

**KEY ELEMENTS INFLUENCING THE SUSTAINABILITY OF PROJECTS
FUNDED BY FOOD AND AGRICULTURAL ORGANISATION IN KENYA**

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DECLARATION

This report is my original work and has not been presented to Kenyatta University or any other Institution for examination purposes. To the best of my knowledge and belief; this report is original and borrowed materials has been done with due reference.

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DEDICATION

This project is dedicated to my family, Wachira, Mercy and Jane for their immense support and encouragement in my quest for furthering my studies.

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ABBREVIATION AND ACRONYMS

| | |
|--------|--|
| ASALs: | Arid and Semi-arid Lands |
| ASTGS: | Agricultural Sector Transformation and Growth Strategy |
| CDF: | Constituency Development Fund |
| DFPs: | Donor Funded Projects |
| FAO: | Food and Agricultural Organisation |
| GDP: | Gross Domestic Product |
| GOK: | Government of Kenya |
| IMF: | International Monetary Fund |
| NGOs: | Non-Governmental Organisations |
| RDT: | Resource Dependency Theory |
| SDGs: | Sustainable Development Goals |
| UN: | United Nations |
| WB: | World Bank |

OPERATIONAL DEFINITION OF TERMS

| | |
|-------------------------------|---|
| Elements | These involve the features or attributes that affect operations or contribute to the sustainability of the donor funded projects to provide desired results consistently. The key elements studied are; stakeholders' influence, resources availability, socio-economic features and management techniques and their influence on the sustainability of projects that are funded by donors. |
| Capacity Building: | Promoting the ability of local communities to develop, implement and sustain the projects that are funded by donors after withdrawal of funding. |
| Donor Funded Projects: | Projects relying on external financial supply that is provided by a sponsor in order to pay for workforce, consumable materials, equipment, overhead costs among other items for the successful conclusion of the project. |
| Management strategies | Refers to the various techniques used to give direction and control the operation of an organisation or entity to achieve set goals and objectives. |
| Stakeholder: | Refers to an individual, groups or organisations of people who have interest, influence on, are involved in, have interests in or will benefit from the donor funded projects. |
| Sustainability: | In this study, the term refers to the continuous efficient management and attainment of success of projects through achieving target goals with available resources and human capital. |

Abstract

Donor funding has promoted growth and development in the past decades by enhancing economic progression, food security and reducing poverty levels in developing nations. However, poor sustainability of the donor funded projects has been common especially after project handover to the host communities or local authorities. This has mainly been attributed to inefficient management, lack of resources, as well as the capacity to sustain the project. Donor funding on food and agricultural projects in Kenya mainly targets to provide food to the vulnerable groups in the society. Thus, the study evaluated the sustainability of projects funded by donors under the Food and Agricultural Organisation (FAO), Kenya. The specific objectives of the research were to evaluate the influence of stakeholders and resource availability, determine the socio-economic elements and the extent to which management techniques influence the sustainability of donor funded projects at FAO Kenya. The research involved a descriptive study design using an open-ended questionnaire survey. The study targeted staff at the Food and Agricultural Organisation, Kenya and consisted of 133 staff. Random sampling was utilised to achieve a sample of 57 after using Yamane formula to obtain a representative sample. Analysis of the raw data was conducted using SPSS version 22.0 to obtain descriptive and correlation statistics on the study variables. The study outcome established that stakeholders influence, availability of sufficient funding or resources, socio-economic elements and management practices directly influence donor funded projects to a greater extent. Statistical inferences showed that the sufficiency of resource and availability is statistically significant alongside management techniques at p-values of 0.05 and 0.029 respectively. Stakeholders' participation influence and socio-economic elements were not statistically significant at p-values of 0.596 and 0.852 respectively. However, all the four variables correlated positively with sustainability of the projects. This means variables that are not statistically significant can be discarded since their hypothesis is null. Further, the R^2 value showed the variables studied affected the dependent variable to a 59% extent. Thus, the study recommends all stakeholders to be involved in project planning and implementation. Further, policies on resource mobilisation and effective channelling to project implementation should be enhanced, relevant measures to ensure socio-economic elements that positively influence donor funded projects are realised should be put in place. Finally, all project implementers should utilise effective management practices to ensure sustainability of donor funded food and agriculture projects.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Donor funding has been dominant in developing nations since the 1950's to the 21st century with the aim to alleviate poverty levels especially at the community level. According to Anita, Geoffrey and Anne (2019), international institutions like the United Nations (UN), World Bank and the International Monetary Fund (IMF) have been at the centre of offering support for global economic projects aimed at improving growth and development. Food is a key issue in addressing poverty and the Sustainable Development Goals (SDGs) target 2.4 clearly outlines that; 'By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality'' (UN Environment, 2018). The target is goal is creating sustainable food production systems and agricultural activities that are resilient towards ensuring sufficient production of food while conserving the environment.

The essence of sustainable development growth has been formulated and embraced globally with efforts to promote the course. Sustainable development goal (SDG) indicator 2.4.1 measures the progress in achieving more productive and sustainable agriculture through providing governments with strategic information for evidence based policies (UN Environment, 2018). The Food and Agricultural Organisation (FAO) a UN body specialises in leading international efforts to alleviate hunger by initiate and support food and agricultural projects (FAO-UN, 2019a). Thus, the sustainability of food and agricultural projects in Kenya is a key elements that is supported by the SDGs target. At the local front,

one of the current Kenyan Government's Big Four Agenda involves food security alongside education, manufacturing, universal healthcare (ASGTS, 2018). The agenda points to the commitment of the Kenyan government to tackle hunger by creating policies to promote agriculture, as well as investing in sustainable food and agricultural projects.

Project sustainability is a key attribute in achieving set goals. According to Nkamelu (2013), a project is considered successful once it realised the outputs and outcomes that were originally set out, is met within the budget estimates and timeline, as well as embraced by the intended beneficiaries. Projects are unique in nature if they possess attributes that differentiate them from any other ongoing project within an organisational setting. McCormick, Mitullah and Manga (2007) attribute the differences to the nature of projects in that they are progressive and to a larger extent based on existing uncertainties and uniqueness associate with specific projects. Thus, the progress of a project incorporates planning and subsequent execution of activities at separate phases or steps which establish sustainability of the project. This project embraced the aspects of socio-economic and environmental attributes to evaluate the sustainability of donor funded food and agriculture projects in Kenya based on FAO operations.

1.1.1 Sustainability of Donor Funded Projects

Sustainability is the capacity of a development project to preserve and increase the flow of benefits within a longer period of time even after inputs by donors has ceased. According to Mensas and Casadevall (2019), the sustainability of projects is dependent upon the creation of a balance and the resultant success between the social, economic and environmental principles. Further, Laedre et al. (2015) assert that sustainability is assessed through the efficiency, effectiveness, impact and relevance of a project to bring about success. Kimani

and Namusonge (2016) looked at the aspects that are instrumental to the continuous performance of Kenyan projects and established that economic, social and resource pillars in the project positively influences sustainability.

Donor funded projects (DFPs) are sponsored through external donations that are majorly provided by international aid or development agencies (Gibson, 2013). They incorporate programmes and facilities that are sponsored by private organisations, NGOs and other stakeholders by providing financing, supervisory measures and ensure achievement of set goals and objectives (Ejughemre, 2013). Keura and Moronge (2016) while looking into the sustainability of projects that are funded by donors found that participation of stakeholders has a direct influence on the continued performance of the projects. However, the research failed to critically look into the impact of stakeholders' influence with respect to ensuring sustained project performance and ownership post-implementation phase.

1.1.2 Donor Funding in Food and Agriculture in Kenya

Donor funding in food and agriculture is carried out to improve food security with majority of the projects being implemented in arid and semi-arid lands (ASALs). This provides much needed foodstuff to feed the surrounding communities, as well as provide capacity and knowledge to leverage on available resources in the area like water to carry out farming (). Thus, donor funding projects provides the infrastructure for irrigation and capacity to promote farming at the community level. The Food and Agricultural Organisation (FAO) Kenyan representation chapter was established in 1977 with a mission of working towards collaborating with the local government of Kenya in promoting, as well as support food and agricultural projects in the region (FAO-UN, 2019a). FAO Kenyan chapter is involved in building a food-secure nation; alleviate hunger and malnutrition using food agriculture

initiatives by contributing towards the improvement of living standards of the general populace (FAO-UN, 2019b). Food and Agricultural Organisation majorly concentrate on five priority areas that target to support agriculture as per the government priorities and according to the policy and reforms in the relevant institutions that incorporates; “Productivity and competitiveness; sustainable natural resource and environmental management; food security and nutrition initiatives and information, knowledge management and coordination systems” (FAO-UN, 2019a).

1.1.3 Resources and Stakeholders in Donor Funded Food and Agricultural Projects in Kenya

Resources in donor funded projects involve materials, equipment or financial aid to implement specific programmes on the ground (Kuria & Wanyoike, 2016). According to Keura and Moronge (2016), in the agricultural sector, programmes targeting farmers are initiated to promote production through providing farm inputs, imported certified seeds and technical capacity to farm appropriately. The agricultural support provided aims at improving production through capacity building, as well as provision of material support. Stakeholders involve persons or group of people who are affected by a specific project, either directly or indirectly, and may be having interests in the project and thus, influence the outcome either on a positive or negative manner. Seppey et al. (2017) stated that stakeholders in donor funded projects may include the host communities’ officials from the government, financiers, observers, supervisors and the communities where the project is hosted. The input of stakeholders for effective implementation of projects is of great essence to the success and consistent optimum performance. This research mainly concentrated on the host communities and government officials as the stakeholders of concern.

The involvement of the community in the implementation of projects is of great importance as a crucial factor in the sustainability and eventual success. According to Nyaguthii and Oyugi (2013), low community participation in the process of implementing, monitoring and evaluating constituency development fund (CDF) projects in Kenya directly affects their success and sustainability. Thus, the involvement of the community in the implementation, monitoring and evaluation of a project are crucial for the continuous performance and successful completion of projects within a community setting. According to Haroun and Adam (2015), a very essential element for project sustainability involves candid participation of the local people due to their concerns and experiences which are essential in ensuring success of the projects.

1.1.4 Socio-Economic Elements Affecting Donor Funded Projects in Kenya

The economic elements that affect projects funded by donors involve the fluctuation of exchange rates, inflation level in the country and interest rates (Gibson, 2013). Most funding is done either in dollars or the currency of funding nation and thus, changes in exchange rates in the host nation has a direct impact on the projects being funded. According to Zhou et al (2013), economic, environmental and social aspects are three key dimensions that can be used in measuring the sustainable development of projects. Thus, measuring sustainability of a project embraced a composite index approach where a number of questions on the three dimensions are incorporated.

Keura and Moronge (2016) assessed what drives the sustainability of projects that are funded by donors in Kenya and established that stakeholder's involvement or participations alongside monitoring and evaluation of the projects positively influences the sustainability of projects funded by donors. The study further outlines that donor funded projects have been started globally to reduce levels of poverty at the community level and improve

developments locally. Kiprop, Nzulwa and Kwena (2017) looked at the challenges that face projects funded by donors in Kenya and asserted the need for effective project planning, monitoring and evaluation to realise better project outcome. Further, the immense contribution by the agricultural sector in Kenya calls for increased input by ensuring self-sustained growth of projects is put in place.

The social aspect of project planning and implementation involves the community affected and cultural attributes affected. Further, the engagement of the community and support directly determines the establishment of a project, the rate of consolidation and success, as well as its adaptation to the necessary changes to successful implementation of the project (Ndegwa, 2015). Finally, Akotia (2014) indicated that a primary limitation that affects sustainability of projects development and regeneration involves the manner of implementation and balancing between the interest of the community and sustainable development of the project.

1.1.5 Management Techniques in the Sustainability of Donor Funded Projects

Effective project performance is pegged upon the type strategies or techniques embraced in the management process to realise target goals. According to Miriti (2018), management processes in the donor-funded projects affects their progress and eventual achievement of target goals. The techniques provide employees involved in project implementation and management with an effective and streamlined process to actualise the laid out plan. Karanja (2014) states that project monitoring and evaluation are key strategies in ensuring the process of implementation follows a trajectory towards realising the target goals and objectives. Further, the management techniques are also at the core of ensuring the stipulated core mandate of the project is followed or realigned with projects vision to meet target goals and

objectives (Iravo & Iravo, 2016). Further, efficient management techniques involve having the right proper leadership structures, using the right styles that promotes growth and development of the project implementation and management teams to achieve set out goals and objectives. Thus, project managers create a strategic plan on the implementation of projects with a view to achieving the best possible outcomes.

The management of donor-funded projects are unique with inclusion of various stakeholders requiring strategic project management to realise target goals. According to Kira and Lutekero (2018), utilisation of committees is effective in community management of donor-funded projects where community interests are also incorporated in the discussions and decision making on the project's implementation process. The management techniques of the project operation directly touch at ensuring participatory engagement of all stakeholders for transparency purposes. Mwangi (2014) assert that effective management techniques provide the capacity to alleviate conflicts in the project management and thereby ensure seamless project implementation without delay and sustained growth and development. In essence, effective management of donor-funded projects incorporate strategic planning and implementation, control and conclusion of specified tasks by a team having the techniques and capacities to establish target goals and objectives and work towards achieving success.

1.2 Statement of the Problem

The sustainability of projects funded and implemented by Food and Agricultural Organisation is important to bring about growth and development, as well as self-reliance to the target communities, as well as ensuring food security. However, the success of the projects should not only be achieved when the donor funding process is ongoing, but rather should continuously be realised even after the donors have ceased supporting the target

projects. This entails donor-funded projects being sustainable even after donor-funding timelines have lapsed and projects have been left to the communities or authorities for management. Despite the excellent performance of donor funded food and agricultural projects during the implementation phase in Kenya, withdrawal of donors or handing over of projects to host communities has shown poor sustainability standards (Kuria & Wanyoike, 2016). According to Keura and Moronge (2016), most of the poverty and hunger eradication projects in Kenya miss the success targets as a result of lacking effective stakeholders' and the host communities' participation, as well as poor monitoring and evaluation of projects.

Agriculture remains the backbone of the Kenyan economy and its slackening has a greater impact to every sector of growth and development in country (ASTGS, 2018). The Food and Agriculture Organisation states that agriculture contributes 26% directly to the Kenyan gross domestic product (GDP), as well as an additional 27% indirectly with connection with other (FAO-UN, 2019a). Further, the agricultural sector in Kenya provides employment to 40% of the entire Kenyan population, as well as more than 70% of the rural population. The Kenyan government has introduced the Big Four Agenda which incorporates food security, manufacturing, affordable healthcare and housing (ASTGS, 2018). The agenda for food security is expected to be achieved with increased investment in sustainable agricultural projects to ensure provision of sufficient foods to Kenyans.

