PROJECT EXIT STRATEGIES, STAKEHOLDERS MANAGEMENT, AND PROJECT SUSTAINABILITY OF DONOR-FUNDED LIVELIHOOD PROJECTS IN KILIFI COUNTY, KENYA

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A Thesis Submitted in Partial Fulfillment of the Requirements for the Award of the Degree of Doctor of Philosophy in Project Planning and Management of the University of Nairobi

2021

DECLARATION

This thesis is my original work and has not been presented in any other university or institution of higher learning for examination or academic purposes.

Signature: Date: 14TH JULY 2021

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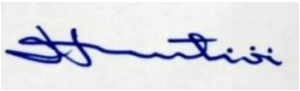
L83/51866/2017

This thesis has been submitted for examination with our approval as the university supervisors.

Signature:  Date: 14TH JULY 2021

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DEDICATION

This study is dedicated to my parents-Mr and Mrs. Josephat Ndombi; siblings-Duncan Shikuku, Carren Ndombi, Victor Ndombi, and nieces-Vexillus and Gloria; and friend-Nancy Mukare.

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ABBREVIATIONS AND ACRONYMS

ACF	-	Action Contre la Faim
ASCA	-	Accumulating Savings and Credit Associations
ASDSP	-	Agricultural Sector Development Support Programme
CARE	-	Cooperative for Assistance and Relief Everywhere
CCF	-	Compassion Capital Fund
CDF	-	Constituent Development Fund
CIDA	-	Canadian International Development Agency
CIDP	-	County Integrated Development Plan
CSF	-	Critical Success Factors
DESA	-	Department For Economic and Social Affairs
DfID	-	Department for International Development
DFLPs	-	Donor-funded Livelihood Projects
DoALF	-	Department of Agriculture, Livestock, and Fisheries
DOI	-	Diffusion of Innovation
ERD	-	European Rural Development
EU	-	European Union
HIV/AIDS	-	Human Immunodeficiency Virus - Acquired Immune Deficiency Syndrome
ICRC/RC	-	International Committee of Red Cross and Red Crescent
IFAD	-	International Fund for Agricultural Development
IFRC		International Federation of Red Cross and Red Crescent
KALRO	-	Kenya Agricultural, and Livestock Research Organization
KFSSG	-	Kenya Food Security Steering Group
KII	-	Key Informant Interview
KPA	-	Kenya Psychiatric Association
KRCS	-	Kenya Red Cross Society
LFA	-	Log-frame Framework Approach
M&E	-	Monitoring and Evaluation
MMR	-	Mixed-Method Research
MoH	-	Ministry of Health
NACOSTI	-	National Commission for Science and Technology and Innovations
NALEP	-	National Agriculture and Livestock Extension Programme
NDMA	-	National Drought Management Authority
NGO	-	Non-Governmental Organization
PMBOK	-	Project Management Body of Knowledge
PMI	-	Project Management Institute
PPBL	-	Problem- and Project-Based Learning
ROSCA	-	Rotating Savings And Credit Associations
SACCO	-	Savings And Credit Cooperative Societies
SAT	-	Southern African Aids Trust
SAT- COMP	-	SAT Community Competence Assessment Tool
SATO	-	SAT Organizational Capacity Assessment Tool
SCI-RPG	-	Sustainable Communities Initiative Regional Planning Grant

SEDI	-	Social and Economic Development Initiative
SEDIT	-	Social And Economic Development Initiative of Tanzania
SHEP UP	-	Small Holder Horticultural Empowerment and Promotion Unit Project
SIDA	-	Swedish International Development Agency
SILC	-	Savings And Internal Lending Communities
SLA	-	Sustainable Livelihoods Approach
SOS	-	School of Sustainability
UKAID	-	United Kingdom Aid
UMADEP	-	Uluguru Mountains Agricultural Development Project
UN	-	United Nations
UNICEF	-	United Nations Children's Fund
US	-	United States
USAID	-	United States Agency for International Development
USDA-MAO	-	United States Department of Agriculture’s Marketing Assistance Project
WHO	-	World Health Organization
WKCDA	-	West Kowloon Cultural District Authority
WOPATA	-	Women and Poverty Alleviation
WPF	-	World Food Programme

ABSTRACT

Donor agencies have heavily funded livelihood programs and projects in Kilifi County but these projects struggle with sustainability with some halting operations immediately after the funding is withdrawn. The purpose of this study was to investigate the influence of project exit strategies on the sustainability of donor-funded livelihood projects; and moderating influence of the stakeholder management on the relationship between the project exit strategies and project sustainability of donor-funded livelihood projects in Kilifi County, Kenya. The objectives of the study were to establish how capacity building exit strategy; project support linkage exit strategy; monitoring and evaluation exit strategy; combined exit strategies, stakeholder management influence the sustainability of donor-funded livelihood projects in Kilifi County. The study was guided by discovery learning theory; diffusion of innovation theory; and theory of stakeholder management. The pragmatic paradigm and descriptive correlational research design were used. A sample size of 170 was selected from a population of 295 from three livelihood projects using Slovin's formula. Three separate focus group discussions were carried out with men in Gandini; women in Dodosa; and the project committee. Separate semi-standardized one-on-one interviews were carried out with 7 key informants. Before data analysis statistical assumptions were tested. Standard deviations, standard error of means, and arithmetic means were used for descriptive analysis while Pearson's Product moment correlation and linear regression, F-tests, and t-tests were used for inferential analysis using statistical package for social sciences version 25. It was established that the mean perception of sustainability did not differ significantly with projects, gender, age, and marital status. However, there was a significant difference in mean perception of sustainability of projects among the different groups based on the highest level of education attained and duration of stay in the project. Of the six formulated research hypotheses, five were rejected while one was not rejected. It was concluded that capacity building exit strategy, support service linkages, monitoring and evaluation, combined project exit strategies, and stakeholder management significantly influenced projects. There was no moderating influence between stakeholder management and the combined project exit strategies. The study found that each factor has an incremental contribution to the dependent variable when other elements are constant. Findings point out that policies should be reviewed or formulated to provide an enabling environment and culture that will support capacity building initiatives such as training, appropriate technologies, enhance resource capacities; access to support services such as government affordable private extension services, affordable and readily available credit, markets; participatory, timely and monitoring and evaluation processes; and collaborative arrangements among players. Further, the use of simple and direct Likert items, use of mixed methods with diverse projects is recommended. Further studies can investigate such factors as community ownership and project control systems, and diverse project contexts may be studied as moderating variables on the relationship of the project exit strategies and project sustainability.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

The need to increase income base and diversify food sources and livelihood alternatives has seen governments throughout the globe and organizations enforce livelihood projects (Lu & Lora-wainwright, 2014; Wicander & Coad, 2015). Alternative livelihood projects are used by several organizations as a method of understanding biodiversity and environmental conservation (Roe et al., 2015) and offering the locals a substitute way of making a living thereby reducing strain on a particular element of biodiversity (ACF international, 2010). Many governments, donor bodies (which include the department for international development (DfID), department for economic and Social Affairs (DESA) of the United Nations finance alternative livelihoods ambitiously to diversify the economies of rural communities for sustenance. Other governments purpose at discouraging people in particular the young people from pursuing white-collar jobs. Implementation of livelihood projects is seen as a pathway in the direction of rural development and reduction of poverty. This has seen job opportunities created and the emergence of new income sources (Lu & Lora-wainwright, 2014).

Funded livelihood projects carried out took many forms ranging from mining, forestry, agriculture, and irrigation to commercial enterprise-oriented projects (Atela et al., 2015; Brian et al., 2013; Engels, 2010; Roe et al., 2015). Traditionally the United States has performed a key function in development through multi-billion funding via international establishments. as an example united states department of Agriculture's marketing assistance project (USDA-MAP) funded agriculture development activities (marketing assistance, financial, and technical assistance) in Armenia in

1996 after the crumbling of the Soviet Union to lessen poverty by facilitating agribusinesses and farmers produce, market, and sell food overseas and improve income base, create employment opportunities, and enhance the dwelling requirements of the Armenians in the countryside (Engels, 2010). China has an extended history of mining which enabled it to make a considerable leap after 1949 after the founding of the Peoples Republic. It embedded sustainable livelihoods approach (SLA) livelihood programming. before then China was had been counting on the state-owned mines.

More than 67 percent of the Indian population directly depend on their livelihoods in agriculture with cotton representing thirty percent of the gross income. Oxfam, TraidCraft, Ambuja Cement Foundation, Zameen Organic, and Chetna Organic are non-governmental organizations funding interventions working towards improving the livelihood conditions in India (Fayet & Vermeulen, 2014). Through its successful implementation of agricultural, mining, and environmental-related livelihood projects; increase in total net income, increase in per capita net income, reduced community dependence on external support and improved environmental indicators have been reported (Lu & Lora-Wainwright, 2014; Tang et al., 2013).

The West and Central African governments and national non-government organizations like in Ghana have focused on a lot of livelihood projects with varied funding modes such as long-term, short-term, smaller to huge grants (Roe et al., 2015). Neves and Toit (2013) enumerates that in the context of declining and limited employment opportunities, the deprived rural residents of South Africa live on livelihood projects, informal enterprises, and cash transfer programs that support food security and generation of income.

In Kenya, livelihood projects have also been implemented not only to diversify economies and dissuading youth from hunting white-collar jobs but also to protect the environment through forestry protection (Atela et al, 2015; Brian et al., 2013; Matiku et al., 2013). Oino et al. (2015) and Kimweli (2013) explain how much cash is spent in community-based projects up in bringing sustainable benefits and profits to the target groups in central Kenya. Most of these projects are generally implemented in hard-hit areas characterized by arid and semi-arid features.

Kilifi is categorized as arid and semi-arid [ASAL] (Kenya Food Security Steering Group, [KFSSG], 2011; Kilifi county integrated development plan [CIDP], 2013-2017). It is among the counties with the highest number of donor-funded projects. Millions of shillings have been channeled through various programs and projects to improve the livelihoods, food security, and income base of the target communities. Kilifi county government's mission to better the livelihoods of the people by promoting competitive agriculture, sustainable fisheries and livestock development, innovative research, growth of a feasible cooperatives sub-sector, sustainable management, and equitable distribution of land resources. This is because agriculture, forestry, and fishing account for 22% of the gross domestic product in Kenya (Trading Economics, 2018). The county does this through the implementation of such programs as the Eastern Africa Agricultural Productivity Programme (EAAPP); Small Holder Horticultural Empowerment and promotion Unit Project (SHEP UP); Agricultural Sector Development Support Programme (ASDSP).

1.1.1 Sustainability of Livelihood Projects

Sustainability itself is a moving target for all projects and is a term much misused and misapplied (Bertera, 2013). Different understandings of sustainability have existed [across the US] (Mattiuzzi, 2017) with more than 100 definitions emerging (Aarseth et al., 2017) and according to Svara et

al., (2015) failure to understand the meaning of sustainability makes it challenging to adopt or implement programs that promote sustainability. In their bibliographic review, Marcelino-Sadaba et al., (2015) failed to get answers to the questions regarding the definition of sustainable projects and whether any project is sustainable. Multiple versions of sustainability are described as: strong and weak, broad and narrow, big 'S' and small 's' sustainability, and more. It is a holistic, ambiguous, forward-thinking, global, and normative concept (Marcelino-Sadaba et al, 2015). The term has been long defined in the context of the triple bottom line of balanced economic, social, and environmental perspectives (Martens & Carvalho, 2017; Nawawi, 2017; Sánchez, 2015; Silvius & Schipper, 2014; Shaw et al, 2014). Karanja (2014) describes sustainability as the idea of promoting long-term economic growth in ways that are beneficial to the environment and people. Chofreh et al. (2015) define sustainability as the endurance of processes and systems. The IFAD Strategic Framework (2007-2010) described sustainability as the ability to ensure that the project-supported institutions and the benefits realized are maintained and continued after the project external funding is withdrawn. Bond et al. (2014) simply referred to sustainability as long-term program continuation following implementation and or simply the maintained practice past the implementation phase. From Oina et al. (2015) it can be deduced that sustainability refers to the degree to project persistence despite the withdrawal of donors. It is with these varieties of definitions that the ability to endure and regenerate benefits and continue implementation upon withdrawal of donor funding will be adapted in this current study.

Sustainability has increased importance (Karanja, 2014) both locally and internationally with local governments [such as in the United States] demonstrating augmented leadership in this area while joining forces with community organizations, non-governmental organizations, and partners to add

to the resilience of the communities in the recent past. Sustainability has attracted intense scholarly interest among academicians, researchers, development institutions, and governments with several articles published yearly between 2009 and 2015 (Aarseth, 2017; Carvalho & Rabechini, 2017; Silvius & Schipper, 2014). There is increasing pressure and growing sensitivity on organizations and donors and researchers to include sustainability issues in the projects (Marcelino-Sadaba et al., 2015).

Some governments such as the US commissioned a national survey in 2010 to establish what local governments had done to promote the sustainability of projects (Svara et al., 2015). Some municipal governments in Canada have sought to integrate the concept of sustainability into their activities by developing "sustainability plans (Stevens & Mody, 2013). In India, different certifications [Fairtrade, Organic and Shop for Change], and traceability schemes [like Better Cotton Initiative] emerged to ensure the sustainability of agricultural projects more so in cotton production (Fayet & Vermeulen, 2014). The principle of excellent project sustainability and performance should be integrated into the project proposal. This ultimately means that sustainability as a component should be considered in the initial stages of the project development, not later than the design stage. Some institutions have adopted sustainability through their mission statement and strategy (Silvius et al., 2013). Aarseth (2017) emphasizes the consideration of sustainability in project design by integrating sustainability issues in the initial phases of projects and unequivocal project design documents. Development bodies such as the European Union (EU) developed policies such as the European Rural Development (ERD) in 1999 to ensure sustainability in rural development in the member state (Zasada, 2015). The policy aims to improve competitiveness, conserve the environment, improve quality of life and diversify the economy.

Each member state is required to specify a budget set aside for rural development. Early designing and implementing an exit strategy is an effort towards ensuring projects are sustained.

In Africa, various forms of project sustainability have been studied and recognized as an important consideration. Morea and Balzarin (2018) delved to understand the financial sustainability of public-private partnerships of agriculture development projects in sub-Saharan Africa. This financial viability aspect helps to assess balanced inflows and outflows and profitability. This is critical in informing choices for implementing projects that guarantee continued returns.

The current study will delve to establish the relationship between the implementation of exit strategy and the sustainability of livelihood projects. Antwi and Ley (2020) brought in an aspect of community acceptance and how it influences project sustainability in the project in Africa. Under this study, elements such as gender activity roles, leadership roles, cultural variations, and perceptions influence project sustainability.

1.1.2 Project exit strategies

A primary distinguishing characteristic of a project is having an exact start and end. Depending on either the life or the funding cycle a project ultimately closes or funding comes to an end. Project exit is the withdrawal of externally supplied project resources from the complete project area while exit strategy (additionally referred to as a sustainability plan) is a descriptive plan of how the project sets to withdraw its resources without endangering the fulfillment of the project goals while making sure the progress closer to these dreams will keep. It describes how the target community might be discharged from a project. Different terms which have been used to intend project exit are transitioning (Bennett et al, 2015) which refers to the formal handover of a donor-funded program to the locals in a manner to make certain programs are sustained through the years.

The purpose of having an exit strategy is to guarantee the sustainability of project impacts after an intervention has ended or withdrawal of external support and to enable more progress towards the program or project's development goals. Failure to include exit strategy during planning may result in haphazard and uncoordinated execution of exit activities in the proximity of the program's end. Three possible approaches that can be followed to exit a project depending on the programming environment as explained by (Gebregergs et al., 2021; Project Management Book of Knowledge [PMBoK], 2017) are: phasing down, phasing out, and phasing over. Phasing down refers to the reduction of the details or activities of funding by the donor; while phasing over refers to handing over of a project to the community (or a local organization) to further its achievement of objects. Phasing out is when the donor completely withdraws his or her support.

The choice of an approach to project exit depends on various factors. Phase-out is chosen if the project believes it brought about changes that are probably going to be sustainable without project inputs. Phase over is preferred when there is a need to continue responsibility. Phase down is chosen when resources are constrained. The facets considered when thinking to exit a project are the sense of ownership; level of commitment by the local community; knowledge and skills to implement the project activities after closure; resource capacity and resilience to environmental shocks. Often the time to exit a project has been determined by time limitedness, achievement of project goals and benchmarks, and calls for timely and proper clear communication. Phasing down, out, or over requires a well-planned tactic. A gradual reduction of the implementer's role over time to an advisory role is required and finally to no role at all. The role involves financing and/or carrying out capacity building, linking the target group to critical service providers, and monitoring and evaluation.

There is an increasing shift in international donors transitioning management and financing of programs to local partners. Avahan HIV/AIDS program (1992-2006) was financed by Bill and Melinda Foundation India and had a tri-phase (2009, 2011, and 2012) plan to transition with financing and execution responsibility being handed over to the locals and Indian government (Bennett, 2015). The program involved reducing funding slowly by slowly, for example in Avahan HIV/AIDS program preparation involved reducing and aligning budget, adopting government policies. The West Kowloon Cultural District Authority (WKCDA) in China was created to take over from the implementing agency. This study concentrated on how capacity building; support service linkage and monitoring and evaluation of the exit strategy implementation interact with stakeholder management towards project sustainability.

1.1.2.1 Capacity building exit strategy

There are varied definitions of capacity based on the extent to which they itemize the activities that should be carried out against the results that are sought. Minzner (2014) defines capacity as skills, practices, and systems that allow organizations or groups to function more effectively and sustainably. Comprehensively capacity refers to the ability to anticipate and influence change; make informed, intelligent decisions; attract, absorb, and manage resources; and evaluate current activities to guide future actions.

In project management capacity implies the capacity to realize project points. Honadle (2018) characterizes capacity building as upgrading the capacity of institutions and individuals to do the correct thing right. Capacity building as an exit methodology can be portrayed as improving the capacity of the nearby community to create informed choices and apportion assets with a point to back the community collect inside assets to function its formative plans with a slightest of the

outside bolster. It points at the innovativeness of specialized administration issues such as asset mobilization and money-related administration among others. In upgrading the capacity of neighborhood community preparing, specialized and supplemental money-related help is required (Karanja, 2014; Minzner, 2014).

The Southern African AIDS Trust (SAT) a regional NGO supporting HIV/AIDS program in South Africa used capacity building (through training and funding) as a strategy. Later on, SAT developed tools to assess the effectiveness of the exit strategy. The SAT Organizational Capacity Assessment Tool (SOCAT) was developed to assess organizational capacity and programming; and SAT Community Competence (SAT- COMP) assessment tool to assess community competence in addressing HIV and AIDS (Simon & Ismail, 2008). Minzner, et al. (2014) indicated that Compassion Capital Fund (CCF) Demonstration Program a US$500,000 ACF-funded program focused on technical assistance, training, and financial support as capacity building strategy to exit programs. Sustainable Communities Initiative Regional Planning Grant SCI-RPG awarded $165 million to 74 metropolitan regions across the United States for regional planning (Geevarghese & Tregoning, 2016). It also funded $10 million worth to support capacity building and technical assistance by national nonprofits in regions. Karanja (2014) focused on: leadership, training, monitoring and evaluation, and financial management aspects concerning project sustainability

1.1.2.2. Support Service linkages exit strategy

As donors and project implementers gradually advance towards exiting projects, they want to leave behind a community that continually accesses critical services. They work towards linking these communities to these vital service providers. The effectiveness and sustainability of groups can be boosted by the creation of vertical and horizontal linkages with other groups. Horizontal linkages

involve the establishment of networks with similar neighboring groups as they can be a starting place for mutual support and assistance while vertical linkages involve establishing networks with local groups, government institutions, or other organizations. These groups motivate and refresh skills and foster the local community to commit towards post-aid implementation.

The accentuation to these back benefit linkages is because this target group is generally under-educated; less proficient; need specialized and administrative aptitudes; need bartering control and way better get to capital; have constrained get to data (Fayet & Vermeulen, 2014). As such different steady activities and intercessions have risen to improve the maintainability like in India to improve the cotton supply chain such as collaborating with private segment and non-government organizations to supply discussions administrations. When a venture closes and the external bolster is now not given, the benefits already realized by venture target bunches are continually misplaced, but venture groups can sidestep this by taking the energetic and bubbly steps to construct farmers' capacity, building up joins and associations with the neighborhood, territorial (or indeed national) supply chain performing artists, and harmonizing administrations with other players and creating charge-for-service field operator courses of action or systems (Ferris et al., 2014).

Unearthing ways [such as contract farming, market analysis, certification, and strategies to support home business development and bolster value chain investment] to link target group [probably small scale farmers] to markets is deemed a vital component of whichever long-term development initiative or strategy. Approaches that can be used include value chain support; group formation for collective marketing; cooperative support; and agro-dealer-agent networks.

Once the target groups [farmers] have been trained, extension services simultaneously focus on enhancing their group management, financial, innovation, and marketing skills of the existing structures. This improves their competitiveness within a market chain.

Donors try to foster projects that encourage market linkage methods. In some countries (such as Zambia), CARE, an international financing NGO, has been working and designing initiatives to bolster the capacity of input providers to supply technology to target (or local) farming communities, instead of simply giving them the required inputs (Ferris et al., 2014). Another area that needs support is the access to credit by the target group [farmers]. As seen earlier most of the farmers lack adequate access to capital. These farmers need financial support that offers them low cost, secure, simple, transparent, and flexible credit; insurance; and saving. In efforts to building the financial skills and provision of small loans, several NGOs are developing "savings and internal lending communities" (SILC's) or self-help, and Savings and credit cooperative societies (SACCOs). Other informal systems as discussed by Francis et al. (2013) are; Rotating Savings and Credit Associations (ROSCAs), well understood as merry-go-rounds, and Accumulating Savings and Credit Associations (ASCAs).

In rural India [Telangana state] self-help movement saving and bank linkage programs model has been used to create self-reliance and empower low capital women through which they have demonstrated how to mobilize, manage and appraise credit (Lalitha & Kumar, 2016). SACCOs have also been used by low-capital women and men in Tanzania to mobilize traditional strength to sustain their livelihoods (Maleko et al., 2013). In Kenya, about 70% of adults turn to several informal lending systems [those that operate outside the regulation of the central monetary policy] to chase their entrepreneurial dreams and boost their livelihoods because of the nature of the formal

financial system [that is characterized by the high cost of borrowing; high deposit requirements, high recurring fees; high maintenance costs] and limited credit capability (Francis et al., 2013). The government of Kenya [with support from the intergovernmental organizations and non-governmental organizations] has also developed policies and programs aimed at improving credit accessibility for the country's entrepreneurs through various acts of parliament [such as the companies act, the cooperative societies act, and the societies act] but have not succeeded in reaching the target groups.

1.1.2.3 Monitoring and Evaluation Exit Strategy

Monitoring and evaluation (M&E) of the implementation of project exit strategy refers to the ongoing and regular or routine observation of the graduation or exit progress and its effectiveness and efficiency in reaching project goals. This process enables the project team and stakeholders to make insights on the effectiveness in achieving the goals of exit strategy and allow for adjustments to the plan (Stevens & Mody, 2013). M&E is needed during the implementation of the exit strategy and after the transition. Tracking the progress of exit strategy requires indicators that facilitate the M&E process and demonstrate the progress in achievement and promotion of sustainability. This monitoring may aid identify project elements and exit strategies that seem sustainable. The information gathered can then be utilized to adjust or amend the design of graduation or exit in communities. Bennett, et al. (2015) asserts that there is a need to establish how M&E of exit strategies (transition process) influences the sustainability of programs.

M&E of an exit strategy can provide early warning on the problems that if addressed while reassuring the stakeholders that the benefits of the projects have been sustained. To evaluate the

effectiveness of an exit strategy, it requires that an ex-post assessment is carried out after some fixed time (1-2 years) after the project closeout to determine whether sustainability was achieved. This should be followed by other longer-term evaluations. These evaluations provide insights on the role of the exit strategy in the project sustainability; and success or failure factors. And give recommendations for a more effective and efficient exit strategy for the future through the reviews.

1.1.3 Stakeholder management in livelihood projects

The nature of projects is characterized as complex, problematic, uncertain and volatile, and underestimated (Waligo et al., 2013). This requires that appropriately skilled project managers apply systematic approaches to accommodate and balance the diverse interests, claims, and robust relationships of the stakeholders to attain the best value of program or project outcomes. From a project manager's perspective information input, prompt communication, and social responsibilities, prompt communication are identified as vital success factors for stakeholder management. Even as managers endeavor to manage these interested groups they are often faced with the challenge of identifying the right stakeholders, their needs, relationships and impacts, and suitable management strategies. Stakeholder collaboration signifies a widely accepted tactic to solving problems linked to stakeholder conflicts in goals and interests such as in bridge construction projects devised to connect Zhuhai in the mainland of China to Macao and Hong Kong (Mok et al., 2015).

Stakeholders in project management refer to individuals with the potential to affect or are equally affected by the interventions of a project or attainment of the project's objectives either directly or indirectly (PMBoK, 2017). Project managers or teams must be careful when trying to manage both

the ever-changing and often conflicting qualitative and quantitative interests of stakeholders. Mok et al. (2015) noted that stakeholders try to protect their vested interests and often issues that are very weighty to one stakeholder group than the other. These stakeholders repeatedly employ strategies to affect project decisions to match their exact goals. Some of the strategies applied by stakeholders in the literature are communication, coalition building, credibility building, withholding, conflict escalation, direct action, and resource building. Three components of stakeholder engagement as discussed by Li et al. (2012) are entities recognized during stakeholder identification; stakeholder worries and concerns and project restraints during the engagement process; and the engagement strategies.

Stakeholder management is linked to project exit strategy and project sustainability. The ineffective or lack of stakeholder participation is a major impediment to sustainability (Waligo et al., 2013). Stakeholder management is a fundamental process in ensuring sustainability in projects (Marcelino-Sádaba & Pérez-Ezcurdia, 2015). Stakeholders must agree on the meaning of sustainability and agree on the parameters or metrics for assessing sustainability. An exit strategy planned in consultation with partners ensures better project outcomes; reduced dependency; and consequently enhances sustainability. This helps increase their familiarity and support for those initiatives and the adoption of higher quality plans (Stevens & Mody, 2013). In the social context of a project, individuals (stakeholders) must interact. During these interactions, three things among many are inevitable: knowledge sharing, communication, and collaboration.

Knowledge, defined as skills and experiences gained over time through working, interacting, and reasoning with information, is an asset that many organizations are exploring its management (creation, storage, dissemination, utilization, and retrieval). Possession of large volumes of

knowledge is considered responsible for much transformation and survival of performing organizations and projects. Knowledge is categorized into four major four groups: the know-what, know-where, know-how, and know-why. During the life of a project, collaborative arrangements and partnerships are established between key players each playing supportive and complementary roles and synergies or combined efforts geared towards achieving project goals. As Bourne (2010) also adds engaging stakeholders for collaboration need constant vigilance in an ever-changing landscape of relationship with unpredictably fluctuating interests, support, and influence.

Establishing clear and ensuring consistent communication with the stakeholder groups about the program's ultimate withdrawal is an essential component in an exit strategy. Communication helps to prepare communities, decrease the dependence syndrome, and may help coming up with innovative ways of self-reliance. This current study will establish how stakeholder knowledge sharing, collaboration, and communication moderate the relationship between the implementation of a combined exit strategy and project sustainability.

1.1.4 Context of the Study

The study was carried out in Gandini Food Security Project, a livelihood project in Gandini in Adu ward; Dodosa High Impact Project in Garashi ward, and Uvumbuzi Self Help Project in Garashi ward. In total these projects supported 295 farmers. All these projects are in Magarini sub-county, Kilifi County in Kenya. Kenya is a low-middle-income, with around 48% of its population struggling with absolute poverty. Subsequent reporting by Red Cross, UNICEF, WFP, Caritas, and World Vision in their project surveys and impact assessments between 2009 and 2012 indicate that the most vulnerable groups are women and children in rural areas. The main causes of poverty are attributed to the shortage of water and low agricultural production (KFSSG, 2011).

Kilifi County is located North and North East of Mombasa in the coast region. The county is positioned between latitude 2º 20" and 4º 0" South and between longitude 39º 05" and 40 º 14" East (Kilifi CIDP, 2013-2017). The county borders Taita Taveta County to the west; Kwale County to the southwest, Mombasa County to the South, the Indian Ocean to the East, and Tana River County to the North. The county has seven sub-counties namely: Ganze, Malindi, Kilifi North, Kilifi South, Magarini, Kaloleni, and Rabai. The county is characterized by two extremes of floods or drought which hugely impact on agriculture, livestock, and fisheries sector on which 90% of the total population directly depend on the Kilifi District Long-term Strategic Development Plan (2001-2015). Due to these ecological and climatic conditions, there is an influx of non-governmental organizations, donor bodies supplementing and complementing the national and county governments' efforts in alleviating human suffering through the implementation of various projects. Most of these projects are livelihood-oriented.

Within the Magarini Sub-county (extending to Kilifi County) five livelihood zones have been identified to capture the prevailing income generation. They include mixed farming (crop farming and livestock keeping), fisheries, casual employment, and formal employment. Climatically the area generally has a hot and humid climate all year round. Average temperatures range between a minimum of 22 degrees Celsius and a maximum of 29.5 degrees Celsius. The region has a poorly distributed bimodal rainfall pattern. The short rains occur between October and December while long rains are experienced between April and June. 80% of the Sub-county is classified under arid and semi-arid land (NDMA, 2018). Magarini Sub-county has been affected by recurrent localized floods in addition to the present drought challenges, jeopardizing food production and further exacerbating the poverty levels in these areas.

Gandini food security and livelihood project was implemented by the Kenya Red Cross Society (KRCS) and the county government's department of agriculture, livestock, and fisheries (DoALF). The project targeted 140 marginalized farmers in Gandini. The goal of the project was to contribute to the improved community resilience towards floods and drought through improved food security and diversified livelihood options. The Giryama is a crop farming community. The project supported farmers with improved irrigation practices, provision of farm tools, improved seeds, on-farm training, and market information. The design of the project was that KRCS would implement and offer technical and advisory services while the DoALF would provide support extension services and other technical support to the farmers. After the project close-out, KRCS and the DoALF would take over. This is a phase-over exit approach.

Dodosa High Impact Project is located in Baricho sub-location of Magarini sub-county in Kilifi. The project initially started with 60 members practicing irrigation agriculture in 2011 but expanded to 95 by the time of closure. The project was initially funded by Karibuni Onlus. The World Food Program would later fund KRCS to support the project with water irrigation pumps, agronomic and financial management training, and market linkages to realize a high impact in terms of food production and income generation. The project was closed in 2017 with the county government expected to take up the supportive role of the project.

Uvumbuzi project is located in Singwaya sub-location in Magarini. The project initially had more than 40 farmers supported by DAST and later by Action Aid Kenya and the government of Kenya under the 'Njaa Marufuku' program. At the closure of the project with 60 farmers in 2016 the county government was to take up the supportive role to keep the project operational.

1.2 Statement of the Problem

The national and county governments in Kenya together with donor bodies such as Department for International Development (DFID), Canadian International Development Agency (CIDA), World Bank, United Nations Children's Fund (UNICEF), and United States Agency for International Development (USAID) among others have joined hands to improve the living standards of its citizens through the implementation of various livelihood projects. Major local non-governmental donor agencies that have supported livelihood interventions between 2020 and 2018 include Kenya Red Cross, World Vision, Actionaid, Plan International, DAST, MESPT, Equator Kenya, Islamic Relief, Muslimaid, Centre for Health and education programs, Caritas, Anglican Development Services. This is so as projects are considered a means of achieving this (Marcelino-Sadaba et al, 2015; Silvius & Schipper, 2014).

Notable programs implemented in the county include Eastern Africa Agricultural Productivity Programme (EAAPP); Small Holder Horticultural Empowerment and promotion Unit Project (SHEP UP); Agricultural Sector Development Support Programme (ASDSP). These programs and projects concentrate on the implementation phase of the project cycle focusing on completing the projects with time, cost, and budget as project performance parameters.

It is disturbing that these governmental and donor-funded livelihood projects have stalled or gone dormant without delay or rapidly after the donors phase out or funding is withdrawn. A similar argument is made by Oino et al. (2015). Wabwoba and Wakhungu (2013); and Kimweli (2013) argue that in Kenya loads of cash is spent on community-based projects. Up until now the majority of such projects little impact when outside funding ceases. Costs incurred for the duration of execution do not correspond with the benefits accrued (Karanja, 2014). These projects exhibit promising characteristics during the implementation phase towards closure. However, the state of

affairs changes when funding is withdrawn and the donors are at a distance. When external funding is withdrawn project operations fade, the intended project benefits diminish and project beneficiaries drop from these projects, and project networks disintegrate. These project beneficiaries are left struggling to endure the waves that come after termination.

In Kilifi County, little is understood through research about the sustainability of these donor-funded food security and livelihood projects. No rigorous observation has been performed concerning how the implementation of the exit strategies and stakeholder management influence the sustainability of donor-funded livelihood projects. The funding pattern by donor bodies is globally changing and thus requiring a wide variety of coping strategies such as the formation of consortiums and synergies. The need for sustainability will continue to receive attention more than before.

1.3 Purpose of the study

The purpose of the study was to investigate the influence of project exit strategies on the sustainability of donor-funded livelihood projects in Kilifi County.

1.4 Objectives of the study

This study was guided by the following six objectives:

1. To establish how capacity building exit strategy influences the sustainability of donor-funded livelihood projects in Kilifi County
2. To determine the extent to which project support linkage services exit strategy influences sustainability of donor-funded livelihood projects in Kilifi County
3. To assess the influence of monitoring and evaluation exit strategy on the sustainability of donor-funded livelihood projects in Kilifi County

4. To examine how combined exit strategy influences the sustainability of donor-funded livelihood projects in Kilifi County
5. To determine the extent to which stakeholder management influence the sustainability of donor-funded livelihood projects in Kilifi County
6. To examine the moderating influence of stakeholder management on the relationship between project exit strategies and sustainability of donor-funded livelihood projects in Kilifi County

1.5 Research questions of the study

This study was carried out to answer the following questions:

1. How does capacity building exit strategy influence the sustainability of donor-funded livelihood projects in Kilifi County?
2. To what extent does project support service linkage exit strategy influence sustainability of donor-funded livelihood projects in Kilifi County?
3. How does monitoring and evaluation project exit strategy influence the sustainability of donor-funded livelihood projects in Kilifi County?
4. How does the combined exit strategy influence the sustainability of donor-funded livelihood projects in Kilifi County?
5. To what extent does stakeholder management influence the sustainability of donor-funded livelihood projects in Kilifi County?
6. How does stakeholder management influence the relationship between project exit strategies and sustainability of donor-funded livelihood projects in Kilifi County?

1.6 Hypotheses of the study

This study tested the following research hypotheses:

$H_1$1: The sustainability of donor-funded livelihood projects in Kilifi County is significantly influenced by project capacity building exit strategy

$H_1$2: Support service linkages significantly influence the sustainability of donor-funded livelihood projects in Kilifi County

$H_1$3: Monitoring and evaluation of project exit strategy significantly influences the sustainability of donor-funded livelihood projects in Kilifi County

$H_1$4 : The combined project exit strategy significantly influence the sustainability of donor-funded livelihood projects in Kilifi County

$H_1$5: Stakeholder management significantly influences the sustainability of donor-funded livelihood projects in Kilifi County

$H_1$6: Stakeholder management has a significant moderating influence on the relationship between project exit strategies and the sustainability of donor-funded livelihood projects in Kilifi County.

1.7 Significance of the study

The findings of the study are not only significant to the author alone, but also to other groups including donor bodies, implementing agencies, stakeholders, policymakers, and learning institutions. Donor bodies such as World Bank, DFiD, CARE, UKAID, USAID, IFRC, ICRC/RC, and UN bodies have been emphasizing sustainability and strategies to ensure projects continue long after funding as regards implementation, regeneration of benefits, and resilience. They have further specifically funded some initiatives aimed at leaving behind sustainable projects. The findings of the study guide how elements of project exit strategy and stakeholder management interact while influencing project sustainability. By extension, this is beneficial to both the national and county governments and agencies which have been funding various programs targeting mostly youth and women that are aimed at diversifying the economies of rural communities for sustenance and lessening the strikes of poverty.

Sustainability has been a perennial challenge for project implementing agencies. Other factors have been extensively studied as regards it but where exactly project exit strategies meet sustainability has not been adequately explored. The agencies have tried to devise different approaches to exit strategies but still, it has not been achieved. The findings of this study form the basis for guiding these agencies in deciding the best match of strategies that can be employed to improve the sustainability of donor-funded projects. In addition, the agencies will utilize the findings as a guide to the stakeholder management process concerning project or program sustainability. The communities and other stakeholders such as line ministries and civil societies are guided based on the findings on their role in choosing the best match of exit strategies in efforts

to ensure that the benefits reached are sustained and continue after the project external funding is withdrawn.

The findings guide the learning institutions such as schools, colleges, and universities teaching project management and development courses; and practitioners in professional practice in the area of project management and development studies. The study however did not cover everything as far as the donor-funded livelihood projects are concerned. The emerging issues and knowledge gaps provoke other scholars to carry out further researches. The findings further contribute to the body of knowledge. Finally, the study bridged the gap that exists in terms of rigorous research on donor-funded livelihood projects. The professionals and practitioners will use the findings to build theories.

1.8 Limitations of the Study

This study was limited by logistics to the study areas. The areas in which the Gandini Food Security and Livelihood project, Dodosa High Impact Project, and Uvumbuzi project are implemented have poor road networks and scarce transport means. The situation worsened with the occurrence of the April 2018 floods that cut off most of the roads enjoining the site. Coupled with resource and time constraints, the researcher hired and trained the research assistants and adequately planned the data collection process. Data processing including cleaning, coding, and verification were immediately done at the end of each day's work to save time and meet the deadline set for data analysis and reporting.

Assured participation and by the target population was another anticipated limitation. This area is used to developmental project-oriented surveys in which in return there are almost immediate

tangible benefits in terms of initiatives or interventions. For this study, there were no instantaneous tangible benefits. This could again result in a delayed process or getting dishonest responses. To minimize this, the research team adequately explained the importance of the study and its future benefits. The researcher obtained and presented approval documents such as a letter of transmittal, from the University of Nairobi; and formal Research Ethics Committee approval for this study.

1.9 Delimitations of the Study

The study is delimited to Gandini food security and livelihood project, Dodosa High Impact Project, and Uvumbuzi Project in Garashi ward in Magarini in Kilifi County because of the context and nature of the projects being studied. The study focused on donor-funded projects working towards strengthening the economic base and bio-diversity of the target population. The Gandini food security and livelihood project was funded by the Australian and Finnish Red Cross and implemented in partnership with Kenya Red Cross Society while Dodosa High Impact Project was funded by World Food Programme and implemented by Kenya Red Cross Society in partnership with the county government of Kilifi. The Uvumbuzi Project was funded by DAST and Action Aid and implemented by Action Aid. The main livelihood in these context projects is crop farming and livestock keeping.

The study was also delimited to establish the influence of exit strategy implementation on the sustainability of donor-funded alternative livelihood projects as moderated by stakeholder management in Kenya. The dependent variable was the sustainability of donor-funded livelihood projects; the independent variable was exit strategy implementation. While many exit strategies could be studied, the research focused on capacity building, support service linkages, and monitoring and evaluation of exit strategy implementation. The influence of stakeholder

management on the relationship between project exit strategy implementation and project sustainability was also studied.

The study was based on the descriptive and correlational mixed-method survey in which questionnaires, interviews, focus group discussions, and observations; multiple sampling methods were employed during data collection. While the study was only based on three projects, the rigorous process gives results generalized to other donor-funded projects in Kenya being implemented under a similar context. The context includes such aspects as project area was located in arid and semi-arid conditions; projects once relied on external support; are livelihood in nature; target economically disadvantaged communities, and had similar purpose or goals. The scope of the study was also reached by the budget constraints. Ideally to understand the bigger picture on capacity building, support service linkages, and monitoring and evaluation of the implementation and their interaction influence sustainability of livelihood projects in Kenya; a study needed to be conducted on large samples of similar projects across all regions or counties to represent the face of the country.

1.10 Basic Assumptions of the Study

The study endeavored to establish the influence of project exit strategy implementation and stakeholder management on the sustainability of donor-funded livelihood projects in Kenya. It was assumed then that the Gandini food security and livelihood project, Dodosa High Impact Project, and Uvumbuzi Project in Kilifi County would provide the perfect mix of characteristics suitable for the study. Based on the variables of the study, it was assumed that: capacity building, support service linkages, and monitoring and evaluation of the implementation and their interaction

influence sustainability of livelihood projects in Kenya; and that stakeholder management moderated the relationship between exit strategy implementation and sustainability of donor-funded livelihood projects in Kenya.

It was further assumed that the attributes not included in this study were held constant and did not influence the relationship of attributes under the study. Other assumptions in the study were accessibility and responsiveness of the respondents; and representativeness of the sample. The study presupposed that the respondents were easily accessible, cooperative, and gave truthful, objective, and reliable information. It was also presumed that the sample chosen was representative of the observations, opinions, and feelings of the population.

1.11 Definition of significant terms

In this study the significant terms are defined as follows:

Capacity building	Enhancing the ability of the local community through training, technical and supplemental financing to make informed decisions and implement its developmental plans with the least amount of external assistance
Donor-funded livelihood projects	Projects aimed at creating a means of earning a living and diversifying economies of people; and whose implementation depends on donor financing external to the target community.
Exit strategy implementation	Operationalizing the plan that describes how the program or project intends to pull out its resources while making sure that attainment of the goals is not endangered and will not be discontinued.
Monitoring and evaluation	Routine observation or tracking of the project as it progresses towards attaining its goals and assessing how efficient and effective the process is achieving the goals.

Stakeholder management	Building, handling, accommodating, balancing the diverse interests, claims, and robust relationships of the interest groups to attain the best value of project outcomes through knowledge sharing, collaboration, and communication with such groups.
Support service linkages	The created interrelationship between providers and users of critical services such as but not limited to extension, credit, and market services
Project Sustainability	The ability of a project to endure, continue implementation and regenerate benefits upon withdrawal of external funding.

1.12 Organization of the study

This study was organized into five chapters. Chapter One, the introduction, presents the historical background to the study outlining the dependent, independent, and moderating variables and the context of the study. The chapter also presents the statement of the problem, purpose, objectives of the study, research questions to be answered, and hypotheses to be tested; the significance of the study; limitations, delimitation, basic assumptions of the study; and definitions of the significant terms used.

Chapter Two presents a literature review relevant to the study. The chapter was organized in the introduction, sub-themes of the study. The sub-themes are capacity building exit strategy implementation; support service linkages; and monitoring and evaluation of exit strategy implementation; stakeholder management concerning the sustainability of donor-funded livelihood projects. The chapter also discusses the theoretical, empirical, and conceptual frameworks. The theoretical framework presents theories adopted to explain the relationship between and among variables while the empirical framework presents relevant studies with aim of

identifying the research gaps. The conceptual framework models the relationships among the constructs of the study. The chapter culminates with research gaps.

Chapter Three presents the methodology for the study. It outlines the research paradigm, the research design, target population, sampling size and sampling techniques, data collection instruments (their pilot testing, validity, and reliability), data collection procedure, data analysis techniques, ethical consideration, and data analysis techniques. Finally, this chapter also presented the operationalization of variables and ethical considerations. Chapter Four covers data presentation, data analysis, interpretation, and discussion. Chapter Five presents a summary of findings, conclusions, recommendations, and suggestions for further studies.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section examines the theoretical, empirical, and conceptual frameworks of the subject of study. In the theoretical framework, theories related to the constructs (capacity building, support service linkage, stakeholder management, and sustainability) of the study are examined including the theory of discovery learning, diffusion of innovation, and theory of stakeholder management. The empirical framework looks at the various studies that have been conducted about the study. The conceptual framework gives the model guiding the relationship of variables for this study.

2.2 Sustainability of Donor-funded Livelihood Projects

Project sustainability brings the distinction between successful and failed community-based projects (Oina et al., 2015) and because of this imperative interplay many institutions (70% of the respondents) in a study by Kiron et al. (2012) were found to be tabling sustainability on the management agenda and consequently upping their commitments toward it and always asking what to do next to make sustainability become part of their system. Even though its integration in projects is gaining momentum, it is also vulnerable. Jenkins et al. (2010) point out that some projects in low and middle earning countries face challenges with sustainability due to competition with other priorities. This leaves it at risk of being treated with less care especially for projects that are under pressure of being completed within the parameters of time, scope, budget alone.

There are different descriptions of project sustainability (Aarseth et al, 2017; Mattiuzzi, 2017) depending on the subject or unit of analysis. These numerous descriptions are a result of increased

scholarly interest and increased pressure by donors and organizations (Aarseth, 2017; Carvalho & Rabechini, 2017; Pohl et al., 2010; Silvius & Schipper, 2014;). Marcelino-Sadaba et al. (2015) unsuccessfully struggled to find a universal meaning of the term in their critical literature review. Findings by Kiron et al. (2012) point out that most organizations are straining to define sustainability in a way that is relevant to their context. In their separate studies, Mattiuzzi (2017) and Karanja (2014) described sustainability as the idea of promoting long-term economic growth in ways that are beneficial to the environment and people when referring to the environment. From the works of Bond et al. (2014) and Spaling et al. (2014) sustainability is a long-term program continuation following implementation and or simply the process of maintaining the practice beyond the implementation phase while relating to projects or programs. Organizational sustainability is described by Chofreh et al. (2015) as endurance of processes and systems when referring to organizations. The above definitions have two meeting points: continuation in implementation and continuation in benefits.

Various definitions, approaches, and indicators exist since the Rio Summit in 1987. There exists no universally accepted definition and indicators of sustainability. It is context-dependent. But Agol et al. (2014) defined it in form of maintenance, continuity of outcomes, and functionality relating to human-environmental systems. Appropriate definition and application of sustainability and its indicators serve as a powerful tool for communication of complex issues, ensure proper project evaluation, foster better decision making, and ensures sustainable development. The indicators should focus on equity in the distribution of outcomes, diversity, required skills (capacity building), and linkages among economic, social, and environmental aspects and the desired change. The indicators should be able to capture intended and unintended outcomes.

Project sustainability as a knowledge area in project management is not a standalone concept. It is linked to other knowledge areas and other practices. Its management is also related to other areas such as performance (Carvalho, & Rabechini, 2017). Though sustainability is a concept that comes later after implementation and closure; its attainment journey starts during the earlier stage and unfailingly considered along the project cycle (Silvius & Schipper, 2014) with consideration to economic, social, and environmental factors (Martens & Carvalho, 2017; Mattiuzzi, 2017; Nawawi, 2017; Sánchez, 2015; Shaw et al., 2014; Silvius & Schipper, 2014) of sustainability should be unswervingly monitored. Projects do not succeed because they fail to recognize a wide range of factors that influence sustainability throughout its lifetime. Many external and internal factors influence project sustainability at a variety of points along its life cycle. Kiron et al. (2012) found out that the internal factors or drivers accounted for 80% of efforts by organizations to ensure sustainability. Just as the life phases cannot be considered completely independently, project managers need to be conscious of potential trade-offs and relations between sustainability factors. A study by Bond et al. (2014) on the long-term sustainability of evidence-based practices in community mental health agencies found that ongoing regular supervision and regular outcome and fidelity monitoring may perhaps promote long-term sustainability.

Several techniques have been developed to assess project performance and sustainability such as Life cycle analysis and the cost is used by Chirenje et al. (2013). Using the project life cycle assessment tool McConville and Mihelcic (2007) pointed that project sustainability can be indicated by transferred and exhibited ownership and increased involvement by the local and other stakeholders throughout the project life cycle and beyond. Other approaches that are synonymously used are Life cycle sustainability assessment and multi-criteria sustainability assessment (Nzila et al., 2012).

Ownership is a function of community involvement and commitment during project conceptualization, planning and designing, implementation, and after. While demystifying the dilemma facing sustainability Oina et al. (2015) says that sustainability is exhibited when there is continued reaping of dividend, participation, and ownership in the project. Projects are considered sustainable when the target community, without external support, can continue producing beneficial results provided that the problem subsists (Spaling et al., 2014). Chirenje et al. (2013) studied the determinants of project sustainability in Indonesia, and Oina et al. (2015) in the community-based project in Kenya respectively found and categorized them into technical (appropriateness of technology and technical skills); economic aspects (cost efficiency, cost recovery and operational requirements); social aspects (participatory decision making and resistance or acceptance); and organizational factors (administrative or management support and legal support).

Similarly, Myers et al. (2014) studied determinants of sustainability of development projects in Eastern Indonesia and found that failure of farmers' ownership resulted in unsustained project outcomes seven years after the funding had ended. From the above studies, it can be inferred that project sustainability is a function of a myriad of pre-requisites including capacity building, funding, community participation, management support, community responsiveness, partnerships and networking, government policy and standard, and environmental protection.

2.3. Project Exit Strategy Implementation and Sustainability of Donor-funded Livelihood Projects

Having a definite start and end is a feature that sets apart projects from other endeavors. This means that however long the project takes, it will surely come to an end. Every implementing agency desires to leave behind a target group assured of maintained project benefits. This requires

a properly designed and implemented exit strategy or sustainability plan, a plan that describes how the project intends to pull out its resources while making sure that attainment of the project goals is not endangered and that advancement towards these aims will continue. Having an exit strategy ensures maintained and further progress towards project impacts after an intervention has ended or withdrawal of external support. Three possible approaches that can be followed to exit a project depending on the programming environment as explained by PMBOK (2017) are: phasing down, phasing over, and phasing out. This current study considers capacity building, support service linkages, and monitoring and evaluation as fundamentals of a befitting project exit strategy.

2.3.1 Project Capacity building and sustainability of donor-funded livelihood projects

In project management capacity means the ability to achieve project aims. Capacity is defined as practices, skills, and systems that permit organizations or groups to function more effectively and sustainably (Minzner, 2014). As earlier seen comprehensively capacity refers to the ability to anticipate and influence change; make informed decisions; mobilize, absorb, and manage resources; and evaluate current activities to guide future actions. In any locality, there exists some level of capacity even without a project, but projects are initiated to enhance the capacity of the target group. This is referred to as capacity building. Honadle (2018) describes the capacity building as the process of increasing the ability of institutions and people to do the right thing.

Capacity building as an exit strategy can be described as enhancing the ability of the local community to make informed decisions and allocate resources to help the community build internal resources to carry on its developmental plans with a minimum of external assistance. It aims at innovativeness of specialized management issues such as resource mobilization and financial management among others. There are various approaches to capacity building as seen by various scholars and institutions. Approaches such as training, funding, technical assistance, and

technological backstopping (Karanja, 2014; Minzner et al 2014) have been studied. These aspects were found to positively influence the sustainability and performance of projects.

Training approach of capacity building

Pieces of training are given to the target nearby community with a point of guaranteeing great administration hones at the community level. This guarantees that communities have adequate assets and capacities to proceed with the venture indeed within the nonappearance of the outside bolster (Karanja, 2014). There is a positive relationship between committee preparation and maintainability of water frameworks in a ponder by Katz & Sara (2017) on rustic water frameworks in Uganda, Bolivia, Honduras, Benin, and Indonesia. Preparing in unused strategies or innovations has been moreover appeared to contribute to expanded yields amid extend execution which is trusted to proceed to do so post-implementation.

De Jager et al. (2011) showed how the introduction of Integrated Nutrient management by combining low and high-income input agriculture resulted in improved economic performance however with compromised sustainability than the use of the conventional ways. The provision of training in mental health and routine supervision of health workers at the local level in mental health was found by Jenkins et al. (2010) to be a sure way of improving the sustainability of health initiatives at the local level. A project should endeavor to offer capacity building to major groups. Chirenje, et al. (2013) emphasize that it is paramount to ensure that major categories like youth, women, the physically handicapped, traditional leaders and receive capacity building to attain their full participation in such matters as planning and budgeting.

Another aspect of capacity constructing through training is that people can gain immediately or in a roundabout way. Direct gain is where the target companies collect expertise and talents and apply

for their profits even as an oblique advantage is where neighbors benefit from getting to know others. A study by Cornish et al. (2015) in East India Plateau found that yield and returns on rice improved after farmers were trained in various aspects of production. Through capacity building, the farmers had learned and adopted new methods of farming.

Technological support capacity building

In improving the capacity of locals as an exit strategy, there is additionally the technical and technological element. This is about the creation of the latest methods (technology and practices) and the installation of the structures. This includes the undertaking infrastructure (or hardware). For an irrigation project, this involves the installation of irrigation systems, provision of inputs, gear, and system. The system enables the proper use of knowledge and capabilities received throughout training and other varieties of software program enhancement. For endured consciousness of the project benefits, the right functioning of the structures is paramount. The set-up of structures and provision of other required inputs, tools, and implements is one manner assisting the adopters include the use of the brand-new thoughts within the DOI theory by using (Durst & Poutanen, 2013; Georgia et al., 2010).

Various studies have explicitly demonstrated this linkage to the sustainability of projects. As a way to enhance the sustainability of the food security and livelihood project implemented in Tanzania's three districts of Kilosa, Kongwa, and Chamwino districts various local implementing agencies (Uluguru Mountains Agricultural Development Project [UMADEP], Women and Poverty Alleviation in Tanzania [WOPATA], INADES Formation Tanzania [IFTz] and Social and Economic Development Initiative of Tanzania [SEDIT]) installed the infrastructure (build chicken

stalls, and incubators among other support functions such as providing training, establishing cooperative associations and markets (Anguko, 2018).

There's a thin but tremendous contrast between technical assistance and training as shapes of capacity building. Technical help looks at both mechanical angles and the specific information within the particular field. For the innovative space, it alludes to the aptitudes and information required to utilize the recently presented advances or strategies. On the other side, the particular information alludes to the suitable information required to successfully and effectively perform capacities particular to the extended field. For business, ventures incorporate: delivery of crop and livestock husbandry services; how to plan critical archives such as the structure, commerce plans; bunches administration; budgetary and entrepreneurial management among others

Resource capacity approach of capacity building

In many cases, the benefits of investments continue for as long as funding lasts. This means there is an increased dependency on external support for most interventions. Interest in sustainability has sparked numerous studies on sustainability through literature is scare. Sustainability is defined as the capacity to function effectively over time with minimum external support or input (LaFond, 2013). This definition sparks the contemplation that there should be some form of support from the donor of implementing agency for closed-out projects. This definition comes in the aid of the poor starter communities who may need some form of financial support or substantial contribution as their local resource base may not be sufficient to support their established systems. But the support should be given in a reducing manner to leave behind a self-reliant and self-sustaining community.

As an exit technique donors and implementers got to realize the significance of the arrangement of satisfactory operational (capital for progressing exercises) particularly amid the execution stage. Preventions related to arranging, administration, and financing are donors to constrained and limited sustainability in most ventures. Sound planning and legitimate management abilities are required for continuity, survival, and development in ventures (LaFond, 2013).

2.3.2. Project Support linkage support and sustainability of donor-funded livelihood projects

Support services are basic to the livelihood projects actualized within the destitute rural setups. These services are administered by undertaking pivotal activities including the target populace and the benefit holders. Davis (2004) found a few cases of micro-credit and micro-enterprise advancement activities in Latin America which had clear impacts on country benefit exercises. This, therefore, means that since continued production is a sure indication of the sustainable project there is a need to improve linkages between the on-the-site enabling activities and support service provision such as input supply and markets.

Access to Extension services

Extension refers to the provision of updated information, advisory, and other current services to help individuals or groups best utilize available resources (Gido et al., 2015). The knowledge acquired through this process enables individuals to make rational decisions concerning the use of resources. A well-functioning and efficient extension service system improves production as well as productivity. Through the extension sessions, the farmers get information (relating to cropping and pricing patterns, seeds and livestock varieties, crop management, and marks) that enable them to optimize limited local resource utilization. Extension service provision is most effective and efficient with the presence of new technologies or operational systems and skills acquired through

capacity building initiatives such as exchange visits, pieces of training, field days, seminars, and exposure fora (Ouma et al., 2018). It is paramount to consider the nature of extension services, approaches used during its delivery, and challenges faced during that process such as inadequate funding and understaffing. The role of each party is also something that should be given equivalent consideration.

Muyanga and Jayne (2016) conducted a study in 16 districts (what is now known as sub-counties) in Kenya on practices and policy lessons on agricultural extension services and found that remote areas and poor farmers do not get better services; public funds to support the delivery of these services are constrained. They recommended that since these services are provided by both the private and public sector, the two major providers should look into devising a mix that would ensure alternative sustainable extension services that are characterized by stakeholder participation, responsive to farmers' needs, cost-effective, broad-based in-service delivery, and accountable. Public extension service provision is where the government line ministry (ministry of agriculture, livestock, and fisheries) takes the lead role. The other form of provision is where the services are delivered by the cooperatives, government parastatals-such as Kenya Agricultural, and Livestock research organization (KALRO)-and out-grower companies (Muhammad, 2018).

The private extension services providers include non-governmental organizations; community-based organizations; private companies such as agrochemical companies; and faith-based organizations. These categories of extension service providers have different strengths and weaknesses and different cost implications. The government has had some initiatives and programs to support the extension service provision to farmers (Muyanga & Jayne, 2016) such as the National Agriculture and Livestock Extension Programme (NALEP) by the government of Kenya in partnership with the Swedish International Development Agency (SIDA).

The Kenyan government has been executing the National Agricultural Extension Policy (NAEP) which advocates for demand-driven extension services (Gido et al., 2015). NAEP was designed to integrate both private and public service providers in solving the systematic and complicated issues faced by the rural farming communities.

Linkages to credit services

Linkages to financial services are another aspect of support to the farmers. Farmers need financing especially after the donor has withdrawn. Those linked to markets can easily access credit from financial institutions, families, and friends. Linking farmers to saving groups also helps in enhancing farmers' financial capability. Mottaleb et al. (2014) say that it is meaningful to understand the factors that affect farmers' decision to sell as a road to strengthen market linkages. Providing basic education (through training) and infrastructure (such as irrigation systems) strengthen market linkages.

One of the challenges that agriculture-oriented projects are day by day struggling with is climate change. Climate change threatens the welfare of millions of people's food security, health, nutrition, and management of natural resources. The implementers of livelihoods projects are incorporating smart initiatives cognizant of climate change aspects in their training and operations as efforts to implement best agricultural practices. These measures can enhance farmers' adaptation to climate change. Juana et al. (2013) found out in their study that access to extension services and credit facilities were among the major factors in embracing climate change adaptation measures among the sub-Saharan African farmers. Access to affordable credit boosts farmer's financial stamina and capacity to meet transaction costs associated with production.

Market linkages

Based on the triple-bottom-line of sustainable development, economic sustainability is one of the three pillars of this mysterious domain. Most of the livelihood projects that aim at improving the economic status of its target population bank on the idea that some of the yields will be consumed through markets. These can only work with the presence of the markets. The market is defined as any structure that allows sellers and buyers to exchange any kind of services, goods, and information. Markets are also referred to as networks or institutions or social arenas that allow firms, customers, suppliers, and government to interact in exchange for goods and services (Dunne et al., 2013). Specific to farmers this would imply a structure that would allow farmers to exchange their farm products and information.

Farmers have different needs that are met by different markets. According to Ferris et al, (2014), there are three major categories of market depending on the formality, structure, and complexities. They include informal, formal, and structured public markets. Informal markets are less regulated and normally they are not taxed. On the other side, the formal markets are relatively highly regulated and they operate with standards of measures informing commodity prices. Structured public markets are complex in that standardized contractual arrangements. By the virtue of the lower capacity of farmers in rural set-ups where most livelihood and food security projects are implemented, the smallholder farmers prefer the informal markets as they offer great income opportunities. On the darker side of informal markets, they are at high risk of cartels. Formal markets can be accessed by farmers who are organized in such groups as community-based organizations or cooperatives.

Market linkages in this case are very vital to achieving economic sustainability. The purpose in linking farmers to markets is to invest in approaches that enable farmers to gain access in to markets that correspond with their investment, production, capacities, and risk profiles; and to link the most susceptible farmers with the most vibrant markets. These linkages offer greater income security, more support services, and social services. Extension service provision plays a very critical role in establishing these linkages. It is on the shoulders of the extension officers to be flexible and be aware of the different needs of the farmers. The farmers are on the other side pressured to up their game and move from subsistence production to agribusiness production. In as much as these smallholder farmers strive to excel, they are often faced with a myriad of challenges in accessing the markets. The hurdles are related to location and distances, access to infrastructure such as roads, agricultural services, access to production technologies, marketing skills, organization of marketing communities (Ferris et al., 2014).

2.3.3 Project Monitoring and evaluation project exit strategy and sustainability donor-funded livelihood projects

Long term success of a project is equivalent to project sustainability. Monitoring and evaluation are among the critical success factors (CSF) of project sustainability (PMBOK, 2001) as found by various scholars such as Kamau and Mohamed (2014); Ochieng and Tubey (2012). Most projects are funded on the basis that they portray a clear outline of how their interventions will be monitored and evaluated. M&E process enables the project team and stakeholders to make insights on the effectiveness in achieving the goals of exit strategy and allow for adjustments to the plan (Stevens & Mody, 2013). Bennett, et al. (2015) avers that there is a need to determine how M&E of exit strategies influences the sustainability of projects or programs. According to Porter and Goldman (2013) M&E helps to understand whether plans (in this respect the sustainability plan or exit

strategy plans) are implemented or followed as planned and whether there are any differences, lessons learned from the activities, and how to strengthen the implementation. M&E can offer early warning on the problems that if addressed while reassuring the stakeholders that the benefits of the projects have been sustained.

An ex-post evaluation is required to evaluate the effectiveness of an exit strategy. This evaluation or assessment is carried out after some fixed time (1-2 years) after the project closes out to establish whether sustainability was achieved. This should be followed by other longer-term evaluations. These evaluations provide insights on the role of the exit strategy in the project sustainability; and success or failure factors. And give recommendations for a more effective and efficient exit strategy for the future. Kamau and Mohamed (2014) concluded in their critical literature review that well-supported monitoring and evaluation by the management influences project sustainability. Papke-Shields et al. (2010); and Ochieng and Tubey (2012) also observed that constant project progress monitoring enhanced increased the probability of achieving project success. In their regression analysis on the critical factors of project success, Ika et al. (2012) found the monitoring and evaluation were CSF among training, coordination, design, and institutional environment.

Revisiting the meaning of M&E, monitoring is a management function that focuses on tracking progress whether or not what is intended in the plan is being done or achieved. Monitoring helps to know what evaluative questions to ask (Porter & Goldman, 2013). Evaluation is the systematic, logical and objective assessment of a completed or an ongoing project, program, or policy, usually including its design, implementation, and results (Kimweli, 2013) and understanding anticipated

and unanticipated change. Evaluation helps find out the relevance, appropriateness, and fulfillment of objectives; efficiency, effectiveness, impact, and sustainability of projects. There is a need to balance between monitoring and evaluation as different aspects of the same. Porter & Goldman (2013) points out that the demand for M&E is occasioned by the need to use evidence to make decisions and this needs a match between the capacity to supply (monitoring) and capacity to demand (evaluation). According to them (Porter & Goldman, 2013) there is high supply over demand when monitoring dominates or masquerades evaluation.

Undertaking unfailing monitoring and evaluation exercise affixes value to the overall efficiency of implementation of the exit strategies by offering remedial action to the variations from the expected results (Kamau & Mohamed, 2014). Robust M&E needs strengthened monitoring and evaluation team (comprising of the key stakeholders) which closely relates to the frequency of M&E and the extent to which M&E can detect variances in the expected results.

Participation in M&E

Understanding M&E practices is highly emphasized in project management especially in donor-funded projects. Since project teams do not work in isolation (but rather work considering the different needs and expectations of stakeholders) there is a need to ensure uphold participatory monitoring and evaluation. There is an increased emphasis on the participatory monitoring and evaluation by the funding agencies; and demand for accountability and inclusion by the target community [beneficiaries or the primary stakeholders] (Kimweli, 2013). As such, there is a shared need for a better understanding of M&E practices, objectives, and procedures to contribute to the sustainability of projects.

The productivity of the M&E teams can be enhanced with capacitating in terms of financial stability, M&E skills, frequency of monitoring, stakeholder representation, use of technology, and team building and work (Gwado, 2012). An ideal monitoring team has good stakeholders' representation and embraces teamwork. In support of this notion, Magondu (2013) found that there is a clear link between relevant skills, resources, and capacities (in terms of numbers, infrastructure, and systems); and effectiveness in M&E skills are needed to know the rules of the game. Further, a case study of the donor-funded food security projects in Kibwezi by Kimweli (2013) revealed that such projects suffered poor performance (failure) and absence of sustainability because of the failure to involve communities in the process of monitoring and evaluation. This hindrance to community participation seems to be protected by such legislation as the official secret act that sometimes bars the community involvement in the monitoring and evaluation activities and open and transparent information sharing by the constituent development fund committee (CDFC) and project management committee (PMC). The projects were later identified by CDF committees and not the community since the community felt that those projects were established, implemented, and monitored by external support. These findings revealed that the community has less involvement in M&E activities. This discloses that participatory monitoring and evaluation throughout the project cycle contributes to the success and sustainability of projects.

However, it needs to be complemented and supplemented with other project management skills. Involving stakeholders in monitoring and evaluation allows for the project team to get feedback on the effectiveness, efficiency, and appropriateness of initiatives at every step along the project cycle. This aims at determining relevance, appropriateness, and fulfillment of objectives. For the

sole purpose of a project exit strategy, to describe how the program intends to pull out its resources (or phase out or phase down or phase over) while ensuring that the attainment of the program or project goals is not endangered and that progress towards these goals will continue (Gardner, Greenblott & Joubert 2005; and Roger & Macias, 2004), participatory M&E enables the project team and stakeholders make insights on the effectiveness in achieving the goals of exit strategy and allow for adjustments to the plan (Stevens & Mody, 2013). Organizing many agencies to work jointly can reduce problems with decision-makers chasing their own scarcely defined interests and contribute more to sustainable management (Hjorth & Madani, 2014).

Tools used in M&E

To satisfy diverse stakeholder needs, relief agencies are obligated to observe stringent project reporting procedures. Project monitoring and evaluation information systems (PMEIS) are a prerequisite for most funding with donors emphasizing the use of well-established systems for project appraisal and monitoring and evaluation. Putting in place a PMEIS enables the stakeholders to get information about the project. PMEIS (a management information system) is designed to mitigate or alleviate poor project performance (and or sustainability), promote learning and accountability. When decision-makers are required to use evidence to aid in decision making there is demand for an M&E system.

Various approaches or tools have been designed and employed in achieving this. Logframe framework approach (LFA), firstly conceived in 1969 by Practical Concepts Incorporated for the United States Agency for International Development (USAID) to support project design and appraisal, has been used widely to represent project strategies (Bene et al., 2015). A logical framework is a tabular matrix that defines the project hierarchical objectives, targets, and means

of verifying results, responsibilities, risks, and assumptions. The logical framework has a vertical and horizontal axis. The vertical axis represents the hierarchical movement of objectives based on the cause-and-effect logic (that is, how one results into the other) and the assumptions and preconditions; while the horizontal axis represents how results can be verified. The 'IF-AND-THEN' relationships can depict how lower-level objectives contribute to subsequent higher objectives. For instance, IF inputs are present, AND the input-activity assumptions hold, THEN the activities can be undertaken. Similarly, IF outcomes are present, AND the outcome-goal assumptions hold, THEN goals will be realized.

Timing and frequency

Timing and frequency of data collection are key aspects of monitoring and evaluation (Bene et al., 2015). Based on timing, monitoring as it is defined is supposed to be objective, continuous, and progressive to inform how outputs are being achieved and take place during the implementation phase while evaluation should be periodical (Porter & Goldman, 2013). Marshall and Suarez (2014) defined M&E broadly as activities (of data collection, descriptive reporting, compliance) used to track and assess performance and meet the diverse needs of different stakeholders.

This aspect of monitoring frequency a case study by Ochieng and Tubey (2012) on CDF projects revealed that frequent monitoring is required for optimal management to be observed. The timing and frequency of M&E depend on the nature and type of projects or intervention. For instance, livelihood projects and resilience projects require high-frequency monitoring (quarterly based). The timing is also dependent on the phases along the project cycle. Based on the timing evaluation is classified as ex-ante evaluation, formative evaluation, summative evaluation, and ex-post evaluation (Marshall & Suarez, 2014).

Ex-ante evaluations are those that take place before the project starts while formative evaluations are those that are undertaken at implementation and rely on feedback from project participants' opinions. Summative evaluations take place at the end of the project intending to measure the outcome or impact of an intervention. Ex-post evaluations are evaluations that are undertaken sometime after the project has been closed. Ex-post evaluation is required to evaluate the effectiveness of an exit strategy sometime after project exit to establish whether sustainability was achieved or whether the strategies put in place are still maintained for the long-term benefit to the project client. This study will concentrate on an ex-post evaluation (aiming at finding out whether the planned or implemented exit strategies were maintained or not) since the project was closed.

2.4 Stakeholder management and sustainability of donor-funded livelihood projects

In project management, stakeholder management refers to managing relationships and meeting the expectations of the interest parties in a project (Bourne, 2010). The notion of stakeholder management is given great consideration because human beings are social animals. Stakeholder management is a so complex problem that no identified formula can be used to solve it as each stakeholder is unique. The ability of an organization (in this case a project) to continue functioning over an extended period is dependent upon the sustainability of its stakeholder relationships. Present and future stakeholder relationships should be embraced as the guiding principle for project decision-making and a pillar to project exit upon the withdrawal of external support. The benefits of stakeholder management as provided for by stakeholder management scholars are a better understanding of the project environment and risks; a clear understanding of project goals and related cost and time; building long term collaborative relationships; better understanding stakeholder interests; sharing knowledge, skills, and experiences; access to wealthy information

and building trust. For livelihoods and food security projects, the key parties would include the implementing agency, the funding agency (donor), the target group, other organizations in the same line of discipline, government departments, media, the general public, special interest groups and service providers.

Tapping into indigenous knowledge is beneficial to the community-based donor-funded project as the local people understand their problems better than any external entity. Stakeholder relationship endeavors to ensure that all stakeholders are engaged in all the phases along the project cycle. Though managing stakeholder relationships is emphasized, Horisch et al. (2014) in their conceptual study they noted that challenges faced during managing stakeholder relationships aimed at sustainability were related to reinforcing the specific sustainability interests of different stakeholders, establishing mutual sustainability interests as regards these specific interest, and empowering stakeholders to play in as mediators for sustainable development.

An exploratory study on construction projects by Bal et al. (2013) revealed that the stakeholder engagement or management process involves: identification; matching stakeholder groups to different sustainability-related targets; prioritization; managing; measuring performance, and putting targets into action. Some procedures have been discussed by Bourne (2010) as critical to be followed before and during engaging the stakeholders that comprise of five steps: identification (enlisting the stakeholders, their mutuality, and influence); prioritization (based on power, proximity to project activities, urgency in terms of the information needs and project outcomes); mapping (developing a list based on the characteristics); engagement (upholding effective communication) and monitoring and evaluation of the stakeholder engagement. The results further suggest that knowing the different stakeholder sustainability agendas and gauging their performance, and employing key performance indicators are vital stages for any stakeholder

management process to realize sustainability-related goals. Yang and Shen (2014) in the findings of a comparative study in Hong Kong and Australian construction projects in which they came up with a framework for stakeholder management that included preconditioning (which relates to information input to stakeholders); stakeholder assessment; stakeholder identification; decision making and continuous support. The whole process of identifying, matching with targets, prioritizing is also referred to as stakeholder analysis. The analysis is based on the power, attitude towards the project, and the interest of the stakeholder (Yang & Shen, 2014). Whether with a positive or negative attitude toward the project, a stakeholder with high interest and high power should be prioritized. The most beneficial would be a stakeholder with high power, high interest, and a positive attitude. On the contrary, the most dangerous stakeholder would be one with high power, high interest, and a negative attitude. Power refers to the ability to control resources, create support and dependencies. This analysis needs to be done in a way to make sure that all parties are actively involved along with all the phases of the project life cycle.

Victorian Government Department of Sustainability and Environment (2005) gives the different levels of stakeholder management (though mentioned as stakeholder engagement) as involvement, collaboration, informing, consultation, and empowering. Involvement is working directly with stakeholders towards achieving goals. Collaboration is establishing partnerships with other stakeholders while informing is simply communication. The consultation relates to obtaining feedback from various stakeholders especially in decision-making given alternatives. Empowering is giving the stakeholders power to make their own decisions. The process flow of stakeholder management can also be as: planning, understanding, internal preparation and alignment, building trust, consultation, responding and implementation, monitoring, and evaluation. Planning concerns

setting out objectives and strategies together, understanding involves getting to know the urgency, legitimacy, and power of different stakeholders. In monitoring and evaluation, the progress of engagement is assessed and documented. The synthesized information is then fed back to the stakeholders as agreed during stakeholder sessions.

Involving players help identify and solve problems in time. This means that involvement should start as earliest as possible before asking any key decisions. Involving stakeholders in the early stages help better manage expectations, unravels the hidden agenda by other stakeholders, and establishes priorities (Yang & She, 2014). Excluding key stakeholders from partaking in key project decisions is at all times a losing strategy (Bal et al., 2013). Stakeholder theory makes it possible for managers to understand and manage stakeholders strategically for the long-term survival of projects.

Sustainability differentiates successful projects from failed projects after the external support is withdrawn. Sustainability and performance of projects can be synonymous in the context of time after the withdrawal of funding. Nyandika and Ngugi (2014) and Bal et al. (2013) studied the influence of stakeholder participation on the performance of road projects in Kenya and found that there was a positive relationship between stakeholder involvement and project performance. Project failure may result when stakeholders are unwilling to support the goals of a given project. This study however adopted knowledge sharing, collaboration, and communication.

Knowledge sharing culture

Knowledge is an asset that many organizations are exploring its management (creation, storage, dissemination, utilization, and retrieval). It is defined as skills and experiences gained over time. It encompasses values, experience, expert insights, and contextual information that are derived

through working, interacting, and reasoning with information. There are four types of knowledge types, that is, external knowledge (competitive knowledge); structured internal knowledge found in documents such as reports; informal internal knowledge as lessons learned; and tacit knowledge (knowledge found in the minds of people). Knowledge is categorized into four major groups: the know-what, know-where, know-how, and know-why. The know-what is the knowledge of the task itself (what should be done) while the know-where is the knowledge of who possesses the information. The 'know-how' is the knowledge of how to do things whereas the know-why is the background information of why things are done.

Possession of large volumes of knowledge is considered responsible for much transformation and survival of performing organizations and projects. Companies such as Sematech and Teltech are living examples. Though regarded as one of the means to achieving project goals, knowledge management has been identified as one of the challenged knowledge areas of project management. Knowledge sharing is one of the major components of knowledge management. It refers to the process of capturing, transferring, synthesizing, and creating new knowledge. It occurs in form of working together through discussions especially during problem-solving. In knowledge sharing there exist two parties, that is, the contributor and the receiver. The contributor is the party with knowledge while the receiver is the party that utilizes the knowledge. Two complementary strategies of knowledge sharing are revealed in a case study on knowledge sharing strategies in Volvo automotive sector by Johansson et al. (2013). They include codification and personalization. In codification, knowledge is exchanged through written documents and systems while in personalization knowledge is shared through interactions.

The culture of knowledge sharing contributes to effectiveness among stakeholders and at the same time contributes to trust and the establishment of collaborative partnerships. Trust is the willingness of one stakeholder to relate with the other stakeholder in the belief that the other stakeholder's actions are beneficial. The absence of effective information sharing consequently led to unsuccessful collaborations. Knowledge sharing promotes project social capital, innovativeness, creativity thereby enhancing performance and sustainability.

Much knowledge is shared between members (stakeholders) who have higher trust and dependency which are equally influenced by communication frequency. A cross-sectional survey by Park and Lee (2013) showed that trust and knowledge sharing were strongly correlated. Trust contributes to open and effective communication among stakeholders. Trust thus facilitates a collaborative environment. Trust is likely to be built with the open and transparent exchange of knowledge; frequent interactions and socializing among stakeholders.

Another aspect of knowledge sharing is senior management support. Strong management support is required for the success of knowledge sharing. The management can support in terms of sending messages of the importance of knowledge and learning; funding for a conducive environment for sharing knowledge; motivation; and clarifying what is the best knowledge critical for a project (organization). Through knowledge-sharing experiences are shared. This provides an opportunity for people to learn and ultimately be able to avoid past mistakes.

Knowledge sharing often faces the challenge of identifying the custodian of knowledge at the right time when such information is direly required and transferring it as well as culture (shared practices, values, and beliefs of different stakeholder groups); process (generation, storing,

dissemination and retrieval); and technology (information technology tools). However, studies by Killen and Kjaer (2012); and Killen and Hunt (2010) pointed out that knowledge sharing faces an impediment of transfer of such knowledge with regards to effective approaches to knowledge sharing and transparency and regularly incomplete post-implementation reviews. Successful knowledge management is signified by growth in the volume of knowledge including lessons learned; access and usage of such knowledge; survival without external support; growth in resource base; senior management support; the presence of sociable knowledge sharing culture; and presence of several channels for its transfer; increased communication frequency; and trust (Park & Lee, 2013).

Stakeholder Collaboration

Collaboration a critical aspect of stakeholder management. One of the challenges projects face is ensuring that stakeholders are engaged in a way to enhance collaboration. In project management, collaborative arrangements and partnerships are established between key players each playing supportive and complementary roles and synergies or combined efforts geared towards achieving project goals. Scandelius and Cohen (2016) pointed out that care should be taken to manage stakeholder relationships to make sure that collaborated efforts are not endangered by the competing and conflicting tensions that could exist among stakeholders. Bourne (2010) added that having stakeholders on board for collaboration needs steady and relentless vigilance in the ever-changing landscape of relationships with unpredictably fluctuating interests, influence, and support.

The execution and management of sustainability or an exit or transition strategy can be hindered by failing coopetition between the project organization and its stakeholders. Scandelius and Cohen (2016) referred to 'coopetition', as a situation where there is simultaneous competition and cooperation. This coopetition can be well managed by management commitment, developing relationships, and managing communication. Balanced two-way communication strategies are required to support collaboration. In this case, the project team and its stakeholders are seen as equal partners. Collaboration among stakeholders is a vital aspect in ensuring the performance and sustainability of projects in diverse contexts, fields, and disciplines. There are two types of stakeholder collaborations: informal and formal. Informal collaborations include interactions related to information exchange or communication while formal collaborations include contractual relationships.

Stakeholder collaborations signify an extensively accepted approach to solving issues relating to lack of understanding and few shared common goals among stakeholders (Waligon et al., 2013). Collaboration encourages the active participation of appropriate stakeholders to bolster the relationships. A comparative case study on Heathrow Terminal 5, one of the construction projects regarded as successful by the British Airways project by Bourne (2014) found that engaging and informing stakeholders on every step of the project increases the chances of success. On the other side when stakeholders are not engaged and informed, success becomes obscured. Collaboration of MoH, CHWs, Nursing council of Kenya, Kenya Clinical Officer Council, WHO Collaborating Centre, and Kenya Psychiatric Association (KPA) was found by Jenkins et al. (2010) to have contributed to the efforts to the sustainability of mental health projects financed by the Department for International Development (DFID) from 2001 to 2004.

Anguko (2018) gave an account of a collaborative arrangement between the donor, local partners, institution for higher learning, and other partners in implementing an integrated livelihood (sunflower and chicken rearing) project in Kilosa, Kongwa, and Chamwino districts in Tanzania. In this account, Oxfam GB collaborated with local partners (Uluguru Mountains Agricultural Development Project [UMADEP], INADES Formation Tanzania [IFTz], Women and Poverty Alleviation in Tanzania [WOPATA], and Social and Economic Development Initiative of Tanzania [SEDIT]), Ministry of agriculture, and the Sokoine University of Agriculture. Each of the parties played its role in the project gearing towards sustainability. Oxfam GB provided the funding while the three local institutions installed the infrastructure (build chicken stalls, and incubators), trained the TOTs, established cooperative associations, and established markets. The ministry of agriculture and the Sokoine University of Agriculture trained the farmers in crop and animal husbandry. This comparative quasi-experimental study by Anguko (2018) was aimed at determining the impact of the project on household income and food security and found that one year later the project's outcomes were still being experienced. However, one year might be little to conclude that the project was sustainable.

Stakeholder Communication

Communication referred to as informing is one of the five engagement levels it entails providing appropriate information to help stakeholders understand project progress, timeframes, risks, availability of resources, problems, and alternative solutions. Planned and clear communication (in terms of purpose and known level of effort) is regarded as an essential tool for maintaining robust relationships (Bourne, 2010) and maintaining proper stakeholder management (Yang & Shen, 2014). Occasionally confusion and ambiguity are prevalent among stakeholders about

project progress. This is because of lack of clarity and timeliness of the message, inappropriate and ineffective channels of communication.

For any project to have successful stakeholder management and accomplish sustainability objectives, well-managed communication is a requirement (Scandelius & Cohen, 2016). An effective communication plan according to Bourne (2010) should contain the mutuality aspect; categorization of stakeholder influence; stakeholder engagement profile (levels of support, receptiveness to the information, target engagement); and strategies for delivering the message. For the project team to ensure effective communication, it must consider the different levels of stakeholder power and influence; roles of different stakeholders; credibility of the message; relevance of the information; and format and content of the information. The purpose of communication may include raising the project profile, improving or soliciting support, maintaining credibility and relevance, and reducing stakeholder resistance.

However, the following barriers can impede effective communication: cultural differences; personal preferences of the information based on the different information need; environmental distractions such as noise, emotions, and lack of interest. Revisiting the Heathrow Terminal 5, a construction project by British Airways (Bourne, 2010) one stakeholder was more powerful, more demanding than others with expectations conflicting other stakeholder's expectations, and due to the aggressiveness in the timeframe, the project team operated with urgency believing that there was no time. Scandelius and Cohen (2016) call that type of arrangement of communication as corporate communication as the management function of communication between an organization (project) and its stakeholders whose aim is to maintain constructive relationships with its stakeholders.

Appropriate, integrated, wide, and enhanced systems need to be put in place to control; measure, and effectively assess the project efforts to respond to stakeholder issues and communicate project progress to the interested parties. Bourne (2010) emphasize that it is fundamental to provide the information that meets the different needs and expectation of different stakeholders. Sustainability Evaluation and Reporting System (SERS) can be used to monitor viewpoints on corporate performance. Other approaches are GRI sustainability reporting guidelines; balanced scorecard, sustainability integrated guideline for management, and sustainability reporting guidelines.

2.5 Theoretical framework

The Discovery Learning theory; Diffusion of Innovation (DOI) theory; and Theory of Stakeholder Management are explained.

2.5.1 Discovery theory of learning by Jerome S. Bruner

The theory of discovery learning attempts to guide, explain and prescribe how learning takes place, and as such it is helpful to ponder on their application to how different people along with the age, context, backgrounds lines during designing of capacity building strategies and programs. One of the major roles that project is leaving behind a community with the learned capacity to independently make decisions in solving their problems.

The community, before the project, depended on external aid such as relief food and any other form of aid. The coming in of various projects such as livelihood projects, the target population receives pieces of training as one approach to capacity building, aiming at refreshing the knowledge that people already have or imparting whole new knowledge and skills (Ndombi & Kisimbii, 2017) that can make them independent even after the external support is withdrawn. People acquire new knowledge and skills through learning.

Learning is relatively a permanent behavioral change that includes observable activity; intrinsic processes like thinking; emotions and attitudes. Discovery theory learning is an inquiry-based, cognitive, constructivist learning theory that occurs in problem-solving situations. The learner relies on the existing knowledge and experience to find out facts and relationships and new truths to be learned.

Learning has many definitions but from the various definitions, it is a process of modifying existing knowledge or acquiring new knowledge, skills, behaviors, values, or preferences (Pritchard, 2013). In this process, the learners actively create their knowledge founded on the things they have known in the past and know now (Chambers et al., 2013). Even in modern learning centers, students are being urged to make connections between what they are learning and what they have experienced in real life. Also called problem-based learning, 21st-century learning, and experiential learning, the theory was advanced by Bruner in 1960. The theory is popular in education where teaching is an exchange of knowledge from teacher to student in a school setting. This kind of learning is pegged on the following elements: structure of knowledge, curiosity, and uncertainty, sequencing, and motivation. This learning is an active one in which the learner is confronted with a problem and left to find solutions with or without guidance. Bruner refers to the presence of teacher's guidance as scaffolding and if done well the students become independent and develop motivation, resourcefulness, and initiatives to solve their problems (Chambers et al., 2013). This scaffolding may further go to the provision of materials – possibly providing practical apparatus to aid in coming up with the solution of problems (Pritchard, 2013). The distinguishing characteristics of successful scaffolding include purpose, clear direction, and expectation (McKenzie, 2012).

It becomes more meaningful learning since the learner makes use of his or her associations as a basis for understanding and there is deeper processing of information. Active learning is often very

motivating. Similar to the humanist approach (facilitation theory of learning) and andragogy the learner is intrinsically motivated to learn new things. As such the learning depends on the desire to meeting a hierarchy of needs. Following Maslow's hierarchy of needs, there are the three main categories of needs to be met: physiological, psychological, and intellectual needs. Bruner also recognized that learning takes place at any stage provided that the content is packaged in a manner to be understood. Adults equally learn though they are different from how children learn. Adult learning is effective when the process involves much seeing (observation) and participation. Learning requires active participation and reinforcement to lead to effective learning transfer. Effective learning is the learning that is lasting and can be used in new and diverse situations (Pritchard, 2013).

Constructivism view of learning is that the learner should learn and do something with the knowledge and skills acquired. That means it should be put into practice. It is noted by Pritchard (2013) that people learn differently and that different groups of people have their preferred mode of acquiring knowledge and skills, thus, learning style. The cognitive style of learning is one's distinctive style of learning activities and problem-solving. For instance, age-wise children and adults have different preferences. Adults prefer learning through observations [visual learners] and practical doing [kinaesthetic learners] while children prefer auditory learning. The enormous knowledge held by most adults (about 75%) is learned through seeing (Laird, 1985). Adults prefer seeing or practicing what they learn new in the desire to solving a problem.

As an experiential theory, discovery theory is a repetitive four-stage cycle going through abstract conceptualization, active experimentation, concrete, and reflective observation. In abstract conceptualization, the learner reviews his or her understanding while during active experimentation experiments are carried out using the new skills acquired. In the third phase of

concrete experience what is learned is put into practice. Finally, in the reflective observation stage, the outcome is objectively analyzed.

2.5.2. Diffusion of innovation theory by E. M. Rodgers

This is a social science theory that originated in communication. It was developed by E. M. Rodgers in 1962 as explained by Doyle et al. (2014) in an attempt to expand and modify Lewin's theory of change (Mitchell, 2013). The theory explains how a new idea or skill or technology gains thrust and spreads through a given community or social system over time.

The relevance of this theory to this study is that when a project is implemented in a community in often there are new ideas (technologies) that are brought into the community. For instance, for a livelihood project; new farming methods, new marketing approaches, and new technologies and systems are introduced. It takes time for such new ideas to be accepted, stick, and diffused. The ideas are accepted first by a few individuals then later expected to cascade to the rest of the members. The ideas are expected (perceived value) to improve the lives of the target community during the project life and after closure. Thus reinforcement (maintenance) of the use of the idea is critical for sustained benefits and it is not inevitable that behaviors will fade or that as years go by people will revert to earlier ones. As earlier seen it is applied too in agricultural extension (a strategy to linking farmers to critical support service) aimed at introducing and cementing an idea or a new practice.

The first objective of this study looked at capacity-building strategies which involved training, acquisition of new knowledge, ideas, the introduction of new technologies. For these ideas to be sustained, the target community needed linkage to support services such as access to extension services, access to credit, and linkages to markets. These support services were explained in the second objective of this study.

Jwaifell and Gasaymeh (2013) defined the theory as the process that conveys an innovation or a novelty through specific avenues amongst the members of a social network or system over time. Innovation is an idea, object, or practice perceived to be new while diffusion is the process by which this innovation is disseminated within the social system, accepted or rejected.

Durst & Poutanen (2013) defined innovation as a new idea, improvement, a solution adopted and implemented and transferred into a useful outcome. The social systems relate to norms of diffusion; the role of change agents and opinion leaders; the type of innovation; and innovation-decision and consequences. Innovation diffusion is synonymously used as knowledge dissemination and use or knowledge translation. There are two ends to innovation: those who produce; and those who utilize the innovation. Durst and Poutanen (2013) refer to this set of organizations or people as innovation communities. People adopt new ideas or behavior resulting in doing something different from what they previously used to do. The process of diffusion involves gathering information regarding the new idea or skill and consider its contribution, its effectiveness, and time needed to be applied or assimilated into what is already known by the potential adopter.

Adoption of the new idea or skill does not happen simultaneously but different people in the social system do so at different times or some are quicker to adoption than others as they possess different features that enable them to do so. Nyandika and Ngugi (2014) also agree by asserting that different persons have dissimilar degrees of willingness and capabilities to adopt innovations, or new ideas or change. Ward (2013) noted that individual adoption decisions or organizational decisions to adopt are complicated and thus it is paramount to examine their different features that lead to

rejection or acceptance and adoption of the new ideas and technologies. Adoption and acceptance have been used interchangeably (Kiwanuka, 2015) but they are different. Adoption can be considered as being aware, embracing, and using new ideas or technology fully. Acceptance is an attitude towards a new idea or technology. Adoption is the use of technology or innovation while acceptance is the continuous use of the technology or innovation. It is critical to understand these different features [of target population] when planning to promote a new idea, behavior, or skill.

Adopters can be grouped into five different adopter categories: the innovators, the early adopters, the early majority, the late majority, and the laggards (Jwaifell & Gasaymeh, 2013). This categorization exhibits approximately normal distribution (Nyandika & Ngugi, 2014) with the early majority taking the highest score while innovators and laggards taking the tail area. The speed of spread of an innovation depends on the relative advantage, trialability, compatibility, complexity, observability of results and simplicity, image, vulnerability, and trust of the idea itself (Owolabi & Mat, 2013). Compatibility is the consistency of the idea with the values, beliefs, and needs of the adopter. Complexity is associated with the risk attached to understanding and using new ideas. Observability is the tangibility of results; image is the extent to which the idea/innovation can be seen contributing to the improvement of an adopter's rank; while trialability is the extent to which an innovation can be tried before committing resources. Further the theories of planned behavior and reasoned action as explained by Owolabi and Mat (2013) outline that other factors of adoption are behavioral intention to act, attitudes (feelings) towards an outcome, subjective norm influencing the intention to perform, and perceived behavioral control that relates to peoples capacity (skills, resources, and opportunities). These attributes were found to be true

with a study by Jwaifell and Gasaymeh (2013) while studying the adoption of interactive whiteboards in schools in Jordan.

Different scholars (proponents of DOI) have presented adoption strategies differently. Nine steps fused into three phases as awareness, interest, and expectation (attitude phase); trial, adoption, and implementation (adoption phase); and decision, experience, and end of use (acceptance phase). It is, in addition, determined that one could pass from attitude to acceptance but it is essential to bear in mind and monitor the adoption stage to enhance the chance of acceptance of a brand-new concept. Ward (2013) presented a five-stage adoption process going via knowledge, persuasion, decision, implementation, and confirmation. At the knowledge stage, there is gaining knowledge of the existence of the innovation; persuasion which refers to getting satisfied of the worth of the innovation; person, collective, or authority commitment to embody the innovation marks the decision stage. At the implementation level, the new concept or generation is put in use, and ultimately at confirmation eventual acceptance or rejection is made.

As explained by Doyle et al. (2014) an organization follows three main phases of adoption of an innovation which include: initiation, decision, and implementation. The initiation phase is marked with agenda-setting and matching in which mobilization for change is done after which the befitting solution is determined. The decision is reached then implementation follows. Implementation is marked with redefinition and clarification and incorporation of the innovation into the system. Effective adoption is reached when adopters are supported with resources, technology (or systems), technical skills, and incentives (George et al., 2010) by change agents (Mitchell, 2013).

The proponents of diffusion of innovation (DOI) have applied it in many fields embracing technology including nursing (Doyle, Garrett & Currie, 2014; George et al, 2010; and Ward, 2013), education (Jwaifell & Gasaymeh, 2013), religion (Olowabi & Mat, 2013) information technology, sociology, manufacturing (Kiwanuka, 2015). It is also widely applied in extension services in agriculture. Innovation diffusion theory is the underpinning for extension agriculture outreach methods (Stephenson, 2003). Stephenson predictably asserts that innovation will at first be adopted by a few innovative farmers and later spread to other farmers.

DOI has however been criticized by several scholars through their various studies with the theory. Ward (2013) criticized the theory that it fails to differentiate technological, environmental, and human factors which limits its applicability. On the other side, the theory has lower predictive nature, and further, it does not provide adequate constructs to deal with collective adoption behavior. Further, the theory does not foster a participatory approach as well it does not consider social support and one's resources for innovation. The theory fails to prescribe the cessation of negative behavior. Kiwanuka (2015) critiqued it as it does not show the link between attitude and acceptance and rejection and that acceptance of an innovation is linear yet in real life, it is not so. This weakness was complimented by the Unified Theory of Acceptance and Use of Technology (UTAUT).

2.5.3 Stakeholder management theory

This theory was developed by Freeman in 1984. It is one of the widely used theories in sustainability management. The emergence of the debate and deliberations on the theory of

stakeholder in the 1970s and 1980s was spurred by the lack of complexity in the dominant management theories during that time. The theory emphasizes the relationship between the organizations and stakeholders. In this theory, Freeman (2010) defines stakeholders as those groups and individuals who have the potential to affect or can be affected by the actions of an organization [project] or any individual or group who can affect or is affected by the achievement of an organization goal. He further argues that the theory of stakeholder can be constructively applied in sustainability management.

The theory was advanced by Donaldson & Preston (1995) and Horisch, Freeman & Schattegger (2014) who further categorized the theory into three different forms as the descriptive or empirical stakeholder theory, the instrumental stakeholder theory, and the normative stakeholder theory. According to Horisch, Freeman & Schattegger (2014), the descriptive theory describes stakeholder management and involves the identification of different stakeholders and their expectations. The instrumental theory describes the influence of stakeholders on the achievement goals, while normative theory describes the purpose of business and moral justification of the sustainability theory. The normative theory focuses on managing stakeholder relationships and not the manipulation or influence of stakeholder actions. This allows for the creation of value for stakeholders in the present without compromising the value in the longer term. The management of relationships is about treating stakeholders equally. This notion of equal treatment is criticized by such researchers as Gioia (1999); and Marcoux, (2000). They opined that stakeholders should be treated based on the circumstances and the focus should be on establishing mutual interests amid conflicting interests or concerns between these different stakeholders rather than banking on available trade-offs. But Jensen (2002) argues that trade-offs are inevitable and thus it might not be possible to have a systematic approach to overcome them. Freeman et al. (2010) and Horisch

et al. (2014) advanced it further by linking the three versions into one integrative sustainability theory.

The theory explains why special interest groups or actors use their appeared legitimate political access or arguments to pull to their ends for example the use of resources. Although he criticizes the theory, he brings in a new version of the theory and referred to it as 'Enlightened Stakeholder Theory' but furthers the stakeholder theory. His criticism of the theory is that stakeholder theory exhibits short-run interests and gives managers unfettered powers to do what they want. The managers are self-centered; pursue their interests; invest in their projects; are not accountable to the societies, and lack a principled criterion to evaluating their performance.

The 'Enlightened Stakeholder Theory' has principled but the objective criterion for assessing the performance of the managers thus managers become accountable. The major elements of the theory are: generating mutual interests between different stakeholders and tradeoffs (as tradeoffs do not solve many problems); and socioeconomic balance justification. Another aspect mention in the theory is the issue of communication. It is mentioned as the creation of awareness among different stakeholders.

In fostering sustainability, possible challenges that managers face would be affixing sustainability in the state of mind of all possibly identified stakeholders; and creating mutual sustainability interests between different stakeholders (Hörisch et al., 2014) as different stakeholders have different and conflicting interests and powers. The reasoning behind the inevitability to establish mutual interests is that people have the greatest power if they utilize it collectively. Hence sustainability challenges are solved relatively easily because of the collective powers. There is

potential in collective power as it can be utilized to integrate diverse interests. Horisch et al. (2014) developed a conceptual framework to foster mutual interest; strengthening sustainability mindset; and empowering the interest groups education (training, knowledge, and skills) and incentives (finances and awards) were illustrated as vital ingredients. This theory offers a structure for developing and executing wider strategic solutions (Starik & Kanashiro, 2013) and dealing with potential conflicts that may crop up when dealing with stakeholders; prevailing over tradeoffs, and implementing broad sustainability or strategic solutions. Stakeholder theory can be purposefully used in the context of sustainability management (Horisch et al, 2014) as it helps place sustainability management in a wider picture, hence, its relevance to this current study. Since stakeholder participation is one of the fundamentals of the project's long-term survival after the project closeout. Nyandika and Ngugi (2014) emphasized that stakeholder theory enables the management to learn, understand and strategically manage them.

As seen under the three versions of (descriptive, instrumental, and normative) stakeholder theory by Horisch, Freeman & Schattegger (2014) it has become imperative that project stakeholders and their expectations are jointly identified. While this is critical, the instrumental version lays open why influence, power, and interest play a role in efforts to meeting project objectives (including sustainability) through involvement, collaboration, and communication.

2.6 Conceptual Framework for the study

The conceptual framework illustrates the concepts upon which this study is based. It presents the independent, dependent, and moderating variables that guided this study to ensure that the researcher focuses on the objectives of the study.

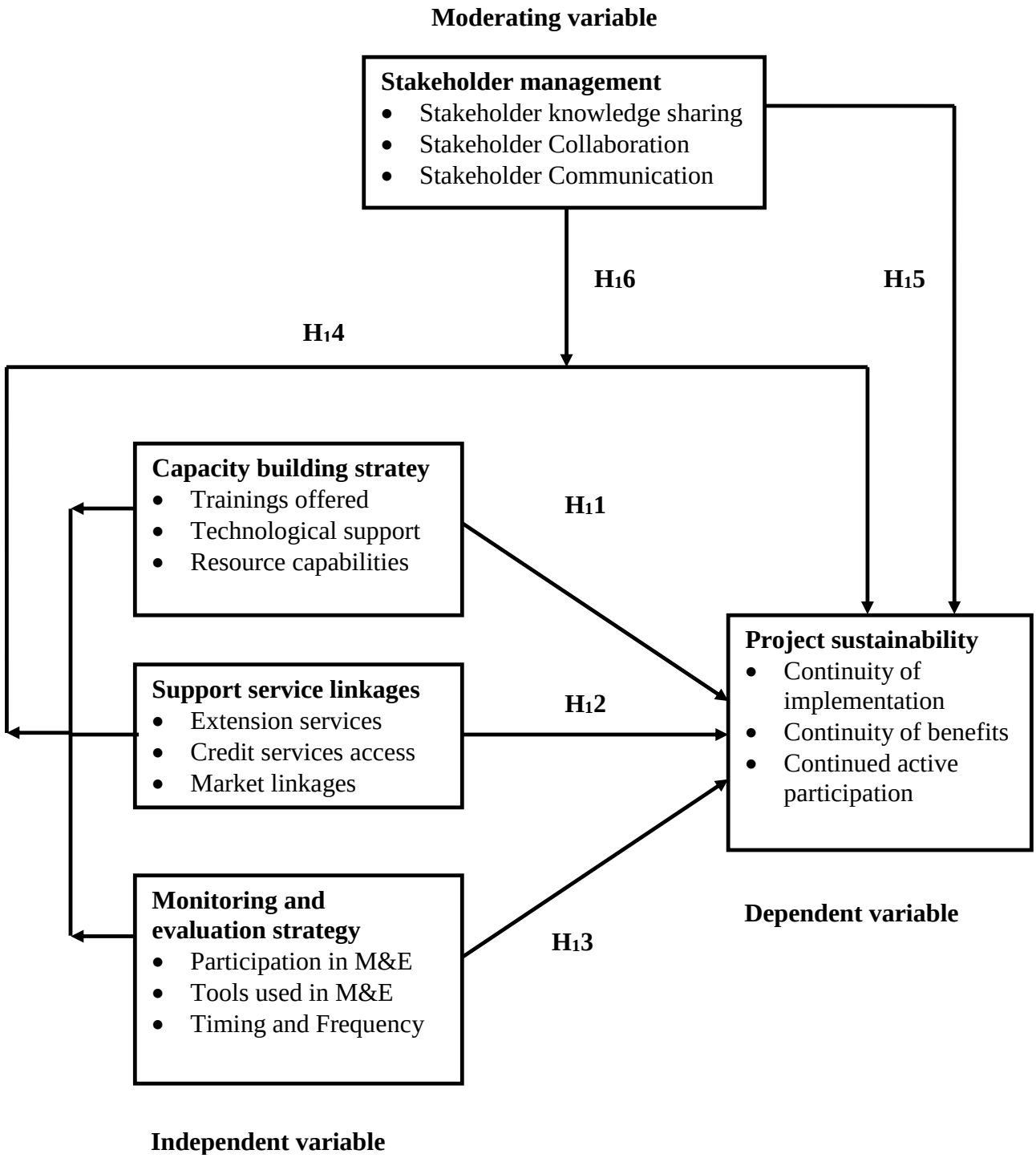

Figure 1: Conceptual framework on exit strategies implementation, stakeholder management, and project sustainability of donor-funded livelihood projects.

The above conceptual framework demonstrates the supposed relationship of concepts or variables that were investigated. The dependent variable was the sustainability of donor-funded livelihood projects. The indicators for this variable are continuity of the implementation of activities; continuation of project benefits to the target group and continuity of active participation of the target beneficiaries in the project. This is based on the various definitions of project sustainability and studies carried out by scholars such as Agol et al. (2014); Bond et al (2014); Kiron et al. (2012); Myers et al (2014); Oina et al. (2015; Spaling et al., (2014). The lifecycle and lifecycle cost used by Chirenje et al. (2013) indicated that ownership and community involvement are functions of project sustainability.

The independent variable was the project exit strategy implementation. In this study, the project exit strategy implementation was studied in terms of capacity building, support service linkages, and monitoring and evaluation. The indicators for capacity building were: training, technical backstopping, and technological assistance. They are informed by studies by Durst and Poutanen (2013); Georgia et al. (2010); Minzner (2014); and Karanja (2014); Roger & Macias (2014). The indicators for support service linkages were: access to extension services; access to credit service; and market linkages as informed by Juana et al (2013); Lalitha & Kumar (2016); Muyanga & Jayne (2016); Roger & Macias (2014). Monitoring and evaluation (M&E) of project exit strategies as indicated by Bennett, et al. (2015); Kamau & Mohamed (2014); Stevens & Mody (2013). M&E influences the sustainability of projects or programs. M&E was indicated by participation in M&E (Kimweli, 2013; Ochieng & Tubey (2012); tools used in M&E and timing and frequency of M&E (Bene et al., 2015; Ochieng' & Tubey, 2012).

The moderating variable in this current study was stakeholder management. This variable was studied in terms of involvement, collaboration, and communication levels of stakeholder

engagement. Studies Bal et al. (2013); Nyandika & Ngugi (2014) and Oina et al. (2015) suggest that there is a relationship between stakeholder involvement and project performance and sustainability while Jenkins et al. (2010) suggested that collaboration contributes to efforts of sustainability of projects.

2.7 Summary of literature review

This chapter covered the theoretical review, empirical review, conceptual framework of the study, and research gaps. In the theoretical Discovery Learning theory; Diffusion of Innovation (DOI) theory; Theory of Stakeholder Management were explained.

The stakeholder management theory was chosen because it is one of the widely used theories of sustainability. Its categorization into descriptive or empirical stakeholder theory, normative stakeholder theory, and instrumental stakeholder theory, clearly explains how different stakeholders and their diverse expectations are identified; how they influence the achievement of goals, and stakeholder relationships are managed. Nyandika and Ngugi (2014) emphasize that stakeholder theory enables the management to learn, understand and strategically manage them. Since projects are implemented in a diverse societal system, the complex systems theory explains the underpinnings of managing these societal systems. Discovery theory of learning guides, explain and prescribe how learning takes place and as such it is helpful to consider their practicality to how different people along with the age, context, backgrounds lines during designing of capacity building programs. Pritchard (2013) noted that people learn differently and that different groups of people have their preferred mode of acquiring knowledge and skills. The diffusion of innovation theory was adopted as it attempts to explain how a new idea or skill or technology gains thrust and spreads through a given community or social system over time. Nyandika and Ngugi (2014) also

agree by asserting that different persons have different degrees of willingness and capabilities to adopt innovations.

In the empirical framework; objectives, research methodologies, and findings of relevant study areas were examined. This included the literature on project exit strategy implementation, stakeholder management, and sustainability of projects. Capacity building was examined in terms of training, systems and technological assistance, technical backstopping support service linkages in terms of access to extension services, access to financial and credit services, and market linkages. Monitoring and evaluation were examined in terms of participation, tools used in M&E, timing, and frequency of M&E. Stakeholder management was studied in terms of stakeholder involvement, collaboration, and communication are also examined.

Table 2.1: Summary of Research gaps

Author	Study	Methodology	Findings	Gaps	The focus of this study
Project exit strategy implementation and sustainability of projects					
Karanja GM (2014)	Influence of management practices on the sustainability of youth income-generating projects in Kangema District, Murang'a County, Kenya	A descriptive survey of 13 youth groups through stratified sampling employing 2 FGDs of 13 each and 1 KII	Appropriate training, effective monitoring and evaluation, sound financial management, leadership, and influence the sustainability of the projects	The study failed to recognize stakeholder management as a moderating variable on sustainability. A small sample size (57 out of 630) would influence the internal validity and generalizability of the result. Post-implementation was not studied to ascertain sustainability. Not clear whether the project was still receiving funds or not.	The moderating influence of stakeholder management on the project exit strategy implementation on the sustainability of projects. The study further focused on projects whose funding ceased. The study also increased the sample size
Martens & Carvalho, (2017)	Key factors of sustainability in project management context: A survey exploring the project managers' perspective	A systematic literature review fusing biblio-metric and content analysis and exploratory factor analysis and survey-based research using mailed closed-ended questionnaires. 143 out of 1050 (13.6% Response Rate). Descriptive statistics and exploratory factor	Stakeholders Management, Resources Saving Sustainable Innovation Business Model, Economic and Competitive Advantage, and Environmental Policies are determinants for	In as much as several recipes for the project, sustainability has been identified, the study fails to examine the capacity building, support service linkages, and monitoring and evaluation of the sustainability. Only project management professionals from Brazilian companies	Capacity building, support service linkages, and monitoring and evaluation of the sustainability Focus on the target group in Kilifi with the inclusion of the KII.

		analysis with SPSS was employed	project sustainability	were selected for data collection	
Bond et al (2014)	Long-term sustainability of evidence-based practices in community mental health agencies	Telephone interviews with program leaders. 48 out of 49 were studied. Projects ending in 2 years and with 6 years after implementation were studied	Adequate funding; outcome monitoring; and regular fidelity; ongoing regular supervision promote long-term sustainability. Adequate funding single-handedly is not sufficient to promote project sustainability.	As the project worked with the community it fails to show how stakeholders were managed. Sampling only involved one respondent per site. The study relied on reports from respondents who had variable and limited knowledge of the project follow-up period.	The moderating influence of stakeholder management on the influence of project exit strategy implementation on the sustainability of projects. The study sought the views and experiences of the primary stakeholders as well as the expert's view.
Carvalho, & Rabechini (2017)	Can project sustainability management impact project success? An empirical study applying a contingent approach	Survey-based research, making use of structural equation-interviews Modeling respondents sampling-respondents were team members or project managers; one respondent per project (222/415). Descriptive statistical analysis, SPSS, Kurtosis were used.	There was a low level of commitment to the environmental and social aspects of the studied projects. There is a positive significant relationship between project sustainability and project success and in reducing the environmental and social negative impact.	Limitedness in the generalization of the study findings, as a result of bias of non-probabilistic sample. Focus on the use of qualitative ex post facto research	The study used mixed method research and triangulate the findings on the influence of stakeholder management on the relationship between project exit strategy implementation and project sustainability.

Wabwoba & Wakhungu (2013)	Factors affecting the sustainability of community food security projects in Kiambu County, Kenya	Evaluation research design; primary and secondary, qualitative data (FGDs, KIIs, Observations); purposeful sampling (informing simple random); Chi-square analysis at 95%	Members participation and funding levels (among other factors such as lead management and climatic patterns) influence the sustainability of such studied projects	Fails to show how M&E is integrated; the role of stakeholders in sustainability; gives it as a recommendation Only qualitative data; only non-random sampling	The study focused on how M&E links with sustainability and the role of stakeholder management in sustainability
Wiek et al, (2014)	Integrating problem and Project-based learning (PPBL) into sustainability programs To describe the PPBL initiatives and the institutional context at the School of Sustainability (SOS).	Case study: data collection was through observations, document reviews, student evaluations, interviews, and faculty surveys.	There were challenges in ensuring the sustainability of programs immediately after the funding is withdrawn. Monitoring and evaluation enhances project sustainability .	Other aspects of exit strategy implementation and stakeholder management are not articulated.	The study focused to link M&E and the other aspects of exit strategy implementation (capacity building and support services) and stakeholder management
Minzner et al (2014).	The impact of capacity-building programs on nonprofits: A random assignment evaluation.	Randomized design of 454 NPOs (237 assigned and 217 to the control group) Survey questionnaires, KIIs, and Literature review. The control was not a typical control as 52%	Program members in the group also had significantly higher capacity growth than the control group on several individual outcome measures	The study focused only on capacity building as an exit strategy while forgetting the inclusion of the vital variables such as support service linkages and stakeholder management. evaluated changes.	This study delved to find out any changes and/or improvement long after the funding was withdrawn to establish effectiveness and sustainability. (Follow-up study to

		had received training from other providers. This compromised the internal validity of the results Analysis: multiple comparisons and regression	in each of the five areas (program, community, organizational, revenue, and leadership development)		establish whether benefits during the implementation are continued post-implementation or whether short-term improvement in capacity leads to improved or sustained outcomes). The study was based on the Kilifi context
Bernnett et al (2015)	Monitoring and evaluating transition and sustainability of donor-funded programs: Reflections on the Avahan experience An AIDS program in India	A mixed-methods (qualitative and quantitative) evaluation of, combining longitudinal case studies with semi-structured surveys of transitioning units or entities.	Ensuring program flexibility promotes sustainability Understanding strategies and contextual features support transition	Other aspects of capacity building and support service linkage during the implementation and post-implementation and stakeholder management are missing	The study focused on how stakeholder management moderates the influence of project exit strategy implementation and sustainability of donor-funded livelihood projects
Stakeholder management and sustainability of projects					
Waligo, Clarke, & Hawkins (2013)	Implementing sustainable tourism: A multi-stakeholder involvement management framework	Case study, 50 stakeholders (from 8 primary stakeholders) case study of the Cornwall Sustainable Tourism (CoaST) Data collection: Primary qualitative data, 3 FGDs (12 respondents), 40 semi-	Aspects of stakeholder management such as leadership qualities information accessibility and quality, relationships	Only qualitative data was collected and analyzed Only FGDs and 40 respondents. Representative not clear as no sample size mentioned Only applicable to CoaST in the UK	The study focused on how stakeholder management moderates the influence of project exit strategy implementation and sustainability of donor-funded livelihood projects

		structured interviews; Analysis: grounded theory, content analysis			
Horisch, Freeman & Schaltegger (2014)	Applying stakeholder theory in sustainability management: Links, similarities, dissimilarities, and a conceptual framework.	Secondary data was used in the study using a systematic literature review	Challenges in managing and strengthening stakeholder relationships including the creation of mutual lasting interests, empowering stakeholders for sustainable development	The aspect of exit strategy implementation is missing and it is moderated by stakeholder management in pursuing sustainability	Focus on how stakeholder management moderates the influence of project exit strategy implementation and sustainability of donor-funded livelihood projects
Li, Ng & Skitmore (2015)	Modeling multi-stakeholder multi-objective decisions during public participation in major infrastructure and construction projects: a decision rule approach.	Questionnaire survey, FGDs; 4-Delphi, Literature review, modeling, a case study, purposive (general public) and stratified sampling; sample of 242 including the general public, government departments, Ngo's and beneficiaries	Conflict among stakeholders is inescapable. Different stakeholders have a different socio-political-cultural background that influences motivation and actions during participation; Participatory approaches increase the willingness to participate and accept results;	How socio-political-cultural backgrounds of different stakeholders influence and moderate the relationship between exit strategy decisions and project sustainability.	Focus holistically on how stakeholder management moderates the influence of project exit strategy implementation and sustainability of donor-funded livelihood projects

			openness and accountability of decisions		
Bal et al (2013)	Stakeholder engagement: achieving sustainability in construction projects	Exploratory study; purpose sampling; 10 respondents; interviews (qualitative study)	The management process involves identification; matching up stakeholders with different sustainability-related targets; prioritization; managing; measuring performance, and putting targets into action.	Only involved the key informant interview. Multiple methods (qualitative and quantitative; random and non-random sampling methods) would allow for triangulation	Inclusion of the quantitative methods and collection of data from the target group
Sustainability of projects					
Silvius & Schipper (2014).	Sustainability in project management competencies: analyzing the competence gap of project managers (specify the competence gap of project managers with regards to sustainability)	Systematic literature review of relevant articles via google scholar-study was conceptual and interpretive	Sustainability should be considered along all the project cycle. Project management standards fail to address sustainability. Competencies-technical, behavioral (interaction with stakeholders), and contextual	The monitoring and evaluation of the sustainability/exit strategies missing	Focus on the aspect of exit strategy and stakeholder management and sustainability of donor-funded livelihood projects.

			(interaction with the context)		
Stevens, & Mody (2013)	Sustainability Plans in British Columbia: Instruments of Change or Token Gestures?	Systematic literature review to study the content and quality of 20 out of 162 municipal plans in British Columbia province using a pretested evaluation protocol	The plans are weak concerning plan creation, sustainability context, provisions that foster implementation and that promote monitoring and evaluation of implementation efforts and usability	The sample was too small and the only qualitative method.	Focus on the aspect of exit strategy and stakeholder management and sustainability of donor-funded livelihood projects
Mok, Shen & Yang (2015).	Stakeholder management studies in mega construction projects: A review and future directions. (in China)	Systematic literature review and content analysis of academic journals of 85 out of 354 articles for the period between 1997 and 2014	SM was grouped under the four most important themes of the stakeholder management process; stakeholder interests and influences; stakeholder analysis methods; and stakeholder engagement.	Does not give attention to exit strategy and project sustainability	The independent influence of stakeholder management on project sustainability and the moderating influence of stakeholder management on the relationship of exit strategy and project sustainability
Aarseth et al (2017)	Project sustainability strategies: A	Systematic literature 68 articles in the fields of project management and	The engagement of community stakeholders, such	Some potential strategies such as support service linkages are missing.	Examining the identified strategies in practical

	systematic literature review	sustainable production before 2016	as the local public, NGOs, and authorities, in planning, development, and implementation of projects and decision making promote sustainability Developing sustainability competencies (through training) Setting up sustainability policies	The monitoring and evaluation of the sustainability/exit strategies missing	projects to give us better insights into the practicability of the strategies in diverse cultural and industrial project contexts, Empirical work critical in equipping better capabilities studying the interaction of sustainability strategies

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter explains the research methodology that will be employed in the current study. Research methodology refers to a way to systematically conducting scientific research while giving reasons for choice and rejection of different methods and systematically finding out all the possible answers of given research questions and making logical. Under this chapter, the following are described: research paradigm, research design, target population, sample size and sampling techniques, data collection instruments, data collection procedure, data analysis techniques, operationalization of variables, and ethical considerations.

3.2 Research paradigm

This study employed the pragmatic paradigm also referred to as multi-paradigmatic research by Taylor and Medina (2013). In pragmatism different perspectives, theories and ideas help researchers gain knowledge of the world around us. It stresses the relationship of the theory and practice since in this paradigm concepts and theories are fundamental tools for finding our way in the world that surrounds us (Sekaran & Bougie, 2016). For instance, this current study is guided by a theoretical perspective as seen in the theoretical framework.

A paradigm refers to a comprehensive world view, belief system, or framework that guides or governs research and practice in a given field (Taylor & Medina, 2013) and it encompasses ontology (view of nature of reality), epistemology (view of the type of knowledge generated) and methodology (disciplined approach to creating knowledge). It is an integrated or combined cluster of substantive concepts, constructs, variables, and problems affixed with corresponding

methodological tools and approaches (Shah & Al-Bargi, 2013). A research paradigm represents a vital element in research since it influences the strategy and how research is conducted since each paradigm has philosophical underpinnings that orient the researcher's points of view on reality. Paradigms are used to institutionalize intellectual activities, broadly group certain research approaches and perspectives to the study of any phenomenon or subject and describe broad approaches to research (Hussain et al., 2013).

This study used a pragmatic paradigm. The pragmatic paradigm is simply known as the mixed strategy or research paradigm. The researcher combined the positivist and constructivist perspectives [of epistemology, ontology, and axiology]; views and approaches. There is an increased emphasis on the use of the multi-strategy research paradigm because of the complementary role played by every single paradigm. Whereas quantitative research addresses the meaning through questionnaires and attitudinal surveys using the Likert scale, qualitative interprets the behaviors, norms, culture, and values (Poni, 2014). The use of both methods ensures that the strengths and weaknesses of each of the single methods are complemented. When used together comprehension is increased and triangulation (corroboration of research findings of both research paradigms) is allowed. These two independent methods were used mutually in a rigorous inquiry to achieve theory testing, modification, and generation at once. It was, therefore, worth designing research by integrating methods as supported by Taylor and Medina (2013) and Hussain et al. (2013) that combining methods offers research with objectivity, validity, reliability, credibility, dependability, transferability, conformability, triangulation, clarity, precision, rigor, standardization and generalizability. The pragmatism paradigm was also adopted because of the nature of the study as the study will involve people with diverse knowledge and experiences about

a phenomenon. For instance, positivist is best adopted for experimental studies while constructivist is best for case studies.

3.3 Research design

Research design is a comprehensive or full plan for data collection in an empirical research project (Bhattacherjee, 2012). Where there is no research design it is difficult for the critic or a reviewer to provide a comprehensive review or appraisal of the proposed or undertaken study. This study employed a descriptive correlational research design. This is a combination of descriptive research and correlational research approaches being used simultaneously. Descriptive design was used in making careful in-depth observations of a subject or phenomenon of interest. The purpose of a descriptive study was to obtain in-depth data that describes the topic or subject or phenomenon of interest (Sekaran & Bougie, 2016). Data that was collected helped in describing the characteristics of objects, events, and situations.

Correlation refers to the extent to which two sets of data are related and the relationships can be indirect, direct, or non-existent (Pyrczak, 2016). Per Creswell (2012) the correlational research design involved the measurement of project exit strategies, stakeholder management, and livelihood project sustainability as variables or constructs and later determine the degree to which these variables are related. When descriptive design and correlational designs are used together the researcher can understand the features of a population in a given setting and study the relationships or associations between or among variables.

To be able to describe and show associations among variables and make quality inferences, the descriptive correlational design required a combination of data collection methods (qualitative and quantitative) and data analysis approaches (descriptive and inferential). This is called mixed-

method research (MMR) also called the third methodological movement. MMR uses both quantitative and qualitative methods during data collection and data analysis in the same study (Peters et al, 2013). Mixed methods are specifically appropriate as they provide a realistic and practical way to understanding multi-dimensional perspectives, different types of causal pathways, and multiple types of outcomes. MMR was established in 2000 in response to the observed limitations of both quantitative and qualitative designs (Caruth, 2013). Since then it has received considerable prominence in social and educational research and this has been influenced by the emergence of triangulation. Triangulation is the combination or integration of at least one qualitative and one quantitative method during the collection, analysis, and drawing of inferences in [an entire] multiphase study or a single study (Hashemi & Babaii, 2013 and Caruth, 2013).

In quantitative research methods, a phenomenon is explained according to the numerical data and analyzed obtained by statistical methods while in qualitative methods findings are produced without using the statistical methods. Quantitative approaches are informed by objectivist epistemology that seeks to explain a universal law in the social reality that emphasizes measuring and analyzing the causal relationships between independent and dependent variables (Yilmaz, 2013). Qualitative approaches are based on the constructivist epistemology; it involves an in-depth description of a people from the perspective of the people affected and that the researcher and the subjects are connected. Qualitative approaches are holistic, largely descriptive, and inductive (Astalin, 2013). The proponents of MMR such as Cronholm and Hjalmarsson (2011) and Venkatesh et al. (2013) opined that the words affix meaning to the numbers, and numbers append precision to words; a wider range of research questions can be handled; present more robust conclusions; offer enhanced validity; increase generalization capability of the research findings;

and offers completeness, complementarity, developmental, corroboration [confirmation], expansion, compensation, and diversity in research.

Therefore, in this study, the independent variables (implementation of exit strategy), modifying variable (stakeholder management), and dependent variable (sustainability of donor-funded livelihood projects) were described by the descriptive research design using descriptive analysis while their associations or relationships were established using the correlational research design in which inferential data analysis methods were carried out using the regression method. Mixed methods (questionnaires, interviews, focus group discussions, and observation will be used in data collection.

3.4 Target population

In research, the target population denotes the total number of objects or subjects that are of interest in a study by a researcher. Mentioning the population is important as other researchers can tell whether or not the sample is representative of the entire population and thus information on the generalizability of the findings.

The target population comprised of the 140 farmers targeted by the Gandini livelihood and food security project; 95 farmers of the Dodosa High Impact project; and 60 farmers targeted by Uvumbuzi Project. A total of 295 farmers and 7 individuals from the technical and administration class formed the target population. The 7 individuals included: ward agricultural extension officer, ward livestock officer attached to the projects; irrigation officer, cooperative officer, 3 assistant chiefs from the area in which the projects were implemented were targeted for qualitative data collection. Three local administrators, the assistant chiefs, representing the three sub-locations in which the projects are sited also formed part of the respondents. The views of the local leaders

about the variables of the study contributed immensely to the inferences of the study. Thus, the target population was 295 farmers drawn from the tree projects and 7 individuals from the technical and administration class totaling 302 members.

Table 3.1: Study population composition

Source	**Gandini project**	**Dodosa Project**	**Uvumbuzi Project**	**Total**
Farmers	140	95	60	**295**
Extension officers	1	0	0	**1**
Livestock officer	1	0	0	**1**
Irrigation officer	0	1	0	**1**
Local administrator	1	1	1	**3**
Cooperative officer	0	0	1	**1**
Total	**143**	**97**	**62**	**302**

Source: Department of agriculture, Kilifi county (2017)

3.5 Sample size and sampling procedure

Sampling is the process of choosing a number of units or subjects or objects or individuals from a population in a manner that the selected group possesses elements representative of the features or characteristics found in the entire group. Representativeness of the sample is critical (Bhattacherjee, 2012) since the observations and inferences about their properties that will be made will be generalized for the entire population. The sample size is the number of units or subjects that would be included in a study after following an appropriate procedure or strategy. The sampling procedure refers to the technique used to select items of the sample (Kothari, 2010).

3.5.1 Sample size

The sample size of was obtained using the formula and table by Solvin's formula (Singh & Masuku, 2014).

Slovin's formula given as

$$\text{Sample size } (n) = \frac{\mathbf{N}}{\mathbf{1+Ne^2}}$$

n= required sample size

N= Population size

e= Marginal error (assumed to be 0.05)

$$\boldsymbol{n} = \frac{295}{1+295(0.05^2)}$$

$$= \frac{295}{1+0.7375}$$

=169.78 (approximately 170 respondents)

This represented 57.63% of the total population.

3.5.2 Sampling procedure

Probabilistic and/or non-probabilistic sampling designs were adopted in selecting the subset to be included in a study. In probabilistic sampling objects or units have an equal chance of being included in the study while in a non-probabilistic sampling design the objects or units do not have

an equal chance of being included in the study. A good sample must possess the characteristics of the population (Zikmund, 2013).

The sampling unit for the study was the farmers in the Gandini food security and livelihood project, the Dodosa High Impact project, and the Uvumbuzi project. This study employed both probabilistic (random) and non-probabilistic (non-random) designs of sampling. Random sampling was adopted for both study sites. In random (or probabilistic) sampling, every member of the population had an equivalent chance of appearing in the sample (Bordens & Abbott, 2011). It reduces the bias that may be due to the preferences of the person choosing the sample and offers some confidence that the sample is bias-free.

Further based on the use of quantitative and qualitative methods to research this study used a nested concurrent sampling design in which a large sample participates in [either] quantitative [or qualitative] and the small sample participates in the opposite simultaneously in a single research phase. The study used proportionate cluster and simple sampling for individual interviews while purposive sampling was used to select particular units (key informants) and members of the population that constituted the focus group discussion. Yilmaz (2013) asserts that quantitative methods require random sampling of large samples.

The proportionate cluster sampling was employed to guarantee a higher degree of representativeness. It results in an equal representation of each section or portion of the population sample. This procedure was adopted since the three projects are located in three different localities and needed to have an equal proportion being drawn from each locality. The cluster approach makes the sampling procedure relatively easier and efficient in fieldwork, particularly where personal interviews are used.

Table 3.2: Study sample size

Sample unit	Gandini Project		Dodosa Project		Uvumbuzi Project		Total	
	N	**n**	**N**	**n**	**N**	**n**	**N**	**n**
Farmers	140	80	95	55	60	35	295	170
Extension officers		1		0		0		1
Livestock officer		1		0		0		1
Irrigation officer		0		1		0		1
Local administrator		1		1		1		3
Cooperative officer		0		0		1		1
Total		**83**		**57**		**37**		**177**

N=population; **n**=sample

As shown in table 3.2, the sample size was proportionally divided among the three projects maintaining the 57.63% share. In Gandini 80 farmers were sampled while 55 were sampled in the Dodosa project. In the Uvumbuzi project, 35 were sampled. In addition, one agricultural extension officer, one livestock officer, one irrigation officer, one cooperative officer, and three local administrators from the respective project sites were included. This made a total of 177 respondents.

Purposive sampling is used when the researcher deliberately wants to select particular units from the population (Kothari, 2004). Purposeful sampling is extensively applied in qualitative research to identify and select information-loaded cases connected to the phenomenon of interest. The sample elements were selected on the basis that they would serve the research purpose. It allowed the researcher to discover, understand and gain more insight into the subject of interest. It was assumed that the members selected possessed the required information for the study. The ward

agricultural extension officer and one livestock production officer, one irrigation officer, one cooperative officer, and three assistant chiefs were included in the study as they were thought to possess the technical information that would contribute much to the inferences made. Between 10 members of the project were randomly selected to form the women's and men's focus discussion groups. The project committee members from the projects were purposefully selected because of their knowledge and experience in project leadership.

3.6 Research instruments

Based on the research paradigm and research design of this study both qualitative and qualitative approaches were used for data collection. Quantitative methods required random sampling of large samples (Yilmaz, 2013). The researcher used pre-constructed standard tools (questionnaires) with pre-determined response categories into which differing experiences of perspectives should fit to avoid the free expression of thoughts and feelings of the subject. This allowed the researcher to have a limited number of responses that later allowed for comparison and statistical aggregation of data. This study employed a survey, interviews, and focus group discussions. The study collected primary (using survey questionnaire guide and interview schedules) and secondary data (by reviewing available literature and reports).

3.6.1 Survey Questionnaires for farmers

A survey refers to a research technique in which individuals in a sample are interviewed in some kind or the behavior of respondents is monitored and described or explained in some way (Zikmud, 2013). A survey is a quantitative method of collecting data using a questionnaire guide. A questionnaire guide is a research tool containing a set of questions aimed at capturing responses in a standardized or homogenized manner (Bhattacherje, 2012). This study used structured questionnaires. Respondents were allowed to select answers from a given set of alternative options

allowing the researcher to realize a particular pattern of response. Structured questionnaires were easy to administer and relatively less costly to analyze.

The questionnaires were divided into two parts. The first part introduced the researcher, purpose, and sought the consent of the respondent. The second part was structured to collect the respondent's opinion. The second part was divided into seven sections. The first section A collected the respondent's demographic information. The rest of the sections were structured to collect respondent's opinions on the variables of interest. Section B collected opinions on project sustainability; section C collected opinions on capacity building; section D on project support service linkages; section E on monitoring and evaluation, section F on stakeholder management. The questionnaire responses in sections B, C, D, E, and F were based on a 5-point Likert scale. In using the Likert scale way of responding, simple worded statements (called Likert items) were used to guide respondents to indicate their degree of disagreement or agreement on a five or seven-point scale that ranges from "strongly disagree" to "strongly agree" (Bhattacherje, 2012). This study used a 5-point Likert scale in which the ratings were: strongly agree (SA), Agree (A), neutral (N), disagree (D), and strongly disagree (SD). This SA, A, N, D, and SD will later be coded as 1, 2, 3, 4, and 5 respectively. The findings on the questionnaires were used to triangulate the findings of the other data collection methods (interviews and focus group discussions).

3.6.2 Interview guide for key informants

Interviews are a qualitative and more personalized way of data gathering technique in which the interviewer works with the interviewee or respondent directly to ask questions and document their responses (Bhattacherje, 2012). Interviews were used as the researcher was interested in understanding the participants' beliefs, emotions, perceptions, and experiences of respondents on

the sustainability of these livelihood projects. This method gave the researcher the chance to clear any issues brought out by the respondent or follow-up or ask probing questions (Bhattacherje, 2012). Being a qualitative data collection tool, the interviewer was part of the measurement instrument.

Semi-standardized one-on-one interviews were used to gather data from the key informants. According to Jackson (2010) in semi-standardized interview questions are asked in a specific order with flexible wording, modified language, more clarification and allow respondents to express their own opinions in their own words.

Seven interviews were carried out with one agricultural extension officers, one livestock extension officer, one irrigation officer, one cooperative officer, and three assistant chiefs as the key informants. Standardized interviews extract out the respondents' opinions, thoughts, and attitudes about study-related issues. The technique allowed deeper and detailed data collection as the interviewer controlled the process hence probing more by adding questions that helped to add more information unlike other methods of data collection. The interactive and intermingling feature of the interview, and its reliance on linguistic or verbal responses, make up its major strength and its main disadvantage as a technique of social study. Care was taken since the altering of questions by the interviewer could adversely affect the results (Gakuu & Kidombo, 2010).

The interview guide consisted of two parts. The first part introduced the researcher, the purpose of the study, and sought the consent of the respondent. The second part contained open-ended questions which sought to collect data on the variables of interest (exit strategy implementation, stakeholder management, and sustainability of donor-funded livelihood projects). The findings on

the interview method were used to triangulate the findings of the other data collection methods (questionnaires, and focus group discussions).

3.6.3 Focus group discussions

Focus group discussion is a qualitative data collection technique in which a small group of between six and twelve respondents is interviewed together and in a loosely structured format in a common location (Bhattacherje, 2012 and Zikmund, 2013). It assumes that the individuals brought together are willing and able to talk about the subject of interest in a group discussion setting. The interviewer plays a facilitative role as the moderator of the discussion allowing every member of the group to respond. Focus groups allow deeper examination into complex issues than other forms of survey research (Bhattacherje, 2012). The deeper examination comes about as other people talk, others are triggered to respond and chip in ideas that initially were not there. Focus group respondents sometimes feed on each other's comments to develop ideas that would be difficult to express in a different interview format (Zikmund, 2013).

In this study three focus group discussions were carried. The discussions were one 8-member man FGD in Gandini, one 10-member woman FGD in Dodosa, and one 9-member project committee FGD. The separate discussions were used to elicit more discussions as one gender may be rendered powerless before the other gender and this may result in biased opinions and perceptions. The project committee was believed to be the face of the project it is believed that they possess a deeper understanding of the group than any other members of the project.

The focus group discussion guide consisted of two parts. The first part introduced the researcher (or research assistant), the purpose of the study, and sought the consent of the respondent. The second part contained open-ended questions which sought to collect data on the variables of interest (exit strategy implementation, stakeholder management, and sustainability of donor-

funded livelihood projects). The findings obtained by the focus group discussion technique were used to triangulate the findings of the other data collection methods (questionnaires and interviews).

3.6.4 Pilot Testing of the Research Instruments

Pilot testing refers to carrying out a small-scale research project that gathers data from respondents with similar features as to those to be used in the full-scale study (Zikmund, 2013) to identify potential practical problems associated with data collection tools, sessions, and methodology (Hurst et al., 2015). The purpose of pilot testing was to ensure the validity and reliability of data collection tools and the data itself. Hurst et al. (2015) assert that research projects that neglect pre-testing (pilot study) are at risk of collecting invalid and incomplete data. Validity concerns truthfulness in what is measured by the data collection instrument while reliability concerns the consistency and dependability of the research instrument. Validity and reliability are not equivalent but are equally important for the quality of a study. Pilot testing guides a larger study or examines particular aspects of the research to determine if the chosen procedures will work as desired (Zikmund, 2013). It is advisable to test the research instruments before carrying out the main study as it displays the strengths and weaknesses (if any) of any data collection technique. This allows improving the tools by either adding more questions, deleting inappropriate questions, or even change the wording to ensure that the questions are understood by the respondents and that the tools capture the information of intent. Pilot testing is a rehearsal activity or a replica of the main data collection exercise. Hurst et al. (2015) pointed out that pilot testing allows for detection and correction of distress, confidence matters, rapport, and duration of data collection process, fatigue and boredom issues. They further say that the time length of the data collection process deteriorates the quality of data collected.

In this study, 17 questionnaires were tested in Paziani in Malindi sub-county, Goshi location. There had been a similar project supported by World Food Program that had been closed in 2018. A few members of the project are involved in the project activities. This project displayed similar attributes as to the current target population. A sample of between 10 and 30 can be used in a pilot study as suggested by Isaac & Michael (1995), Hill (1998) and Julious (2005). Van Belle (2002) suggests 12 while Treece & Treece (1982) suggested 10 % of the total sample size. The findings of the pilot testing were analyzed for reliability and validity using the Cronbach alpha technique.

3.6.5 Validity of Research Instruments

Validity is one of the attributes a research instrument should possess. This ensures sound management of the tools. Validity is the degree to which a test measures exactly what is required to be measured. Thus it indicates the extent to which a tool measures what it is supposed and expected to measure. Two types of validity were given an upper hand in this study: content validity and criterion-related validity.

Content validity is the degree to which a measuring tool offers adequate coverage of the topic or subject under study. Content validity is related to the content and format of the instrument. This validity was ensured by an extensive review of literature on the variables and constructs under study. This was tested by using a panel of experts (including the research supervisors) who judged the standards of the instruments as suggested by (Bhattacherje, 2012). The discussion zeroed in on the clarity, relevance, and appropriateness of the items.

3.6.6 Reliability of Research Instruments

Reliability is one of the psychometric parameters to be considered while ensuring sound measurement of research tools. Reliability refers to the precision and accuracy of a measurement

procedure while according to Bhattacherje (2012) reliability refers to the extent to which the measure of a variable or a construct is dependable or consistent. Thus a reliable measuring tool gives consistent results.

The sample of the study (57.63%) also contributed to reliability. Bhattacherje (2012) suggested that to improve reliability there should be a strike of balance between qualitative (observation, focus group discussions, and interviews) and quantitative measurement (questionnaires) for triangulation; designing questions that are clear and not ambiguous. In this study, the research assistants will be trained and motivated before doing the real data collection. Piloting of the 17 questionnaires was done also to look into the issues of clarity, precision, wording, and sequence as suggested by Van Belle (2002). Treece & Treece (1982) suggested that 10 % of the total sample size can work. Additional approaches such as ensuring refreshments and other means to minimize fatigue and boredom were used to ensure reliability.

Cronbach Coefficient was used to measure reliability. Kinyanjui (2014) points out that Cronbach's Coefficient is applied to test internal consistencies of samples of a particular population in cases where research tools with Likert-type scales are used. The Cronbach's alpha of reliability will be interpreted as $\alpha < 0.5$ – Unacceptable; $\alpha > 0.5$ – Poor; $\alpha > 0.6$ – Questionable; $\alpha > 0.7$ – Acceptable; $\alpha > 0.8$ – Good; $\alpha > 0.9$ – Excellent," (Gliem & Gliem, 2003; and Lee, Yim & Kim, 2018).

3.7 Data Collection Procedures

Research is only as good as the data collected. And this squarely concerns the procedure followed right from problem formulation, choice of research methodology, designing of data collection tools, mobilization of the target population, the specific data collection process up to data analysis.

The data collection tools for this study were survey questionnaires, focus group discussion guides and interview guides. They were designed with consultations with the supervisors and experts in the field of project management whose purpose was to ensure the validity and reliability of instruments. The introductory letter was obtained from the University of Nairobi, School of Open and Distance Learning introducing the investigator to the relevant authorities. The letter facilitated the acquisition of the permit for research from the National Commission for Science Technology and Innovation (NACOSTI). The researcher also sought approvals from the Kenya Red Cross Society, the County commissioner's office, and the county director of education in Kilifi County. The local leadership in Gandini, Baricho, and Singwaya sub-locations was also reached out for permission.

The study questionnaires were uploaded to kobo collect before training of research assistants.

To make sure that the validity and reliability of data collection tools were achieved, the research assistants needed to understand the content of the tools and the expectations as advised by Hurst et al. (2015). A one-day training was organized for five research assistants. The training entailed a brief overview of the statement of the problem and objectives. The training thoroughly delved into reviewing the contents (wording and interpretations) of the data collection tools and ethical issues of research and use of the kobo approach. The training materials were created step by step and in sequence to make them easy to follow for future reference during the main study. This was followed by phone, and letter booking of appointment with key informants and mobilization of the farmers for data collection for pretest (small scale data collection) and the actual data collection. Seventeen questionnaires were pretested in Paziani in Paziani sub-location, Malindi division, and Malindi sub-county in Kilifi County. To ensure the problems associated with the interview environment were minimized; a conducive environment (an area with no background noise,

personal distraction, and crowding) was chosen to enhance adequate rapport and data collection continuity.

Secondary and primary data were collected. Primary data was gathered using survey questionnaires, focus group discussion guides, and interview guides. Secondary data was gathered by reviewing the literature, organizational project reports, and project reports at the community level. The data collection process took ten days. There was debriefing after each day's data collection to obtain feedback from the research team.

3.8 Data analysis technique

The data collected was further checked for completeness before being subjected to data analysis. This involved close examination of the filled data collection tools (survey questionnaires, interviews, focus group discussion, and checklists. This prior process entailed data cleaning, editing, coding, and error checking. Data integrity was upheld during this stage. Data integrity refers to the proper data cleaning, editing, and coding; and the truthfulness of information as promised by the researcher to the information audience for decision making (Zikmund, 2013). Data editing involved checking for completeness, legibility, and consistency of data before coding and storage. Editing refers to a process of carefully examining the accuracy and consistency in gathered raw data to detect errors and omissions and correcting while coding is the assignment of numerals to responses to limit the number of classes or categories of responses. Coding concerned careful assignment of numerical scores or classifying symbols to already edited data. Since the design was descriptive and correlational the current study employed both descriptive and inferential data analysis techniques. Descriptive analysis is the basic or simple conversion of data in a manner that describes the basic features such as central tendency (modes, medians, and

means), distribution, and variability [range, standard deviation, and variance] (Zikmund, 2013). The inferential analysis simply means statistical hypothesis testing (Bhattacherje, 2012).

3.8.1 Quantitative data analysis techniques

Quantitative data were analyzed using descriptive and inferential data analysis techniques. Descriptive analysis was undertaken using central tendency (mode, means, and median), frequency distribution, and percentages) and measures of dispersion (variance and standard deviation) to understand the characteristics of the respondents. The inferential analysis was carried out using a correlation and regression model to test the hypothesis and test for associations among variables of interest under this study. ANOVA was used to test model fitness.

Due to the relative homogeneity nature of target farmers in the projects due to common belief, cultural alignment, and location the finite research population was assumed to be normally distributed. Normal distribution refers to the notion that most observations are crowded towards the central area of the range of values while fewer observations are clustered near the extreme ends of the range (Bhattacherje, 2012) for independent, large, and random samples. Therefore, measures of central tendency, dispersion, and variability were used to examine the strength and weakness of central tendency and how values are spread around the central tendency (statistical dispersion) using mode, mean, and standard deviation. The level of confidence was set at ninety-five percent (95%) while the level of significance alpha will be set at 0.05. Inferential and descriptive statistics were generated using the Statistical Package for Social Sciences version 25 (SPSS 25).

This study used regression analysis to find out how the independent, moderating, and dependent variables were related. To describe the strength of the relationship Pearson's Product Moment Coefficient (r) was used. Two tail tests were performed at every stage. The separate influence of

the independent variable (exit strategy implementation) and moderating variable (stakeholder management) on the dependent variable (sustainability of livelihood projects) was analyzed using simple regression. Specifically, four hypotheses identified under the research objectives 1, 2, and 3 of the exit strategy implementation's (capacity building; support service linkages and monitoring and evaluation) and objective 5 (stakeholder management) influence on the sustainability of donor-funded livelihood projects had linear correlation thus simple regression analysis using Pearson's Product Moment Correlation (r) was performed.

Multiple regression analysis was performed for the hypothesis testing for the combined influence of the exit strategy implementation and stakeholder management on the sustainability of donor-funded livelihood projects. Stepwise Regression (R^2-adjusted 'r' squared) data analysis will be used for non-linear relationships (Kinyajui, 2014). Stepwise regression is achieved by incrementally trying out an independent variable at a time or including all probable independent variables in the model or removing those independent variables that have statistically insignificant influence on the dependent variable. It can also be achieved by combining independent variables and measure its effect on the dependent variable.

In correlation, three possible interpretations are based on the values of **'r'** in which the negative values of **'r'** indicate a negative relationship between variables while positive values of **'r'** indicate a positive relationship between variables. Zero values of **'r'** indicate the absence of a relationship between variables. Based on the strength of the relationship each of the positive and negative can have a weak, moderate, and strong correlation. Values of **'r'** between +0.1 and +0.29 indicate weak positive correlation; between +0.3 and +0.49 moderate positive relationship; +0.5 and +1.0

strong positive correlation: while **'r'** between -0.1 and -0.29 indicate weak negative correlation; between -0.3 and -0.49 moderate negative relationship; -0.5 and -1.0 strong negative correlation (Kinyajui, 2014 and Obare et al. 2016).

3.8.1.1 Correlation and Regression Models

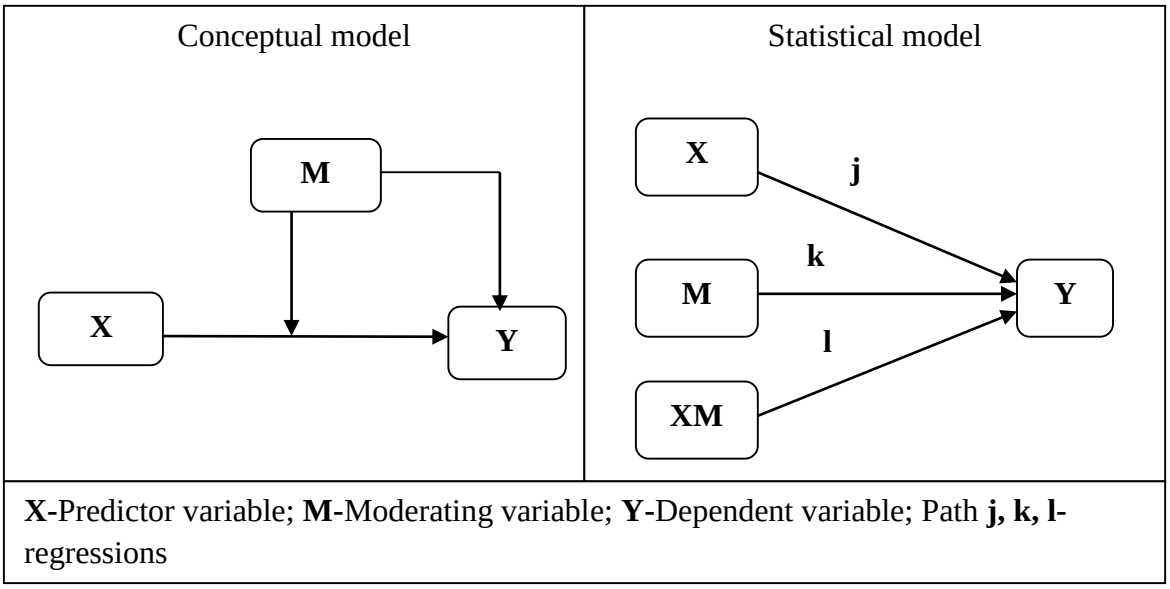

Figure 2: Conceptual and statistical models

Figure 4 represents the conceptual and statistical models that were used in this study to examine the relationship between and among variables. The statistical model indicates the regressions that were performed. The path '**j**' and '**k**' represent how the predictor variable (project exit strategy implementation) and moderating variable (stakeholder management) influenced '**Y**' (sustainability of donor-funded livelihood projects). Path **'c'** shows the interaction of the predictor and the moderating variable in influencing **'Y'.** The independence of stakeholder management as the variable of the project sustainability was also tested. The indicators of the study variables were represented as shown in Table 3.3 below.

Table 3.3: Study variables and their respective indicators

Variable type	Description	Indicators
Dependent variable	Sustainability of donor-funded livelihood projects (Y)	Continuity of implementation; Continuity of benefits; Continued active participation
Independent variable	Project exit strategy implementation (X4)	Capacity building (X1); Project support service linkages (X2); monitoring and evaluation (X3)
Moderating variable	Stakeholder management (X5)	Knowledge sharing, Collaboration, and Communication

The table above represents the variables under this current study as follows:

Dependent variable

Y - Sustainability of donor-funded livelihood projects

Indicators: Continuity of implementation; Continuity of benefits; Continued active participation

Independent variables

X_1 - Capacity building

X_2 - Project support service linkages

X_3 - Monitoring and evaluation of project exit strategy

X_4 - Combined project exit strategy implementation

$ß_0$ - Constant term

$ß_1, ß_2, ß_3, \ldots ß_n$ - Beta coefficients

X1, X2, X3,…Xn - Predictor variables

Moderating variable

X_5 - Stakeholder management

3.1.8.2 Regression Model for Objective One

The following linear regression model guided the analysis of data for Objective One.

$H_0$1: Sustainability of donor-funded livelihood projects in Kilifi County is not significantly influenced by project capacity building exit strategy

Model one

Project sustainability=f (Project capacity building exit strategy)

$Y=f(X_1, Ɛ)$

$Y= ß_0+ ß_1X_1+ Ɛ$

Where Ɛ is the random error

3.1.8.2 Regression Model for Objective Two

The following linear regression model guided the data analysis for Objective Two.

$H_0$2: Support service linkages do not significantly influence the sustainability of donor-funded livelihood projects in Kilifi County

Model Two

Project sustainability=f (Support service linkages)

$Y=f(X_2, Ɛ)$

$Y= ß_0+ ß_2X_2+ Ɛ$

Where Ɛ is the random error

3.1.8.3 Regression Model for Objective Three

The following linear regression model guided the data analysis for Objective Three.

$H_0$3: Monitoring and evaluation of project exit strategy does not significantly influence the sustainability of donor-funded livelihood projects in Kilifi County

Model Three

Project sustainability=f (Monitoring and evaluation of project exit strategy)

$Y=f(X_3, Ɛ)$

$Y= ß_0+ ß_3X_3+ Ɛ$

Where Ɛ is the random error

3.1.8.4 Regression Model for Objective Four

The following non-linear regression model guided the data analysis for Objective Four.

$H_0$4: Combined project exit strategy does not significantly influence the sustainability of donor-funded livelihood projects in Kilifi County

Model Four

Project sustainability=f (Capacity building, Project support service linkage, Monitoring and evaluation of the project exit strategy)

$Y=f(X_1, X_2, X_3, Ɛ)$

$Y= ß_0+ ß_1X_1+ ß_2X_2+ß_3X_3+ Ɛ$

Where Ɛ is the random error

3.1.8.5 Regression Model for Objective Five

The following linear regression model guided the data analysis for Objective Five

$H_0$5: Stakeholder management does not significantly influence the sustainability of donor-funded livelihood projects in Kilifi County

Model five

Sustainability of donor-funded livelihood projects=f (stakeholder management)

$Y=f(X5, \varepsilon)$

$Y= ß_0+ ß_5X_5+ \varepsilon$

Where ε is the random error

3.1.8.6 Regression Model for Objective Six

The following non-linear regression model guided the data analysis for Objective Six

$H_0$6: Stakeholder management does not significantly influence the relationship between project exit strategy and sustainability of donor-funded livelihood projects in Kilifi County

Regression Model Six

Sustainability of donor-funded livelihood projects=f (Capacity building, Project support service linkage, Monitoring and evaluation of the project exit strategy, stakeholder management)

$Y=f (X_4, X_5, \varepsilon)$; where $X_4= X_1, X_2, X_3,$

$Y=f (X_1, X_2, X_3, X_5, \varepsilon)$

$Y=ß_0+ ß_1X_1+ ß_2X_2+ß_3X_3+ ß_5X_5+ ß_5X1, X2, X3$

$Y= ß_0+ ß_1X_1+ ß_2X_2+ß_3X_3+ ß_5X_5+ ß_{15}X_1X_5+ ß_{25}X_2X_5+ ß_{35}X_3X_5+ \varepsilon$

3.1.8.7 Tests of Hypotheses

Various hypotheses were tested to make empirical conclusions as summarized in Table 3.2 indicating the research objectives, null hypotheses, model, type of analysis and the interpretation of results.

Table 3. 4: Summary of research objectives, null hypotheses, model, and type of analysis and the interpretation of results

Objective	**Null hypothesis**	**Model**	**Analysis**	**Interpretations**
To establish how capacity building exit strategy influences the sustainability of donor-funded livelihood projects in Kilifi county, Kenya	Sustainability of donor-funded livelihood projects in Kilifi County is not significantly influenced by the implementation of project capacity building exit strategy	$Y= ß_0+ ß_1X_1+ Ɛ$ Y=Project sustainability X_1=Capacity building $ß_0$=Constant term $ß_1$=Beta coefficient $Ɛ$ =random error	Simple regression Pearson's Product Moment Correlation (r)	For $p < 0.05$, **H_o** was rejected; and $p>0.05$, **H_a** accepted For the strength of the relationships, **r** values were considered whereby: $+ 0.10 < r < + 0.29$; weak correlation;
To determine the extent to which project support linkage exit strategy influences the sustainability of donor-	Support service linkages do not significantly influence the sustainability of donor-funded livelihood projects in Kilifi County	$Y= ß_0+ ß_2X_2+ Ɛ$ Y=Project sustainability X_2=Support service linkages	Simple regression Pearson's Product Moment Correlation (r)	

funded livelihood projects in Kilifi county		$ß_0$=Constant term $ß_2$=Beta coefficient Ɛ =random error		+ 0.30 < r < + 0.49; moderate correlation; + 0.5 < r < + 1.0; strong correlation.
To assess the influence of monitoring and evaluation of the exit strategy on the sustainability of donor-funded livelihood projects in Kilifi county, Kenya	Monitoring and evaluation of project exit strategy does not significantly influence the sustainability of donor-funded livelihood projects in Kilifi County	$Y= ß_0+ ß_3X_3+ Ɛ$ Y=Project sustainability X_3=Monitoring and evaluation $ß_0$=Constant term $ß_3$=Beta coefficient Ɛ =random error	Simple regression Pearson's Product Moment Correlation (r) regression	
To examine how combined exit strategy influences the sustainability of donor-funded livelihood projects in Kilifi county, Kenya	The combined project exit strategy does not significantly influence the sustainability of donor-funded livelihood projects in Kilifi County	$Y= ß_0+ ß_4X_4+ Ɛ$ $Y= ß_0+ ß_1X_1+ ß_2X_2+ß_3X_3+ Ɛ$ Y=Project sustainability X_1=Capacity building X_2=Support service linkages	Multiple regression	For $p < 0.05$, $\mathbf{H_o}$ was rejected; and $p>0.05$, $\mathbf{H_a}$ accepted For the strength of the relationships, **r**

		X_3=Monitoring and evaluation X_4=Combined project exit strategy $ß_0$=Constant term $ß_1$, $ß_2$, $ß_3$, $ß_4$=Beta coefficients Ɛ =random error		values were considered whereby: + 0.10 < r < + 0.29; weak correlation; + 0.30 < r < + 0.49; moderate correlation; + 0.5 < r < + 1.0; strong
To determine the extent to which stakeholder management influence sustainability of donor-funded livelihood projects in Kilifi county, Kenya	Stakeholder management does not significantly influence the sustainability of donor-funded livelihood projects in Kilifi County	$Y= ß_0+ ß_5X_5+ Ɛ$ $Y= ß_0+ ß_5X_5+ Ɛ$ X_5=Stakeholder management $ß_0$=Constant term $ß_5$, $ß_6$, $ß_7$, $ß_8$=Beta coefficients Ɛ =random error	Simple regression	
To examine the moderating influence of stakeholder management on the relationship between	Stakeholder knowledge sharing does not significantly influence the relationship between project exit strategy and	$Y=ß_0+ ß_4X_4+ ß_5X_5+ ß_{45}X_4X_5 + Ɛ$ $Y=ß_0+ ß_1X_1+ ß_2X_2+ß_3X_3+ ß_5X_5+ ß_{15}X_1X_5+ ß_{25}X_2X_5+ ß_{35}X_3X_5+ Ɛ$	Multiple regression	

project exit strategy and sustainability of donor-funded livelihood projects in Kilifi county, Kenya	sustainability of donor-funded livelihood projects in Kilifi County	X_1=Capacity building X_2=Support service linkages X_3=Monitoring and evaluation X_4=Combined project exit strategy X_5=Stakeholder management $ß_0$=Constant term $ß_1, ß_5, \ldots ß_{35}$=Beta coefficients $Ɛ$ =random error		
	Stakeholder management does not significantly influence the relationship between capacity building exit strategy and sustainability of donor-funded livelihood projects in Kilifi County	$Y=ß_0+ ß_1X_1+ ß_5X_5+ß_{15}X_1X_5+ Ɛ$ X_1=Capacity building X_5=Stakeholder management $ß_0$=Constant term $ß_1, ß_5, ß_{15}$=Beta coefficients $Ɛ$ =random error	Multiple regression	For $p < 0.05$, $\mathbf{H_o}$ was rejected; and $\mathbf{H_a}$ accepted For the strength of the relationships, **r** values were

	Stakeholder communication does not significantly influence the relationship between project exit strategy and sustainability of donor-funded livelihood projects in Kilifi County	$Y=ß_0+ ß_2X_2+ ß_5X_5+ß_{25}X_2X_5+ Ɛ$ X_2=Support service linkages X_5=Stakeholder management $ß_0$=Constant term $ß_2$, $ß_5$, $ß_{25}$=Beta coefficients $Ɛ$ =random error	Multiple regression	considered whereby: + 0.10 < r < + 0.29; weak correlation; + 0.30 < r < + 0.49; moderate correlation; + 0.5 < r < + 1.0; strong
	Stakeholder management does not significantly influence the relationship between project exit strategy and sustainability of donor-funded livelihood projects in Kilifi County	$Y=ß_0+ ß_3X_3+ ß_5X_5+ß_{35}X_3X_5+ Ɛ$ X_3=Monitoring and evaluation X_5=Stakeholder management $ß_0$=Constant term $ß_3$, $ß_5$, $ß_{35}$=Beta coefficients $Ɛ$ =random error		

3.8.2 Qualitative data analysis techniques

Data gathered using focus group discussion, and key informant interviews were analyzed separately. This involved organizing qualitative data, breaking them into manageable lumps, assigning symbols (coding), synthesizing and determining patterns. This facilitated the identification and explanation of the linkages between data collected using the various methods of qualitative data collected.

Content analysis and grounded theory analysis methods were used. Two-step triangulation was carried out. The first stage triangulation involved comparing and corroborating the qualitative data collected using in-depth interviews and observation. The second stage of triangulation involved the corroboration of the qualitative findings and the quantitative data collected through survey questionnaires.

3.10 Ethical considerations

As in all human interactions, ethical issues exist in research concerning proper research techniques, and appropriate use of research results. Research ethics is the application of morals to behavior related to the research environment or context. In this current study ethical issues of concern involved obtaining the research permit, explanation of the purpose, benefit, expectations, consent, anonymity, and voluntary participation.

The introductory letter was obtained from the University of Nairobi, School of open and distance learning introducing the researcher to the relevant authorities. The researcher obtained a permit for research from National Commission for Science, Technology, and Innovation (NACOSTI). The permit from NACOSTI facilitated the acquisition of permission from the Kilifi County

commissioner and the county director of education's office to undertake the research in Magarini sub-county. The researcher sought approvals from the Kenya Red Cross Society, the Action Aid, and local leadership in Baricho and Singwaya, and Gandini. Before engaging the respondents in the data collection exercise, the researcher constantly debriefed the respondents on the purpose of the research and why it was important for them to partake of the study including academic, knowledge creation, and inform of the future programming and decision making. The respondents were informed of the importance of voluntarily giving honest responses and cooperating in the process. The researcher ensured confidentiality and safety of the respondents, information non-disclosure, cause no harm, use of a methodology that meets the standards of the research; give honest findings, and give feasible recommendations. Anonymity and confidentiality were ensured by using case numbers or codes instead of their real names when reporting data. The researcher restricted access to information that could reveal names, contacts, or other identifying features. Data collection instruments were destroyed once the data kept in a data file and the report approved.

3.9 Operationalization of variables

Table 3.5: Operationalization of variables

Objective	Variable	Indicators	Measurement	Measuring scale	Statistical analysis	Tools of analysis
	Dependent variable: Sustainability of donor-funded livelihood projects in Kilifi	Continuity of implementation	Level of commitment	Interval	Parametric	Descriptive analysis
		Maintained Benefits	Level of dividends (or production)	Interval	Parametric	
		Continued active participation	Level of participation	Interval	Parametric	
			Observations In-depth questioning			
1. To establish how capacity building exit strategy influences the sustainability of donor-funded livelihood	**Independent variable:** Capacity building exit strategy	Training offered	Level of transfer	Interval	Parametric	
		Technological and technical assistance	Level of use of systems (having specific sector skills)	Interval	Parametric	
		Resource capabilities	Level of external funding	Interval	Parametric	

projects in Kilifi county, Kenya						Descriptive and Linear regression
			In-depth questioning and focus discussion on new methods, management practices		Non-parametric	Descriptive analysis
2. To determine the extent to which project support linkage exit strategy influences sustainability of donor-funded livelihood projects in Kilifi county, Kenya	**Independent variable:** Support service linkages	Extension services access	Access to crop husbandry information	Interval	Parametric	Descriptive analysis and Linear regression
		Credit services access	Access to credit (level of investment)	Interval	Parametric	
		Market linkages	Access to markets	Interval	Parametric	
			In-depth questioning and focus discussion on support service arrangements		Non-parametric	Descriptive analysis

3. To assess the influence of monitoring and evaluation of the exit strategy on the sustainability of donor-funded livelihood projects in Kilifi county, Kenya	**Independent variable:** Project Monitoring and evaluation	Participatory M&E	M&E skills (or level of community involvement)	Interval	Parametric	Descriptive analysis and Linear regression
		Tools used in M&E	Availability (or use) of M&E Tools	Interval	Parametric	
		Timing and frequency	No of M&E visits	Interval	Parametric	
			In-depth questioning and focus discussion on M&E practices		Non-parametric	
4. To examine how combined exit strategy influences the sustainability of donor-funded	**Independent variable:** Combined project exit	Capacity building		Interval	Parametric	Descriptive analysis and Multiple regression
		Support service linkages		Interval	Parametric	

livelihood projects in Kilifi county, Kenya	strategy implementation	Monitoring and evaluation		Interval	Parametric	
			In-depth questioning and focus discussion on Project exit strategy		Non-parametric	
5. To determine the extent to which stakeholder management influence sustainability of donor-funded livelihood projects in Kilifi county, Kenya	**Moderating variable (but treated as an independent variable):** Stakeholder management	Stakeholder knowledge sharing	Knowledge accessibility Lessons learned Level of trust	Interval	Parametric	Descriptive analysis and linear regression
		Collaboration	Number of established partnerships	Interval	Parametric	
		Communication	The flow of information (level of effort to disseminate information)	Interval	Parametric	

6. To examine the moderating influence of stakeholder management on the relationship between project exit strategy and sustainability of donor-funded livelihood projects in Kilifi county, Kenya	**Moderating variable:** Stakeholder management	Stakeholder management+ (Capacity building+ Support service linkages+ Monitoring and evaluation)	Strength of relationship	Interval	Parametric	Descriptive analysis and multiple regression
			In-depth questioning and focus discussion on the interactions		Non-parametric	Descriptive analysis

In Table 3.5 above, an interval scale was used for quantitative measures of the independent variables while an ordinal scale was used for qualitative scales. The 5-point Likert scale with the assigned numerical score was used. The difference between the two numbers was treated as equal.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, INTERPRETATION, AND DISCUSSION

4.1 Introduction

The chapter displays the data analysis, data presentation, interpretation, and discussion. The analysis, presentation, interpretation, and discussion have been organized per the study objectives and research questions and hypotheses under specific sections and sub-sections. The first section delves into the response rate of the respondents. The second section presents the respondent demographic profiles while the third section gives the tests of statistical assumptions, assumptions, and analysis of the Likert type of data. The fourth section displays the analysis, presentation, interpretation, and discussion of the relationship under the examination.

This study employed the pragmatic paradigm also referred to as multi-paradigmatic research in which descriptive correlational research design was used. This combination required simultaneous use of descriptive and correlational (inferential) research approaches of analyses under each objective. The descriptive analysis was carried out using means and standard deviations. The inferential analysis was carried out using Pearson's Product moment correlation, linear and Stepwise multiple regression to test the relationships. Further on each of the objectives, qualitative analysis was carried out using interviews and focus group discussions.

4.2 Questionnaire Response Rate

Questionnaires were administered to a sample of 170 farmers. 163 were returned complete. This represented a 95.88% questionnaire response rate. 7 questionnaires were incomplete and thus were not used in the analysis. The 95.88% of the response was considered a representative sample and

thus can allow data analysis. This surpasses Saunders et al. (2003) argument that 30 to 50% response is acceptably sufficient for statistical generalization. One on one in-depth interviews were conducted with 7 key informants that had been targeted.

4.3 Demographic profiles of the respondents

This section gives the demographic background of the respondents according to items used in the data collection tool (questionnaire) administered. The background information is given under the sub-themes: the mother project from which they come; gender, age bracket, marital status, the highest level of education attained; and duration of stay in the project.

4.3.1 Distribution of the respondents by project

The researcher to find out the mother project from which the respondents came. Different projects have different environments and thus the perception on sustainability may differ. The respondents were requested to indicate the name of the project from the options given. The findings were presented in Table 4.1 below.

Table 4.1: Distribution of respondents by project

Project	Frequency	Percent
Gandini Food Security	79	48.5
Dodosa Project	50	30.7
Uvumbuzi Project	34	20.9
Total	**163**	**100.0**

The study findings indicate that 48.5% (79) of the respondents came from the Gandini Food security project while 30.7% (50) respondents came from the Dodosa project. The least, 20.9% (34) of the respondents came from the Uvumbuzi project. This indicated more respondents in Gandini were willing to respond to the questions than the rest of the projects.

4.3.2 Distribution of the respondents by gender

The researcher sought to find out the gender of the respondents taking part in the study. Kilifi county exhibits great gender disparity in roles and as such, it was vital to understand the level of involvement of each gender which influences the level of participation in project activities and thus may hold different views on project sustainability. The respondents were requested to indicate their gender in the questionnaire. The study findings were represented as follows in table 4.2.

Table 4.2: Distribution of the respondents by gender

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Male	32	19.6	19.6	19.6
Female	131	80.4	80.4	100.0
Total	**163**	**100.0**	**100.0**	

The study findings indicate that only 19.6% (32) of the respondents were male while 80.4% (131) of the respondents were female. This gender representation is against the third gender rule in Kenya. It indicates the greater responsibility of livelihood food security is left for the female gender.

4.3.3 Distribution of respondents by age bracket

The researcher sought to establish the distribution of the respondents by age. Age influence the rate of learning and application of new ideas, knowledge and technologies and such individuals in different age groups may hold different perception on project sustainability. The respondents were asked to indicate their age from the five options of age groups given in the questionnaire. The age groups were: 18-25 years, 26-35 years, 36-45 years, 46-55 years, and 56 years and above. The findings are presented as shown in Table 4.3.

Table 4.3: Distribution of respondents by age

Age	Frequency	Percent
18-25 years	8	4.9
26-35 years	30	18.4
36-45 years	43	26.4
46-55 years	36	22.1
Above 55 years	46	28.2
Total	**163**	**100.0**

The study findings indicate that 4.9% (8) respondents fell in the bracket of 18-25 years; 18.4% (30) respondents in 26-35 years while 26.4% (43) respondents were in the 36-45-year bracket. 22.1% (36) respondents were in the 46-55-year bracket while 28.2% (46) respondents were above 55 years. This reveals that 71.8% were 55 years and below (but not less than 18 years) and hence reproductive meaning that the larger percentage of the respondents fall in the reproductive age. In this case, age would be an insignificant factor to consider the perception of the respondent on the sustainability of donor-funded livelihood projects.

4.3.4 Distribution of respondents by marital status

The researcher sought to establish the distribution of the respondents by marital status. Marital status influences individual involvement in livelihood activities and thus in the implementation of exit strategies. Competing parental roles may influence the participation of individuals in project activities. The more the responsibilities the more the needs and thus the higher the involvement in livelihood activities. The respondents were requested to indicate their marital status among the three options in the questionnaire. All the respondents responded to this question. The three statuses were: single, married, and single parent. In this study ‘single’ imply individuals without parental responsibilities while ‘single parent’ implied individuals with parental responsibilities including widows and widowers. The findings are presented as shown in table 4.4 below.

Table 4.4: Distribution of respondents by marital status

Marital status	Frequency	Percent	Valid Percent	Cumulative Percent
Single	6	3.7	3.7	3.7
Married	119	73.0	73.0	76.7
Single parent	38	23.3	23.3	100.0
Total	**163**	**100.0**	**100.0**	

The findings reveal that only 3.7% (6) respondents were single with 73% (119) respondents being married. 23.3% (38) respondents were single parents. This shows that the majority (96.3%) of the respondents apart from the role in the project they have a role of parenthood. This factor is significant considering what is required in the implementation of the exit strategies.

4.3.5 Distribution of respondents by the highest level of education

The researcher sought to establish the distribution of the respondents by the highest level of education attained. The highest level of education influences the rate of learning and application of new ideas, knowledge, and technologies and such individuals with different levels of education may hold different views about project benefits and participation. The respondents were asked to indicate the highest level of education by picking from the five options in the questionnaire- 'Did not attend school', 'Lower primary', 'Upper primary school', 'secondary school'' and 'College/tertiary'. The study findings are presented as shown in table 4.5.

Table 4.5: Distribution of respondents by the highest level of education

Highest level of education	Frequency	Percent
Did not attend school	75	46.0
Lower primary school	33	20.2
Upper primary school	45	27.6
Secondary school	10	6.1
Tertiary/college	0	0
Total	**163**	**100.0**

Table 4.5 reveals that all the respondents to this question. 46% (75) of the respondents did not attend school at all. 20.2% (33) attained the lower primary school education while 27.6% (45) of the respondents attained the upper primary school education. 6.1% (10) respondents attained a secondary school education. None of the respondents attained tertiary or college education. The variability in the level of education is a significant factor for analysis as regards the sustainability of the donor-funded livelihood projects especially the capacity building exit strategies.

4.3.6 Distribution of the respondents by the duration of stay in the project

The researcher sought to find out the distribution of respondents by the duration of stay. Individuals with different duration of stay in a project have different experiences and levels of participation in project activities and thus may have a different feel of project benefits. The respondents were asked to respond as guided by the questionnaire which had five options. The options were: 1 year or less, 2 years or less, 3 years, 4 years, and 5 years and more. The study findings are shown in the table 4.6.

Table 4.6: Distribution of the respondents by the duration of stay in the project

Duration on the project	Frequency	Percent
1 year or less	0	0
2 years	21	12.9
3 years	28	17.2
4 years	11	6.7
5 years and above	103	63.2
Total	**163**	**100.0**

Table 4.6 shows that no respondent had stayed on the project for one year or less. 12.9% (21) respondents had stayed in the project for 2 years. 17.2% (28) respondents had stayed in their respective project for 3 years. Only 6.7% (11) had stayed for 4 years while 63.2 % (103) respondents had stayed for 5 years and above. The mixed duration of stay indicates a significant consideration for the sustainability of donor-funded livelihood projects in terms of the length of the project to achieve sustainability. This study indicates that 100% had stayed in their respective projects for 2 years and above. This is considered a reason to have started feeling the benefits of projects. Further, the variability in the duration gives a reasonable factor for consideration for analysis on the respondent's perception of the sustainability of the donor-funded livelihood projects.

4.4 Tests for Statistical Assumptions and Analysis of Likert-type Data

This section shows how tests of normality, multi-collinearity, singularity, homoscedasticity, and heteroscedasticity were performed. The section also demonstrates Type I and Type II errors that arise results are wrongly deduced during tests. Further, the sections describe the use of the Likert Scale in data analysis.

4.4.1 Tests for Normality

Many parametric statistical methods including linear regression, Pearson correlation, f-test, and t-tests require that the variables are approximately normally distributed. This study uses regression and correlation as the main parametric statistical methods of analysis. The parametric forms of inferential analysis, therefore, require to fit the assumption that data is drawn from a normally distributed set or that the sample is drawn from a normally distributed population. The consequences of failing to consider normality assumptions may break down inferences and conclusions. As such Das and Imon (2016) explain that this may lead to drawing erroneous inferences and wrong conclusions. This further invalidates the parametric inferential analysis such as regression and correlation. Normality of distribution can be tested visually or through normality tests (Lee et al., 2014; Das & Imon, 2016; Ho & Yu, 2015). The visual methods include the graphical approaches of the histograms, scatter plots, Q-Q plots, and P-P plots (Das & Imon, 2016). The common inferential tests of normality are Kolmogorov-Smirnov (K-S) test and the Shapiro-Wilk test (S-W). S-W is popularly used because of its strength and rotational robustness and user-friendliness (Lee & Shao, 2014). Descriptively, normality can be ascertained by the degree of skewness and kurtosis. These two (skewness and kurtosis) are established indices for the degree of departure from normality whose desirable z-values should be between +/-1.96.

In this study, Kolmogorov-Smirnov (K-S) test and Shapiro-Wilk test (S-W) were carried out. The null hypothesis that "the data is not drawn from a normally distributed population" was tested. The decision and verdict were made against p value=0.05. The null hypothesis was rejected when the p-value fell below 0.05 while the null was sustained when the p-value fell above 0.05.

Visual inspection of the histograms, scatter plots, Q-Q plots, and P-P plots were carried out. Z values of Skewness and Kurtosis were also incorporated to support the tests for normality. The test for normality findings is as shown in tables 4.7 and 4.8 below.

Table 4.7: Tests for Normality

Variable/indicator	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	**df**	**Sig.**	**Statistic**	**df**	**Sig.**
Sustainability of donor-funded livelihood projects	0.097	163	0.001	0.979	163	0.013
Capacity building exit strategy	0.088	163	0.003	0.983	163	0.042
Support service linkages	0.075	163	0.028	0.986	163	0.090
Monitoring and Evaluation	0.105	163	0.000	0.978	163	0.010
Stakeholder Management	0.115	163	0.000	0.966	163	0.000

a. Lilliefors Significance Correction

Table 4.7 show that the S-W p-values for four variables (sustainability of donor-funded livelihood projects, capacity building exit strategy, monitoring and evaluation, and stakeholder management) lie between 0.000 and 0.042 which is less than 0.05. The null hypothesis '*The data is not drawn from a normally distributed population'* is rejected and concluded that there is enough evidence that the data for (sustainability of donor-funded livelihood projects, capacity building exit strategy, monitoring and evaluation, and stakeholder management as) variables are drawn from normally distributed population. Only one variable (support service linkages with a p-value of 0.09 which is greater than 0.05) was not drawn from a normally distributed population. This is insignificant as 4 out 5 assume normality. Therefore, it was concluded that data were drawn from a normally distributed population. A similar standing is supported by the z-values for skewness and kurtosis as indicated in table 4.8 below.

Table 4.8: Tests for Skewness and Kurtosis

Measure	Sustainability of donor-funded livelihood projects	Capacity building exit strategy	Support service linkages	Monitoring and evaluation	Stakeholder management
Skewness	-0.343	0.222	0.324	0.038	0.307
S.E.	0.190	0.190	0.190	0.190	0.190
z-values	-1.805	1.168	1.705	0.2	1.616
Kurtosis	-0.07	0.113	0.217	-0.290	-0.735
S.E.	0.378	0.378	0.378	0.378	0.378
z-value	-0.1852	0.2989	0.5741	-0.7672	-1.944

Table 4.8 reveals that the z-values for all the variables fall between -1.944 and 1.705. These values are within +/-1.96 which is desirable to hold assumption for normality.

4.4.2 Tests for Multi-collinearity and Singularity

The researcher sought to find out whether there existed the problem of multi-collinearity among the variables. Multi-collinearity is a condition when the variables under study are under the influence of two or more relationships meaning that two or more independent variables are correlated with each other (Duzan & Shariff, 2015 and El-Salam, 2014). This a condition where independent variables are greatly correlated. The existence of multi-collinearity makes the redundant or related variables unreliable and therefore the parameters less interpretable. While testing for multi-collinearity variance inflation factor (VIF) method was used. VIF measures the degree of inflation of the estimated regression coefficients in comparison to when a predictor variable is not related linearly. According to El-Salam (2014), a VIF value of greater than 10 and a tolerance of less than 0.1 indicate the existence of multi-collinearity. Though Shirley et al. (2005) opine that for minimal multi-collinearity is indicated with $1\text{-}R^2$ greater than 0.1; it is also argued

that a correlation coefficient of two independent variables that is equal or more than 0.7 indicates the presence of multicollinearity (Pedace, 2013). The test was carried out by VIF and tolerance methods and the findings are as shown in Table 4.9 below.

Table 4.9: Test for Multi-collinearity

	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model	**B**	**Std. Error**	**Beta**	**t**	**Sig.**	**Tolerance**	**VIF**
(Constant)	6.365	3.265		1.950	0.053		
Capacity building exit strategy	0.388	0.112	0.285	3.454	0.001	0.641	1.560
Support service linkages	0.067	0.081	0.070	0.835	0.405	0.612	1.634
Monitoring and Evaluation	0.126	0.111	0.118	1.137	0.257	0.408	2.451
Stakeholder Management	0.195	0.101	0.199	1.937	0.055	0.414	2.417

a. Dependent Variable: Sustainability of donor-funded livelihood projects

Table 4.9 above indicate that VIF values for the three dependent variables (capacity building exit strategy, support service linkages, and monitoring and evaluation) and the modifying variable (stakeholder management) are between 1.560 and 2.451 which far less than 10 while the tolerance values for the above variables fall between 0.408 and 0.641 which are greater than 0.1. Therefore, the conclusion was that there was no multi-collinearity between independent variables.

4.4.3 Tests for Homoscedasticity and Heteroscedasticity

The researcher was required to test for homoscedasticity and heteroscedasticity before prudent inferential data analysis. Homoscedasticity is a situation where the variance errors across all levels of the predictor variable are the same while heteroscedasticity is the absence of homoscedasticity, that is, the variance errors vary across all levels or observations. Failure to correct

heteroscedasticity invalidates statistical tests of significance such as regression analysis therefore the chances of making wrong inferences are high. This can as well result in making Type I error. Scatter diagrams were plotted (Appendix F) for counterchecking for heteroscedasticity and homoscedasticity to investigate the location and width of points between each independent variable and dependent variable. They showed an absence of heteroscedasticity.

4.4.4 Control of Type I Error and Type II Error

It is imperative to control type I and type II errors in research to make valid interpretations and incorrect conclusions. Type I error (error of the first kind) arise when the null hypothesis is rejected when there is significant evidence that it is true whereas type II error (error of the second kind) befall when a false null hypothesis is sustained when there is enough evidence that it is false (Sedgwick, 2014; and Trafimow & Earp, 2017). According to Li (2014) type I error refers to the probability of incorrectly accepting the alternative hypothesis and type II error is when the probability of incorrectly rejecting an alternative hypothesis.

Conventionally, the null hypothesis is rejected when the obtained p-value is less than the set p-value (alpha) and the null hypothesis is sustained when the obtained p-value is greater than the set alpha. Any contravention of the above rule results in either two errors. Knudson and Lindsey (2014) enumerated that these errors also occur when inadequate samples are used in correlational tests. Thus to control these errors the researcher used a larger sample of 170 as also suggested by Sedgwick (2014) who pointed out that large samples have estimates that approach the magnitude of the population parameters. This sample size for quantitative data collection was arrived at by using Solvin's formula (Singh & Masuku, 2014) on a population of 295. Trafimow and Earp (2017) suggested (though provisionally) that one can use a formula to arrive at a sample size and

use it as a good estimate for computing population parameters. The researcher also set the confidence interval high at 95% so that in case of errors they would only occur at a probability of 5% (alpha=0.05) as suggested by Trafimow and Earp (2017).

4.4.5 Analysis of Likert-type Data

The Likert way of interpreting study findings ensures accuracy. In this study quantitative data were obtained by use of self-administered questionnaires. The questionnaire was divided into two parts. The first part introduced the researcher and the purpose of the study while seeking consent for data collection. The second part delved into collecting data-the respondent's demographic information and opinion on the study variables. This second part was divided into six (6) sections of which the last sections (collecting respondents' opinion on study variables) were based on the 5-point Likert scale. The study predictor variables were capacity-building exit strategy, support service linkages, monitoring, and evaluation. The modifying variable was stakeholder management while the dependent variable was the sustainability of donor-funded livelihood projects.

Each variable had nine (9) Likert items for uniformity. The scale rating was as: strongly disagree (SD)=1; Disagree (D)=2; Neutral (N)=3; Agree (A)=4; and strongly agree (SA)=5. Any negatively stated Likert item was reversed before subjecting the data to analysis to ensure uniformity. The assumption of equidistance between the Likert rating (scales) was held to allow parametric analyses as pointed by Lantz (2013). In this study, an equidistance of 0.8 was used as 1.0<SD<1.8; 1.8<D2.6; 2.6<N<3.4; 3.4<A<4.2; and 4.2<SA<5.0. The descriptive statistics were presented by way of means and standard deviations.

4.5 Analysis of sustainability of donor-funded livelihood projects in Kilifi County

In this study sustainability of donor-funded livelihood projects was identified as the dependent variable. Based on the literature review theoretically and empirically sustainability is indicated by continued implementation, continued benefits, continued active participation. Therefore, data were collected on these aspects for the analysis of the dependent variable. All the 163 respondents replied to all the Likert items.

In the questionnaire, to measure the dependent variable, each of the above three indicators three (3) Likert items were developed for uniformity. As such sustainability had a total of nine items all positively stated.

4.5.1 Continued implementation

This indicator had three Likert items. The researcher pursued to establish the extent to which the respondents perceived the continued implementation after the withdrawal of the donor. The respondents were requested to indicate their level of agreement or disagreement based on the 5-point Likert scale as strongly disagree (SD)=1; Disagree (D)=2; Neutral (N)=3; Agree (A)=4; and strongly agree (SA)=5. The mean was while the standard deviation findings for the three items are as shown in Table 4.10 below.

Table 4.10: Continued Implementation

	SD F (%)	D F (%)	N F (%)	A F (%)	DA F (%)	N	Mean	S.E.	Std. Dev
SUS1	0 (0%)	22 (13.5%)	7 (4.3%)	78 (47.9%)	56 (34.4%)	163 100	4.03	0.076	0.965
SUS2	2 (1.2%)	32 (19.6)	5 (3.1%)	75 (46%)	49 (30.1%)	163 100	3.84	0.086	1.100
SUS3	2 (1.2%)	30 (18.4%)	6 (3.7%)	84 (51.5%)	41 (25.2%)	163 100	3.81	0.082	1.051
Composite							**3.893**		

SUS1: The project activities have continued normally;
SUS2: The laid infrastructural system is optimally operational;
SUS3: The number of beneficiaries has not reduced since the donor withdrew.

Table 4.10 shows the findings concerning responses to the three statements. Item 1 (SUS1) pursued to establish the extent to which the respondents perceived continuity of project activities. All items were stated positively. All 163 responded to these items. As indicated none of the respondents strongly agreed; 22 (13.5%) disagreed; 7 (4.3%) were neutral; 78 (47.9%) agreed; and 56 (34.4%) strongly agreed. The majority (82.3%) agreed that project activities continued even after the donor withdrew. The mean was 4.03 and a standard deviation of 0.965 with a standard error of the mean of 0.076. The perception lies between 3.065 and 4.995. The population perception lied between 3.954 and 4.106 thus holding the same view as the sample. Based on Lantz's (2013) assumption the respondents agreed that project activities continued normally as indeed the majority of the sample respondent represented by 134 (82.3%) tended to agree.

Item 2 (SUS2) sought to establish the extent to which the respondents perceived the operation of the laid infrastructural system. 2 (1.2%) respondents strongly disagreed; 32 (19.6%) disagreed; 5 (3.1%) were neutral; 75 (46%) agreed; and 49 (30.1%). The majority of the respondents (76.1%)

agreed that the laid infrastructure had continued operation. The mean was 3.84 and a standard deviation of 1.10 with a standard error of the mean of 0.086. The perception lies between 2.74 and 4.94. The sample held mixed perception with few neutral stands with the majority (76.1%) agreeing. The population perception lied between 3.754 and 3.926 thus holding the same view that the infrastructure installed operated optimally. Based on Lantz's (2013) assumption, the respondents viewed that the infrastructure by projects under study installed operated optimally.

Item 3 (SUS3) sought to find out the extent to which the respondents regarded the change in the number of beneficiaries since the donor withdrew. The results indicate that 2 (1.2%) strongly disagreed; 30 (18.4%) disagreed; 6 (3.7%) were undecided; 84 (51.5%) agreed; while 41 (25.2%) strongly agreed. The majority of the respondents (76.7%) agreed that the number of beneficiaries did not reduce meaning it remained the same. The statement was positive in meaning. The mean for this perception was 3.81, the standard deviation was 1.051, and the standard error of the mean of 0.082. This meant that the sample view lied between 2.759 and 4.861 while the population was between 3.728 and 3.892. The sample and population views were that there had been a reduction in the number of beneficiaries.

The table also indicates a composite mean of 3.893. With the assumption of Lantz (2013) the sample perceives that there was continued implementation of the project even after the pullout of the donor.

4.5.2 Continued Benefits

This indicator had three Likert items. The researcher pursued to establish the extent to which the respondents perceived the continued benefits after the withdrawal of the donor. The respondents were requested to indicate their level of agreement or disagreement based on the 5-point Likert

scale as strongly disagree (SD)=1; Disagree (D)=2; Neutral (N)=3; Agree (A)=4; and strongly agree (SA)=5. The mean was while the standard deviation findings for the three items are as shown in Table 4.11 below.

Table 4.11: Continued benefits

	SD F (%)	**D F (%)**	**N F (%)**	**A F (%)**	**DA F (%)**	**N**	**Mean**	**S.E.**	**Std. Dev**
SUS4	6	37	4	71	45	163	3.69	0.094	1.205
	(3.7%)	(22.7%)	(2.5%)	(43.6%)	(27.6%)	100			
SUS5	10	61	19	58	15	163	3.04	0.091	1.162
	(6.1%)	(37.4%)	(11.7%)	(35.6%)	(9.2%)	100			
SUS6	48	80	4	26	5	163	2.14	0.087	1.105
	(29.4%)	(49.1%)	(2.5%)	(16%)	(3.1%)	100			
Composite							**2.956**		

SUS4: There are continued farm yield since the donor support stopped
SUS5: There is continued income generation since the donor support stopped
SUS6: Other benefits have emerged as a result of this project

Table 4.11 shows the findings concerning responses to the three statements. Item 4 (SUS4) pursued to establish the extent to which the respondents perceived continuity of farm yields. All items were stated positively. All 163 responded to these items. As indicated 6 (3.7%) of the respondents strongly disagreed; 37 (22.7%) disagreed; 4 (2.5%) were neutral; 71 (43.6%) agreed; and 45 (27.6%) strongly agreed. The mean was 3.69 and a standard deviation of 1.205 with a standard error of the mean of 0.094. The perception lied between 2.485 and 4.895. This means that the respondents held mixed perceptions about the agreement and disagreement in the continued of the yields though the majority tending towards agreeing. The population perception lied between the mean of 3.596 and 3.784 thus held the view that there was continuity in the farm yields since the donor stopped support.

Findings on item SUS5 seeking to establish the opinion of the respondents on continued income generation since the donor pulled out of the project(s) indicated 3 (1.8%) strongly disagreed; 11 (6.7%) agreed; 6 (3.7%) were neutral; 89 (54.6%) agreed and while 54 (33.1%) of the respondents strongly agreed to the statement. The mean was 3.04 while the standard deviation was 1.162 and the standard error of the mean was 0.091. The sample mean lied between 1.878 and 4.202. The population mean lied between 2.949 and 3.131. This implied that the respondents held mixed perceptions about the agreement and disagreement in the continuity of the income generation with the majority tending towards agreement. The population held a neutral perception about the continuity of income generation upon the withdrawal of the donor.

Item 6 (SUS6) sought to establish the opinion of the respondents on other benefits emerging as a result of the project. 48 (29.4%) strongly disagreed; 80 (49.1%) disagreed; 4 (2.5%) were neutral; 26 (16%) agreed; and 5 (3.1%) strongly agreed. The mean response for this item was 2.14 with a standard deviation of 1.105 and a standard error of a mean of 0.087. The sample mean lied between 1.035 and 3.245 and the population mean between 2.053 and 2.227. The majority of the respondents (78.5%) disagreed with the opinion. According to the sample mean range, the respondents held mixed opinions with impartiality and with more tending towards disagreement.

4.5.3 Continued Active Participation

The researcher sought to find out the extent to which the respondents perceived the continued active participation after the withdrawal of the donor as guided by the three (3) Likert items as pointers. The respondents were requested to indicate their level of agreement or disagreement based on the 5-point Likert scale as strongly disagree (SD)=1; Disagree (D)=2; Neutral (N)=3;

Agree (A)=4; and strongly agree (SA)=5. The mean was while the standard deviation findings for the three items are as shown in Table 4.12 below.

Table 4.12: Continued Active Participation

	SD F (%)	**D F (%)**	**N F (%)**	**A F (%)**	**DA F (%)**	**N**	**Mean**	**S.E.**	**Std. Dev**
SUS7	2	15	1	85	60	163	4.14	0.072	0.915
	(1.2%)	(9.2%)	(0.6%)	(52.1%)	(36.8%)	100			
SUS8	3	11	6	89	54	163	4.10	0.070	0.893
	(1.8%)	(6.7%)	(3.7%)	(54.6%)	(33.1%)	100			
SUS9	3	12	6	100	42	163	4.02	0.068	0.871
	(1.8%)	(7.4%)	(3.7%)	(61.3%)	(25.8%)	100			
Composite						**163**	**4.087**		

SUS7: You frequently take part in the planning of the project
SUS8: You continually take part in decision making
SUS9: You regularly contribute towards project improvements

Table 4.12 presents the findings in respect to responses to the three statements that pointers to the respondents' perception towards continued active participation. All items were stated positively. All 163 responded to these items. Item 7 (SUS7) pursued to establish the extent to which the respondents perceived frequency in taking part in planning. As shown 2 (1.2%) of the respondents strongly disagreed; 15 (9.2%) disagreed; 1 (0.6%) were neutral; 85 (52.1%) agreed; and 60 (36.8%) strongly agreed to the perception. The majority of the respondents (88.9%) agreed that they frequently took part in the planning of the project. The mean was 4.14 and standard deviation of 0.915 with a standard error of the mean of 0.072. The perception lied between 3.225 and 5.055. The population perception lied between 4.068 and 4.212 thus hold the view as that they frequently took part in planning since the donor stopped support.

Findings on item 8 (SUS8), seeking to establish the opinion of the respondents on their participation in decision making showed that 10 (6.1%) strongly disagreed; 61 (37.4%) agreed; 19 (11.7%) were neutral; 58 (35.6%) agreed and while 15 (9.2%) of the respondents strongly agree to the statement. The majority (87.7%) of the respondents agreed. The mean was 4.10 while the standard deviation was 0.893 and the standard error of the mean was 0.072. The sample mean lied between 3.207 and 4.993. The population mean lied between 4.03 and 4.17. While the sample mean range indicated that a few held a neutral perception on the continued active participation in decision making the population computation indicated that it perceived to have active participation in decision making.

Item 9 (SUS9) sought to establish the opinion of the respondents on regular contributions towards project improvements. 3 (1.8%) strongly disagreed; 12 (7.4%) disagreed; 6 (3.7%) were neutral; 100 (61.3%) agreed; and 42 (25.8%) strongly agreed. The majority of the respondents (87.1%) agreed to have regularly contributed towards project improvements. The mean response for this item was 4.02 with a standard deviation of 0.871 and a standard error of mean of 0.068. The sample mean lied between 3.149 and 4.891 and the population mean between 3.952 and 4.088. While the sample mean range indicated that a few held a neutral perception on the regular contribution towards project improvements the population computation indicated that it is perceived to have a regular contribution towards project improvements.

The sustainability items (9) had a composite mean of 3.6462, standard error of mean of 0.04353 and standard deviation of 0.5557. According to Lantz (2013) range between 3.4 and 4.2 indicated agreeing to the perception. This connotes that the respondent perceived the donor-funded livelihood projects were sustainable.

The researcher further sought to establish the respondents' perception of the sustainability of the project according to the project, gender, age, marital status, the highest level of education attained, duration of stay on the project.

Perception of respondents on the sustainability of donor-funded livelihood projects by projects

The researcher sought to establish whether there was a significant difference in the perception of sustainability of donor-funded livelihood projects by projects among the three different projects from which the sample was drawn. A null hypothesis was stated as: *There is no significant difference in mean perception of sustainability of donor-funded livelihood projects among the three projects.* ANOVA using the Tukey test was carried out at a 0.05 level of confidence. The test findings were illustrated as $F_{(2,160)} = 1.670$; $p = 0.192 > 0.05$. The null was not rejected therefore it was concluded that the respondents from the three projects held the same view about project sustainability.

Perception of respondents on the sustainability of donor-funded livelihood projects by gender

The researcher sought to establish if the perception of the respondents differed by gender by testing the null hypothesis at a 0.05 level of confidence using the Independence Sample test. The null hypothesis was stated as: *There is no significant difference in mean perception of sustainability of donor-funded livelihood projects between male and female respondents*. The test was reported as $t_{(161)} = 0.428$; $p = 0.669 > 0.05$ and as such the null was not rejected. It was concluded that the perception did not differ between genders.

Perception of respondents on the sustainability of donor-funded livelihood project by age

The researcher sought to understand the perception of the respondents on the sustainability of donor-funded livelihood projects across 5 different age groups. ANOVA using the Tukey test was carried out at a 0.05 level of confidence to test the hypothesis: *There is no significant difference in mean perception of sustainability of donor-funded livelihood projects among the different age groups.* The test findings were indicated as $F_{(4,158)} = 0.517$; $p = 0.724 > 0.05$. Based on the p-value the null was not rejected and the conclusion was that the respondents' opinion on the sustainability of donor-funded livelihood projects did not differ.

Perception of respondents on the sustainability of donor-funded livelihood project by marital status

The researcher sought to establish whether or not the perception of respondents differed among the marital status by testing the null hypothesis on the means. The null was stated as: *There is no significant difference in mean perception of sustainability of donor-funded livelihood projects among the marital status.* ANOVA using the Tukey test was carried out at a 0.05 level of confidence. The test findings were indicated as $F_{(2,160)} = 1.268$; $p = 0.284 > 0.05$. The null was not rejected. It was concluded that respondents among different marital statuses held the same view about sustainability.

Perception of respondents on the sustainability of donor-funded livelihood project by highest level of education attained

The researcher sought to determine whether or not the respondents' opinions on the sustainability of donor-funded livelihood projects differed across 5 different highest levels of education attained. ANOVA using the Tukey test was carried out at 0.05 level of confidence to test the hypothesis:

There is no significant difference in mean perception of sustainability of donor-funded livelihood projects among the different levels of education attained. The test findings were indicated as $F_{(3,159)} = 3.812$; $p = 0.011 < 0.05$. Based on the p-value the null hypothesis was rejected, thus, the perception varied among the levels of education attained.

Perception of respondents on the sustainability of donor-funded livelihood project by the duration of stay in the project

The researcher sought to determine whether or not the respondents' opinions on the sustainability of donor-funded livelihood projects differed across 5 different durations in the project. ANOVA using the Tukey test was carried out at a 0.05 level of confidence to test the hypothesis: *There is no significant difference in mean perception of sustainability of donor-funded livelihood projects among the different durations of stay in the project.* The test findings were indicated as $F_{(3,159)} = 7.118$; $p = 0.000162 < 0.05$. Based on the p-value the null hypothesis was rejected. It was concluded that the perception of sustainability differed according to the duration of stay in the project.

The nine items under sustainability of donor-funded livelihood projects had a Cronbach's reliability coefficient of 0.690. Cronbach's alpha is a measure for internal consistency which is the degree to which all the items in a test measure the same concept (Tavakol & Dennick, 2011; Vaske et al., 2017) and it is used when multiple items are used to measure a single construct (Diedenhofen & Musch, 2016). A value between 0.65 and 0.85 is considered acceptable (Vaske et al., 2017). The researcher concluded that the items measured the sustainability of donor-funded livelihood projects.

From the findings, it was worth noting that though the overall position of the project was that the project had elements of sustainability, that is, continued implementation, continued benefits, and

continued active participation. These findings are in line with studies by Bond et al. (2014); Karanja (2014); Mattiuzzi (2017); Spaling et al. (2014). In a study by Spaling et al. (2014) sustainability of water resource projects in Central Kenya was exhibited by continual production of benefits. The continuity of implementation was achieved because of the system installed or provided. Though from the focus group discussions and interviews the projects' crop production had been adversely affected by floods experienced in March 2018 as the irrigation system connected to River Sabaki had been affected. To diversify the livelihoods, Kenya Red Cross [the main implementer] had supported farmers to integrate livestock keeping in the Gandini irrigation project apart from rehabilitating the system to some extent. The respondents were inclined to tangible benefits of farm yields and income since most of them dealt mostly with farm activities (crop and livestock production). While the observation of the project schemes did not show 100% utilization of the fields the farmers indicated that they utilize the knowledge and skills acquired to work on extra rented plots outside the project scheme. When asked to mention some of the benefits that the project had brought to the community one member of the focus group discussion said,

> *"Because of this project [Gandini irrigation project] my household can have food and I sell some to support my daily bills"*

Though the overall opinion indicated that the project was sustainable the majority of respondents (78.5%) opined that they did not see the emergence of other benefits of the project. From the in-depth interviews, however, it was learned that other benefits included the acquisition of knowledge on new methods of crop and livestock husbandry. A key response when asked to mention other benefits she said,

> "*I personally I gained much education which enables me to plant different crops utilizing the same plot unlike in the past when I practiced mono-cropping season after season*"

Another member of the Dodosa project described and said,

> *"I have been able to support the education of my children as the income I gain from the sale of vegetables [maboga] and green maize [matsere] support the school fees and other school collections."*

The composite mean for continued benefits was 2.956. This falls in the neutral areas according to Lantz (2013). This is explained by mixed opinions offsetting the scores from the focused group discussion and interview regarding the outputs (farm yields and income) in comparison to the cost of maintaining and running the irrigation machines. One respondent from an FGD said this on the cost when they were asked to explain what they thought about the adequacy of the installed system,

> *"Yes, it was adequate for the project but it had more expenses than we thought."*

The respondents indicated that there was continued active participation as regards planning, decision making, and contribution towards project improvements. This was in line with the inference by Oina et al (2015) that sustainability is socially indicated by continued participation in decision making and planning. Other forms of contribution included labor force during common installations, provision of land, and provision of locally available materials, and security for the project assets.

On the respondents' perception of the sustainability of the project according to the project, gender, age, marital status, the highest level of education attained, duration of stay on the project. The views were similar across the projects, genders, age groups, and marital status. However, the views of respondents on sustainability differed significantly across the different levels of education attained and duration of stay. The means for different levels of education were as 'Did not attend school' (n=75, μ=3.5822), 'Lower primary' (n=33, μ=3.4714), 'Upper primary' (n=45, μ=3.83210 and 'Secondary school' (n=10, μ=3.8667). The means for different project duration were as '2 years' (n=21, μ=3.3757), '3 years' (n=28, μ=3.3413), '4 years' (n=11, μ=3.798) and '5 years and

above' (n=103, μ=3.7681). Those who had stayed for less than 3 years were neutral about sustainability. Since the majority who had stayed more than three years had mean perception agreeing to the aspects of sustainability it was concluded that the impact of projects can fully be felt at 3 years of implementation.

4.5.4 Implications of the findings on the sustainability of donor-funded livelihood projects in Kilifi county

Findings indicated that the sustainability of studied donor-funded livelihood projects was better understood through continued participation of the communities in planning and decision making. Continued implementation of project activities (through functioning systems); and continued benefits (in terms of yields, income, and other emerging benefits) were less recognized by the farmers as aspects of sustainability. This implies that the community actively participated in all processes of planning and decision-making to undertake to reach a given socio-economic goal by consciously analyzing the problems and outlining a course of action to resolve those problems. Project closed out before the community could optimally feel the benefits of the project and gains from project systems and technologies.

4.6 Analysis of Project Capacity building exit strategy and sustainability of donor-funded livelihood projects in Kilifi County

The research objective one was to establish how capacity building exit strategy influences the sustainability of donor-funded livelihood projects in Kilifi County. The indicators for capacity building exit strategy were training, technological capacity, and resource capacity building.

4.6.1 Training strategy and sustainability of donor-funded livelihood projects in Kilifi County

This indicator had three Likert items. The researcher pursued to establish the extent to which the respondents perceived the training influenced sustainability of donor-funded livelihood projects. The respondents were requested to indicate their level of agreement or disagreement based on the 5-point Likert scale as strongly disagree (SD)=1; Disagree (D)=2; Neutral (N)=3; Agree (A)=4; and strongly agree (SA)=5. The mean and the standard deviation findings for the three items are as shown in Table 4.13 below.

Table 4.13: Training and sustainability of donor-funded livelihood projects in Kilifi County

	SD F (%)	**D F (%)**	**N F (%)**	**A F (%)**	**DA F (%)**	**N**	**Mean**	**S.E.**	**Std. Dev**
CB1	2 (1.2%)	7 (4.3%)	0 (0%)	86 (52.8%)	68 (41.7%)	163 100	4.29	0.061	0.785
CB2	1 (0.6%)	1 (0.6%)	1 (0.6%)	98 (60.1%)	62 (38%)	163 100	4.34	0.046	0.592
CB3	0 (0%)	5 (3.1%)	2 (1.2%)	92 (56.4%)	64 (39.3%)	163 100	4.32	0.051	0.655
Composite							**4.32**		

CB1: You were adequately trained before the project closed
CB2: You have the skills required to carry out crop husbandry
CB3: You apply the skills you received in previous training before project closure

Table 4.13 above presents the findings in respect to responses to the three statements that pointers to the respondents' perception towards training offered during the project life. All items were stated positively. All 163 responded to these items. Item 1 (CB1) sought to find out whether the respondents had been trained adequately before the project closed. As indicated, 2 (1.2%) of the respondents strongly disagreed; 7 (4.3%) disagreed; none had a neutral stand; 86 (52.8%) agreed and 68 (41.7%) strongly agreed. The majority (94.5%) were positive about the adequacy of the training. The mean was 4.29 and the standard deviation was 0.785. The sample perception lied

between 3.505 and 5.075 implying that the respondents were adequately trained before the project closure.

Item 2 (CB2) sought to establish the respondents' opinion on whether they had skills required for crop husbandry. The findings indicate that 1 (0.6%) strongly disagreed; 1 (0.6%) agreed; 1 (0.6%) was neutral; 98 (60.1%) agreed; and 62 (38%) strongly agreed. the majority of the respondents (98.1%) had a positive stand. The mean was 4.34, a standard deviation of 0.592, and a standard error mean of 0.046. The perception lies between 3.748 and 4.932. This implies that the respondents held the view that they had adequate skills for crop and livestock husbandry.

Item 3 (CB3) sought to find out whether the respondents applied the skills acquired in the training before the project closed. Findings pointed out that none (0%) of the respondents strongly disagreed; 5 (3.1%) disagreed; 2 (1.2%) were neutral; 92 (56.4%) agreed; and 64 (39.3%) strongly agreed. the majority of the respondents (95.7%) were positive about the opinion. The mean was 4.32, with a standard deviation of 0.655 and a standard error of the mean of 0.051. The mean perception lied between 3.665 and 4.975. This implied that that sample perceived to apply the skills they received before the project closed. The overall mean perception of 4.32 indicates that the respondents agreed strongly that training influenced the sustainability of DFLPs in Kilifi County.

4.6.2 Technological support and sustainability of donor-funded livelihood projects in Kilifi County

The three Likert items of this indicator sought to establish the extent to which the respondents perceived the technological support influenced the sustainability of donor-funded livelihood projects. The respondents were requested to indicate their level of agreement or disagreement

based on the 5-point Likert scale as strongly disagree (SD)=1; Disagree (D)=2; Neutral (N)=3; Agree (A)=4; and strongly agree (SA)=5. All the items were stated positively. The mean and the standard deviation findings for the three items are as shown in table 4.14 below.

Table 4.14: Technological support and sustainability of donor-funded livelihood projects in Kilifi County

	SD F (%)	**D F (%)**	**N F (%)**	**A F (%)**	**DA F (%)**	**N**	**Mean**	**S.E.**	**Std. Dev**
CB4	0 (0%)	1 (0.6%)	4 (2.5%)	99 (60.7%)	59 (36.2%)	163 100	4.33	0.089	0.554
CB5	17 (10.4%)	57 (35%)	20 (12.3%)	64 (39.3%)	5 (3.1%)	163 100	2.90	0.092	1.131
CB6	2 (1.2%)	47 (28.8%)	12 (7.4%)	64 (39.3%)	38 (23.3%)	163 100	3.55	0.095	1.172
Composite							**3.59**		

CB4: The project installed/supplied the required system for production
CB5: The system installed/supplied is functioning satisfactorily
CB6: The system is maintained as required

The findings in table 4.14 present the responses on the three Likert items. Item 4 (CB4) sought to find out from the respondents whether the project provided the required system for production. All 163 responded to these items. It was found out that none (0%) of the respondents strongly agreed; 1 (0.6) disagreed; 4 (2.5%) were neutral; 99 (60.7%) agreed; and 59 (36.2%) strongly agreed. The majority (96.9%) held a positive response to the requirement of the system provided. The mean was 4.33, standard deviation 0,554, and standard error of the mean of 0.089. The sample perception on the provision of the required system lied between 3.776 and 4.884 implying that the respondents held the view that the project provided the required systems.

Item 5 (CB5) pursued to establish whether the system provided functioned satisfactorily after the closure. From the findings, 17 respondents (10.4%) strongly disagreed; 57 (35%) agreed; 20 (12.3%) were neutral; 64 (39.3%); 5 (3.1%) agreed; and strongly disagreed. The mean was 2.90, the standard deviation was 1.131 while the standard error of the mean was 0.092. The mean perception on satisfactory functioning of the systems lied between 1.769 and 4.031. This suggests that the respondents had mixed views about the functionality of the systems provided with more tending to the negative (disagreement).

Item 6 (CB6) sought to establish whether the respondents perceived that the systems were maintained as required. The findings indicate that 2 (1.2%) respondents strongly disagreed; 47 (28.8%) disagreed; 12 (7.4%) were neutral; 64 (39.3%) agreed; and 38 (23.3%). The mean was 3.55, the standard deviation was 1.172 and the standard error of the mean was 0.095. The mean perception lied between 2.378 and 4.722. The respondents had varied views on the maintenance of the system with more tending towards positive (agreement). The overall mean perception of technological support's influence on the sustainability of 3.55 indicated that respondents were positive that it influenced the sustainability of DFLPs.

4.6.3 Resource capacities and sustainability of donor-funded livelihood projects in Kilifi County

The three Likert items of this indicator sought to establish the extent to which the respondents perceived the resource capacities influenced the sustainability of donor-funded livelihood projects. The respondents were requested to indicate their level of agreement or disagreement based on the 5-point Likert scale as strongly disagree (SD)=1; Disagree (D)=2; Neutral (N)=3; Agree (A)=4;

and strongly agree (SA)=5. All the items were stated positively. The mean and the standard deviation findings for the three items are as shown in Table 4.15 below.

Table 4.15: Resource capacities and sustainability of donor-funded livelihood projects in Kilifi County

	SD F (%)	**D F (%)**	**N F (%)**	**A F (%)**	**DA F (%)**	**N**	**Mean**	**S.E.**	**Std. Dev**
CB7	13 (8.0%)	43 (26.4%)	14 (8.6%)	74 (44.8%)	20 (12.3%)	163 100	3.27	0.095	1.207
CB8	14 (8.6%)	40 (24.5%)	14 (8.6%)	72 (44.2%)	23 (14.1%)	163 100	3.31	0.096	1.229
CB9	2 (1.2%)	20 (12.3%)	11 (6.7%)	103 (63.2%)	27 (16.6%)	163 100	3.82	0.070	0.897
Composite							**3.46**		

CB7: Since project closure other institutions or individuals have supported
CB8: You contribute financially towards the project activities
CB9: You have budgeting skills

The findings in Table 4.15 presents the responses on the three Likert items. Item 7 (CB7) sought to find out from the respondents whether the other institutions or individuals have supported the project since its closure. All 163 responded to these items. The findings indicated that 13 (8.0%) of the respondents strongly disagreed; 43 (26.4%) disagreed; 14 (8.6%) were neutral; 74 (44.8%) agreed; and 20 (12.3%) strongly agreed. The mean was 3.27, the standard deviation was 1.207 and the standard error of means was 0.095. The mean perception of other institutions or individual support lied between 2.067 and 4.477. This denotes that the respondents had mixed views on other individual and institutional support tending toward positive (agreement).

Item 8 (CB8) sought to find out the extent to which the respondents perceived they contributed towards the project activities. The findings showed that 14 (8.6%) respondents strongly disagreed; 40 (24.5%) disagreed; 14 (8.6%) were neutral; 72 (44.2%) agreed and 23 (14.1%) strongly agreed.

The mean was 3.31, the standard deviation was 1.229 and the standard error of means was 0.096. The mean perception lied between 2.081 and 4.539 implying that the sample perception was mixed with more on the agreement side.

Item 9 (CB9) sought to establish the extent to which the respondents perceived to have budgeting skills. The findings reveal that only 2 (1.2%) respondents strongly disagreed; 20 (12.3%) disagreed; 11 (6.7%) were neutral; 103 (63.2%); and 27 (16.6%) strongly agreed. The majority (79.8%) of the respondents agreed that they had budgeting skills. The mean was 3.82, the standard deviation was 0.897 while the standard error of means was 0.070. The mean perception of other support lied between 2.923 and 4.717. The sample held the view they had budgeting skills.

Table 4.16: Means and standard deviations of capacity building exit strategy and sustainability of donor-funded livelihood project

Sub-indicator	N	Mean	Std. Error	Std. Deviation	Cronbach's coefficient
Trainings	163	4.3190	0.04335	0.55351	0.672
Technological support	163	3.5890	0.04885	0.62369	
Resource capacities	163	3.4642	0.05658	0.72240	
Valid N (listwise)	163				

Table 4.16 above indicates various composite means, standard error of means, and standard deviations (computed using transform function under the SPSS) for the constructs considered under capacity building exit strategy. Training scored a mean of 4.319 with a mean perception falling between 3.766 and 4.873. This points out that the sample perception was agreeing that training contributed to the sustainability of donor-funded livelihood projects. Technological support had a mean of 3.589 and a standard deviation of 0.6237. The mean perception lied between 2.965 and 4.213 falling to a smaller extent on neutral and a much on agreeing and thus concluded that the respondents held a view that technological support contributes to the sustainability of

projects. Resource capacities had a mean of 3.464 and standard deviation of 0.7224 with sample perception falling between 2.742 and 4.186 indicating that mixed views but most tend to the positive. This was concluded that enhanced resource capacity contributed to the sustainability of projects. The overall composite mean perception for capacity building was 3.791 indicating an agreement view that capacity building influenced the sustainability of donor-funded livelihood. The Cronbach's Reliability coefficient for the nine Likert items was 0.673 indicating that the items had an acceptable internal consistency for a capacity-building exit strategy.

4.6.4 Inferential analysis of Influence of capacity building exit strategy on the sustainability of donor-funded livelihood projects

Objective one of this study pursed to establish how capacity building exit strategy influenced the sustainability of donor-funded livelihood projects in Kilifi County. Capacity building was identified as a component of a project exit strategy. According to the reviewed literature capacity building was contributed by training, technological support, and enhanced resource capacities. The pointers of sustainability of donor-funded projects were continued activity implementation, continued benefits, and continued active participation by the members. From the studies and theories, capacity building and sustainability were positively correlated. A null hypothesis was therefore formulated and tested to determine the argument. Inferential analysis was carried out using correlation and regression methods. The correlation was used to establish the association between capacity building exit strategy and sustainability of donor-funded livelihood projects in Kilifi County. Regression was carried out to establish the extent of influence between the two variables.

Hypothesis one

H_0: Sustainability of donor-funded livelihood projects in Kilifi County is not significantly influenced by project capacity building exit strategy

H_1: Sustainability of donor-funded livelihood projects in Kilifi County is significantly influenced by project capacity building exit strategy

Regression Model one

Project sustainability=f (Project capacity building exit strategy)

$Y=f(X_1, Ɛ)$

$Y= ß_0+ ß_1X_1+ Ɛ$; where

$ß_0$=Constant term

$ß_1$=Beta coefficient

X_1= Project capacity building exit strategy

$Ɛ$ = the random error

The data that was used to test this hypothesis were obtained from the responses on Likert items CB1 to CB9. The items were pursued to establish the extent to which capacity-building exit strategy influenced the sustainability of donor-funded livelihood projects in Kilifi County. The respondents were requested to indicate their level of agreement or disagreement based on the 5-point Likert scale as strongly disagree (SD)=1; Disagree (D)=2; Neutral (N)=3; Agree (A)=4; and strongly agree (SA)=5 for each of the nine (9) items.

Correlation between capacity building exit strategy and sustainability of DFLPs

The correlation was carried for association and obtained the findings as indicated in table 4.17 below.

Table 4.17: Correlation between capacity building exit strategy and sustainability of DFLPs

		Sustainability of donor-funded livelihood projects	Capacity building exit strategy
Sustainability of donor-funded livelihood projects	Pearson Correlation	1	0.495**
	Sig. (2-tailed)		0.000752
	N	163	163
Capacity building exit strategy	Pearson Correlation	0.495**	1
	Sig. (2-tailed)	0.000752	
	N	163	163

**. Correlation is significant at the 0.01 level (2-tailed).

The table 4.17 shows Pearson product moment correlation (r) =0.495; p=0.000752<0.01. In reference to 0.8-.09 very strong positive; 0.6-0.7 strong positive; 0.5 moderate positive; 0.3-0.4 weak positive; 0.1-0.2 very weak positive; and -0.8- -09 very strong negative; -0.6- -0.7 strong negative; -0.5 moderate negative; -0.3- -0.4 weak negative; -0.1- -0.2 very weak negative this finding shows that there is a moderate positive correlation between capacity building exit strategy and sustainability of donor-funded livelihood projects. This implies that as the level of capacity building increases the sustainability of donor-funded livelihood projects increases. By p-value testing, 0.000752<0.01 and therefore the null hypothesis "*There is no significant relationship between capacity building exit strategy and sustainability of donor-funded livelihood projects in Kilifi County"* was rejected and concluded that sustainability of DFLPs in Kilifi County was significantly related to project capacity building exit strategy.

Regression analysis for capacity building exit strategy and sustainability of DFLPs

Regression analysis was carried out to obtain the model summary, model fit, and coefficients as in indicated in tables 4.18, 4.19, and 4.20 below.

Table 4.18: Regression model summary for capacity building exit strategy and sustainability of DFLPs

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.495[a]	0.245	0.240	0.48447

a. Predictors: (Constant), Capacity building exit strategy

The model table 4.18 above shows that capacity building predicted 24.5% of sustainability of DFLPs however when adjusted predicted 24% sustainability of DFLPs. This implies that 75.5% is accounted for by other factors. To find out the fitness of the model (how capacity building predicts sustainability of DFLPs) ANOVA test was carried out to test the null hypothesis "*The model for capacity building exit strategy predicting the sustainability of DFLPs is not fit"* and gave the results as indicated in the table below.

Table 4.19: Test for Model fitness for predicting capacity building exit strategy and sustainability of DFLPs

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	12.243	1	12.243	52.162	0.000752[b]
Residual	37.788	161	0.235		
Total	**50.031**	**162**			

a. Dependent Variable: Sustainability of donor-funded livelihood projects
b. Predictors: (Constant), Capacity building exit strategy

The model fitness test as shown in table 4.19 above indicate $F_{(1,161)} = 52.162$; $p = 0.000752 < 0.01$. The null hypothesis was rejected and thus the model was fit. Therefore, capacity building predicted 24.5% of the sustainability of DFLPs. This implies that capacity building alone could be used to predict the sustainability of DFLPs.

To find out the extent to which capacity building influences the sustainability of DFLPs, the mathematical model below was determined guided by the SPSS generated coefficients as shown table below.

$Y= ß_0+ ß_1X_1+ Ɛ$; *where* $Ɛ$ *is the random error*

Table 4.20: Mathematical model for capacity building exit strategy and sustainability of DFLPs

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	1.079	0.357		3.020	0.003
Capacity building exit strategy	0.677	0.094	0.495	7.222	0.000752

a. Dependent Variable: Sustainability of donor-funded livelihood projects

Table 4.20 shows a mathematical model

$Y=1.079+0.677X_1+ Ɛ$ where; Ɛ is error and X_1 is the capacity-building exit strategy

This means that an increase in capacity building by one (1) unit increases the sustainability by 0.677 units and a reduction by one (1) unit reduces sustainability by 0.677 units. It follows that a decrease by a unit effort in capacity building will reduce sustainability by 0.495.

Given the p=0.000752<0.05 the null hypothesis "*Sustainability of donor-funded livelihood projects in Kilifi County is not significantly influenced by project capacity building exit strategy*" was therefore rejected. It was concluded that the sustainability of donor-funded livelihood projects in Kilifi County was significantly influenced by the project capacity building exit strategy.

The Likert scale value can be computed as:

Y=1.079+ (0.677*0.245) + Ɛ

Y=1.079+0.166

Y=1.245

According to the Likert rating by Lantz (2013), 1.245 falls in the strongly disagreeing (rejection) area. This is confirmed by t=3.02; p=0.003<0.05. The null hypothesis "*Capacity building does not significantly influence the sustainability of DFLPs*" would be rejected implying that any shift in the capacity building would significantly cause a shift in sustainability.

Further, in the capacity-building strategy, the researcher sought to establish the significant contribution of training, technological support, and resource capacities independently. The findings were indicated in table 4.21 below.

Table 4.21: Training, Technological support, Resource capacities and Sustainability of DFLPs

Model	**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
	B	**Std. Error**	**Beta**		
(Constant)	0.400	0.332		1.205	0.230
Trainings	0.568	0.062	0.566	9.191	0.000
Technological support	0.196	0.055	0.220	3.563	0.000
Resource capacities	0.026	0.047	0.034	0.551	0.583

a. Dependent Variable: Sustainability of donor-funded livelihood projects

b. Predictors: (Constants), Training, Technological support, Resource capacities
$F_{(3,159)}$ =37.935; p=0.000059<0.05

The Table 4.21 shows that ß value of training of 0.568 (ßt=0.568; p=0.00000093<0.05); ß-value of technological support of 0.196 (ßtech=0.196; p=0.000485<0.05) and ß-value of resource capacities of 0.026 (ßr=0.026; p=0.583>0.05). These imply that training and technological support had a significant influence while resource capacities did not have a significant influence on sustainability.

The expanded mathematical model for capacity building exit strategy using the table above is as follows:

Y=0.4+0.568T+0.196Tech+0.026R where;

T=Trainings

Tech=Technological support

R=Resource capacities

Based on the test statistics ($F_{(3,159)}$ =37.935; p=0.000059<0.05) on the model fitness was concluded that the model is fit.

4.6.5 Discussion on capacity building exit strategies and sustainability of donor-funded livelihood projects

The findings clearly showed that capacity building exit strategy influenced the sustainability of DFLPs in Kilifi County. This was descriptively shown by the mean perception of 3.795 inferential analysis also showed that capacity building and sustainability are positively and moderately correlated (r=0.495). The regression analysis findings revealed a p-value of 0.000<0.05 (rejection of the null hypothesis). Further, training (p=0.00<0.05) and technological support (p=0.000<0.05) had a significant influence on sustainability. The farmers had received adequate training before project closure and were applying the knowledge and skills. The skills and knowledge acquired through the training enabled the farmers to make informed decisions and attain full participation in project operations. These results concur with findings by Karanja (2014) while studying the sustainability of income-generating activities (IGAs) in Murang'a (in Kenya). In his findings training had a positive influence on the sustainability of the IGAs. Consequently, the findings are in line with the findings of Kats and Sara (1997) in rural water systems in Uganda, Bolivia, and Honduras in which training and sustainability had a positive correlation. The training enabled the

use of new technologies which agrees with Cornish et al (2015) in which through capacity building the farmers in East India Plateau were able to change from conventional methods of farming and practice alternative cropping systems which improved their yields and returns. Anguko (2018) also found that the installation of appropriate infrastructure enhanced the sustainability of poultry production projects in the Kilosa, Kongwa, and Chamwino districts in Tanzania. In this study, the respondents alluded that project installed the required system though were not functioning satisfactorily considering the effects of floods in 2018 and the great distances from the source of water experienced in the Uvumbuzi project.

From the focus group discussions and in-depth interviews, it was established that the project had delivered several pieces of training ranging from group dynamics and leadership, best agricultural practices, financial and entrepreneurial training, group saving and loaning, operation and maintenance training. This was viewed as adequate for the farmers. The respondents felt that the adequacy of skills enabled them to train other neighboring communities in such issues as land preparation, manuring and fertilizer application, post-harvest handling. When asked their opinion on the training offered before project closure, one of the members said,

> *"The training we received made this area a hub for modern agriculture where our neighbors come to pick a few lessons, for example, Bombi project I the neighboring ward was started because of this project"*

The project had also provided various capacity-building programs to support the transfer of skills such as exchange programs, open days, and field days. The training was delivered in collaboration with the line departments such as agriculture and irrigation, livestock production, social services, cooperatives development.

On technological support, the respondents of the questionnaires agreed that the required systems had been installed (scored second highest mean 4.33) but had mixed views about the functionality

of the systems provided with more tending to the negative (disagreement) and mixed reaction on maintenance. From the FGDs and in-depth interviews, it was established that the functionality of the systems was adversely affected by the floods experienced in 2018 in which the irrigation pipes were swept away and six heavy-duty Lister pumps were destroyed due to submergence. The project had efforts to rehabilitate the affected systems but was limited by finances. The cost of running and maintaining the pumps was high as most of them relied on diesel and petrol though the [Gandini] project had supported fuel in the initial years but later stopped. One respondent said,

> *"Yes, the machines were adequate for the project and were functioning well until when the floods [in April 2018] came and destroyed them but we got new machines which were not fully installed except one"*

However, in Kilifi County, resource capacity enhancement ($p=0.583>0.05$) did not significantly contribute to sustainability though the respondents agreed to have capacities that contributed to sustainability. It was explained by the mixed reactions concerning the presence of external institutions to support the farmers and financial contributions towards the project operations after the projects closed. The farmers' concentration on their plots made it challenging for farmers to contribute to the common pool of resources for the respective projects. From the interviews and FGDs, it was determined that apart from Kenya Red Cross (in Dodosa and Gandini projects) and Action Aid (in Uvumbuzi) the county government (department of agriculture), World Vision, Food and Agriculture organization, office of the member of county assembly had supported in seed provision, infrastructure, and capacity building. The respondents [farmers] had put in place mechanisms for a monthly subscription to support the project activities. From the FGDs participation project members had subscribed to varied monthly collections depending on the project. One respondent said,

"In my group, we contribute Kenya Shilling 200 per person to buy fuel for machines and maintenance of damaged pipes."

4.6.6 Implications of findings on capacity building exit strategies on sustainability of donor-funded projects in Kilifi county

From the descriptive and inferential analyses, training and technical support to farmers were more pronounced than resource capacity development. This implied that investing more in capacity-building initiatives to develop knowledge and skills can enhance decision making and participation of the community in projects and thus enhancing sustainability. Since there was a little contribution by resource capacity development projects can devise resource mobilization strategies that can cushion their efforts upon donor withdrawal.

4.7 Analysis of Support service linkages and sustainability of donor-funded livelihood projects in Kilifi County

Research objective two was to establish the extent to which support service linkages influence the sustainability of donor-funded livelihood projects in Kilifi County. The indicators for support service linkages were access to extension services, access to credit services, and market linkages.

4.7.1 Access to extension services and sustainability of donor-funded livelihood projects in Kilifi County

This indicator had three Likert items. The researcher pursued to establish the extent to which the respondents perceived the access to extension services influenced the sustainability of donor-funded livelihood projects. The respondents were requested to indicate their level of agreement or disagreement based on the 5-point Likert scale as strongly disagree (SD)=1; Disagree (D)=2;

Neutral (N)=3; Agree (A)=4; and strongly agree (SA)=5. The mean and the standard deviation findings for the three items are as shown in Table 4.22 below.

Table 4.22: Access to extension services and Sustainability of DFLPs

Item	SD F (%)	D F (%)	N F (%)	A F (%)	DA F (%)	N	Mean	S.E.	Std. Dev
SS1	11 (6.7%)	65 (39.9%)	22 (13.5%)	42 (25.8%)	23 (14.1%)	163 100	3.01	0.096	1.225
SS2	5 (2.5%)	44 (27.0%)	7 (4.3%)	74 (45.4%)	33 (20.2%)	163 100	3.53	0.092	1.178
SS3	2 (1.2%)	32 (19.6%)	15 (9.2%)	88 (54%)	26 (16.0%)	163 100	3.64	0.079	1.011
Composite							3.393		

SS1: There is a formal agreement with extension service providers
SS2: You often receive advisory on crop husbandry
SS3: Your access to extension services is affordable

The findings in Table 4.22 presents the responses on the three Likert items on access to extension services. Item 1 (SS1) sought to find out from the respondents whether there was a formal agreement with extension providers. The findings indicate that 11 (6.7%) of the respondents strongly disagreed; 65 (39.9%) disagreed; 22 (13.5%) were neutral; 42 (25.8%) agreed while 23 (14.1%) strongly agreed. The mean was 3.01, the standard deviation was 1.225 and the standard error of the mean was 0.096. The mean perception of the sample lied between 1.785 and 4.235. This points that the respondents had a mixed opinion (equidistant about the neutral) on the availability of the formal agreement.

Item2 (SS2) sought to establish whether the extent to which the respondents received advisories on crop husbandry. 5 (2.5%) respondents strongly disagreed; 44 (27%) disagreed; 7 (4.3%) were

neutral; 74 (45.4%) agreed while 33 (20.2%) strongly agreed that they often received the advisories. The mean was 3.53 with a standard deviation of 1.178 and a mean standard error of 0.092. The mean perception of the frequency of advisories lied between 2.352 and 4.708. The respondents had mixed views on the frequency of reception of advisories tending towards the positive. The composite mean perception for extension services was 3.393. This lied on the edge of neutrality.

4.7.2 Access to credit services and sustainability of donor-funded livelihood projects in Kilifi County

This indicator had three Likert items. The researcher pursued to establish the extent to which the respondents perceived the access to credit services and its influence on the sustainability of donor-funded livelihood projects. The respondents were requested to indicate their level of agreement or disagreement based on the 5-point Likert scale as strongly disagree (SD)=1; Disagree (D)=2; Neutral (N)=3; Agree (A)=4; and strongly agree (SA)=5. The mean and the standard deviation findings for the three Likert items for access to credit service are as shown in table 4.23 below.

Table 4.23: Access to credit services and sustainability of DFLPs

Item	SD F (%)	D F (%)	N F (%)	A F (%)	DA F (%)	N	Mean	S.E.	Std. Dev
SS4	49 (30.1%)	78 (47.9%)	9 (5.5%)	23 (14.1%)	4 (2.5%)	163 100	2.11	0.083	1.066
SS5	29 (17.8%)	75 (46%)	13 (8.0%)	32 (19.6%)	14 (8.6%)	163 100	2.55	0.097	1.233
SS6	13 (8.0%)	26 (19.6%)	60 (36.8%)	51 (31.3%)	13 (8.0%)	163 100	3.15	0.083	1.046
Composite							**2.603**		

SS4: There are adequate credit facilities from which you can get a loan around you
SS5: You frequently acquire a loan to support your project activities
SS6: The interest rate for credit is affordable

Item 4 (SS4) sought to establish the extent to which the respondents perceived to have adequate credit facilities from which they could acquire loans. The results show that 49 (30.1%) of the respondents strongly disagreed; 78 (47.9%) disagreed; 9 (5.5%) were neutral; 23 (14.1%) agreed and 4 (2.5%) strongly agreed. The majority (78%) disagreed. The mean for this item was 2.11 showing that the sample disagreed. However, with the standard deviation of 1.066, the mean perception between 1.044 and 3.176 implied that the sample perception falls heavy on disagreement with slight towards the neutral.

Item 5 (SS5) sought to determine the degree to which the respondents perceived they had acquired loans to support project activities. 29 (17.8%) strongly disagreed; 75 (46%) disagreed; 13 (8.0%) were neutral; 32 (19.6%) agreed while 14 (8.6%) strongly agreed. The mean of 2.55 lies in the disagreement area, however with the standard deviation of 1.233 it meant that the mean perception of the sample lied between 1.327 and 3.773 it showed that the respondents had mixed perceptions regarding the acquisition of loans to support project activities.

Item 6 (SS6) strived to determine the respondents' perception of the affordability of the interest rate on loans acquired. It was found out that 13 (8.0%) strongly disagreed; 26 (19.6%) disagreed; 60 (36.8%) were neutral; 51 (31.3%) agreed; and 13 (8.0%) strongly agreed. This item scored a mean of 3.15; a standard deviation of 1.046 and a standard error of the mean of 0.083%. With a perception mean range of 2.104 and 4.196 it implies mixed views but slightly tending to an agreement but generally concluded that the sample was neutral that the interest rates were affordable.

4.7.3 Market linkage services and sustainability of donor-funded livelihood projects in Kilifi County

The three Likert items were pursued to find out the extent to which the respondents perceived the market linkages and their contribution to the sustainability of donor-funded livelihood projects. The respondents were requested to indicate their level of agreement or disagreement based on the 5-point Likert scale as strongly disagree (SD)=1; Disagree (D)=2; Neutral (N)=3; Agree (A)=4; and strongly agree (SA)=5. The mean and the standard deviation findings for the three Likert items for market linkages are as shown in table 4.24 below.

Table 4.24: Access to credit services and sustainability of DFLPs

Item	SD F (%)	D F (%)	N F (%)	A F (%)	DA F (%)	N	Mean	S.E.	Std. Dev
SS7	5 (2.5%)	53 (32.5%)	6 (3.7%)	70 (42.9%)	30 (18.4%)	163 100	3.42	0.093	1.191
SS8	6 (3.7%)	66 (40.5%)	11 (6.7%)	53 (32.5%)	27 (16.6%)	163 100	3.18	0.096	1.232
SS9	2 (1.2%)	34 (20.9%)	18 (11.0%)	80 (49.1%)	29 (17.8%)	163 100	3.61	0.082	1.044
Composite							**3.403**		

SS7: You have sufficient production for the market
SS8: You have adequate market for the produce
SS9: The market prices are favorable

Table 4.24 above item 7 (SS7) sought to establish the views of the respondents on whether they had sufficient production for the market. The findings indicate that 5 (2.5%) strongly disagreed; 53 (32.5%) disagreed; 6 (3.7%) were neutral; 70 (42.9%) agreed; and 30 (18.4%) strongly agreed. The item had a mean score of 3.42; a standard deviation of 1.191 and a standard error of means of 0.093. The mean perception fell between 2.229 and 4.611 implying mixed views tending slightly towards agreeing. The conclusion was that perception was neutral on the sufficiency of production for the market.

Item 8 (SS8) sought to find out the perception of the respondents on the availability of adequate market for their produce. It was found out that 6 (3.7%) of respondents strongly disagreed; 66 (40.5%) disagrees; 11 (6.7%) were neutral; 53 (32.5%) agreed; 27 (16.6%) strongly disagreed. This item had a mean score of 3.18; a standard deviation of 1.232; and a standard error of mean of 0.096. The mean perception lied between 1.948 and 4.412. This implied mixed views about the market for produce tending towards agreement.

Item 9 (SS9) sought to establish the views of the respondents on the market prices as regards whether they are or not favorable. The findings indicate that only 2 (1.2%) strongly disagreed; 34 (20.9%) disagreed; 18 (11%) were neutral; 80 (49.1%) agreed; and 29 (17.8%) strongly agreed. The item had a mean score of 3.61; a standard deviation of 1.044; and a standard error of the mean of 0.0822. The mean perception of the market prices lied between 2.566 and 4.654 implying mixed views but much tending towards agreeing to favorable market prices.

Table 4.25: Composite descriptive for support service linkages and sustainability of donor-funded livelihood project

Sub-indicator	N	Mean	Std. Error	Std. Deviation	Cronbach's coefficient
Access to Extension services providers	163	3.39	0.069	0.885	0.659
Access to Credit services	163	2.61	0.060	0.769	
Market linkages	163	3.40	0.073	0.938	
Composite mean	**163**	**3.1336**	**.04574**	**0.5839**	

Table 4.25 above shows respective composite means, standard deviations, and standard error of mean for the three (3) indicators under support service linkages computed using SPSS. Access to extension services had a composite mean of 3.39, a standard deviation of 0.885, and a standard error mean of 0.069. The mean perception of 2.505 and 4.275 indicating mixed views on the access to extension services tending towards agreement though the composite mean shows a neutral stand. Access to credit services had a mean of 2.61 and standard deviation of 0.769 and a standard error of the mean of 0.060 with a mean perception lying between 1.841 and 3.379. Though the composite mean indicates disagreement (negative) stand, the sample had mixed views tending toward disagreement. Market linkages scored a composite mean of 3.40 with a standard deviation of 0.938

indicating a neutral stand. The composite mean range of 2.462 and 4.338 show mixed views on the market linkages. However, the overall composite mean for the support service linkages is 3.1336, and the standard deviation of 0.5839 indicating a mixed reaction tending toward agreement.

The Cronbach's Reliability coefficient for the nine Likert items was 0.659 indicating that the items had an acceptable internal consistency for the training construct. Therefore, the conclusions made for this construct (support service linkages) are valid. The composite means for extension service indicated that the sample perception of the respondents, 3.39, falls in the neutral area indicating mixed views.

4.6.5 Inferential analysis of the influence of support service linkages on the sustainability of donor-funded livelihood projects

Objective two of this study pursued to establish the extent to which support service linkages influence the sustainability of donor-funded livelihood projects. The constructs studied under support service linkages were: access to extension services, access to credit services, and market linkages. The studies reviewed indicated a positive correlation between access or linkage to these support services and the sustainability of projects.

Inferential analysis was carried out using correlation and regression methods. A correlation was used to establish the association between support service linkages and sustainability of donor-funded livelihood projects in Kilifi County. Regression was carried out to establish the extent of influence between the two variables between support service linkages and sustainability of donor-funded livelihood projects in Kilifi County.

Hypothesis two

H_0: Support service linkages do not significantly influence the sustainability of donor-funded livelihood projects in Kilifi County

H_1: Support service linkages significantly influence the sustainability of donor-funded livelihood projects in Kilifi County

Regression model two

Project sustainability=f (Support service linkages)

$Y=f(X_2, \varepsilon)$

$Y= ß_0+ ß_2X_2+ \varepsilon$; where

$ß_0$=Constant term

$ß_2$=Beta coefficient

X_2=Support service linkages

ε = the random error

To test this hypothesis data was obtained from the responses to Likert items SS1 to SS9 (SS1-SS3=access to extension services; SS4-SS6=Access to credit services; SS7-SS9=Market linkages). The respondents had been requested to indicate their level of agreement or disagreement based on the 5-point Likert scale as strongly disagree (SD)=1; Disagree (D)=2; Neutral (N)=3; Agree (A)=4; and strongly agree (SA)=5 for each of the nine (9) items.

Correlation between support service linkages and sustainability of DFLPs

The correlation was carried for the association between support service linkages and sustainability of DFLPs and obtained the findings as indicated in table 4.26 below.

Table 4.26: Correlation between support service linkages and sustainability of DFLPs

Variable/indicator	Test	Sustainability of donor-funded livelihood projects	Support service linkages
Sustainability of donor-funded livelihood projects	Pearson Correlation	1	0.386**
	Sig. (2-tailed)		0.000
	N	163	163
Support service linkages	Pearson Correlation	0.386**	1
	Sig. (2-tailed)	0.000	
	N	163	163

**. Correlation is significant at the 0.01 level (2-tailed).

The table 4.26 above shows Pearson product moment correlation (r) =0.386; p=0.00011<0.01. In reference to 0.8-.09 very strong positive; 0.6-0.7 strong positive; 0.5 moderate positive; 0.3-0.4 weak positive; and 0.1-0.2 very weak positive, there is a weak positive correlation between support service linkages and sustainability of DFLPs. The null hypothesis "*There is no significant relationship between support service linkages and sustainability of donor-funded livelihood projects in Kilifi County"* was rejected to imply that there was a significant relationship between support service linkages and sustainability of donor-funded livelihood projects in Kilifi County.

Regression analysis for support service linkages and sustainability of DFLPs in Kilifi County

The outputs of the regression analysis were used to determine the summary model, fitness of the model, and the mathematical model for the variables under objective three.

Table 4.27: Regression Model summary for support service linkage and sustainability of DFLPs

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.383[a]	0.147	0.141	0.515

a. Predictors: (Constant), Support service linkages

The model in table 4.27 above shows that support service linkage predicts 14.7% of sustainability of DFLPs however when adjusted it predicts 14.1% of sustainability of DFLPs. 85.3% of

sustainability is predicted by other factors. The fitness of the model was tested by ANOVA. The null hypothesis, "*The model for support service linkages predicting the sustainability of DFLPs is not fit".* The results of the test are indicated in table 4.28 below:

Table 4.28: Test for model fitness for predicting support service linkage and sustainability of DFLPs

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	7.341	1	7.341	27.684	0.00027[b]
Residual	42.690	161	0.265		
Total	**50.031**	**162**			

a. Dependent Variable: Sustainability of donor-funded livelihood projects
b. Predictors: (Constant), Support service linkages

The model fitness p-value test in table 4.28 shows $F_{(1,161)} = 27.684$; $P=0.000027<0.05$. The null hypothesis was rejected and concluded that the model for support service linkages predicting the sustainability of DFLPs is fit and that support service linkage predicts 14.7% of sustainability of DFLPs. This hints out that support service linkages could alone be used to predict the sustainability of DFLPs.

To find out the extent to which support service linkages influence the sustainability of DFLPs, the mathematical model below was determined guided by the SPSS generated coefficients as shown table below.

$Y= ß_0+ ß_2X_2+ Ɛ$; *where* $Ɛ$ *is the random error*

Table 4.29: Mathematical model for support service linkages and sustainability of DFLPs

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	2.504	0.221		11.339	0.000
Support service linkages	0.365	0.069	0.383	5.262	0.00027

a. Dependent Variable: Sustainability of donor-funded livelihood projects

From table 4.29 above a mathematical model was generated as shown below.

$Y=2.504+0.365X_2+ \mathcal{E}$ where; Ɛ is error and X_2 is the Support service linkages

The model shows that an increase in support service linkages by one (1) unit increases the sustainability by 0.365 units and reduction by one (1) unit reduces sustainability by 0.365 units. Given the p=0.00027<0.05 the null hypothesis "*Support service linkages do not significantly influence the sustainability of donor-funded livelihood projects in Kilifi County*" was therefore rejected. It was concluded that Support service linkages significantly influence the sustainability of donor-funded livelihood projects in Kilifi County.

Table 4.30: Access to extension, credit services, market linkages, and sustainability of DFLPs

	Unstandardized Coefficients		**Standardized Coefficients**		
Model	B	Std. Error	Beta	**t**	**Sig.**
(Constant)	2.558	0.226		11.341	0.000
Access to Extension services	0.170	0.051	0.271	3.310	0.001
Access to Credit services	0.045	0.053	0.062	0.853	0.395
Market linkages	0.116	0.049	0.196	2.388	0.018

a. Dependent Variable: Sustainability of donor-funded livelihood projects

The above coefficients indicate the independent contribution of access to extension services, access to credit services, and market linkages. The table indicates that access to extension and market linkages had a significant influence whereas credit facilities did not have a significant influence on the sustainability of DFLPs in Kilifi County.

The expanded model considering the three looked as follows;

$Y=2.558+0.17E+0.045C+0.166ML+ \mathcal{E}$

This indicates that an increase by one unit of access to extension services contributes an increment of 0.17 units of sustainability; an increase by one unit of access to credit services would contribute

to 0.045 units of sustainability. An increase by one unit of market linkages would contribute to an increase in sustainability by 0.166 units.

This study established that respondents had mixed reactions on the contribution of support service linkages as informed by the composite mean perception of 3.1336 which falls in the neutral area. The discrete constructs of access to extension services (μ=3.39), access to credit μ=2.61) and market linkages (μ=3.40) also scored means in the neutral area. Inferential analysis revealed that support service linkages weakly but positively correlated (Pearson moment correlation, r=0.386) with the sustainability of DFLPs. The support service linkages collectively influenced the sustainability of DFLPs ($p=0.00027<0.05$). However, delving deeper, it was revealed that access to extension services ($p=0.001<0.05$) and market linkages ($p=0.018<0.05$) had a significant influence.

4.6.6 Discussion on support service linkages and sustainability of donor-funded livelihood projects in Kilifi county

Davis (2004) also found out that improving linkages to markets and provision of support services influenced the sustainability of projects in Latin America. Access to extension services was vital to ensure that new technologies or operational systems were efficiently and effectively utilized and to ensure that skills acquired through capacity-building initiatives were transferred practically and optimally. This was similar to what Gido et al. (2015) found about the important role that extension services play in enhancing project sustainability. The ward agricultural extension officer (in Kilifi County) indicated that the department as a mandate had programs to support extension service. This finding corresponded with Muyanga and Jayne (2016) that the districts studied had initiatives

and programs to support the extension service provision to farmers and thus contributed to project sustainability.

Asked on whether or not there was a formal agreement with service providers the larger proportion disagreed though appreciated that respective projects had supported the provision of extension services from the extension officers from the county government departments of agriculture and livestock though they could not ascertain the details of the agreement between the departments and the projects as they knew that such an agreement had been between the project implementers and the government. One key informant said,

> *"The officers from the agriculture department have been coming with the Red Cross staff to advise us on farming."*

There was no provision of such services from private service providers. From the in-depth discussion, it was established that the Gandini project has a formal agreement between the department of agriculture and livestock for extension services twice a month (which had not been entirely honored). On whether the respondents often received the advisories in the FGDs they indicated that the frequency reduced after the project closed. The departments explained that limited resources were the main limiting factor. On affordability of extension services, it was established that some could feel the cost as it had been catered for by the project implementer hence a higher proportion (70%) thought it was affordable. The reason for the disagreeing proportion was that in times of urgency they had to sometimes take care of the logistics of the officers for them to visit farms. Other costs included communication in case the advisory would be delivered over the phone. One respondent in the FGD said,

> *"Looking for agricultural officers for more agricultural information became a challenge. The community had to contribute money for their transport"*

Muyanga and Jayne (2016) conducted a study in 16 sub-counties in Kenya on practices and policy lessons on agricultural extension services and found that remote areas and poor farmers do not get better services; public funds to support delivery of these services are constrained. Juana et al. (2013) also found out in their study that access to extension services and credit facilities were among the major factors of sustainability in sub-Saharan African farmers.

Access to credit ($p=0.395>0.05$) did not have a significant influence. These findings however to some extent disagreed with Davis (2004) findings in which micro-credit and micro-enterprise development initiatives had clear impacts on the sustainability of rural projects. The quantitative descriptive results on access to credit services scored a composite mean of 2.61 indicating that respondents were neutral (mean perception lying between 1.841 and 3.379) with mixed views. The majority (78%) of the respondents disagreed to the perception that there were adequate credit facilities from which they could acquire loans in their locality. The mean score for this item 4 (SS4) was 2.11 implying disagreement. It was established that the formal financial institutions (commercial banks-KCB, SBM, CBK, Equity bank) from where the respondents acquired loan were categorized into banking agents, mobile banking, and loaning (M-shwari and Tala) non-formal means of acquiring loans including the village savings and loaning associations (*visanduku*). From the FGDs and interviews, it was established that the respondents preferred non-formal institutions to formal because of the distances and the long process for applying for loans. All the commercial banks were located in Malindi town. The interest rate in the formal institutions and mobile loaning was relatively higher than in the non-formal institutions. The average interest rate in commercial banks According to World Trend Plus's Global Economic Monitor (2019) Kenya's Bank Lending Rate was reported at an average of 12.380 % per annum in November 2019 compared to the informal institutions at most 10%.

Table 4.31: Loan acquisition and utilization

Loan utilization category	N	%
School fees	34	42
Opening up new business	17	21
Food	15	19
Main stream Project investment	8	10
Construction	5	6
Hospital bills	2	2
Total	**81**	**100**

Table 4.32: Sources of loans

Sources of loans	Proportion of institutions	N	%	Remarks
None	None	63	39	
Loaning associations	SILC groups (20) GSLA (27)	47	29	Proportion based on preference
Commercial banks	Equity bank (15) Cooperative Bank of Kenya [CBK] (14) Kenya Commercial Bank [KCB] (8) SBM Bank (5)	42	26	rather than actual loan acquisition
Bank agents	Equity (4), Cooperative bank (3)	7	4	
Mobile loaning	M-shwari (3) Tala (1)	4	2	
Total		**163**	**100**	

Table 4.31 above shows the main bill that the loans acquired were used to support. Much of the loans acquired were used to support education by paying school fees (42%), opening up new or expanding businesses (21%), and buying household food (19%). It was unexpected that only 10%

of the respondents who acquired loans used them to support project activities. This was explained by one respondent that the other bills were seen as individual responsibility but for the project, it was thought to be a corporate responsibility.

As categorized by Ferris et al. (2014) in Kilifi informal marketing was practiced. The markets were less regulated and prices were determined by the farmers themselves. This study found that these markets faced a myriad of challenges including location and distances, access to infrastructure such as roads, agricultural services, access to production technologies, marketing skills, organization of marketing communities. The discussions and in-depth interviews revealed that the departments of agriculture and cooperatives had played a role in linking farmers to markets. The department of agriculture (unit of agricultural economics) had delivered training on the market survey to the farmers. The department also shared market information as regards the quality of produce, pricing, and potential market locations. The farmers however opined that the departments had not played a notable role in finding markets for the farm produce. The cooperative model had been tried in the Gandini project in which farmers had been organized to form cooperatives. Two cooperatives had been formed; Bungale Irrigation Farmers' Cooperative Society (BIFCS) and Kwamuga Cooperative Societies (KCS). BIFCS had been duly registered with the registrar of cooperatives and had nine-member executive and three-member supervisory committees. KCS had not been registered with the registrar of cooperatives by the time of the study. The purpose of cooperatives was to support mass production, collective marketing, saving, and loaning however none of these aspects had been realized.

4.8 Analysis of Monitoring and evaluation and sustainability of donor-funded livelihood projects in Kilifi County

Research objective three was to establish the extent to which monitoring and evaluation influence the sustainability of donor-funded livelihood projects in Kilifi County. The indicators for monitoring and evaluation were participation in M&E, Tools used in M&E and timing and frequency of M&E.

4.7.1 Participation in M&E and sustainability of donor-funded livelihood projects in Kilifi County

This indicator had three Likert items. The researcher pursued to establish the extent to which the respondents perceived the participation in M&E influenced the sustainability of donor-funded livelihood projects. The respondents were requested to indicate their level of agreement or disagreement based on the 5-point Likert scale as strongly disagree (SD)=1; Disagree (D)=2; Neutral (N)=3; Agree (A)=4; and strongly agree (SA)=5. The mean and the standard deviation findings for the three items are as shown in table 4.33 below.

Table 4.33: Participation in Monitoring and evaluation and sustainability of DFLPs

	SD F (%)	D F (%)	N F (%)	A F (%)	DA F (%)	N	Mean	S.E.	Std. Dev
ME1	0 (0.0%)	22 (13.5%)	14 (8.6%)	76 (46.6%)	51 (31.1%)	163 100	3.96	0.076	0.971
ME2	0 (0%)	16 (9.8%)	21 (12.9%)	79 (48.5%)	47 (28.8%)	163 100	3.96	0.071	0.902
ME3	0 (0.0%)	2 (1.2%)	3 (1.8%)	105 (64.4%)	53 (32.5%)	163 100	4.28	0.044	0.561
Composite						**163**	**4.07**		

ME1: You regularly participated in monitoring the progress of this project before the donor withdrew
ME2: You regularly participated in reviewing the progress of this project before donor withdrew
ME3: Your feedback informs the future implementation of this project

The findings in Table 4.33 above present the responses on respondents' participation in M&E. Item1 (ME1) sought to find out the extent to which the respondents perceived they participated in the monitoring of the progress of the project before the donor withdrew. None of the respondents strongly disagreed. However, 22 (13.5%) disagreed; 14 (8.6%) were neutral; 76 (46.6%) agreed; and 51 (31.1%) strongly agreed. The majority (77.7%) agreed. The item scored a mean of 3.96; a standard error of the mean of 0.076; a standard deviation of 0.971. The mean perception lied between 2.989 and 4.931. As much as this range indicates some neutrality the perception tends more towards the positive and as such it was concluded that the sample perceived that they regularly participated in the monitoring of the progress of the project.

Item 2 (ME2) was pursued to establish the extent to which the respondents view their participation in reviewing the project progress. None of the respondents strongly disagreed. 16 (9.8%) disagreed; 21 (12.9%) were neutral; 79 (48.5%) agreed; and 47 (28.8%) strongly agreed. The majority (77.3%) were positive. The item scored a mean of 3.96; a standard error of 0.071 and a

standard deviation of 0.902 with a mean perception ranging between 3.058 and 4.862. The much tension toward the positive was concluded that the sample was regularly involved in reviewing the progress of the project.

Item 3 (ME3) sought to find out the perception of the respondents on whether or not their feedback to the project leadership and management informed future implementation. None (0.0%) of the respondent strongly disagreed; 2 (1.2%) disagreed; 3 (1.8%) were neutral; 105 (64.4%) agreed; and 53 (32.5%) strongly agreed. The majority (97.9%) of the respondents were positive. The item had a perception mean score of 4.28; a standard error of the mean of 0.044 and a standard deviation of 0.561. The mean perception between 3.719 and 4.841 concluded that the respondent's feedback informed the future implementation of the project. The composite mean of 4.07 for participation in M&E indicated that the respondents participated in the monitoring and evaluation of the project before the donor withdrew.

4.7.2 Tools in M&E and sustainability of donor-funded livelihood projects in Kilifi County

The three Likert items of this indicator sought to determine the extent to which the respondents perceived the tools in M&E influenced the sustainability of donor-funded livelihood projects. The respondents were requested to indicate their level of agreement or disagreement based on the 5-point Likert scale as strongly disagree (SD)=1; Disagree (D)=2; Neutral (N)=3; Agree (A)=4; and strongly agree (SA)=5. The mean and the standard deviation findings for the three items are as shown in table 4.34 below.

Table 4.34: Tools in Monitoring and evaluation and sustainability of DFLPs

Item	SD F (%)	D F (%)	N F (%)	A F (%)	DA F (%)	N	Mean	S.E.	Std. Dev
ME4	0 (0.0%)	1 (0.6%)	1 (0.6%)	130 (79.8%)	25 (15.3%)	163 100	4.09	0.039	0.495
ME5	1 (0.6%)	1 (0.6%)	10 (6.1%)	124 (76.1%)	27 (16.6%)	163 100	4.07	0.043	0.551
ME6	0 (0.0%)	32 (19.6%)	14 (8.6%)	87 (53.4%)	30 (18.4%)	163 100	3.71	0.077	0.987
Composite						**163**	**3.96**		

ME4: The project has well outlined objectives
ME5: The project has well outlined targets
ME6: The project has a well spelt out means of measuring performance

Item 4 (ME4) collected responses to establish the views of the respondents on whether the project had well outlined objectives. None of the respondents strongly disagreed. One (0.6%) disagreed; 1 (0.6%) was neutral; 130 (79.8%) agreed; and 25 (15.3%) strongly agreed. The majority (95.1%) were positive. The item scored a mean of 4.09; a standard error of the mean of 0.039 and a standard deviation of 0.495 and a mean perception range between 3.595 and 4.585. Thus, it was concluded that the project had well outlined objectives.

Item 5 (ME5) collected data to establish the extent to which the respondents perceived that the project had well outlined targets. One (0.6%) strongly disagreed; 1 (0.6%) disagreed; 10 (6.1%) were neutral; 124 (76.1%) agreed; and 27 (16.6%) strongly agreed. The majority (92.7%) agreed. The item scored a mean of 4.07; a standard error of the mean of 0.043 and a standard deviation of 0.551 with a mean perception range between 3.519 and 4.621. The conclusion was that the project had well outline targets.

Item 6 (ME6) sought to establish the extent to which the respondents perceived the presence of the well spelt out means of measuring project performance. None of the respondents strongly disagreed. 32 (19.6%) disagreed; 14 (8.6%) were neutral; 87 (53.4%) agreed; and 30 (18.4%) strongly agreed. The item scored a mean of 3.71 with a standard error of the mean of 0.077; the standard deviation of 0.987; and the mean perception range of between 2.723 and 4.697. There was an extent of mixed views but concluded that the sample perceives that the project had well spelt out means of measuring project performance. The indicator scored a composite mean score of 3.96 and a standard deviation of 0.52. It was concluded that the respondents perceived that the tools used in monitoring and evaluation had an influence on the sustainability of DFLPs.

4.7.3 Frequency and timing in M&E and sustainability of donor-funded livelihood projects in Kilifi County

The three Likert items of this indicator sought to determine the extent to which the respondents perceived the frequency and timing in M&E influenced the sustainability of donor-funded livelihood projects. The respondents were requested to indicate their level of agreement or disagreement based on the 5-point Likert scale as strongly disagree (SD)=1; Disagree (D)=2; Neutral (N)=3; Agree (A)=4; and strongly agree (SA)=5. The mean and the standard deviation findings for the three items were as shown in table 4.35 below.

Table 4.35: Frequency and timing in Monitoring and evaluation and sustainability of DFLPs

Item	SD F (%)	D F (%)	N F (%)	A F (%)	DA F (%)	N	Mean	S.E.	Std. Dev
ME7	0 (0.0%)	22 (13.5%)	8 (4.7%)	86 (52.8%)	47 (28.8%)	163 100	3.97	0.074	0.939
ME8	0 (0.0%)	28 (17.2%)	13 (8.0%)	67 (41.1%)	55 (33.7%)	163 100	3.91	0.082	1.051
ME9	1 (0.6%)	18 (11.0%)	19 (11.7%)	76 (46.6%)	49 (30.1%)	163 100	3.94	0.075	0.957
Composite							**3.94**		

ME7: Frequent monitoring can contribute to project results
ME8: There has been frequent monitoring for the project
ME9: The project prepared time schedules to track progress

Table 4.35 shows findings for the three items (ME7-9). Item 7 (ME7) collected responses to establish the perception of the respondent on the contribution of frequent monitoring on project results. None of the respondents strongly disagreed. 22 (13.5%) disagreed; 8 (4.7%) was neutral; 86 (52.8%) agreed; and 47 (28.8%) strongly agreed. The majority (81.6%) were positive. The item scored a mean of 3.97; a standard error of the mean of 0.074 and a standard deviation of 0.939 and a mean perception range between 3.031 and 4.909. Thus it was concluded that the respondent perceived that frequent monitoring contributed to project results.

Item 8 (ME8) collected data to establish the extent to which the respondents perceived that there had been frequent project monitoring. None of the respondents strongly disagreed. 28 (17.2%) disagreed; 13 (8.0%) were neutral; 67 (41.1%) agreed; and 55 (33.7%) strongly agreed. The majority (74.8%) agreed. The item scored a mean of 3.91; a standard error of the mean of 0.083 and a standard deviation of 1.051 with a mean perception range between 2.859 and 4.961. The conclusion was that the respondents perceived there was frequent project monitoring.

Item 9 (ME9) sought to establish the extent to which the respondents perceived the project prepared time schedules to track project progress. One (0.6%) of the respondents strongly disagreed; 18 (11.0%) disagreed; 19 (11.7%) were neutral; 76 (46.6%) agreed; and 49 (30.1%) strongly agreed. The majority score (76.7%) was positive. The item scored a mean of 3.94 with a standard error of the mean of 0.075; a standard deviation of 0.957; and a mean perception range of between 2.983 and 4.897. There was an extent of mixed views but concluded that the sample perceived that project prepared time schedules to track project progress. The indicator scored a composite mean score of 3.94 and a standard deviation of 0.86. It was reliably concluded (with Cronbach's coefficient =0.786) that the respondents perceived that the frequency and timing in monitoring and evaluation had an influence on the sustainability of DFLPs.

Table 4.36: Composite descriptive for monitoring and evaluation and sustainability of DFLPs

Sub-indicator	N	Mean	Std. Error	Std. Deviation	Cronbach's coefficient
Participation in ME	163	4.0675	0.05611	0.71641	0.786
Tools used in ME	163	3.9571	0.04073	0.52003	
Frequency and timing in ME	163	3.9427	0.06695	0.85474	
Valid N (listwise)	163	3.9891	0.04043	0.51619	

Table 4.36 above shows respective composite means, standard deviations, and standard error of mean for the three (3) indicators under monitoring and evaluation as computed using SPSS. Participation in M&E had a composite mean of 4.07, a standard deviation of 0.72, and a standard error mean of 0.056. The mean perception of 3.35 and 4.79 agreement with the perception that the respondents participated in the M&E activities of the project. The perception on tools used in M&E had a mean of 3.96 and standard deviation of 0.52 and a standard error of the mean of 0.041 with

a mean perception lying between 3.44 and 4.48. This indicated that M&E tools were used in the project. The perception on the frequency and timing of M&E had a mean of 3.94 and a standard deviation of 0.86 and a standard error of the mean of 0.067 with a mean perception range of between 3.08 and 4.00 implying that the neutrality extending most towards positive. Based on the Cronbach's coefficient (α=0.786) and the composite statistics (mean =3.99, SE=0.040, SD=0.52) and mean range between 3.47 and 4.51 lead to the conclusion that M&E (participation, tools used, and frequency and timing) influenced the sustainability of DFLPs in Kilifi County.

From the data on M&E, the Likert items on Participation in the M&E activities concerned the regular participation in actual monitoring, participation in project reviews, and utilization of the respondents' feedback on the project. These items were perceived to be all positive.

4.7.4 Inferential analysis of the influence of Monitoring and evaluation on the sustainability of donor-funded livelihood projects

Objective three pursued to determine the extent to which monitoring and evaluation influenced the sustainability of donor-funded projects. Participation of the community in M&E; tools used in M&E and frequency and timing for M&E were explored. According to the studies reviewed, there existed a positive relationship between these constructs and the sustainability of projects. Correlation and regression were carried out to determine the existence of relationships and influence.

Hypothesis Three

> **H0:** Monitoring and evaluation of project exit strategy does not significantly influence the sustainability of donor-funded livelihood projects in Kilifi County

H1: Monitoring and evaluation of project exit strategy significantly influence the sustainability of donor-funded livelihood projects in Kilifi County

Model Three

Project sustainability=f (Monitoring and evaluation of project exit strategy)

$Y=f(X_3, Ɛ)$

$Y= ß_0+ ß_3X_3+ Ɛ$; Where

$ß_0$=Constant term

$ß_3$=Beta coefficient

X_3=Monitoring and evaluation

$Ɛ$ = the random error

Data for this objective was collected using Likert items ME1 to ME9 (where ME1-ME3=participation in M&E; ME4-ME6=Tools used in M&E, and ME7-ME9=Frequency and timing for M&E). Responses were based on the 5-point Likert scale of strongly disagree (SD)=1; Disagree (D)=2; Neutral (N)=3; Agree (A)=4; and strongly agree (SA)=5.

Correlation between monitoring and evaluation and sustainability of DFLPs

A correlation test was carried out to test the null hypothesis that "*There is no significant relationship between monitoring and evaluation and sustainability of donor-funded livelihood projects in Kilifi County".* The findings of the correlational tests are as indicated in table 4.37 below.

Table 4.37: Correlation results for support service linkages and sustainability of DFLPs

Variable/indicator	Test	Monitoring and Evaluation	Sustainability of donor-funded livelihood projects
Monitoring and Evaluation	Pearson Correlation	1	0.458**
	Sig. (2-tailed)		0.000
	N	163	163
Sustainability of donor-funded livelihood projects	Pearson Correlation	0.458**	1
	Sig. (2-tailed)	0.000	
	N	163	163

**. Correlation is significant at the 0.01 level (2-tailed).

The table 4.37 above shows Pearson product moment correlation (r) =0.458; p=0.0000389<0.01. This was a moderate positive correlation. Based on the p-value method, the null hypothesis was rejected. This means that there was a (moderate) positive correlation between monitoring and evaluation and sustainability of DFLPs.

Regression analysis for monitoring and evaluation and sustainability of DFLPs in Kilifi County

The outputs of the regression test were used to determine the fitness of the model and the mathematical model for the variables under objective three.

Table 4.38: Regression Model summary for monitoring and evaluation; and sustainability of DFLPs

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.458[a]	0.210	0.205	0.496

a. Predictors: (Constant), Monitoring and Evaluation

The model in table 4.38 above points that monitoring and evaluation explain 21% of the sustainability of DFLPs. When adjusted it predicts 20.5%. This means that 79% of sustainability was explained by other factors. The fitness of the model was tested using ANOVA with a null

hypothesis, "*The model for monitoring and evaluation predicting the sustainability of DFLPs is not fit".* The results of the fitness test are shown in Table 4.39 below.

Table 4.39: Test of model fitness for predicting monitoring and evaluation and sustainability of DFLPs

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	10.495	1	10.495	42.740	0.0000389[b]
Residual	39.535	161	0.246		
Total	**50.031**	**162**			

a. Dependent Variable: Sustainability of donor-funded livelihood projects

b. Predictors: (Constant), Monitoring and Evaluation

The model fitness p-value test showed $F_{(1,161)} = 42.740$; $P=0.0000389<0.05$. The null hypothesis was therefore rejected. The model was there concluded to be fit and that M&E predicted 21% of sustainability of DFLPs in Kilifi County.

To determine the extent to which M&E influenced the sustainability of DFLPs, a mathematical model was established by the SPSS generated coefficients as shown in table 4.40 below. The mathematical model followed the pattern as:

$Y= ß_0+ ß_3X3+ Ɛ$; *where* $Ɛ$ *is the random error*

Table 4.40: Mathematical model for Monitoring and evaluation and sustainability of DFLPs

	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	**t**	**Sig.**
(Constant)	1.679	0.303		5.535	0.000
Monitoring and Evaluation	0.493	0.075	0.458	6.538	0.0000389

a. Dependent Variable: Sustainability of donor-funded livelihood projects

From the model above $ß_0=1.679$; $ß_3=0.493$ therefore the model looked as

$Y=1.679+0.493X_3+ \mathcal{E}$ where; Ɛ is error and X_3 is the monitoring and evaluation.

The model indicates that an increase in monitoring and evaluation by one (1) unit automatically results in an increase in sustainability by 0.493 and a reduction in sustainability by one unit it would result in a decrease in sustainability by the same margin. The p=0.000<0.05 made the null hypothesis "*Monitoring and evaluation of project exit strategy does not significantly influence the sustainability of donor-funded livelihood projects in Kilifi County*" be rejected. Therefore, the conclusion was that Monitoring and evaluation of project exit strategy significantly influence the sustainability of donor-funded livelihood projects in Kilifi County.

The Likert scale value can be computed as:

$Y=1.679+0.493X_3+ Ɛ$

$Y=1.679+0.493*0.21+ Ɛ$

$Y=1.079+0.103+ Ɛ$

$Y=1.782+ Ɛ$

Following the Lantz (2013) 1-5 scale 1.782 falls in the disagreement (rejection) area thus the null hypothesis was rejected.

Table 4.41: Participation, tools, frequency, and timing in M&E and sustainability of DFLPs

	Unstandardized Coefficients		**Standardized Coefficients**		
Model	B	Std. Error	Beta	**t**	**Sig.**
(Constant)	1.874	.373		5.020	.000
Participation in ME	.251	.068	.324	3.711	.000
Tools used in ME	.057	.077	.054	.743	.459
Frequency and timing in ME	.133	.058	.204	2.285	.024

a. Dependent Variable: Sustainability of donor-funded livelihood projects

In table 4.41 above coefficients indicate the independent contribution of community participation in M&E, tools used in M&E, and frequency and timing in M&E. The table indicates that community participation in M&E and frequency and timing in M&E had significant influence whereas tools used in M&E did not have a significant influence on the sustainability of DFLPs in Kilifi County. Therefore, the expanded mathematical model for Monitoring and evaluation looked as:

Y=1.874+0.25P+0.057TL+0.133FT+ $\mathcal{E}$; where P=community participation in M&E, TL=tools used in M&E and FT=frequency and timing in M&E.

The model shows that an increase by one (1) unit of community participation in M&E, tools used in M&E, and frequency and timing in M&E would increase the sustainability of DFLPs by 0.25, 0.057, and 0.133 units respectively.

The descriptive and inferential analysis indicated that M&E influenced the sustainability of DFLPs in Kilifi County. The mean perception scores for participation in M&E (μ=4.0675); Tools used in M&E (μ=3.9571) and frequency and timing of M&E (μ=3.9429) all fell in the affirmative area. Inferentially it was found that M&E had a positive moderate correlation with the sustainability of DFLPs in Kilifi County.

4.7.5 Discussion on monitoring and evaluation and sustainability of donor-funded livelihood projects in Kilifi county

This study found out that M&E significantly influenced the sustainability of these projects. This concurred with what Kamau and Mohamed (2014); Ika et al. (2012) and Ochieng and Tubey (2012) found in their studies that M&E was a critical success factor for project sustainability as well-supported monitoring and evaluation by the management influences project sustainability.

Collectively M&E significantly influenced sustainability by $p=0.0000389<0.005$. This level of significance out rightly explained how critical this function is in the success of any project as found out by Kamau and Mohamed (2014); and Ochieng and Tubey (2012).

Further analysis of the M&E constructs under this study revealed that participation (with $p=0.000<0.05$) of the communities in the M&E processes of the project contributed significantly to sustainability. This finding agreed with a case study of the donor-funded food security projects in Kibwezi by Kimweli (2013) which disclosed that donor-funded projects suffered poor performance and absence of sustainability because of the failure to involve communities in the process of monitoring and evaluation. Another similar finding by Ochieng & Tubey (2012) in their case study of constituent development fund (CDF) projects in Ainamoi constituency in Kericho County uncovered that failure of those projects was occasioned by the failure to involve the local community in the M&E process. The respondents agreed that they had participated in M&E processes by frequently taking part in tracking performance, reviewing progress, and giving feedback that informed future project implementation.

From the qualitative data collection methods (FGDs and interviews) it was established that much of the monitoring in irrigation agriculture in the Gandini project was led by a team of trainers of trainers (TOTs). From the discussion, the TOT concept had been adopted because of the county staffing challenges in the department of agriculture since the extensive Garashi ward only had one ward agricultural officer to cover the whole area. During the visits (by the ward agricultural officers, TOTs, and the officers in charge of the respective projects) the farmers themselves were to be present at their respective plots to receive feedback, thus their participation in M&E activities. Through the discussion, it was determined that the operations of the project and the work of the TOTs were reduced due to the effects of floods. One member of the FGD said that:

> *"After the floods which carried away lands, the TOTs reduced the frequent monitoring of the project since some of the farmers have exited the project"*

Uvumbuzi and Dodosa projects did not have the TOTs but relied on the group leadership and the ward extension officers to visit their plots and give them feedback.

On project reviews, it was established through the FGDs that farmers had monthly meetings through which they would share views on the project progress though they had mixed reactions on whether they met regularly. It was established that donor field missions and meetings were held on a quarterly basis after which further feedback would be provided to the farmers. One key informant (Chief) observed that the intensity of monitoring and project reduced as the project proceeded towards the end and that the office was only visited when there was a pressing issue to be addressed. The sentiments were:

> *On monitoring, it has been so effective especially when the project was starting. Now things have changed a little. Some things are just implemented without my knowledge and when issues come up is when they look up for me."*

The Likert items on tools used in M&E collected views on the existence of well-outlined objectives; well-outlined target; and well spelled out means of measuring the performance which had means (4.09, 4.07, and 3.71 respectively) indicating a positive stand. However, on further analysis, the tools constructs did not have a significant contribution to sustainability as indicated by $p=0.459>0.05$. Most of the members in the FGDs and the key informant identified themselves with the group constitution which had objectives and targets. It was established that some objectives had not been reached because of the 2018 floods that set them aback. There were mixed reactions on the extent to which the respondents perceived the existence of well-spelled out means of measuring performance. Some members in the FGDs claimed that performance was relative and identified with crop yield, increase in income and increase in the number of poultry and goats

and that only ad hoc methods were existing. It was found out that the programming project objectives and targets had not been disseminated to the farmers. The project monitoring and evaluation tools such as log-frames were only understood by the implementing agencies.

On monitoring frequency and timing, the researcher focused on the project implementation phase and after the project life to establish how the culture of monitoring was practiced while the project was still ongoing and after the projects were closed. This construct had a mean perception in the agreement area (μ=3.9429). Expanded analysis through regression showed that the construct contributed significantly ($p=0.024<0.05$) to the sustainability of the projects in Kilifi County through frequent monitoring and sticking to the prepared monitoring schedules. It was established in the FGDs that that monitoring frequency was high during the life of the project but reduced drastically afterward. One member of the FGDs related this observation to facilitation by the implementing agencies in terms of transport and allowances for the agricultural officers as he reasoned out by saying:

> *"May be it was because of our inability to support the officers that they reduced the monitoring [extension] frequency."*

However, the views converged that the frequency and timing of the project improved the project results. This corresponded with Bene et al. (2015) who found out that timing and frequency of data collection are key aspects of monitoring and evaluation. It was pointed out the increased monitoring kept the track in check while holding the farmers accountable and avenues for sharing new information. Because of this, a case study by Ochieng and Tubey (2012) on CDF projects revealed that frequent monitoring is required for optimal management to be observed. The productivity of the M&E teams can be enhanced with capacitating in terms of frequency of monitoring, stakeholder representation, use of technology, and team building and work (Gwado, 2012)

4.8 Analysis of combined project exit strategy and sustainability of donor-funded livelihood projects in Kilifi County

Objective four of this study was to examine how combined exit strategy influences the sustainability of donor-funded livelihood projects in Kilifi County. The combination of the project exit strategy encompassed project capacity-building strategy, support service linkages, and monitoring and evaluation. The empirical literature reviewed in this study reveals that the three strategies independently influenced the sustainability of projects. Capacity building components studied by Minzner et al (2014); and Karanja, (2014) indicated a positive relationship with sustainability. On support service linkages Dunne et al (2013); and Ferris et al (2014) Juana et al. (2013); Mottaleb et al. (2014); Muyanga showed a positive relationship. Kamau and Mohamed, 2014; Kimweli (2013); Ochieng and Tubey (2012); and Stevens and Mody (2013) found a positive relationship between monitoring and evaluation and sustainability of projects.

4.8.1 Descriptive analysis of the combined project exit strategy and sustainability of DFLPs

The combined statistics obtained using the 'transform function in SPSS' indicated that the combined project exit strategy scored a mean perception of 3.63, a standard error of the mean of 0.033, and a standard deviation of 0.42. The mean perception consequently lied between 3.21 and 4.05 thus falling slightly in the neutral and extending most to the positive. It was therefore concluded that combined project exit strategy influenced the sustainability of donor-funded livelihood projects.

4.8.2 Inferential analysis of the combined project exit strategy and sustainability of DFLPs

The inferential analysis under this objective was guided by the following hypothesis.

Hypothesis Four

H0: The combined project exit strategy does not significantly influence the sustainability of donor-funded livelihood projects in Kilifi County

H1: The combined project exit strategy significantly influences the sustainability of donor-funded livelihood projects in Kilifi County

Model four

Project sustainability=f (Capacity building exit strategy, Project support service linkages, Monitoring and evaluation of the exit strategy)

$Y=f(X_4, \mathcal{E})$

$Y=f(X_1, X_2, X_3, \mathcal{E})$

$Y= ß_0+ ß_1X_1+ ß_2X_2+ß_3X_3+ \mathcal{E};$ Where

$ß_0$=Constant term

X_1=Capacity building exit strategy

X_2=Project support service linkages

X_3=Monitoring and evaluation

$ß_1, ß_2, ß_3$ =Beta coefficients

ε = the random error

Correlation between combined project exit strategies and sustainability of DFLPs

The correlation test was carried out to test the null hypothesis "*There is no significant relationship between combined project exit strategy and sustainability of DFLPs in Kilifi County*". The findings of the correlation test are as shown in table 4.42 below.

Table 4.42: Correlation between project exit strategies and sustainability of DFLPs

Variable/indicator	Test	Combined Project Exit Strategy	Sustainability of donor-funded livelihood projects
Combined Project Exit Strategy	Pearson Correlation	1	0.528**
	Sig. (2-tailed)		0.000
	N	163	163
Sustainability of donor-funded livelihood projects	Pearson Correlation	0.528**	1
	Sig. (2-tailed)	0.000	
	N	163	163

**. Correlation is significant at the 0.01 level (2-tailed).

Regression analysis for combined project exit strategies and sustainability of DFLPs in Kilifi County

The outputs of the regression analysis were used to determine the summary model, fitness of the model, and the mathematical model for the variables under objective four. The findings for the model, fitness, and mathematical model are as shown in table 4.43 below.

Table 4.43: Regression Model summary for combined project exit strategies and sustainability of DFLPs

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
3	0.547c	0.300	0.287	0.469

c. Predictors: (Constant), Capacity building exit strategy, Support service linkages, Monitoring, and Evaluation

From the model above the combination of the three variables have a combined prediction of 30% of sustainability of DFLPs though when adjusted it predicts 28.70%. This implies that 70% of sustainability was accounted for by other factors.

The fitness of the model was tested by ANOVA. The null hypothesis, "*The model for combined project exit strategy predicting the sustainability of DFLPs is not fit".* The results of the test are indicated in table 4.44 below:

Table 4.44: Test of fitness of the model for predicting combined project exit strategy and sustainability of DFLPs

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	14.995	3	4.998	22.684	0.0000042[d]
Residual	35.035	159	0.220		
Total	**50.031**	**162**			

d. Predictors: (Constant), Capacity building exit strategy, Support service linkages, Monitoring and Evaluation

The model fitness p-value test shows $F_{(3,159)} = 22.684$; $p = 0.0000042 < 0.05$. The null hypothesis was rejected and concluded that the model for combined project exit strategy predicting the sustainability of DFLPs is fit and that combined project exit strategy predicts 30% of sustainability of DFLPs.

Table 4.45: Mathematical model for a combined project exit strategy and the sustainability of DFLPs

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	1.092	0.326		3.348	0.001		
	Combined Project Exit Strategy	0.702	0.089	0.528	7.880	0.000	1.000	1.000

a. Dependent Variable: Sustainability of donor-funded livelihood projects

b.

From the unstandardized coefficients in table 4.45 above the mathematical model was generated as:

$Y=1.092+0.702\ X_4+ Ɛ$, where; Ɛ is error and X_4 is the combined exit strategy.

This model implies that a change by one unit of combined exit strategy will cause change sustainability by 0.702. Using the standardized coefficients, it implies that combined exit strategy contributed ($ß_1=0.528$), to the sustainability of DFLPs in Kilifi County. These contributions were significant at 0.05 based on the p-value testing ($p=0.0000000022615<0.05$). The Likert scale value can be computed as:

$$Y=1.092+0.702*0.3+ Ɛ$$

$$Y=1.3026+ Ɛ$$

Following the Lantz (2013) 1-5 scale 1.302 falls in the disagreement (rejection) area thus the null hypothesis was rejected and conclude that combined exit strategy influenced the sustainability of project sustainability.

Table 4.46: Mathematical model for broken combined project exit strategy and sustainability of DFLPs

Model	Unstandardized B	Std. Error	Standardized Beta	t	Sig.	Tolerance	VIF
(Constant)	0.722	0.364		1.982	0.049		
Capacity building exit strategy	0.435	0.114	0.318	3.811	0.000	0.633	1.58
Support service linkages	0.096	0.078	0.100	1.22	0.224	0.649	1.541
Monitoring and Evaluation	0.244	0.092	0.227	2.65	0.009	0.600	1.666

From the unstandardized coefficients in table 4.46 above the mathematical model was generated as:

$Y=0.722+0.435CB+0.096SSL+0.244ME+ Ɛ$, thus,

$Y=0.722+0.435X_1+0.096X_2+0.244X_3+ Ɛ$

This model implies that a change by one unit of respective variables (capacity building, project support service linkages, monitoring, and evaluation) will cause change sustainability by 0.435 units of capacity building, 0.096 units of project support service units, and 0.244 units of monitoring and evaluation. Using the standardized coefficients, it implies that capacity building contributed more ($ß_1=0.3180$), to the sustainability of DFLPs in Kilifi County followed by Monitoring and evaluation with $ß_3=0.227$. These contributions were significant at 0.05 based on the p-value testing (capacity building with $p=0.000<0.05$; and monitoring and evaluation ($p=0.009<0.05$). Project support service linkages contribution of 0.100 is insignificant ($p=0.224>0.05$). From the combination, it was therefore concluded that capacity building and monitoring and evaluation contributed to the sustainability of DFLPs in Kilifi County.

The findings for the combined project exit strategies are partly in support of the notion by Magondu (2013) who found that there is a clear link between relevant skills, resources, and capacities (in terms of numbers, infrastructure, and systems); and effectiveness in M&E skills are needed for project sustainability.

4.9 Analysis of Stakeholder Management and sustainability of donor-funded livelihood projects in Kilifi County

Research objective five was to establish the extent to which stakeholder management influences the sustainability of donor-funded livelihood projects in Kilifi County. The indicators for s were stakeholder knowledge sharing, stakeholder collaboration, and stakeholder communication.

4.9.1 Stakeholder knowledge sharing and sustainability of donor-funded livelihood projects in Kilifi County

With three Likert items for this construct, the researcher sought to determine the extent to which stakeholder knowledge sharing influenced the sustainability of DFLPs. The respondents' levels of agreement on the 5-point Likert scale were found to be as shown in table 4.47 below.

Table 4.47: Stakeholder knowledge sharing and sustainability of DFLPs

Item	**SD F (%)**	**D F (%)**	**N F (%)**	**A F (%)**	**DA F (%)**	**N**	**Mean**	**S.E.**	**Std. Dev**
SM1	1 (0.6%)	1 (0.6%)	3 (1.8%)	85 (52.1%)	73 (44.8%)	163 100	4.40	0.049	0.624
SM2	2 (1.2%)	4 (2.5%)	7 (4.3%)	116 (71.2%)	34 (20.9%)	163 100	4.08	0.053	0.676
SM3	2 (1.2%)	17 (10.4%)	5 (3.1%)	95 (58.3%)	44 (27.0%)	163 100	3.99	0.071	0.913
Composite						**163**	**4.16**	**0.042**	**0.54**

SM1: You have adequate accessibility to project knowledge
SM2: You have learned so much from this project
SM3: There is a high level of trust among the stakeholders

Table 4.47 above presents the responses on stakeholder knowledge sharing. Item 1 (SM1) sought to determine the extent to which the respondents viewed the accessibility of project knowledge. Only one (0.6%) strongly disagreed, one (0.6%) disagreed and 3 (1.8%) were neutral. 85 (52.1%) agreed while 73 (44.8%) strongly agreed. The majority of the respondents (96.9%) agreed. The item scored a mean of 4.4 and standard deviation of 0.624 and standard error of the mean of 0.049 giving a mean perception between 3.776 and 5.024 falling in the agreement area. It was therefore concluded that the respondents perceived they accessed project knowledge.

Item 2 (SM2) sought to establish the perception of the respondents on learning from the projects. It was found out that 2 (1.2%) respondents strongly disagreed; 4 (2.5%) disagreed; 7 (4.3%) were

neutral; 116 (71.2%) agreed and 34 (20.9%) strongly agreed. The majority (92.1%) were positive. The mean score was 4.08; the standard deviation was 0.676 and the standard error of the mean of 0.053. The mean perception lied between 3.404 and 4.756 all lying in the affirmative area. Therefore, it was descriptively concluded that the respondents agreed to have learned much from the project.

Item 3 (SM3) was pursued to establish the respondents' degree of agreement as regards a high level of trust among the stakeholders. Two (1.2%) strongly disagreed; 17 (10.4%) disagreed while 5 (3.1%) were neutral. 95 (58.3%) agreed and 44 (27%) strongly agreed. The items scored a mean of 3.99 a standard deviation of 0.913 and a standard error of the mean of 0.071. The mean perception range of between 3.077 and 4.903. The range extends from the neutral point toward the positive. Therefore, it was concluded that the respondents perceived that had learned much from the project.

Given the composite statistics of the mean (4.16), standard error of the mean (0.042) and standard deviation (0.54), and mean perception between 3.62 and 4.7; it was descriptively concluded that there was knowledge sharing and it influenced the sustainability of DFLPs in Kilifi county.

4.9.2 Stakeholder collaboration and sustainability of donor-funded livelihood projects in Kilifi County

With three Likert items for this construct, the researcher sought to determine the extent to which stakeholder collaboration influenced the sustainability of DFLPs. The findings on respondents' levels of agreement on the 5-point Likert scale are presented as shown in table 4.48 below.

Table 4.48: Stakeholder collaboration and sustainability of DFLPs

Item	SD F (%)	D F (%)	N F (%)	A F (%)	DA F (%)	N	Mean	S.E.	Std. Dev
SM4	1 (0.6%)	33 (20.2%)	4 (2.5%)	94 (57.7%)	31 (19.0%)	163 100	3.74	0.079	1.010
SM5	2 (1.2%)	50 (30.7%)	9 (5.5%)	77 (47.2%)	25 (15.3%)	163 100	3.45	0.088	1.118
SM6	4 (2.5%)	63 (38.7%)	13 (8.0%)	56 (34.4%)	27 (16.6%)	163 100	3.24	0.094	1.201
Composite						**163**	**3.48**	**0.071**	**0.91**

SM4: Apart from the lead sponsor, other institutions have supported the project
SM5: The department of agriculture and livestock has constantly supported farmers after the project closure
SM6: The department of cooperative development has worked with the project since the withdrawal of the donor

The three Likert items above sought to establish the perception of respondents on stakeholder collaboration and sustainability of DFLPs. Item 4 (SM4) was pursued to establish the respondents' degree of agreement as regards the presence of other institutions that have supported the project. Only 1 (0.6%) respondent strongly disagreed; 33 (20.2%) disagreed and 4 (2.5%) were neutral. 94 (57.7%) agreed while 31 (19.0%) strongly agreed. The majority (86.7%) of respondents were affirmative to the Likert item. The item had a mean score of 3.74; a standard deviation of 1.01 and standard error of the mean of 0.079 and a mean perception range of 2.73 and 4.75. This indicated that the item had mixed feelings about the presence of other supportive institutions apart from the parent project implementer.

Item 5 (SM5) sought to find out the extent of agreement as regards the constant support from the department of agriculture and livestock in the contribution to the sustainability of DFLPs. Only 2 (1.2%) respondents strongly disagreed; 50 (30.7%) disagreed; 9 (5.5%) were neutral; 77 (47.2)

agreed; while 25 (15.3%) strongly agreed. The items scored a mean perception of 3.45 with a standard deviation of 1.118, standard error of the mean of 0.088, and mean perception range of between 2.332 and 4.568. Likewise, this indicated that the item had mixed feelings as regards whether the department of agriculture and livestock constantly supported the farmers. However, as the perception extends more to the affirmative area it was concluded that the department had constantly supported the farmers after the donor withdrew its support.

Item 6 (SM6) pursued to establish the respondents' degree of agreement as regards constant support from the department of cooperative development since the withdrawal of donors. Results show that 4 (2.5%) strongly disagreed; 63 (38.7%) disagreed; 13 (8.0%) were neutral. 56 (34.4%) agreed while 27 (16.6%) strongly agreed. These items had a mean perception of 3.24, a standard deviation of 1.201, a standard error of the mean of 0.094, and a mean perception range of between 2.039 and 4.441. The respondents had mixed views that the department of cooperatives had constantly supported the project since the donor withdrew its support.

The composite statistics for stakeholder collaboration were mean (3.48), standard deviation (0.91), standard error of the mean (0.071), and a mean perception range of between 2.51 and 4.39. The respondents had mixed feelings about the collaboration in terms of additional support apart from the parent project implementer.

4.9.3 Stakeholder communication and sustainability of donor-funded livelihood projects in Kilifi County

With three Likert items for this construct, the researcher sought to determine the extent to which stakeholder communication influenced the sustainability of DFLPs. The respondents' levels of agreement on the 5-point Likert scale were found to be as shown in table 4.49 below.

Table 4.49: Stakeholder communication and sustainability of DFLPs

Item	SD F (%)	D F (%)	N F (%)	A F (%)	DA F (%)	N	Mean	S.E.	Std. Dev
SM7	0 (0.0%)	6 (3.7%)	11 (6.7%)	118 (72.4%)	28 (17.2%)	163 100	4.03	0.049	0.623
SM8	1 (0.6%)	18 (11%)	16 (9.8%)	85 (52.1%)	43 (26.4%)	163 100	3.93	0.073	0.927
SM9	0 (0.0%)	19 (11.7%)	9 (5.5%)	74 (45.4%)	61 (37.4%)	163 100	4.09	0.074	0.945
Composite						**163**	**4.02**	**0.049**	**0.620**

SM7: The project has a clear communication within the project
SM8: The project has an accessible reporting system
SM9: Meetings are held frequently to update members

The three Likert items above sought to establish the perception of respondents on stakeholder communication and sustainability of DFLPs. Item 7 (SM7) sought to establish the extent of agreement as regards the existence of clear communication within the project. The findings show that none of the respondents strongly disagreed. Six (3.7%) respondents disagreed; 11 (6.7%) were neutral; 118 (72.4%) agreed; and 28 (17.2%). The majority (89.4%) were affirmative. The item scored a mean perception of 4.03, a standard deviation of 0.623, and standard error of the mean of 0.049, and a mean perception range between 3.407 and 4.653. The mean perception range fell in the agreement area and thus concluded that there was clear communication within the project.

Item 8 (SM8) sought to establish the extent to which the respondents agreed as regards the existence of an accessible reporting system in the project. Only 1 (0.6%) strongly disagree; 18 (11%) disagreed; 16 (9.8%) were neutral; 85 (52.1%) agreed; and 43 (26.4%) strongly agreed. The majority (78.5%) agreed. The item scored a mean perception of 3.93; a standard deviation of 0.927; a standard error of men of 0.073 and a mean perception range between 3.003 and 4.857. This item

had mixed feeling about the neutral extending toward the pick of agreement. Therefore, it was concluded that the reporting system was accessible.

Item 9 (SM9) sought to establish the extent to which the respondents agreed regarding the frequency of holding meetings to update the members on the project progress. The findings indicated that none (0%) of the respondents strongly disagreed; 19 (11.7%) disagreed; 9 (5.5%) were neutral. 74 (45.4%) agreed while 61 (37.4%) strongly agreed. The majority (82.8%) were positive. The item had a mean perception of 4.09; a standard deviation of 0.945; a standard error of the mean of 0.074 and a mean perception range of between 3.145 and 5.035. It was concluded that respondents held frequent meetings to update on project progress.

This construct stakeholder communication had a composite mean perception of 4.01 and standard deviation of 0.62 and a standard error of the mean of 0.049 and a mean perception of 3.39 and 4.63. The range falls in the agreement area. Therefore, the study descriptively concluded that there was communication in the project even after the project donor stopped their support.

The mean (transformed by SPSS) for the stakeholder management was 3.88 with a standard deviation of 0.564 and a standard error of means of 0.044 and a mean perception range of between 3.316 and 4.444. With a Cronbach's coefficient of 0.796, it was reliably concluded that stakeholders influenced the sustainability of DFLPs in Kilifi County.

4.8.4 Inferential analysis of the influence of stakeholder management and sustainability of donor-funded livelihood projects in Kenya

Objective five was pursued to determine the extent to which stakeholder management influenced the sustainability of donor-funded projects. Knowledge sharing culture; Stakeholder collaboration and stakeholder communication were explored. According to the studies reviewed, there existed a

positive relationship between these constructs and the sustainability of projects. Correlation and regression were carried out to establish the existence of relationships and influence.

Hypothesis Five

H0: Stakeholder management does not significantly influence the sustainability of donor-funded livelihood projects in Kilifi County

H1: Stakeholder management significantly influences the sustainability of donor-funded livelihood projects in Kilifi County

Model Three

Project sustainability=f (Stakeholder management)

$Y=f(X_5, Ɛ)$

$Y= ß_0+ ß_5X_5+ Ɛ$; Where

$ß_0$=Constant term

$ß_5$=Beta coefficient

X_5=stakeholder management

$Ɛ$ = the random error

Data for this objective was collected using Likert items SM1 to SM9 (where SM1-SM3=knowledge sharing; SM4-SM6=stakeholder collaboration, and SM7-SM9=stakeholder communication. Responses were based on the 5-point Likert scale of strongly disagree (SD)=1; Disagree (D)=2; Neutral (N)=3; Agree (A)=4; and strongly agree (SA)=5.

Correlation between stakeholder management and sustainability of DFLPs

The correlation test was carried out to test the null hypothesis "There is a significant relationship between stakeholder management and sustainability of DFLPs in Kilifi County". The findings of the correlation test are as shown in table 4.50 below.

Table 4.50: Correlation between stakeholder management and sustainability of DFLPs

Variable/indicator	Test	Sustainability of donor-funded livelihood projects	Stakeholder management
Sustainability of donor-funded livelihood projects	Pearson Correlation	1	0.471**
	Sig. (2-tailed)		0.000
	N	163	163
Stakeholder management	Pearson Correlation	0.471**	1
	Sig. (2-tailed)	0.000	
	N	163	163

**. