa's development landscape. In *Urban Forum* (Vol. 31, No. 1, pp. 95-113). Dordrecht: Springer Netherlands.
- Kimweli, J. M. (2013). The role of monitoring and evaluation practices to the success of donor funded food security intervention projects A case study of Kibwezi District. *International journal of academic research in business and social sciences, 3*(6), 9.
- Kiprop, D. A. V. I. D., Nzulwa, J., & Kwena, R. O. N. A. L. D. (2017). Challenges facing donor funded projects in Kenya: A case of community empowerment and institutional support project. *The Strategic Journal of Business & Change Management, 4*(2), 278-294.
- Klagge, B., & Nweke-Eze, C. (2020). Financing large-scale renewable-energy projects in Kenya: investor types, international connections, and financialization. *Geografiska Annaler: Series B, Human Geography, 102*(1), 61-83.
- Klagge, B., & Nweke-Eze, C. (2020). Financing large-scale renewable-energy projects in Kenya: investor types, international connections, and financialization. *Geografiska Annaler: Series B, Human Geography, 102*(1), 61-83.
- Kumar, A., Takeshima, H., Thapa, G., Adhikari, N., Saroj, S., Karkee, M., & Joshi, P. K. (2020). Adoption and diffusion of improved technologies and production practices in agriculture: Insights from a donor-led intervention in Nepal. *Land Use Policy, 95*, 104621.
- Kurgat, B. K., Lamanna, C., Kimaro, A., Namoi, N., Manda, L., & Rosenstock, T. S. (2020). Adoption of climate-smart agriculture technologies in Tanzania. *Frontiers in sustainable food systems, 4*, 55.
- Li, Y., Sun, H., Li, D., Song, J., & Ding, R. (2022). Effects of digital technology adoption on sustainability performance in construction projects: The mediating role of stakeholder collaboration. *Journal of Management in Engineering, 38*(3), 04022016.
- Loparimoi, P. M., & Ng'eno, W. K. (2023). Effect of Community Participation on Sustainability of Donor Funded Projects in Chukudum, Budi County. *Journal of Public Policy and Governance, 3*(2), 12-22.

- Magero, I., & Muchelule, Y. (2019). Influence of stakeholder's participation on sustainability of women funded projects in Carolina for Kibera. *The Strategic Journal of Business & Change Management*, 6 (2), 2248 – 2258.
- Maina, W. (2020). Kenya: The state, donors and the politics of democratization. In *Civil society and the aid industry* (pp. 134-167). Routledge.
- Manaf, S., Mukhyi, M. A., Veronica, D., Ahyar, M., & Timisela, S. I. (2024). Corporate Financial Management, Risk Assessment, and Investment Strategies: Analyzing Their Effects on Business Sustainability. *Global International Journal of Innovative Research*, 2(6), 1407-1414.
- Masika, N. (2020). *Stakeholder participation and project sustainability* (Doctoral dissertation, Kampala International University, College of Humanities and Social Sciences).
- Matelski, M., Zijlstra, S., & van Kempen, L. (2022). Civil society legitimacy as a balancing act: competing priorities for land rights advocacy organisations working with local communities in Kenya. *Canadian Journal of Development Studies/Revue canadienne d'études du développement*, 43(3), 301-319.
- Miriti, D. M. (2016). *Donor funding practices and financial sustainability of donor aided projects in World Vision Kenya* (Doctoral dissertation, University of Nairobi).
- Mohammed, M. I. & Sagwa, E, V.(2020). Influence of Funding on Stakeholder's Involvement in Constituency Development Fund Projects in Ijara Constituency, Garissa County Kenya. *Journal of African Interdisciplinary Studies*, 4(12), 41-52.
- Moses, A., Bosco, T. J., & David, K. J. (2023). Stakeholder's resource mobilization and sustainability of government funded agricultural projects in Uganda: A case study of potato projects in Kabale District.
- Muinga, N., Magare, S., Monda, J., English, M., Fraser, H., Powell, J., & Paton, C. (2020). Digital health Systems in Kenyan Public Hospitals: a mixed-methods survey. *BMC Medical Informatics and Decision Making*, 20(1), 1-14.
- Mujabi, S., Otengei, S. O., Kasekende, F., & Ntayi, J. M. (2015). Determinants of successful implementation of donor-funded projects in Uganda. *International Journal of Social Economics*.
- Muluh, G. N., Kimengsi, J. N., & Azibo, N. K. (2019). Challenges and prospects of sustaining donor-funded projects in rural Cameroon. *Sustainability*, 11(24), 6990.
- Mulwa, C. N. (2023). *The effects of stakeholder's participation on project sustainability among donor-funded projects in Kenya: case of the Kenya Innovation Engine* (Doctoral dissertation, Africa Nazarene University).