The management process of donor-funded project has a direct influence on their sustainability and how well they achieve the target goals and objectives. Nthenge (2014) studied the elements that influence the sustainability of water projects funded by donors in Tana River County and found that poor planning and management post-donor funding affected sustainability. Further, Kiara and Luketero (2018) assessed the elements that influence performance of water projects funded by donors in Embu County and established

that sufficient allocation of resources coupled with technology inclusion has a positive influence on the projects' performance. However, poor planning and management post donor funding impacts on the continued operation of the projects. Subsequently, Kuria and Wanyoike (2016) evaluated donor funded projects and established that most of them either go under or perform below expected outcome after donor funding due challenges in the project continuity from a management perspective.

The reviewed studies critically looked into the sustainability of projects funded by donors. However, there is a dearth of knowledge on the factors that hinders effective continued operation of food and agricultural projects after donor funding has ceased in Kenya. This is majorly in respect to management and operation aspects of the project implementation and continued process towards achieving the target goals and objectives post donor-funding phase. Therefore, there is a greater need to bring out a clear understanding on the factors that affect the sustainability of projects that are funded by donors especially after cessation of funding. Key consideration in this study was placed on establishing the disconnect that exists between donors' input, their exit and the lack of projects sustainability. Thus, the main aim of the study was to evaluate the factors affecting sustainability of projects funded by donors under FAO in Kenya especially after the donor funding phase.

1.3 Objectives of the Study

1.3.1 General Objective

The main objective of the research study was to evaluate the key elements that influence the sustainability of donor funded projects under Food and Agricultural Organisation (FAO) in Kenya.

1.3.2 Specific Objectives

The Specific objectives were;

- i. To evaluate the influence of stakeholders participation on the sustainability of donor-funded projects in the Food and Agricultural Organisation, Kenya.
- ii. To assess the influence of resource availability on the sustainability donor-funded projects in the Food and Agricultural Organisation, Kenya.
- iii. To evaluate the socio-economic elements affecting the sustainability of donor-funded projects in the Food and Agricultural Organisation, Kenya.
- iv. To establish the extent to which management techniques influence the sustainability of donor-funded projects in the Food and Agricultural Organisation, Kenya.

1.3.3 Research Questions

The research questions in the study were;

- i. What influence do stakeholders' participation have on the sustainability of donor-funded projects in the Food and Agricultural Organisation, Kenya?
- ii. What is the influence of resource availability to the donor-funded projects in the Food and Agricultural Organisation, Kenya?
- iii. What socio-economic elements affect the sustainability donor-funded projects in the Food and Agricultural Organisation, Kenya?
- iv. What extent do management techniques influence the sustainability of donor-funded projects in the Food and Agricultural Organisation, Kenya?

1.4 Significance of the Study

The study outcome will significantly impact on various people and sectors in the Kenyan growth and development of the food and agricultural sector;

The study outcome provides insights to government policy makers on measures to be put in place to promote and enhance sustainability of food and agricultural projects in Kenya. This is crucial to the growth and development of the food and agricultural projects in Kenya and eventually contribute positively to the realisation of one of the Big Four agenda. This is in respect to the elements that support sustainability of food and agricultural projects funded by donors in Kenya even after donor funding has ceased and thus, ensure sustained food security. Key consideration in the study was placed on evaluating the diverse features influencing the sustainability of food and agricultural projects in Kenya.

The study also contributes by enlightening the community concerned and stakeholders on how to effectively ensure self-sustained growth of the food and agricultural projects in their locality. This is realised through enhanced knowledge and information on their role in the sustainability of food and agricultural projects funded by from implementation to maturation of the projects.

Further, the study findings act as a reference tool for donor funding agencies to create awareness and improve capacity of the involved stakeholders for the sustainability of projects. The study findings are also important in the implementation phase, monitoring and evaluation of strategic plans of donor funded food and agricultural projects.

Finally, the study outcome contributes to the development of academia by evaluating crucial key elements that affects the continuous improvement and performance of food and agricultural projects funded by donor in Kenya. Thus, the study forms a library for future

reference by scholars in the field of academia, as well as establishes future areas of research to expand the field of knowledge on the study variables.

1.5 Scope of the Study

The research looked at the key elements influencing the sustainability of donor-funded projects that are managed, monitored and evaluated by FAO in Kenya during implementation phase. Study coverage entailed the perspective of subjects involved in the funding and monitoring of the projects to obtain an opinion expert from the funding and management entities which incorporated the FAO employees. Thus, the study only targeted employees of Food and Agricultural Organisation-Kenya Chapter who are involved with food and agricultural projects funded in Kenya. The scope of study looked into projects funded under FAO within the territories of Kenya implemented between 2014 and 2018 and directly involved in food security and hunger alleviation target goals. The scope also covered projects where FAO is involved whether through financial or capacity support in respect to monitoring and evaluation for success purposes. The aim was to assess the impact or the interplay between overseas stakeholders in the funding and the functional development, as well as the influences of the projects' sustainability especially under the management of the host communities.

1.6 Limitation of the Study

The study process faced limitation in respect to data collection and acquiring of expert opinion on the study objective. Having conducted data collection during the Covid-19 pandemic and subsequent lock-downs, drop-in and collect survey's was impossible and thus, online survey process was embraced. The researcher also embraced open-ended questionnaires to acquire the opinions of the respondents which provided insightful findings

on the key elements influencing the sustainability of donor-funded projects by FAO Kenya. Further, due to the limited travel restrictions and time constraints, the assessment of all donor agencies funding sustainable agricultural projects could not be achieved. Thus, the limitation was mitigated by restricting the scope of coverage to Food and Agricultural Organisation, Kenya. Based on the fact that FAO covers all sectors of food and agricultural programs in Kenya; from project planning, implementation, monitoring and evaluation, the research was substantive in providing the necessary subject of study. Thus, the researcher evaluated the key elements of food and agriculture donor funded projects at FAO Kenya to meet the study's objectives.

1.7 Organisation of the Study

The research study been structured into five chapters with chapter one involving the background study, significance and scope of the study, objectives, significance and scope of study, as well as the limitation of the study. Chapter two presents the theoretical framework on the study involving theories that bring out the concepts in the research followed by the empirical review of studies on the objectives, the literature summary and eventually the research gap. The chapter then concludes with a conceptual framework of the study that shows the relationship of the independent and dependent variables in the study. Chapter three covers the methodology to be utilised in the actual data collection which involves the study design, target population, sampling design, data collection tools, technique of data collection, data analysis and finally ethical considerations in the study process. Chapter four presents the study outcome and the interpretation of the analysed data. Finally, Chapter Five presents the summary of the study results, the conclusion, recommendations and areas of further research.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The chapter focuses on elements affecting project sustainability by looking into the theoretical framework, empirical review of studies touching on the research variables, research gap and lastly, the conceptual framework on how the study variables relate.

2.2 Theoretical Review

The theoretical framework involves three theories; the theory of sustainability, resource dependency theory and stakeholders' theory. The study is based on the Theory of Sustainability and supported by the other two in respect to resources and stakeholders influence on the sustainability of food and agricultural projects funded by donors. The theory of sustainability clearly exemplifies the main concept under consideration with a special focus on the features that impact on it directly or indirectly. The economic aspect of the theory of sustainability brings to focus the indicators that determine the implementation of donor funded projects. However, the theory on its own is not sufficient to determine the key elements influencing projects' sustainability. Thus, the resource dependence theory and stakeholder theory brings to focus the other two concepts for consideration and thus, support the concept of sustainability as per the study objectives.

2.2.1 Theory of Sustainability

Sustainability theory came up in 1972 developed by Meadows and others in a team of 17 researchers when the report, 'Limits to Growth' came into the public attention (Ageyman, 2005). The theory of sustainability clearly defines an economy and society that is lasting and exists on a global scale. The theory attempts to prioritise and integrate the social responses

that are within environmental and cultural perspectives to resolve prevailing challenges (Ekardt, 2009). Through an economic model, the theory brings to focus the sustaining of natural and financial capital in order to enhance human dignity. Generally, sustainability is ability of an entity to be maintained with time and achieve the set out goals and objectives. For a project to be termed sustainable, it is not supposed to exhaust the resources that it depends on for sustenance or the political community.

The sustainability of donor-funded food and agricultural projects lie in the management process and sustaining of growth to achieve the project's goals objective. Christen (2010) cite sustainability as aimed at providing measurable indicators that enable decision making and guide solution generation to meet practical challenges in a given circumstance. In the context of this study, the sustainability of donor funded projects involves all the aspects of funding, monitoring and evaluation, stakeholder participation, and how they are integrated into the social and ecological conditions and interrelations that exist between the natural and social systems (Ejughemre, 2013). The research mainly focused on sustainability in respect to how communities benefit from donor funded projects within a sustained process. Further, assess the attributes that contribute to the sustaining of projects' benefits and outcomes in the long run and thus, the need for assessing theories touching on resources and stakeholders.

2.2.2 Resource Dependency Theory

Jeffrey Pfeffer and Gerald R. Salancik developed the Resource Dependency Theory (RDT) in the 1970s and it involves the external resources that impacts directly to the operations or behaviour of any given organisation (Hillman, Withers & Collins, 2009). RDT is based upon the tenets of organisations being dependent upon resources that emanate from environment in which the organisation exists which to a greater extent has other entities that work

simultaneously. In essence, the organisations or entities related whereby the resources that are needed by one organisation are in the hands of other organisations and thus, entities involved in project management will look out for resources from other organisations to realise set out goals (Davis & Cobb, 2010). Donor funded projects mainly target communities and the implementation process will rely on the funding from NGOs and other agencies supporting the process. Resources are therefore the foundation of power, and Chapman et al. (2011) state that organisations or entities that are legally independent can be dependent upon each other. Critical analysis of the Resource Dependence Theory reveals that assertion of dependence on the theory points to its weakness (Drees & Heugens, 2013). Based on the changing dynamics in financial uncertainties, it is prudent to lean towards theories that also look into and outlines the uncertainties therein.

The RDT majorly effects on non-profit organisations with recent studies indicating the aspect of resource dependence has resulted in non-profit entities becoming more commercialised. Hillman, Withers and Collins (2009), assert that organisations are dependent upon resources for project success and sustainability, thus indispensable. However, there is need for outlining the conceptual element of supporting resources for sustainable project development. This theory will thus be supported by the Stakeholder Theory to bring out the sustainability of projects that are funded by donors in the Food and Agricultural Organisation Kenya chapter activities. Food and agricultural projects that directly touch on the plight of communities require resources that span financial, as well as human resource to provide necessary skill and expertise. There is thus, the need for involving all stakeholders within the community to ensure project success and sustainable development. Further, Seppey et al. (2017) state that management, monitoring and evaluation, as well as the socio-economic elements that critically impacts on the sustainability development of projects. The theoretical framework

thereby brings out the interdependency of various attributes in respect to donor funded projects success and sustainability even after donor funding has ceased.

2.2.3 Stakeholder Theory

Edward Freeman developed the Stakeholder Theory in 1984 and covered the management and business ethics which outlines the morals and values necessary to be followed in the management of the organisation (Freeman, 2010). Miles (2012) assert that the theory posits that active participation in any given development is critical and supportive to the community that benefits in the project. Poor or lack of community participation leads to poor problem determination, constraints and desires of the local community (Ndou, 2012). Further, the lack of community involvement hinders appreciation or ownership of the project by the target community. According to Harvey and Reed (2007), the participation of a project's beneficiaries creates a sense of ownership among the community members which is a crucial aspect in the ongoing project's operation and maintenance continues past the implementation phase.

The stakeholder theory in respect to this research study; emphasis is placed on the participation of host communities who benefit or get affected by the food and agricultural donor funded project. The involvement or participation of beneficiaries includes during project identification, formulation and planning, implementation phase, monitoring and evaluation (Laplume, Sonpar & Litz, 2008). Collaborative or joint involvement is the strategy utilised in ensuring participation of the community that benefits from the project, as well as the agencies involved in the implementation process (Mwangi, 2014). Community involvement is done through joint meetings with agencies involved, incorporating chosen representatives or through the local authorities (Miles, 2012). The real value of community

participation is found in the mobilisation of the entire community instead of engaging specific people at individual levels to bring out effective outcomes.

The researcher was keen in respect to stakeholder participation at all levels of project development to evaluate elements favouring or impeding sustainability. The role of funding or implementing partners is also critical in respect to providing necessary inputs, capacity and expertise to achieve project success (Kiara & Luketero, 2018). NGOs are key implementers in the Kenyan donor funded projects and their stake in respect to monitoring and evaluation for ongoing donor-funded projects fosters ownership, accountability and sustainability of the project post implementation phase. Continued improvement and sustained performance of the project outcome are key goals for any project and critical planning is necessary (Seppey et al., 2017). Planning incorporates how funds are utilised, mode of project implementation and project handover to the community once donors or NGO agencies are leaving the project. In essence, proper monitoring and evaluation by the stakeholders that are involved improves transparency which in turn raises a sense of owning the projects outcomes, benefits and failures by all parties in the process.

2.2.4 Summary of Theoretical Framework

The theoretical framework examined above provides a clear view of the variables under consideration in this research study. The three theories bring to focus the various concepts in respect to project sustainability from a general perspective. The theory of sustainability prioritises the social responses that are found in the environment and cultural settings to bring solution to challenges being faced in project implementation. This theory forms the main framework under which this study is anchored and the two other theories support the actualisation of the study attributes in respect to projects sustainability. The theory highlights

measurable indicators that directly affect the sustainability of projects that are donor funded. The resource dependency theory highlights the impact of resources or financing in project implementation, the availability and sustainability. Availability and sufficiency of resources is important at the implementation stage of the project and the sustainability of the projects depends on their self-sustenance or continued funding from the donors, local authorities or host communities. The stakeholder theory looks into the influence of other participants beyond the organisational structure and business ethics on the project management and performance. The involvement of the community, as well as their participation in the actual implementation of the projects that are donor funded come into focus in this consideration.

2.3 Empirical Review

The empirical review incorporates the elements and study variables as outlined by the study objectives. The study variables involve stakeholders' influence, resource availability and socio-economic elements influence on sustainability of donor funded projects.

2.3.1 Stakeholders' Influence in Sustainability of Donor Funded Projects

Sabbil and Adam (2015) looked at the features affecting projects' sustainability post donor funding duration through a descriptive and analytical method of study in Darfur State of South Sudan. The study established that after the exit of donors, projects continue to function and the results achieved are majorly attributed to the involvement of the beneficiaries at all stages of the project. Lack of alternative funding and support after the end of donor funding was found to directly impact on the projects sustainability negatively. Further, the lack of effective personnel to manage the projects for the beneficiaries directly affects projects' sustainability.

Ndegwa (2015) while looking at the sustainability of health projects in developing nations acknowledged the great importance of stakeholders involved and especially the target community leaders. Through a descriptive study, the study found that there is a positive correlation between the stakeholders' participation and the sustainability of projects. Further, the input of stakeholders in the project goes beyond the implementation phase thereby enhancing the sustainability of the project post-funding by the donor. Additionally, the study found that the critical input in project sustainability involves financial support and proper management.

Kuria and Wanyoike (2016) evaluated attributes affecting projects sustainability in Nakuru County through a descriptive study. Stratified sampling was used in acquiring a representative sample and data collected through a semi-structured questionnaire. The study established through regression analysis that involvement of stakeholders and the community's participation has a positive influence on the sustainability of donor funded projects.

Ngatia and Kihara (2018) evaluated the determinants of sustainability of donor funded community projects in Garissa County with a special focus on community participation. The study utilised a descriptive study method and included donor funded project managers, agencies and project beneficiaries as the study subjects. The study outcome showed that there was significant relationship between sustainability of donor-funded projects' with the participation of communities. The study thus, concluded that improvement of various indicators of community participation is necessary to promote project sustainability. These involved community empowerment, community involvement in decision making, planning, monitoring and evaluation.

Magero and Muchelule (2019) looked at the influence of stakeholder's participation on the sustainability of women funded projects in Kibera which contribute greatly to uplifting living standards. The study used a descriptive study design and targeted NGO members, project manager, finance officers, project coordinators, medical staff and support staff. Study outcome found that participation of stakeholders was very crucial in the sustainability of the women funded projects. Thus, trends should be instituted to help sustain the project to continuously have greater impact at the community level.

2.3.2 Resource Availability and Sustainability of Donor Funded Projects

Keura and Moronge (2016) assessed the sustainability of food security in projects funded by donors in Samburu County and found the need for increased funding to improve agricultural output. The study recommended effective community involvement in project implementation and management to embrace and own the project for future sustenance and sustainability. The steps are aimed at mitigating the impact of drought and unreliable rainfall that has significantly continued to constrain the food and agricultural sector in Kenya.

Further, Seppey, Ridde, Toure and Coulibaly (2017) looked into the sustainability of projects funded by donors in Mali by looking at the impact of financing. The aspect of results-based financing (RBF) came up in the study and was described as a new alternative in the financing of health projects in African countries. Study outcomes showed that a lack of proper planning especially with available resources and proper motivation in the project implementation affects the sustainability of projects funded by donors.

Kiara and Luketero (2018) on issues influencing donor funded water and sanitation projects in Embu County through a descriptive study design found that adequate resource allocation in project implementation has a positive influence on the performance of the projects. Further,

the study emphasised on the need for proper resource management, monitoring and evaluation supported with stakeholders' involvement to ensure efficient project implementation and sustainability. Thus, sufficient funding or resource provision is necessary for successful project implementation coupled with proper utilisation of the resources availed.

Anita, Geoffrey and Anne (2019) evaluated factors affecting the sustainability of donor-funded projects food security projects in Tharaka Nithi County through an exploratory study. A descriptive survey targeting donor funded food security projects were studied. The study outcome pointed to positive correlation between institution capacity and donor funding role to the sustainability of food security projects. The study concluded by asserting the critical input of donors in ensuring sustainability of donor funded food security projects.

2.3.3 Socio-Economic Elements Affecting Sustainability of Donor Funded Projects

Wabwoba and Wakhungu (2013) evaluated the elements that affect the sustainability of food projects in the community settings in Kenya and found that the country is one of the nations in sub-Saharan Africa affected by food insufficiency. Therefore, Kenya relies on non-governmental organisation funding to raise and maintain projects aimed at ensuring food security especially in the ASALs. The study showed most projects are unsustainable and there is no much achievement in spite of the substantial funding to food and agricultural projects by the government of Kenya and donors with the major aim of ensuring food security. However, the study by Wabwoba and Wakhungu (2013), failed to establish the root cause of the project failure especially post-implementation phase.

Akotia (2014) on social and economic sustainability benefits of projects asserted that ensuring and preserving balance between the economic aspirations of the people and their sustainable priorities is crucial. Through a mixed study method, the research looked at the

various aspects of project implementation that derail its progress. The study highlights the critical aspect of sustainable regeneration as a focal point in project implementation and success. Further, the study outcome pointed to lack of commitment by project implementers to effectively how social and economic aspects affect the sustainability of benefits proffered on the projects being implemented. The study therefore recommended for checklist on the key sustainability tenets that ensure sustained regeneration of projects.

Ndou (2012) investigated the reasons why community-based projects failed in Limpopo South Africa. Through a mixed method of study, the study looked into various aspects of project management and implementation and established that economic, environmental and social aspects are three key dimensions that affect project sustainability. The research found that lack of funds, poor funds management, lack of commitment and motivation, low education of members and lack of youth involvement in the community based projects caused failure. Thus, establishing and addressing key aspects contributing to project failure is necessary to promote project growth and sustainability.

Finally, Kimani and Namusonge (2016) assessed features that are key attributes to the project sustainability in Kenya by use of a cross-sectional evaluation survey. Through analysis of the project implementers, the study through a correlation analysis established that the economic, social and resource availability pillars positively impacts on the sustainability of projects.

2.3.4 Management Techniques Influence on the Sustainability of Donor Funded Projects

The management of donor funded projects involves project management in respect to financial planning, monitoring and evaluation which are core attributes for sustainability of projects. According to Hassan, Iravo and Iravo (2016), effective and efficient management

incorporates putting in place proper leadership structures, using the right styles to achieve set out goals and objectives. Further, Mwangi (2014) cite project management to involve the commencement of planning, implementation, controlling and conclusion of work by a team or staff with a goal to achieve target goals and objectives which determine success.

Iyer and Jha (2005) on features influencing project cost performance of construction projects outlined the competence of project managers, coordination, leadership skills, top management support and monitoring by participants as key aspects. The study also outlined that coordination among project participants, social condition, economic and climatic conditions also affects the success of projects.

Ndou (2012) evaluated reasons behind the failure of community-based projects in Limpopo and found that lack of awareness among members and poor monitoring and evaluation of project by relevant authorities, insufficient funding, poor project management, corruption and poor financial management, as well as lack of commitment and motivation to the community affects projects' sustainability. However, the study failed to comprehensively address the features and further assess their effect on the sustainability of projects funded by donors.

Karanja (2014) cited monitoring as a key attribute that enables management to identify and assess potential problems, as well as successes of a given project. Further, the study states that monitoring provides a starting point for corrective actions that involve both substantive and operational aspects in the improvement of project design, implementation process, as well as quality of results improvement. Further, the aspects of monitoring make it possible to achieve reinforcement of initial positive results which is a major aspect that cannot be overlooked due to its input in the sustainability of any venture or project.

Keura and Moronge (2016) on the drivers of sustainability indicate participation, control, cost sharing and ownership are effective attributes to support community management. Further, the study stated the need for internal and external aspects that impact on a given project to be addressed effectively to ensure sustainability. Internal features involve community cohesion, management skills, financial problems, misplaced priorities and traditions within the community setting that impacts directly on project management at the community level (McCormick, Mitullah & Manga, 2007). External aspects involve policies and strategies from the government, donor directives, economic dynamics and political influence.

Effective community management of donor funded projects is best achieved through committees that represent the whole community in decision making and deliberations on the project implementation (Kiara & Luketero, 2018). Further, Mutimba (2013) cites legal backing of the committees as a necessary aspect together with structures put in place to enable them participate in the project implementation process and management. This ensures not only understanding the project and feeling part of it, but also helps in instilling and capacity to drive the project forward as a community ensuring sustainability. Thus, community involvement and management should be prioritised in donor funded projects to ensure project success and sustainability.

2.4 Summary of the Literature and Research Gap

The literature review brings to focus the elements of donor funded projects sustainability with a keen focus to Kenya. Table 2.1 presents the literature reviewed from various authors and the gaps arising to be studied as per the study objectives. Various aspects have been outlined as having a direct impact on the efficiency and sustainability of projects that funded by donors in Kenya. These include stakeholders' involvement, efficient management of

finances, community involvement, and proper management of implementation among others. The gap relating to the specific elements that hinder the sustainability of food and agricultural projects that are funded in Kenya was studied and came up with findings that supported the study objectives.

Table 2.1: Summary of Literature Review and Gaps

| Author & Year | Focus of Study | Findings | Knowledge Gap |
|--------------------------|--|--|---|
| Iyer and Jha (2005) | The study focused on the aspects that affect costs performance of projects. | The study found that; project participants' conflict, poor implementation, hostile socio-economic and climatic conditions affect costs performance of projects. | The study did not look at the aspects to ensure project sustainability and donor funding. |
| Ndou (2013) | The study focused on the reasons behind failing of community-based projects. | The study found that; lack of awareness among members, Poor management, Corruption and insufficient funding lead to failing of community based projects. | The study did not establish donors funding influence on the sustainability of projects. |
| Akotia (2014) | The study mainly looked into the social and economic benefits of sustainability of projects. | The study established that lack of financial support, requirements in a project and the unwillingness of clients to adopt sustainability directly affects sustainability of projects. | The researcher failed to address the sustainability of agricultural projects. |
| Karanja (2014) | The study evaluated the management practices in project sustainability. | The study found that; Financial management, Effective project monitoring and evaluation, appropriate training, effective leadership have a direct influence on the management practices in project sustainability. | The study did not look into the sustainability of agricultural projects. |
| Ndegwa | The study looked | The study found that; stakeholders | The study failed to |

| | | | |
|---------------------------------|---|---|--|
| (2015) | into the health projects' sustainability within developing world. | input, sufficient financial support, effective implementation affects health projects sustainability. | evaluate the projects' beneficiaries input in sustainability. |
| Sabil & Adam (2015) | The study mainly focused on the elements that affect the sustainability of projects in Darfur, South Sudan. | The study found that; Beneficiaries involvement, lack of alternative funding, poor management are the elements affecting sustainability of projects in Darfur, South Sudan. | The study did not address the donor funding input for sustainability post funding. |
| Kimani & Namuson ge (2016) | The study focused on the elements contributing to sustainability of projects. | The study found that; stakeholders' involvement, social, economic and resource pillars availability contribute to the projects' sustainability. | The study did not assess sustainability of agricultural projects after donor funding. |
| Hassan, Iravo and Iravo (2016), | The focus of the study was the sustainability of road construction projects in Kenya. | The study found that; community involvement, participatory approaches and proper management practices contributes to project sustainability. | Specific socio-economic aspects to enhance sustainability of projects. |
| Keura and Moronge (2016) | The study concentrated on the drivers of donor funded food projects sustainability in Kenya | The study found that; stakeholders' participation, monitoring and evaluation drives sustainability of donor funded projects. | The study did not evaluate sustainability after donor exit and agricultural donor funded projects. |
| Kuria & Wanyoike (2016) | The focus of the study was elements affecting projects sustainability in Nakuru. | The study established that the involvement of stakeholders and the community coupled with sufficient funding affect projects sustainability. | The study failed to look into the sustainability of agricultural projects funded by donor. |
| Sepey et | The study focused | The study found that; poor planning, | The study did not look |

| | | | |
|-------------------------|---|--|---|
| al. (2017) | on the sustainability projects funded by donors in Mali. | lack of motivation to implementation process affects project's sustainability. | into the stakeholders input in project sustainability. |
| Kiara & Luketero (2018) | Study focused on the elements that influence water and sanitation projects funded by donors in Embu County. | The study found that; stakeholders' involvement, adequate resources, proper resource management, monitoring and evaluation directly contributed to performance of projects funded by donors. | The study failed to assess the agricultural donor-funded projects sustainability. |

2.5 Conceptual Framework

The conceptual framework is a diagrammatic representation conceptualised by the researcher on the relationship between study variables and the confounding or intervening variables (Mukerji, 2013). Thus, this section outlines a graphical representation of the relationship between donor funding sustainability as the dependent variables with stakeholders' influence, resources availability and socio-economic elements as the independent variables. The independent variables are to the left and involve stakeholders' influence, availability of resources, socio-economic aspects and management techniques influence on the sustainability of food and agricultural projects funded by donors. The dependent variable is to the right hand side and involves the sustainability of projects with the arrow showing the effect of variables. The aspects of the dependent variable involve self-sustained growth of the projects, continued performance, improved implementation, as well as effective monitoring and evaluation. The conceptual framework is represented by the diagram below (Figure 2.1);

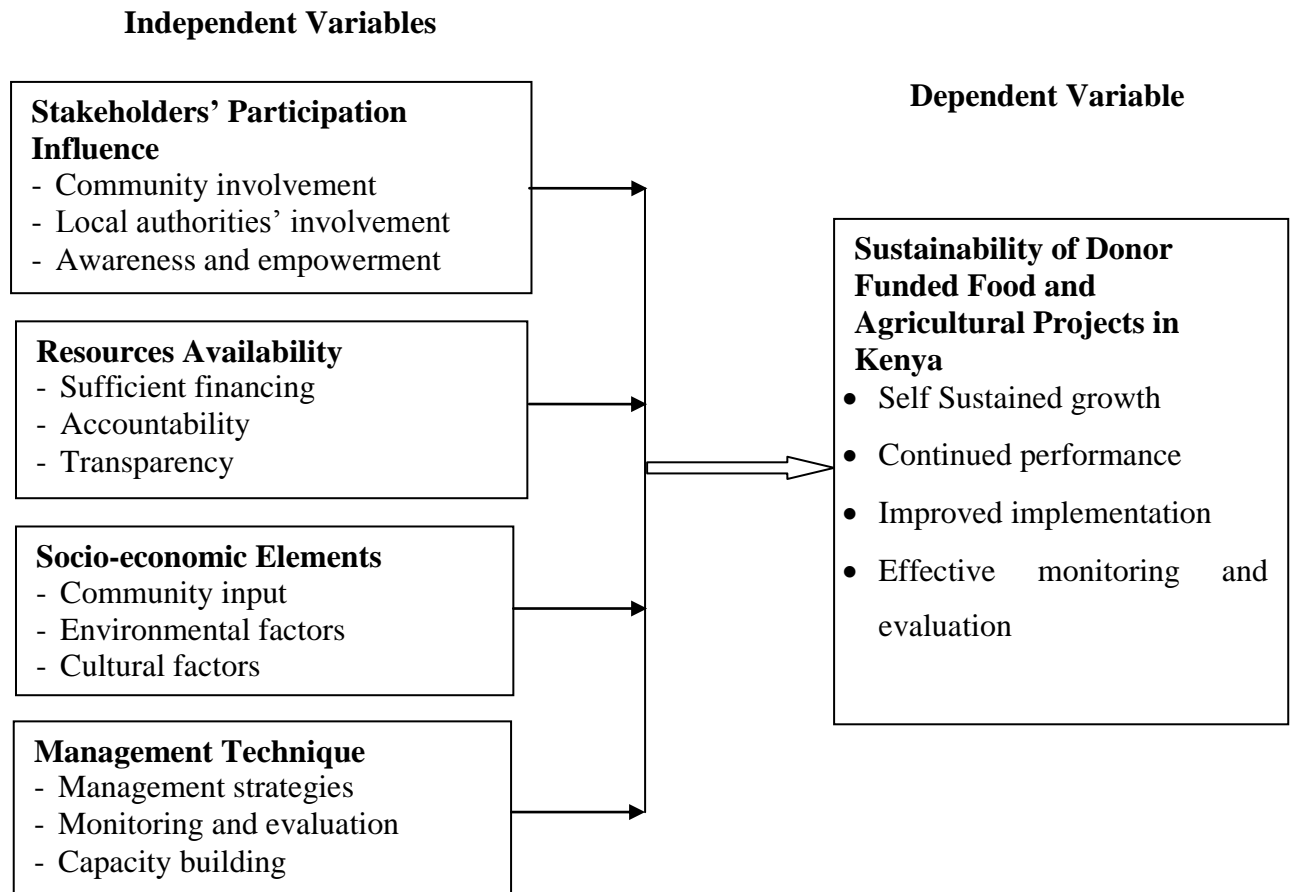


Figure 2.1: Conceptual Framework

Source; Author (2020)

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The chapter focuses on the methodology utilised in the research process to collect data for answering the research questions. The methodology covers the research design, area of study and target population, the sampling design, data collection tools, research quality (reliability and validity), data collection and analysis, as well as the ethical consideration.

3.2 Research Design

The researcher utilised a descriptive design which was effective in determining the feeling of respondents on the key elements that influence the sustainability of donor funded food and agricultural projects in Kenya. The design was critical in evaluating the study objectives and derived appropriate inferences on the key elements influencing sustainability of FAO donor funded projects. One crucial aim for a descriptive study design involves explaining a phenomenon or relationship in existence between two or more phenomena (Mugenda & Mugenda, 2003). According to Creswell (2014), research designs exemplify the strategy that is selected to integrate various components of a study within an articulated process to address a research problem. The study design involved a framework of data collection, analysis and interpretation to make inferences and conclusion.

3.3 Target Population

The target population was a group of staff or study subjects drawn from FAO Kenya where a sample for study was drawn to take part in the study. Creswell (2014) defines a target population as the whole group of entities or objectives that a study looks into to come up with generalised conclusions. The target population in this study involved one hundred and thirty-

three (133) employees of Food and Agricultural Organisation (FAO) Kenya, where thirty-six (36) are field officers and ninety-seven (97) are based in Nairobi.

3.4 Sampling Design

Using Yamane Formula, the study population involved 133 employees of FAO Kenya and thus, the sample size will be;

$$n = \frac{N}{1 + Ne^2} \dots\dots\dots (I)$$

Where N represented the target population (N= 133), E represented the estimate error at 10% in the sample (E= 0.1). Thus;

$$n = \frac{133}{1 + 133 (0.01)^2} n = \frac{133}{2.33}$$

$$57.082 \quad \sim \quad 57$$

Thus, the study’s sample size was 57 to whom the questionnaire survey was administered.

3.5 Data Collection Instrument

The section involved describing the tool for collecting primary data to answer the research questions and provided insights for making inferences and conclusions on the study objectives. Creswell (2014) assert that data collection methods necessary for acquiring primary data incorporate structured and semi-structured questionnaires, observations, interviews and focus groups. The study employed a survey method to collect data by using a questionnaire administered to the sampled study population.

Research quality of the research instrument was determined through validity and reliability assessment done via a pilot study. The inclusion criteria for projects information sought from the study subjects spanned the duration from 2014 to 2018. This gave a clear timeline for

evaluation and gave specific information regarding the projects' sustainability as per the Food and Agricultural Organisation in Kenya.

3.5.1 Pilot Study

A pilot study was conducted by the researcher to assess the quality of the research instruments in respect to the accuracy and suitability of the study design and data collection tools chosen. According to Cooper and Schindler (2013), a pilot study is important in testing the estimate time that the actual survey would take, confirm the clarity and logical flow of questions in the survey process and assess whether the questions are clear and concise. The pilot study entailed assessing the validity and reliability of data collection tools. The results of the pilot study were not included in the final study discussion, but were only be used in assessing the research quality of the tool.

3.5.2 Validity of the Instrument

Validity is defined by Kiblerlin and Winterstein (2008) as the extent to which a data collection instrument measures what it is intended to assess. The assessment of both content and face validity was carried out to establish the quality of the research tool to answer the research questions and meet the study objectives. Validity was assessed by evaluating the responses of the pilot study to ascertain whether they measure the study variables. The views of a professional researcher were sought to ascertain any weaknesses and rectify the questionnaire prior to the main study.

3.5.3 Reliability of the Instrument

A reliability test was also done to assess the degree to which the data collection tool measured or yielded results that are consistent with repeated trials before the main study.

Generally, reliability it is the measure of consistency of the research instrument with respect to the items being assessed. The process of testing reliability involved; A pilot study where ten respondents at FAO Kenya were surveyed, eight (8) responded positively. One of the questionnaires was incomplete and thus was disregarded in the final reliability test. The analysis outcome to test for reliability was conducted to establish the Cronbach alpha for the pilot study outcome.

The researcher utilised Cronbach’s alpha (α) to measure the reliability of the research tool by establishing internal consistency. The table below shows the reliability test outcome from the pilot study done.

Reliability Analysis

Table 3.1: Cronbach’s Alpha Test Results

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|------------------|--|------------|
| .712 | .728 | 27 |

Source: (Survey Data, 2020)

The alpha result was: $\alpha = 0.712$ as shown in Table 3.1 pointing to the research tool being reliable as per Lance, Butts and Michels (2006), that a Cronbach alpha 0.70 and above indicates internal consistency showing the research tool is of acceptable reliability for research study.

3.6 Data Collection Techniques

The techniques of data collection involved a survey administered to the sampled respondents in the study population through a questionnaire. The questionnaire was administered through drop-off and pick-up method to the 57 respondents working with FAO after consenting. Two

weeks were given to the respondents before collecting the filled questionnaires for data analysis purposes. This was crucial in allowing the respondents to independently and conveniently respond to the questions in the survey.

3.7 Data Analysis and Presentation

Analysis of the data obtained in the study involved refining raw data collected from the survey, coding it and statistically analysing to acquire representative findings. The Statistical Package for Social Sciences (SPSS) version 22.0 and Microsoft Excel 2013 was utilised to analyse the data obtained from the field to give descriptive statistical findings and graphical representations. Descriptive statistics has been presented as frequencies, percentages and average or means, which have been presented in frequency tables and graphs or pie charts. In order to show the relationship between the independent variable and the dependent variable, regression analysis was conducted and represented using the model below;

$$Y_{PS} = \alpha X_1 + \beta X_2 + \delta X_3 + \mu X_4 + C \tag{II}$$

Where:

Y_{PS} = Project Sustainability (PS)

X_1 = Stakeholders Influence (SI)

X_2 = Resource Availability (RA)

X_3 = Socio-Economic Elements (SEE)

X_4 = Management Technique Influence (MI)

α = Correlation Coefficient of Stakeholder’s Influence to Project Sustainability

β = Correlation Coefficient of Resource Availability to Project Sustainability

δ = Correlation Coefficient of Socio-Economic Elements to Project Sustainability

μ = Correlation Coefficient of Management Technique Influence to Project

Sustainability

C= Constant Coefficient (C)

Thus;

$$Y_{PS} = \alpha X_{SI} + \beta X_{RA} + \delta X_{SEF} + \mu X_{MI} + C \dots\dots\dots (III)$$

The model assessed the sustainability of donor funded food and agricultural projects at FAO Kenya. The model also created a relationship that establishes the foundational framework to assess project sustainability and success even after donors are done with the implementation process.

3.8 Ethical Considerations

The research process entailed being aware of both legal and ethical issues to be taken into consideration in the study duration. First, approval from the Dean of Graduate School at Kenyatta University was sought to carry out the study, followed by ethical approvals from the National Commission for Science, Technology and Innovation (NACOSTI). Issues for ethical consideration in the study incorporated the privacy and confidentiality of respondents, informed consent, minimising risk, voluntariness, data collection methods and time taken. The respondents were recruited using an open and voluntary process where they were sampled and requested to participate in the survey process. Full disclosure of the research contents was done to the sampled respondents prior to the actual data collection. Respondents only took part on voluntary basis and this was made sure by allowing them to make informed decisions to participate on their own without coercion. Informed consent was utilised by ensuring that potential respondents are fully aware of the contents of the survey and the duration taken in answering the questions. Subsequently, respondents were free to leave the survey process at any point of the study process.

CHAPTER FOUR: RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

The study sought to evaluate key elements influencing sustainability of donor funded projects under Food and Agricultural Organisation (FAO). Four variables were evaluated and involved stakeholder's participation, resource sufficiency, and socio-economic elements, as well as the management techniques. The chapter outlines the findings obtained in the study process involving the descriptive and inferential statistics. The first part presents statistics on the study objectives involving the descriptive data on the variables influencing sustainability of donor funded food and agricultural projects. The second part involves inferential statistics that shows the relationship between the dependent variables and the four independent variables depicting the key elements influencing sustainability of food and agricultural projects in Kenya.

4.2 Analysis of Response Rate and Descriptive Statistics

A total of fifty-seven (57) questionnaires were presented to the sampled study subjects and a total of fifty respondents took part completed the survey. However, two of the questionnaires were incomplete thus discarded during refining and coding of raw data. This gave a total of forty-eight (48) correctly filled questionnaires that were utilised in data analysis representing a response rate of 84.2%. The response rate was high and thus, point to the results being a representative of the target population.

4.2.1 Demographics of Respondents

The information included in the survey involved gender, age, education level, duration of working in the organisation and job designation of the respondents. The demographics are presented without any distinctive features for respondents' anonymity and confidentiality.

4.2.1.1 Gender and Age of Respondents

Table 4.1: Gender and Age of Respondents

| | Gender of Respondents | | Total | Percentage (%) | |
|---------------------------|-----------------------|--------------|-------------|----------------|------|
| | MALE | FEMALE | | | |
| Age of Respondents | 26-29 Years | 7 | 2 | 9 | 18.8 |
| | 30-35 Years | 9 | 10 | 19 | 39.6 |
| | 36-39 Years | 4 | 5 | 9 | 18.8 |
| | 40-44 Years | 2 | 1 | 3 | 6.3 |
| | 45 Years and Above | 7 | 1 | 8 | 16.7 |
| Total | 29 | 19 | 48 | 100% | |
| Percentage (%) | 60.4% | 39.6% | 100% | | |

Source: (Survey Data, 2020)

The gender of the respondents involved 60.4% male and 39.6% female. This demographic parameter had no direct impact on the study's objective, but only targeted at defining the study's respondents. The age factor is crucial in determining the level of experience alongside the duration of working in the organisation. There were a higher proportion of respondents in the age bracket of 30-35 years for both genders at 39.6% pointing to the probability of high proportion of middle aged workforce at the organisation.

4.2.1.2 Education Level of Respondents

Table 4.2: Education Level of Respondents

| | Gender of Respondents | | Total | % | |
|------------------------|-----------------------|--------|-------|----|--------|
| | MALE | FEMALE | | | |
| | Diploma Holder | 0 | 3 | 3 | 6.3% |
| Education Level | Bachelor's Degree | 16 | 7 | 23 | 47.9% |
| | Master Degree | 13 | 9 | 22 | 45.8% |
| Total | | 29 | 19 | 48 | 100.0% |

Source: (Survey Data, 2020)

The highest proportion of the respondents had a Bachelors or Master degree level of education at 47.5% and 45.8% respectively and only 6.3% were Diploma holders. The proportion indicates a workforce with higher education qualifications and thus, substantive knowledge on the project processes in their field of work. However, the latter aspect is clearly depicted by the duration of working in the organisation which demonstrates experience. Education variable in the survey was crucial in pointing to the level of expertise and capacity of the respondents in respect to having knowledge on the study subject alongside the gender aspect. This is supported by Connely et al. (2016) that education study aspect in a survey helps establish the academic attainment and thereby indicate the level of literacy and understanding of the survey. Thus, helps in establishing the achievement of informed study outcomes within different categories of educational attainment.

4.2.3 Duration of Working in the Organisation and Respondents' Job Designation

The duration of working at the organisation and the job designation of respondents were crucial to give an overview of the respondents' awareness on the study objective. This gives credibility of the responses being given by individuals with experience, capacity and knowledge on the donor funded food and agricultural projects' sustainability in Kenya. Table

4.3 gives a cross-tabulation of duration of working in the organisation and the job designation of the respondents. Figures 4.1 and 4.2 represent graphically the duration of working in the organisation and job designation respectively.

Table 4.3: Duration of Working and Job Designation

| | | Job Designation | | | Total | % |
|--|---------------|-----------------|--------------|---------------|-------------|------|
| | | Field Officer | Office Staff | Support Staff | | |
| Duration of Working in the Organisation | 0-5 Years | 3 | 17 | 4 | 24 | 50% |
| | 6-10 Years | 4 | 7 | 6 | 17 | 36% |
| | 11-15 Years | 0 | 4 | 0 | 4 | 8% |
| | Over 15 Years | 1 | 1 | 1 | 3 | 6% |
| Total | | 8 | 29 | 11 | 48 | 100% |
| % | | 16.7% | 60.4% | 22.9% | 100% | |

Source: (Survey Data, 2020)

Most of the respondents had working experiences of five years and below at 50%, followed by 6-10 years at 36%, 11-15 years at 8% and lastly over 15 years at 6%. The demographic also showed that a majority of the respondents in respect to duration and job designation involved office staff with a working experience of five years and below. However, less proportion is observed for other job designation of support staff and field officers, but the highest proportion in the two categories is within the working experience of 6-10 years.

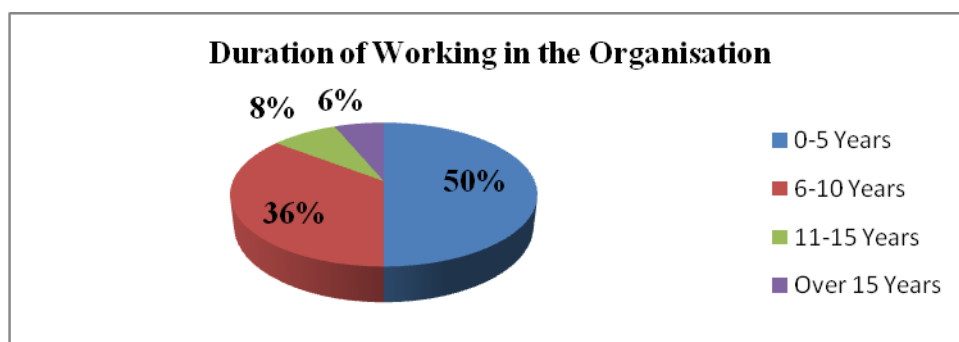


Figure 4.1: Duration of respondents working in the organisation

Source: (Survey Data, 2020)

Half of the respondents had a working experience spanning 5 years and below accounting for 50%, while 36% had worked for 6-10 years, 8% had worked for 11-15 years and a partly 6% had over 15 years working experience with the organisation. The statistics points to respondents having sufficient experience based on the level of experienced portrayed which is necessary to provide sufficient and accurate information on the study objectives.

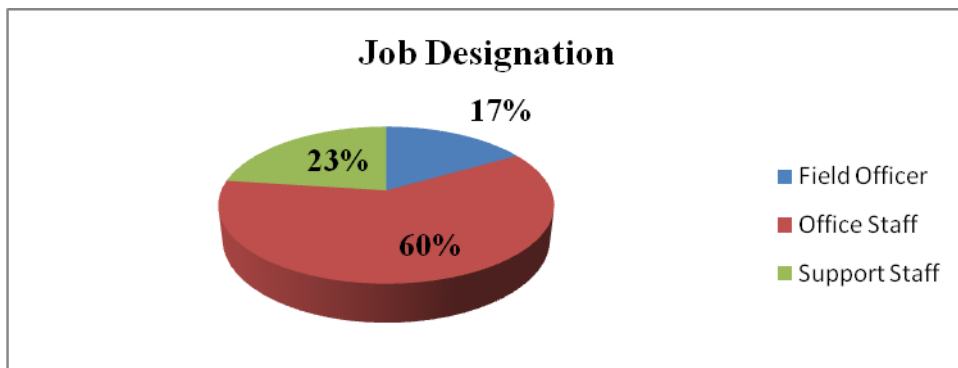


Figure 4.2: Job designation of respondents

Source: (Survey Data, 2020)

The respondents' job designation involved 17% field officers, 60% office staff and 23% support staff. Job designation diversity provided a holistic approach to the study project in respect to collecting opinion of field officers, office staff and the support staff who contribute to the project processes at the Food and Agricultural Organisation. The field officers are involved in the collection of data on the projects at the ground while the office staff are key policy formulators for implementation, as well as analyse the progress of projects for any changes or further support. According to Munyoki and Mulwa (2012), diverse study subjects in a target study population is crucial in ensuring achievement of a representative sample thereby ensuring generalisation of study results. Thus, the study outcome based on the general information is representative of the target population involving subjects directly handling donor funded food and agricultural projects in Kenya.

4.2.4 Sustainability of Food and Agricultural Projects

The researcher also sought to identify the sustainability level of food and agricultural projects between 2014 and 2018 and whether they provided food security. Figure 4.3 indicates that majority of the projects provided food security in the area of implementation.

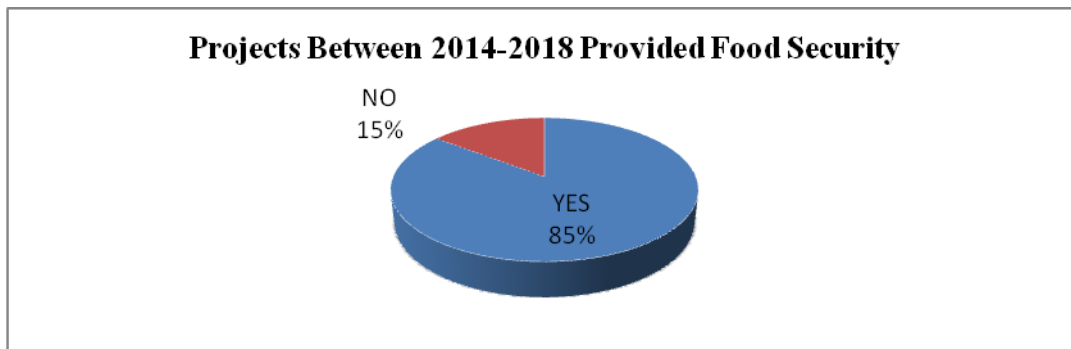


Figure 4.3: Donor funded projects between 2014 and 2018 provided food security

Source: (Survey Data, 2020)

Majority of the food and agricultural projects provided food security as per 85% of the respondents. The open ended question provided respondents opinion on the project sustainability and provision of food security. The importance of donor funded projects was evident in the responses especially in providing food security; “donor funded projects provide households sufficient foods by providing quality seeds and farm inputs to increase productivity.” Further, non-governmental organisations were termed to play a key role in agricultural projects to provide food security; “NGOs have carried out assessments on food security and causes of poor food production at the community level like the locust infestation. The responses posit that donor funded projects have been sustainable and effective in providing food security to the community. However, the researcher further assessed the reasons behind stalling or failing of some donor funded projects that are aimed at providing food security to host communities between 2014 and 2018 as shown in table 4.4 and subsequent open-ended question responses.

Table 4.4: Level of Project Sustainability

| | Frequency | Percent | Cumulative Percent |
|--------------------------|------------------|----------------|---------------------------|
| Project Stalled | 1 | 2.1 | 2.1 |
| Poor Sustainability | 2 | 4.2 | 6.3 |
| Fair Sustainability | 15 | 31.3 | 37.5 |
| Good Sustainability | 28 | 58.3 | 95.8 |
| Excellent Sustainability | 2 | 4.2 | 100.0 |
| Total | 48 | 100.0 | |

Source: (Survey Data, 2020)

Majority of the respondents stated that there was good sustainability of projects at 58.3%, followed by fair sustainability at 31.3% and excellent sustainability at 4.2% yielding a total of 93.7%. Only a mere 6.35% of the respondents cited the projects as poorly sustainable or stalled all together at 4.2% and 2.1% respectively. The open-ended question on the reasons for projects not being sustainable was stated as follows;

Proper stakeholders' engagement and especially the host community was cited by the respondents as a prominent reason for project sustainability. One respondent cited that 'the beneficiary population was not adequately contacted... poor linkage with other programmes in the target community... project not important to community... donor convincing the community project is important.' Community engagement comes out clearly from the survey as an element that influences project sustainability to a larger extent. Further, resources were cited as key attributes that affect projects development and their capacity to sustain operation and deliver results. Respondents cited that, "Lack of sufficient funding to sustain the projects," "limited resources," "Delay in release of funds from donors," "Mismanagement of funds... corruption." The human resource aspect also came up as affecting project sustainability; "some projects stalled for lack of proper human skills and resources." The responses are in line with Kiara and Luketero (2018) study outcome that resource sufficiency,

as well as proper utilisation positively influences projects' sustainability. Further, Kuria and Wanyoike (2016) established that sufficient funding and stakeholders' involvement enhances project sustainability.

Environmental or climatic aspects also contribute to a greater extent on the project sustainability with respect to results and impact to the community expectations from donor funded projects. "Changing weather conditions," "Climatically changes" "Unpredictable unfavourable weather elements," "Poor emergency drought preparedness." Project management also came up as a key aspects that influences the sustainability of food and agricultural projects and thereby determining food security realisation. "Poor monitoring of the projects"; "Poor planning resulting to delay in implementation"; "Poor emergency drought preparedness"; and "Lack of good exit strategies." This is supported by Keura and Moronge (2016) that monitoring and evaluation greatly influences project sustainability in donor funded food security projects.

4.3 Descriptive Analysis

4.3.1 Stakeholders' Participation

The first objective of the study sought to evaluate the influence of stakeholders in the sustainability of projects funded by donors in the Food and Agricultural Organisation, Kenya. The study findings for this objective are as indicated in table 4.5 where a mean of 1 indicates strongly disagree, 2 disagree, 3 uncertain, 4 agree and 5 strongly agree.

Table 4.5: Stakeholder’s Influence

| Stakeholders’ Influence | N | Mean | Std. Deviation |
|--|----------|-------------|-----------------------|
| Stakeholders Positively Influence Sustainability | 48 | 4.2292 | .90482 |
| Host Community Involvement Affects Sustainability | 48 | 4.6667 | .80776 |
| Communities' Inclusion as Stakeholders Ensures Project Sustainability after Donor Withdrawal | 48 | 4.2292 | 1.03635 |
| Decision Making together with Authorities and Community Enhance Project Sustenance | 48 | 4.4375 | .89695 |
| Stakeholders' Participation at all Phases of Project Enhance Project Sustainability | 48 | 4.5625 | .84818 |
| Valid N | 48 | | |

Source: (Survey Data, 2020)

From table 4.5 above, the study outcome was that stakeholder’s involvement in projects ensures sustainability with all respondents being in agreement at a mean of 4.23. Specifically, the involvement of host communities in project process affects projects sustainability scored highly at 4.67 indicating strong agreement followed by stakeholder’s participation at all phases of the project planning and implementation at 4.56. Further, decision making with authorities in areas of operations and community involvement directly ensures sustainability at 4.44 agreement. Finally, the inclusion of local communities as stakeholders was supported by respondents to contribute greatly to project sustainability at 4.23.

The study outcome is supported by Haroun and Adam (2015) which found that involvement of the local community enhances project sustainability as their interests and concerns are geared towards the success of the projects for their benefit. Further, Magero and Muchelule (2019) study found that stakeholders ensure operations of projects to continue for the benefit of target subjects. Subsequently, Anita, Geoffrey and Anne (2019) found that communities where donor funded projects are based; form a key part of stakeholders who positively

impacts on the project's development ensuring sustainability is achieved for their own benefit. Community involvement at all stages of project formulation and implementation helps in establishing and prioritising the community needs, as well as mobilising internal and external resources that ensure sustainability (Keura and Moronge, 2016). Thus, self-reliance of the project is stimulated resulting in reduced dependence on donor funding and thus, sustainability is realised even after the exit of donors.

The study outcome showed a significant positive influence of stakeholders' involvement in donor funded projects. Thus, increased project involvement directly translated into improved project sustainability. Saint Ville, Hickey and Phillip (2017) assert that increasing stakeholders influence by a unit would subsequently increase the levels of sustainability of donor funded food security projects. Additionally, Harvey and Reed (2007) opine that the participation of a project's beneficiaries creates a sense of ownership among the community members contributing to enhancing project's operation and maintenance past the implementation phase and donor's exit. The research outcome clearly affirms that stakeholders play a pivotal role not only in project planning and implementation, but also greatly contributes to and influences sustainability of donor funded food and agricultural projects.

4.3.2 Availability of Resources or Funding

The second objective of the study sought to assess the influence of resource availability or funding on the sustainability of projects funded by donors in the Food and Agricultural Organisation, Kenya. The study findings for this objective are as indicated in table 4.6 where a mean of 1 indicates strongly disagree, 2 disagree, 3 uncertain, 4 agree and 5 strongly agree.

Table 4.6: Resources and Project Sustainability

| Resources Availability | N | Mean | Std. Deviation |
|--|----------|-------------|-----------------------|
| Resource Sufficiency | 48 | 4.3125 | 1.07498 |
| Effective and efficient project's budget planning and allocation | 48 | 4.3542 | 1.13905 |
| Human Resource is Critical in Planning and Implementation which Impacts Project Sustainability | 48 | 4.1667 | 1.05857 |
| Capacity Building Promotes Human Resources which in turn Supports Project Sustainability | 48 | 4.5000 | .82514 |
| Valid N | 48 | | |

Source: (Survey Data, 2020)

Projects require resources to achieve the target objective with the level of availability directly impacting on the achievement of goals and success in the process. From table 4.6, sufficiency of resources in a project process has a proportionate impact on the sustainability of projects at 4.31. However, the utilisation of resources availability plays pivotal role in sustainability with effective budget planning and allocation having a direct impact on project sustainability at a mean of 4.35. Subsequently, human capital is one of the critical forms of resources in the project sustainability due to project planning and management and the availability is termed to be critical at a mean score of 4.17. Additionally, the study outcome showed that capacity building promotes human resources and eventually promotes projects' sustainability at 4.5 mean score which was the highest for the objective.

The study outcome on resources' availability is supported by Seppey et al. (2017) that lack of proper planning of available resources in project implementation affects the sustainability of donors funded projects. Further, Ngatia and Kihara (2018) on the determinants of donor funded community projects' sustainability state that there is a direct correlation between

effective financial management and project sustainability. Sufficient resources ensure necessary materials, human capital and capacity for project actualisation and resolving challenges that arise in the process are available. Further, Kiara and Luketero (2018) posited that proper resource management and sufficient funding of donor funded projects ensures successful project implementation and sustainability after projects become self-reliant. Projects' self-reliance lies in the implementation phase where resources are made to flow and sustain the project running without hitches even without external funding and influences.

Resources for project development involve contribution by the host community in form of capacity and support to ensure the project achieves its set goals and objectives. According to Keura and Moronge (2016), community involvement brings in human resources necessary to contribute in project ownership and helps in translating the human involvement resource into sustainable human capital for project sustenance. Further, the sustainability of projects in respect to funding ensures continuous project running and performance with steady flow of resources and subsequent generation of revenue to sustain its operations (Kuria & Wanyoike, 2016). Thus, sustainability is achieved with the donor funded projects attaining capacity to generate revenue for continued operation after donors exit.

4.3.3 Socio-economic Elements

The third objective sought to evaluate the socio-economic elements affecting the sustainability of projects funded by donors in the Food and Agricultural Organisation, Kenya. The study findings in respect to socio-economic elements involved education and level and social status, host community, level of poverty, community input and environment as represented in table 4.7. The findings are presented in average form, where a mean of 1 indicates strongly disagree, 2 disagree, 3 uncertain, 4 agree and 5 strongly agree.

Table 4.7: Socioeconomic Elements on Sustainability of Projects

| Socioeconomic Elements on Sustainability | N | Mean | Std. Deviation |
|--|----------|-------------|-----------------------|
| Education and Level of Social status of the Host Community affects Implementation | 48 | 3.8125 | 1.19674 |
| Level of Poverty affects Duration of Funding | 48 | 3.1042 | 1.30856 |
| Host Community Input Affects Sustainability | 48 | 4.4375 | .84818 |
| Involving the Community Promotes ownership and Project Sustainability | 48 | 4.5208 | .82487 |
| Environmental Status Affects Projects | 48 | 4.1042 | 1.13437 |
| Valid N | 48 | | |

Source: (Survey Data, 2020)

Community participation is critical in project sustainability with a mean of 4.52 showing strong agreement and occurs through involvement. Further, direct input of the community in the project process scored higher agreement levels on project sustainability 4.4 mean as indicated in table 4.7. Further, environmental status determines the sustainability of the project at 4.10 with respect to agricultural project majorly being reliant on the weather patterns, availability of rain or water for irrigation. The aspect of education and status level in the community though stated to affect sustainability to a certain extent showed a mean of 3.81 and level of poverty indicated uncertainty on its effect at 3.1 mean score of agreement.

The study's outcome is supported by Kuria and Wanyioke (2016) in respect to social status and community needs having an influence on the sustainability of donor funded projects where the beneficiaries guard the progress for their own benefit. Further, the socioeconomic aspects directly link to the environmental aspects which influence the progress and sustainability of donor funded projects. According to Anita, Geoffrey and Anne (2019), the climatic changes and weather patterns affects the sustainability of donor funded projects aimed at ensuring food security is achieved to the host communities. Areas with harsh

climatic conditions like drought and lack of water for irrigation prove a great challenge to keep agricultural projects running for longer periods (Keura & Moronge, 2016).

Socioeconomic attributes in respect to the projects under consideration has to be assessed to achieve returns on the project investments. However, the study outcome posited that the effect of socioeconomic elements on the sustainability of donor funded projects was found to be the least influential in the study outcome. This can be attributed to its impact not directly influencing the sustainability of projects. However, the influence cannot be overlooked as outlined by Kimani and Namusonge (2016) that social and economic pillars impacts on the sustainability of projects and ensure realisation of set goals and objectives. Further, Akotia (2014) assert that social and economic aspects of a project have to be balanced with the sustainable priorities to achieve positive outcomes. Essentially, the process of project implementation impacts on the socio-economic attributes of the beneficiaries and thus, the relationship is reciprocal in nature.

4.3.4 Management Techniques Influence

The last objective sought to establish the extent to which management techniques influences the sustainability of projects funded by donors in the Food and Agricultural Organisation, Kenya. Project management is critical in the process of implementation to achieve the target goals and objectives of the study. The study findings for this objective are indicated in table 4.8 where a mean of 1 indicates strongly disagree, 2 disagree, 3 uncertain, 4 agree and 5 strongly agree.

Table 4.8: Management Techniques Influence

| Management Techniques Influence | N | Mean | Std. Deviation |
|---|----------|-------------|-----------------------|
| Effective Management practices | 48 | 4.4792 | .85027 |
| Monitoring and Evaluation | 48 | 4.5208 | .85027 |
| Efficient Management of Project Processes | 48 | 4.3333 | .85883 |
| Proper Leadership Promotes Sustainability | 48 | 4.4375 | .84818 |
| Transparency | 48 | 4.1250 | 1.04423 |
| Proper Policies | 48 | 4.2708 | .89299 |
| Valid N | 48 | | |

Source: (Survey Data, 2020)

The study outcome showed monitoring and evaluation, effective management practices, proper leadership, efficient management process, proper policies in place and transparency to influence sustainability of projects to a greater extent. Monitoring and evaluation influences at a mean value of 4.52 which was the highest followed by effective management practices at 4.48, then proper leadership at 4.44, efficient management at 4.33, proper policies at 4.27 and finally transparency at 4.13. These results are in tandem with findings from Keura and Moronge (2016) that project management in respect to leadership aspects, monitoring and evaluation, proper polices and strategies, as well as transparency and accountability directly impacts on the sustainability of donor funded projects to a greater extent. The inclusion of positive management techniques in project management and implementation influences sustainability. Further, Ngatia and Kihara (2018) state that program planning; leadership and management skills; monitoring and evaluation positively influence sustainability of donor funded projects. Essentially, proper policies in the process of project roll-out has a positive influence on the sustainability of the donor funded food and agricultural projects operation even after donors have exited.

Efficient and effective project implementation majorly relies on the manner in which all project phases are managed, streamlined and modified to achieve the set goals and objectives. Ndegwa (2015) states that appropriate leadership qualities influence the management of projects by ensuring the implementation phase is done effectively and efficiently to achieve project goals and objectives. Project managers are supposed to provide direction in the implementation phase and thus, portray high degree of leadership with integrity. Further, they are expected to act as role model in the project planning and implementation phases to influence project sustenance. The study established that proper leadership in project planning and implementation influence sustainability to a large extent. Transparency as an element of management was established to positively influence sustainability of donor funded food and agricultural project to a greater extent. Wabwoba and Wakhungu (2013) assert that transparency in the project management on matters planning and implementation ensures that resources are utilised effectively and the processes are followed appropriately to achieve the set project goals and objectives.

The study further established that monitoring and evaluation were essential in the management technique influence towards the sustainability of donor funded food and agricultural projects post donor funding. This is in line with Keura and Moronge (2016) study outcome which established that monitoring and evaluation was the second most influencing aspects that ensures project sustainability in donor funded food security projects. There is a need for constant monitoring and evaluation to ensure successful implementation and achievement of the projects' goals. Increasing levels of monitoring and evaluation by unit phases would enhance the level of sustainability of donor funded projects positively.

4.4 Inferential Statistics

4.4.1 Correlation Analysis

The coefficient of correlation is a statistic value that gives the relationship between the independent and the dependent variables and is represented by the variable having the range of -1.00 to +1.00. The correlation coefficient established in the table below show a positive correlation between the four independent variables in respect to key elements influencing project sustainability at FAO. The coefficients show positive correlation between sustainability of donor-funded food and agricultural projects as the dependent variable to the elements of stakeholders' influence, resources availability, socio-economic elements and management influence.

Strong positive correlation was observed between stakeholder's participation and project sustainability, as well as resource sufficiency and project sustainability at 0.76 and 0.75 respectively. Equally, socio-economic elements and management techniques showed positive correlation to the sustainability of donor funded food and agricultural projects in Kenya at 0.5 and 0.6 respectively. Further, positive correlation was observed between all the independent variables when paired within the dependent and independent variables. Thus, the correlation coefficients indicate that a significant increase in any of the variables influences the dependent variables while at the same impacting on the influence of the other aspects of the independent variables. The study outcomes indicate the four elements evaluated involving stakeholders' participation influence, resource sufficiency, socio-economic elements and management techniques have a positive influence on the sustainability of donor funded food and agricultural projects. This is in line with descriptive findings discussed and supported by previous research studies. Table 4.9 outlines the correlation matrix between the independent variables and the dependent variable in the study process.

Table 4.9: Correlation Matrix

| | | Sustainability of donor- funded projects | Stakeholder' s participation | Resource sufficiency | Socio- economic elements | Managemen t techniques |
|--|---------------------------------|---|------------------------------------|-------------------------|--------------------------------|---------------------------|
| Sustainability of donor- funded projects | Pearson Sig. (1-tailed) N | 1.000 .000 48 | .7601 .000 48 | .7543 .000 48 | .5451 .000 48 | .6451 .000 48 |
| Stakeholder's participation influence | Pearson Sig. (1-tailed) N | .7601 .000 48 | 1.000 .000 48 | .481 .000 48 | .534 .000 48 | .361 .026 48 |
| Resource sufficiency | Pearson Sig. (1-tailed) N | .7543 .000 48 | .481 .000 48 | 1.000 .000 48 | .201 .000 48 | .281 .000 48 |
| Socio-economic elements | Pearson Sig. (1-tailed) N | .5451 .000 48 | .534 .000 48 | .201 .026 48 | 1.000 .000 48 | .423 .000 48 |
| Management techniques influence | Pearson Sig. (1-tailed) N | .6451 .000 48 | .361 .000 48 | .281 .026 48 | .423 .000 48 | 1.000 .000 48 |

Source: (Survey Data, 2020)

The table clearly shows that the four key elements evaluated in the study show positive correlation with the dependent variable of sustainability of donor-funded projects though to varying extent. Further, the review of the four elements with respect to the independent variable to establish the R-value yielded the results below in table 4.10 which outlines the variance extent between the variables studied.

Table 4. 10: Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .616 ^a | .590 | .315 | .49039 |

a. Predictors: (Constant), Stakeholders Participation, Resource Sufficiency, Socio-economic elements, Management Techniques

Source: (Survey Data, 2020)

The result outcome in the table show variations between the dependent and independent variables. The R square which depicts the coefficient of determination shows that sustainability of donor-funded food and agricultural projects is influenced by Stakeholders Participation, Resource Sufficiency, Socio-economic elements and Management Techniques. The R^2 value of 0.590 shows that the four elements studied influence the dependent variable to a 59% extent. This variance is significantly at average and point to less amount of unexplained variation to the studied variables as predictors to sustainability of donor-funded food and agricultural projects in Kenya. However, based on the adjusted R^2 value of .315 showing 31.5%, there is some significant variance of unexplained predictors in the study. Thus, further study should target more parameters to establish their influence and variance.

4.4.2 Regression Analysis

Regression analysis was conducted via SPSS to ascertain the relationship between the independent variable and the four elements of the dependent variable. The co-efficient obtained were utilised to show the relationship between the independent and dependent variables in a linear model.

Table 4.11: Regression Coefficients-^a

| Model | Unstandardized | | Standardized | T | Sig. |
|------------------------------------|----------------|------------|--------------|-------|------|
| | Coefficients | | Coefficients | | |
| | B | Std. Error | Beta | | |
| (Constant) | 4.169 | .569 | | 7.324 | .000 |
| Stakeholders Participant Influence | .105 | .196 | .128 | .534 | .596 |
| Project Sustainability | | | | | |
| Resource Sufficiency | .260 | .129 | .379 | 2.021 | .050 |
| Socio-economic | .019 | .101 | .031 | .188 | .852 |
| Effective Management | .496 | .220 | .571 | 2.259 | .029 |

a. Dependent Variable: Level of Project Sustainability

Source: (Survey Data, 2020)

The standardised coefficients in table 4.11 yielded a linear model showing how stakeholders' influence, resources availability, socioeconomic elements and management techniques influence sustainability of donor food and agricultural projects funded projects. The beta values have a constant coefficient of 4.169 which shows the outcome when all the aspects impacting on sustainability of donor funded food and agricultural project are at zero values. The stakeholder's participant influence shows a $\beta=0.128$ at $p=0.596$, resource sufficient at $\beta=0.379$ and $p=0.05$, socio-economic influence at $\beta=0.031$ and $p=0.852$ and effective management techniques at $\beta=0.571$ and $p=0.029$. Analysis of the variables shows that only resource sufficiency and management techniques variables are statistically significant. This is because the p-value should be less than or equal to 0.05 (≤ 0.05) for a variable to be statistically significant. Whereas a variable whose p-value is greater than 0.05 is not statistically significant and thus points to strong evidence of the null hypothesis. Thus, the relationship is represented in the linear model below.

$$Y_{\text{(Project Sustainability)}} = 0.128X_{\text{(Stakeholders Participation)}} + 0.379X_{\text{(Resource Sufficiency)}} + 0.031X_{\text{(Socio-economic Elements)}} + 0.571X_{\text{(Management Techniques)}} + 4.169$$

The model indicates that, for a unit increase in sustainability to be realised, the aspects of the independent variables must influence change to some extent. However, based on the fact that only resource sufficiency and management techniques are statistically significantly in the study outcome, the dependent variable is influenced statistically by the two in the model. Thus, the statistically significant model in this study is;

$$Y_{\text{(Project Sustainability)}} = 0.379X_{\text{(Resource Sufficiency)}} + 0.031X + 0.571X_{\text{(Management Techniques)}} + 4.169$$

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

The chapter presents a summary incorporating the research objectives, methodology used and major findings. This is followed by the major conclusion of the study, recommendations emanating from study conclusions and finally the suggestions for further research.

5.2 Summary of Study

The purpose of the study was to evaluate the key elements influencing the sustainability of donor funded Food and Agricultural Organisation projects in Kenya. The study was carried out by surveying staff working with Food and Agricultural Organisation (FAO) Kenya which is mainly involved in supporting and promoting agricultural projects to improve food security. The specific study objectives entailed evaluating the stakeholders' influence on the sustainability of projects; assessing the influence of resource availability or funding on the sustainability of projects; evaluating the socio-economic elements affecting the sustainability of projects and establish the extent to which management influences the sustainability of projects funded by donors in the Food and Agricultural Organisation, Kenya. The researcher through a descriptive research design collected data from the Food and Agricultural Organisation (FAO), Kenya who had key information on the study objectives. Data was analysed to obtain statistical data that was necessary to make inferences on the study objectives.

The study outcome showed that stakeholder's influence, availability of resources or funding and management elements influences sustainability of food and agricultural projects to a greater extent. All issues for the key elements assessed showed a positive correlation to donor funded food and agricultural projects sustainability with a special focus on the duration post-

donor funding. However, only resource sufficiency and management techniques were statistically significant. The summarised findings for the four variables is as follows;

Stakeholders' participation have a direct positive correlation with the sustainability of donor funded food and agricultural projects in Kenya. The inference made from the study findings shows that a positive increase in stakeholders' influence to the sustainability of donor funded food and agricultural projects in Kenya. This means that an increase in stakeholders influence positively influences the sustainability of donor funded food and agricultural projects. However, the variable was statistically insignificant having a p-value of 0.596 which way above the recommended 0.05. This means the variable does not have statistical significance on the sustainability of donor funded food and agricultural projects and thus the null hypothesis suffice.

Availability of resources was shown to have a direct positive influence on the sustainability of donor funded food and agricultural projects. Thus, a positive increase in the resources for projects funded by donors influences the sustainability to positive extent. The variable was also statistically significant at p-value of 0.05 showing its relevance in the study and thus influences food and agriculture donor funded projects in Kenya. The statistical significance therefore shows that the null hypothesis of resource availability and sufficiency not influencing sustainability of donor funded food and agricultural projects should be negated.

Socio-economic elements evaluated shows a positive correlation to the sustainability of donor funded food and agriculture projects in Kenya. However, the socio-economic elements were not prominent on its effect and showed that it affects sustainability of food and agricultural projects to some extent at overall with some aspects like education, status level and poverty status of host communities having least effect on the sustainability of the

projects. The positive influence is however negated by it being not statistically significant at a p-value of 0.852 showing null hypothesis stands.

Finally, management techniques show positive correlation with effective management practices, monitoring and evaluation, proper leadership, proper policies and efficient management showing significant influence. Thus, a positive increase in units of management directly influences the sustainability of donor funded food and agricultural projects in Kenya. The variable was also statistically significant at p-value 0.0029 showing that the management techniques influences the sustainability of donor funded projects in Kenya.

5.3 Conclusion

Sustainability of food and agricultural projects involves the continuation of project activities and continuous performance of project after the donor funding has ceased. The achievement of project sustainability is a key element in donor funding as most donors are concerned with projects that are viable and have clearly defined sustainability plans. The research study sought to establish the key elements influencing the sustainability of donor funded projects under FAO in Kenya. The study outcome established that stakeholders influence, availability of sufficient resources, socio-economic elements and management practices directly influence donor funded projects to a greater extent. The following conclusions on the study objectives can be clearly deduced from the study outcome.

Stakeholders in donor funded food and agricultural projects are key partners that influence sustainability to a greater extent. The study outcome clearly shows that involvement of various stakeholders in project implementation positively influences the sustainability of the project even post donor funding. The host community constitutes a very critical stakeholder in food and agricultural projects and its involvement directly influences sustainability of projects to a greater extent. Subsequently, stakeholders have to be involved in all phases of

the projects from planning to implementation to provide capacity and knowledge on running the project effectively. This ensures that the stakeholders get clear insights on the projects operations, what it needs to keep running and how to ensure projects' goals are realised resulting in owning the project. The outcome with stakeholder involvement is continued project operation and sustainability even after exiting of donors.

Availability of resources both in financial and human capital is critical throughout the entire project phase and subsequent progress after donor exit to ensure effective achievement of the projects' goals and objectives. The planning and implementation phases of the food and agricultural projects cannot go on without sufficient resources, as well as the sustenance to achieve the set goals. The study outcome clearly showed that sufficient funding ensures the project continues running without hitches and the set goals and objectives are achieved on a timely basis. Subsequently, the availability of effective and efficient human resources ensure proper planning and project implementation to meet the target goals promptly. The variable also showed statistical significance in its influence to the sustainability of donor funded projects. Thus, the study outcome clearly exemplifies the greater impact made by sufficient funding and effective human resources in ensuring donor funded food and agricultural projects are sustainable and their operations sustained to achieve set out goals and objectives.

The aspects of socio-economic elements that were established in the study to affect the sustainability of donor funded projects involved social status of the community, host community involvement, environmental aspects and level of poverty in the region. The study outcome showed that socio-economic elements evaluated impacts on donor-funded projects to the least extent compared to the other aspects of the dependent variable. Socio-economic key elements impact on donor funded food and agricultural projects' sustainability to some extent and thus, effective realignment of the elements to the projects goals is necessary. The

lack of understanding by the community due to poor education levels may impede the project implementation process and affect sustainability after donors exit as the host community may fail to own the project. However, the socio-economic elements can effectively be addressed by countering the ones affecting the project negatively and relying on those affecting it positively for effective sustainability of the project. However, the variable was not statistically significant. Thus, a clear analysis of the socioeconomic elements within a given project target area is necessary to put in place measures to avoid conflicting relationship between the community's socioeconomic status and the project's goals.

Finally, the study established that management practices greatly influences the sustainability of donor funded food and agricultural projects to a large extent compared to all the assessed elements. Management practices spans the planning, implementation and outcome evaluation phases and thus, touches on all spheres of the project. The study outcome pointed that effective project management is very crucial to the sustainability of donor funded food and agricultural projects. The management practices that were established to positively influence sustainability of projects involve monitoring and evaluation, effective planning, efficient management of resources, efficient policy formulation, transparency and proper leadership. The study variable was also statistically significant and shows its great influence on the sustainability of donor funded food and agriculture projects. Thus, effective management practices have to be put in place at all stages of the food and agricultural projects' planning and implementation processes to ensure success and subsequent sustainability after donors has exited. These involves effective management practices, proper leadership techniques, strategic management and proper policies implementation.

5.4. Recommendations

Based on the study outcomes, the following recommendations are viable;

Stakeholders involvement is a critical element in donor funded projects sustainability and thus, measures should be put in place and legislation passed to support the involvement of all essential stakeholders at all phases of food and agricultural projects. Donor funded projects in Kenya should be embraced by host communities and county authorities to ensure sustainability is achieved.

Effective resource mobilisation strategies and channelling of sufficient funding and capacity for donor funded projects should be put in place to ensure sustainability of projects. The policies should be put in place by relevant government agencies and effective collaboration with donors, FAO and NGOs implementing food and agricultural projects should be prioritised.

Policies on the enhancement of socio-economic elements that impact on donor-funded projects should be put in place. Government authorities should initiate programs that enlighten people through capacity building and public participation to ensure they understand the importance of donor funded projects. This would ensure reduced conflicts with host communities and ensure projects run effectively and eventually sustainability is achieved.

Effective and efficient management practices that promote project sustainability should be put in place to ensure improved project success and provide food security to marginalised areas. Increased capacity building should be put in place for project teams to address challenges facing donor funded projects' implementation and create solutions to ensure project sustainability. Strict monitoring and evaluation of projects, effective planning and implementation, as well as transparency should be the key attributes in all projects to ensure sustainability. Finally, governments should put in place measures to punish all project managers who bungle donor funded food and agricultural projects in order to uphold growth and ensure sustainability even after donors' exit.

5.4.1. Suggestion for Further Research

Further research should be done on how collaborative efforts with stakeholders, government authorities and host communities can be done to ensure sustainability of donor funded food and agricultural projects and if possible be anchored in law. This can be realised by conducting extensive studies based on keen observation of selected projects and coming up with specific study outcomes and probable policies for implementation by government agencies. Further, the other aspects that impact on the sustainability of donor funded projects should be evaluated to establish the 41% variance that was not accounted for in the correlation analysis outcome. Finally, there is a need for further research on the impact of social, economic and environmental elements on the sustainability of food and agricultural donor funded projects. This should involve how the elements interact to impact on the sustainability of donor funded food and agricultural projects in Kenya.

REFERENCES

- Akotia J.K. (2014). *A framework for social and economic sustainability benefits evaluation and sustainable regeneration projects in the UK*. (PhD Thesis, University of Salford, UK).
- Anita, M.M., Geoffrey, K.G. & Anne, S. (2019). Factors affecting sustainability of donor funded food security projects in Tharaka South Sub-county, Tharaka Nithi Count, Kenya. *Asian Journal of Agricultural Extension, Economics & Sociology*, 33(4), 1-7. <https://doi.org/10.9734/ajaees/2019/v33i430185>.
- ASTGS (2018). “*Agricultural Transformation and Growth Strategy: Towards agricultural transformation and 100% food security in Kenya*.” Food Security, Kilimo Kenya. Retrieved March 12, 2019. <<http://www.kilimo.go.ke/wp-content/uploads/2019/01/ASTGS-Frequently-Asked-Questions.pdf>>.
- Cavanaugh, J-A, E., Frame, B. & Lennox, J. (2006). The sustainability assessment model (SAM): Measuring sustainable development performance. *Australian Journal of Environmental Management*, 13(3), 142-145. <https://doi.org/10.1080/14486563.2006.9725127>.
- Cooper, D. & Schindler, P. (2010). *Business research methods*. 11th Ed. London: McGraw-Hill Education.
- Cooper, D. & Schindler, P. (2013). *Business research methods*. 12th Ed. London: McGraw-Hill Education.
- Creswell, J.W. (2014). *Research design: Qualitative, quantitative and mixed methods approaches*. 4th ed. Thousands Oak, California: Sage publications, Inc.

- Drees, J.M. & Heugens, P. (2013). Synthesising and extending resource dependence theory: A meta-analysis. *Journal of Management*, 39, 1666-1698. <https://doi.org/10.1177/0149206312471391>.
- Ejughemre, U. (2013). Donor support and the impacts on health system strengthening in Sub-Saharan Africa: Assessing the evidence through a review of the literature. *AJPH*, 1(7), 145-151. <https://doi.org/10.12691/ajphr-1-7-1>.
- Ekaradt, F. (2009). Theory of sustainability. *Research Unit Sustainability and Climate Policy*, Accessed January 20, 2019 <<http://www.sustainability-justice-climate.eu/en/nachhaltigkeit.html>>.
- Food and Agricultural Organisation of the United Nations (FAO-UN) (2019a). FAO in Kenya: Our offices. FAO. <<http://www.fao.org/kenya/fao-in-kenya/en/>>.
- Food and Agricultural Organisation of the United Nations (FAO-UN) (2019b). FAO in Kenya: Project lists. FAO. <<http://www.fao.org/kenya/programmes-and-projects/project-list/en/>>.
- Freeman, R.E. (2010). *Strategic management*. Cambridge: Cambridge University Press.
- Gibson, T. (2013). “*Influence of donor funded projects on the social-economic welfare of the rural communities: Case of CADSAL in Elgeiyo Marakwet County, Kenya.*” (Dissertation the University of Nairobi, Kenya). Nairobi: UON.
- Hassan, A.I., Iravo, M. & Iravo, M. (2016). An assessment of sustainability of donor funded road construction projects in Kenya. *IOSR Journal of Humanities and Social Science*, 21(10), 54-60.

- Hillman, A.J., Withers, M.C. & Collins, B.J. (2009). Resource dependence theory: A review. *Journal of Management*, 35(6), 1404-1427.
<https://doi.org/10.1177/0149206309343469>.
- Iyer, K.C. & Jha, K.N. (2005). Factors affecting cost performance: Evidence from the Indian construction projects. *International Journal of Project Management*, 23, 283-295. <https://doi.org/10.1016/j.ijproman.2004.10.003>.
- Karanja, G.M. (2014). Influence of management practices on sustainability of youth income generating projects in Kangema district, Murang'a County, Kenya. *International Journal of Education and research*, 2(2), 1-12.
<https://ijern.com/journal/February-2014/21.pdf>.
- Keura, E.O. & Moronge, M. (2016). Drivers of sustainability of donor funded food security projects in Kenya: a case of Samburu County. *The Strategic Journal of Business and Change Management*, 3(4), 593-613.
- Kiara, A.N. & Luketero, S.W. (2018). Factors influencing performance of donor funded projects: A case of Embu water and Sanitation Company, Embu County Kenya. *International Academic Journal of Information Sciences and Project Management*, 3(2), 317-330. https://www.iajournals.org/articles/iajispm_v3_i2_317_330.pdf.
- Kimani, L.R. & Namusonge, G.S. (2016). Factors instrumental to sustainability of projects in Kenya: A case study of Oparanya Mother Care, Kakamega County. *The Strategic Journal of Business and Change Management*, 3(4), 3030-319.
<http://strategicjournals.com/index.php/journal/article/viewFile/326/348>.
- Kothari, C.R. (2009). *Research methodology: methods and techniques*. 2nd ed. New Delhi: New Age International Publishers.
- Kuria, E. & Wanyoike, D.M. (2016). Assessment of factors influencing sustainability of donor funded projects in Nakuru County. *International Journal of Economics*,

Commerce and Management, IV (10), 472-501. <http://ijecm.co.uk/wp-content/uploads/2016/10/41027.pdf>.

Laplume, A., Sonpar, K. & Litz, R. (2008). Stakeholder theory: Reviewing a theory that moves us. *Journal of Management*, 34(6), 1152-1189.
<https://doi.org/10.1177/0149206308324322>.

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.
<https://strategicjournals.com/index.php/journal/article/view/1257/1227>.

McCormick, D., Mitullah, W. & Manga, E. (2007). "Extent and forms of donor proliferation and coordination in Kenya." *Working Paper. Institute for Development Studies. University of Nairobi, Kenya.*

Mensah, J. & Casadevall, S.R. (2019). Sustainable development: Meaning, history, principles, pillars, and implications for human action: Literature review. *Cogent Social Sciences*, 5(1), 1653531. <https://doi.org/10.1080/23311886.2019.1653531>.

Miles, S. (2012). Stakeholders: essentially contested or just confused? *Journal of Business Ethics*, 108(3), 285-298. <https://doi.org/10.1007/s10551-011-1090-8>.

Mugenda, O. & Mugenda, G. (2003). *Research methods: Quantitative and qualitative approaches*. Nairobi: Acts Press.

Mukerji M. (2013) Conceptual Framework and Methodology. In: *ICTs and Development*. London: Palgrave Macmillan. https://doi.org/10.1057/9781137005540_4.

- Munyoki, J. & Mulwa, A. (2012). *Social science research: A handbook*. 1st ed. Nairobi, Kenya: Downtown Publishers and Printers.
- Mutimba, E.M. (2013). “*Determinants of sustainability of donor funded projects: The case of selected projects in Ganze constituency in Kilifi County.*” (Doctoral Dissertation, University of Nairobi, Kenya).
- Mwangi, J.K. (2014). “*Factors influencing sustainability of non-government organisations funded community projects in Kenya: A case of Action Aid Funded project in Makima Location, Embu County*” (Master Thesis, the University of Nairobi, Kenya).
- Ndegwa A.K. (2015). *Factors influencing the sustainability of KEMRI HIV/AIDS grants funded projects in Kenya.*” (Unpublished PhD Thesis. United States University-Africa, Nairobi, Kenya).
- Ndou, D.N. (2012). An investigation into the reasons for failure of community-based projects at Folovhodwe, Limpopo. Thesis, University of South Africa.
- Ngatia, A. & Kihara, A. (2018). Determinants of sustainability of donor funded community projects in Garissa County. *Journal of Entrepreneurship and Project Management*, 3(1), 25-50.
- Sabbil, A.A.S. & Adam, O.H.M. (2015). Factors affecting project sustainability beyond donor’s support: The case of area development scheme (ADS) in Umkadada locality, North Darfur State, Western Sudan. *International Journal of Technical Research and Applications*, 3(1), 94-101.
- Saint Ville, A.S., Hickey, G.M. & Phillip, L.E. (2017). How do stakeholder interactions influence national food security policy in the Caribbean? The case of Saint Lucia. *Food Policy*, 68, 53-64. <https://doi.org/10.1016/j.foodpol.2017.01.002>.

Sepey, M., Ridde, V., Toure, L. & Coulibaly, A. (2017). Door-funded project's sustainability assessment: A qualitative case study of a results-based financing pilot in Koulikoro region, Mali. *Globalisation and Health*, 13(86), 1-15. <https://doi.org/10.1186/s12992-017-0307-8>.

UN Environment (2018). *Sustainable food production*. Nairobi: United Nations Environment Programme. Accessed January 26, 2019, <<https://www.unenvironment.org/regions/asia-and-pacific/regional-initiatives/supporting-resource-efficiency/sustainable-food>>.

Wabwoba, M.S. & Wakhungu, J.W. (2013). Factors affecting sustainability of community food security projects in Kiambu County, Kenya. *Agriculture and Food Security*, 2(9), 1-5. <https://doi.org/10.1186/2048-7010-2-9>.

APPENDICES

Appendix I: Research Tool

Letter to the Respondent

Grace Gatuhu
Kenyatta University
Email: ggatuhu@yahoo.com
Phone No: +254 723 950 146

Dear Respondent,

I am an MBA (Project Management Option) student at Kenyatta University undertaking a research study on “*Key Elements Influencing the Sustainability of Projects Funded by Food and Agricultural Organisation in Kenya.*” I kindly request for your participation in this survey process which will enable me come up with crucial information to realise the study objective. Your participation in this survey is voluntary and identity will be anonymous.

Kindly note that your responses will remain be handled with utmost confidentiality and only utilised for the research discussion purpose. The duration for questionnaire is approximately 15 minutes to answer. Kindly give responses to the best of your ability. In case of any queries or clarification; kindly feel free to contact me through the contacts in the above address or the Kenyatta University, School of Business.

Thank you.

Yours

Grace Gatuhu,

Sign:

Date:

I give my consent to participate in this study.

Sign: (Optional)

Date:

Sample Questionnaire

The questionnaire is divided into various parts: Kindly answer each question in the section as accurately as possible.

Kindly answer questions by ticking the appropriate spaces or boxes [] and/or by commenting in the space provided.

SECTION A: GENERAL INFORMATION

1. Select your gender?

Male []

Female []

2. Select your age bracket.

25 and Below []

26 – 29 []

30 – 35 []

36 – 39 []

40 – 44 []

45 and above []

3. What is your education level?

Secondary School graduate []

Diploma Holder []

Graduate []

Master Degree []

PhD []

4. Duration of working in the organisation?

0 – 5 years []

6 – 10 years []

11 – 15 years []

Over 15 years []

5. What is your job designation?

Field officer []

Office Staff []

Others

6. Do you think projects funded by donors in the period 2014-2018 have been effective in providing food security in Kenya?

Yes []

No []

Give reasons:

.....
.....
.....

7. On a scale of 1-5, how can you rate the level of sustainability of agricultural projects funded by donors between 2014 and 2018?

1: Projects stalled

2: Poor sustainability

3: Fair sustainability

4: Good sustainability

5: Excellent sustainability

8. For the projects that were not sustainable, what reasons were cited to have caused stalling?

.....
.....
.....

SECTION B:

The questions below seek to evaluate influence of stakeholders on the sustainability of food and agricultural projects funded by donors in Kenya. On a scale of 1 – 5, what is your level of agreement with the following statements?

1= Strongly Disagree; 2= Disagree; 3= Uncertain; 4= Agree; 5= Strongly Agree

| Statement | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| i) Stakeholders positively influences the sustainability of projects | | | | | |
| ii) The host community involvement is critical in project sustainability | | | | | |
| iii) Projects that incorporate communities as stakeholders achieve sustainability after donors' withdrawal. | | | | | |
| iv) Decision making involving local authorities and the community as key stakeholders enhances project sustenance | | | | | |
| v) Participation of the stakeholders at all phases of project planning and implementation enhances sustainability. | | | | | |

SECTION C:

The questions below seek establish the influence of the availability of resources or funding on the sustainability of projects funded by donors in the food and agricultural projects in Kenya.

On a scale of 1-5, what is your level of agreement with the following statements?

1= Strongly Disagree; 2= Disagree; 3= Uncertain; 4= Agree; 5= Strongly Agree

| Statement | 1 | 2 | 3 | 4 | 5 |
|---|----------|----------|----------|----------|----------|
| i) Sufficiency of resources is crucial for projects' sustainability | | | | | |
| ii) Effective planning and budget allocation ensures project sustainability. | | | | | |
| iii) Human resource is a crucial aspect in project planning and implementation, and thus supports sustainability. | | | | | |
| vi) Capacity building promotes human resources input in project sustainability. | | | | | |

SECTION D:

The questions below seek determine the socio-economic elements that affects the sustainability of selected food and agricultural projects in Kenya. On a scale of 1-5, how do you agree with the following?

1= Strongly Disagree; 2= Disagree; 3= Uncertain; 4= Agree; 5= Strongly Agree

| Statement | 1 | 2 | 3 | 4 | 5 |
|--|----------|----------|----------|----------|----------|
| (i) The level of community status in respect to education affects project implementation process. | | | | | |
| (ii) The level of poverty directly affects the duration of project funding by donors. | | | | | |
| (iii) The input of the host community in project implementation is a fundamental element in the sustainability of the projects | | | | | |
| (iv) Community involvement promotes project ownership and eventually sustainability. | | | | | |
| (v) Environmental status affects the type of project to be initiated by donors and how it will be sustained. | | | | | |

SECTION E:

The questions below seek to establish the extent to which management influences sustainability of food and agricultural projects funded by donors in Kenya. On a scale of 1-5, how do you agree with the following?

1= Strongly Disagree; 2= Disagree; 3= Uncertain; 4= Agree; 5= Strongly Agree

| Statement | 1 | 2 | 3 | 4 | 5 |
|---|----------|----------|----------|----------|----------|
| (i) Effective management affects project implementation and sustainability. | | | | | |
| (ii) Monitoring and evaluation enhances project implementation and eventual sustainability. | | | | | |
| (iii) Effective and efficient project management promotes project sustainability. | | | | | |
| (iv) Proper leadership in the project management influences projects sustainability. | | | | | |
| (v) Involvement of all parties in financial management enhances transparency which is a key aspect in project sustainability. | | | | | |
| (vi) Proper policies ensure project sustainability. | | | | | |

Appendix II: Open Ended Question Responses

| |
|--|
| <p>Question 6. Do you think projects funded by donors in the period 2014-2018 have been effective in providing food security in Kenya? Give reasons for the answer above:</p> |
| <p>The donor funds provided have enable Kenya achieve its objective in ensuring vulnerable households are food secure through provision of quality seeds and inputs using mechanisms that ensure high productivity. Through the funds received, NGOs and agencies have been able to conduct valuable assessment such as livelihood, food and seed security assessment and recently locust surveillance. Through the same funds infrastructural works such as development of a functional water trucking system, repair of broken canals and development of irrigation infrastructure has led to food secure households; casing point crop production in Turkana County using irrigation as an alternative source livelihood.</p> |
| <p>There has been reduced mortality rate over hunger; Majority of Kenyan citizens can now afford 3 meals a day.</p> |
| <p>The food security of beneficiaries has improved as evidenced by good food consumption score; coupled with an improvement of diet as indicated by the dietary diversity score which are both better than the pre-intervention levels. That is, the beneficiaries were able to consume more food and of better quality after interventions. In terms of productive assets, the beneficiaries were able to increase their livestock wealth as measured by the Tropical Livestock Unit (TLU). Furthermore, the cash provided had stabilized the beneficiaries and they were able to diversify cash usage from a relatively high portion of the cash spent on food from the first payment to meeting other household needs, like school fees, debt repayment and purchase of clothes and water and lighting bills, from the second cash payment. Moreover, the cash plus has enabled the beneficiaries to improve their credit worthiness.</p> |
| <p>Donor projects by FAO provide technical expertise and linkages with experts all over the world</p> |
| <p>Partially yes, Funds allocated to projects for emergency relief during 2016-2017 drought period reached the beneficiaries past the crisis period due to the lengthy bureaucratic procurement process. The emergency relief provided did not create resilience but provided a spur of the moment relief leaving the beneficiary aid dependent.</p> |
| <p>yes there has been good food security</p> |
| <p>The solutions are short lived. The project document objectives are just for the period the project lives.</p> |
| <p>An example: FAOKE built fodder stores and livestock markets in counties most affected by drought in the country. The fodder stores provided the ability for the farmers to store fodder harvested during times of plenty to be used during times of drought/scarcity. This sustains the livelihood of the farmers as they do lose their animals to drought.</p> |
| <p>They have enabled farmers to build resilience to climate shocks such as floods.</p> |
| <p>Kenya faces shocks related to harsh climatic conditions. These occurrences make the population vulnerable and reduce their resilience. Through the donor funding, the beneficiary households are able to;; a. Bounce back to their previous state before the shock; b. Better prepared to handle shock; c. Gain important skills i.e. financial management, entrepreneurship etc. ; d. Increase productivity</p> |
| <p>Most of the beneficiaries benefited from cash/food donations/advice on better farming methods/agricultural inputs making them more resilient for longer periods.</p> |

| |
|---|
| In Kenya, food security still trying to exists since not all people at all times have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. ; The four pillars of food security which are food availability, access to food, utilization and stability have not been fully accessed to all people in Kenya. Kenya is still faced by rapid population growth, rapid urbanization, low income, poverty and increasing demand for food products for biofuel production. |
| 1. Reduced deaths resulting from malnutrition; 2. Increased income to HHS from farming revenues |
| There is continuous supply of food in the markets |
| The cycle of food insecurity continues in the same areas/regions that keep receiving the aid |
| Corruption; Lack of proper implementation and follow-through |
| Most projects have been working towards achieving zero hunger in Kenya which has been effective achieved per year in each target society. |
| It has been effective |
| The objectives achieved based on the proposals |
| The impact of FAO KENYA is not largely felt in the country by netizens. |
| They address challenges identified jointly by FAO and Government and are in line with country program frame work as well as FAO region /national priorities that address food security. |
| Donor funding has been used in implementation of various FAO activities that provide tools & methodologies for food sustenance, providing techniques to local farmers/agriculturists in crop production |
| Emergency projects provide food security only for a short period. Resilience projects provide a more holistic approach as they provide more sustainability. A combination of activities including cash plus a service(Training, agricultural, fisheries or livestock inputs have proven better.; ; Crop yield assessments done on farmers who receive that beneficiaries who received inputs and training from FAO are expected to produce more harvests. |
| Targeting is very important in addition to implementing the correct strategies |
| a. The farmers have been drought resistance crops which has increased the food production; b. Farmers have increased income in their pockets due to high production; c. Living standards for many farmers have improved due to more increased harvests. |
| The targeted beneficiaries have been provided with livelihood package in form of agricultural inputs, cash and capacity building to support them go back into productive livelihoods and utilize their productive assets after having experienced natural and human shocks that destabilized the way of life, source of food and income. This support has ensured that beneficiaries engaged in productive agricultural activities for food and nutritional security and at the same time have access to food. |
| FAO has provided numerous supports to the farming community in Kenya. This includes 2016-2017 drought stricken households, especially in arid and semi arid areas of Kenya and the cross border areas of Kenya and Somalia who were on the verge of destitution due to massive deaths of livestock. FAO supported vulnerable livestock farmers with supplementary feeds (Range cubes), mineral blocks and pasture hay, which not only prevented death of livestock but also ensured sustained supply of milk to affected households; the milk helped meet the nutritional needs especially of lactating mothers, young children, elderly and sick.; Another tier of support involving provision of cash and inputs to affected households ensured |

households had the capacity to purchase foodstuffs to meet their basic nutritional requirements while using the inputs to expand on agriculture post-drought as a way to recover from the drought shocks. These interventions have direct implication in providing food security.

Between the period: - 2014-2018, there were periods of droughts and floods but donor aided projects intervened in order to ensure there is food security. without humanitarian interventions three would have been high levels of food insecurity

In the period, 2014-2018, rapid population growth, rapid urbanization, low income, poverty and increasing demand for food products. Was a big challenge. With Kenya's, Big Four agenda key pillars; food security and food production projects funded by donors came forward partnering with the government to providing food security in Kenya to vulnerable and poor communities.

In 2018 there was a severe drought in Kenya, and the government appealed to donors for support in feeding the affected communities/families. The support provided by donors went a long way in providing food security in the country.

Projects helped safeguard the livelihood assets of the target beneficiaries therefore ensuring their food security; Some of the projects introduced innovative technologies that enabled farmers/beneficiaries to improve their farms' productivity while at the same time adapting to the changing weather patterns.

| |
|--|
| 8. For the projects that were not sustainable, what reasons caused the stalling? |
| 1. Lack of proper stakeholder engagement; 2. Limited resources |
| The design of the project is usually good; the only challenge is the protracted crisis especially in the context of Somalia. Issues such as recurrent droughts and security concerns often interfere with sustainability of projects. |
| Climatic changes.; Language barriers ; Illiteracy ; Poor infrastructure |
| Insecurity |
| Lack of prior review for sustainability this is now part of project formulation |
| Poor emergency drought preparedness; Lack of a contingency plan; Delay in release of funds from donor; Lengthy procurement process |
| Excessive rainfall affected harvest |
| <ul style="list-style-type: none"> i. Poor project formulation phases. The beneficiary population was not adequately contacted during project formulation phase. ii. The donor is bent towards donor funding bias; iii. hand over process not very well defined; iv. linkages with other programmes in the target community not so well defined; v. Beneficiary interests not so well taken care of. The project is rather forced onto the community.; The donor only is interested in convincing the community that the project is important |
| An example: FAOKE built fodder stores and livestock markets in counties most affected by drought in the country. The fodder stores provided the ability for the farmers to store fodder harvested during times of plenty to be used during times of drought/scarcity. This sustains the livelihood of the farmers as they do lose their animals to drought. |
| Lack of buy-in by the community |
| a. Lack of proper follow up and management; b. Lack of research on best practices; c. Lack of wide and objective consultation |
| Poor management / monitoring |
| The causes of stalling of projects are shortage agricultural water-use; cultivated land loss; inappropriate or lack of knowledge on the usage of fertilizers and pesticides, and environmental degradation, lack of knowledge for a healthy environment, economic profitability, and social and economic equity. |
| <ul style="list-style-type: none"> 1. Poor planning resulting to delay in implementation; 2. Limited timeline given by the donors for some projects; 3. Poor infrastructure in some regions thus hindering accessibility in time; 4. Insecurity in some regions making difficult to reach the targeted group |
| Short Project deadlines that do not allow for proper planning and handovers |
| Corruption that involved diversion of funds and farming inputs; Inadequate training of beneficiaries; Unpredictable unfavourable weather elements. |
| Project I have been involved in were sustainable. |
| Some projects stalled for lack of proper human skills and resources. Others are because of lack of long term plan in their sustainability. |

| |
|--|
| Projects that impart knowledge and skills work better than those that simply distribute inputs or food or cash. |
| Political interference, lack of adequate capacity. |
| Lack of synchrony in implementing partners. |
| Corruption from government officials; Poor monitoring of the projects; Changing weather conditions. |
| Lack of adequate follow up with the communities as well as initiatives not being well tailored to the expectations of the concerned beneficiaries. |
| There are various factors such as: 1. lengthy procurement procedures, 2. delays in promised donor funds actually being received from donors; 3. Occurrence of other disasters in different areas of the world that cause shifts in donor funding. |
| Lack of good exit strategies. |
| - Poor implementation method - Poor training to the farmers; -Resistance by farmers to adopt some farming skills. |
| A few projects stalled along during the implementation period and this largely arose in areas that experienced security challenges. In such incidences, the implementation could not be finalized due to insecurity threats faced by the implementers and the beneficiaries. Priority is given to the protection and safety of the beneficiaries necessitating the need to withhold the interventions until the security situation improves. |
| -Reduced funding; -Emerging emergencies that led to channelling funds more to emergency and less on development. |
| 1. Short lived projects where the beneficiaries cannot continue to take care of themselves once the donor funded project has come to an end; 2. Inadequate transfer of knowhow among implementing partners to beneficiaries; 3. high running costs |
| The heterogeneity of agricultural systems implies that the assessment of agricultural sustainability requires multidisciplinary approaches that are; however, difficult to apply, it is also sometimes difficult to verify the accuracy of the information provided by farmers. |
| Projects not fully aligned to community priorities. |
| Lack of sufficient funding to sustain the projects. |