- Muriki, M. (2020). *The effect of Internal Audit on the implementation of Donor Funded Projects at Veterinaries' sans frontiers Germany* (Doctoral dissertation, University of Nairobi).
- Muthomi, N. M. (2015). *Influence of project management practices on implementation of donor funded education projects in Kajiado County, Kenya* (Doctoral dissertation, University of Nairobi).
- Mutimba, E. M. (2013). *Determinants of sustainability of donor funded projects: The case of selected projects in Ganze Constituency in Kilifi County, Kenya* (Doctoral dissertation, University of Nairobi).
- Ndungu, J. N., & Karugu, J. (2019). Community Participation and Performance of Donor Funded Youth Projects in Korogocho, Nairobi City County, Kenya. *International Journal of Current Aspects*, 3(3), 227-240.
- Nthenge, F. M. (2014). *Factors influencing sustainability of donor funded projects: a case of Wenje water projects in Tana River County, Kenya* (Doctoral dissertation, University of Nairobi).
- Ochieng, A. I. A. (2020). *Stakeholder Participation and Sustainability of Community Development Projects, implemented by Plan International in Kilifi County, in Kenya* (Doctoral Dissertation, Mua).
- Ochieng, D. O. (2016). *Factors influencing implementation of donor funded projects: a case of non governmental organizations' projects in Kibra, Nairobi County, Kenya* (Doctoral dissertation, University of Nairobi).
- Ochunga, F. O. (2016). *Influence of stakeholder participation on sustainability of community development projects implemented by plan international in Homa bay town sub-county* (Doctoral dissertation, University of Nairobi).
- Okoth, S. (2022). Influence of Socio-Cultural Factors on Performance of Donor-Funded Livelihood Projects, Lakezone Ward Turkana County, Kenya. *Lakezone Ward Turkana County, Kenya (December 05, 2022)*.
- Onziru, B., & Kimutai, G. (2022). Stakeholder Participation and Sustainability of World Bank Funded Water Projects in Karamoja, Uganda. *The International Journal of Business & Management*, 10(1).
- Ouma, D. S. (2012). *Factors affecting the effective implementation of Donor funded projects in Kenya: a case of World Bank Funded projects in Kenya* (Doctoral dissertation, University of Nairobi).
- Policies against COVID-19. *Public Administration and Policy*, 24(1), 92-107.
- Quintas, P. R. (2002). *Managing knowledge in a new century*. Buckingham: Open University Press.

- Ray, S. (2015). Infrastructure finance and financial sector development.
- Roziqin, A., Mas' udi, S. Y., & Sihidi, I. T. (2021). An analysis of Indonesian government
- Sepey, M., Ridde, V., Touré, L., & Coulibaly, A. (2017). Donor-funded project's sustainability assessment: a qualitative case study of a results-based financing pilot in Koulikoro region, Mali. *Globalization and health*, 13, 1-15.
- Sharma, R., & Ray, S. (2019, April). Exploring the impact of mobile technology adoption on financial sustainability of telecentres: The case of India. In *Proceedings of the 12th international conference on theory and practice of electronic governance* (pp. 427-434).
- Shylendra, H. S., & Bhardikar, K. (2009). Microfinance-based disaster mitigation: a study of two donor-supported projects in Kutch, Gujarat. *Journal of Social and Economic Development*, 11(1), 46-68.
- Ssengooba, F., Ssenyonjo, A., Musila, T., & Ekirapa-Kiracho, E. (2021). Momentum for policy change: alternative explanations for the increased interest in results-based financing in Uganda. *Global health action*, 14(1), 1948672.
- Storvang, P., & Clarke, A. H. (2014). How to create a space for stakeholders' involvement in
- Swahib, Y. (2020). *Factor Influencing Sustainability for Donor Funded Projects to Youth Groups in Tanzania: the Case PAYED Projec* (Doctoral dissertation, Mzumbe University). theory, and opportunities in an expanding field of research. *Journal of cleaner production*, 59, 5-21.
- Temba, F. I. (2015). Assessing The Role of Stakeholder's Participation on Sustainability of Donor Funded Project: A Case Study of Youth with Disabilities Community Program in Tanga. Undefined. <https://www.semanticscholar.org/paper/Assessing-The-Role-ofStakeholder%E2%80%99s-Participation-Temba/258261a7b0c4ba6d33029d4fe6f4e1ba16edac5e>
- Torkelson, E. (2020). Collateral damages: Cash transfer and debt transfer in South Africa. *World Development*, 126, 104711.
- Twesigye, P. (2022). Structural, governance, & regulatory incentives for improved utility performance: A comparative analysis of electric utilities in Tanzania, Kenya, and Uganda. *Utilities Policy*, 79, 101419.
- Ying, Li., Hua, Sun., Dakun, Li., Jian, Song., Rong, Gui, Ding. (2022). Effects of Digital Technology Adoption on Sustainability Performance in Construction Projects: The Mediating Role of Stakeholder Collaboration. *Journal of Management in Engineering*,doi: 10.1061/(asce)me.1943-5479.0001040
- Bray, I. (2022). Effective fundraising for nonprofits: Real-world strategies that work. Nolo.



- Dyck, B., Manchanda, R. V., Vagianos, S., & Bernardin, M. (2023). Sustainable marketing: an exploratory study of a sustain-centric, versus profit-centric, approach. *Business and Society Review*, 128(2), 195-216.
- Halkos, G., & Gkampoura, E. C. (2021). Where do we stand on the 17 Sustainable Development Goals? An overview on progress. *Economic Analysis and Policy*, 70, 94-122
- McMillan, M., Rodrik, D., & Sepúlveda, C. (2017). Structural change, fundamentals and growth: A framework and case studies (No. w23378). National Bureau of Economic Research.
- Radelet, S. (2015). *The great surge: The ascent of the developing world*. Simon and Schuster.
- Thondhlana, G., Mubaya, C. P., McClure, A., Amaka-Otchere, A. B. K., & Ruwanza, S. (2021). Facilitating urban sustainability through transdisciplinary (TD) research: lessons from Ghana, South Africa, and Zimbabwe. *Sustainability*, 13(11), 6205.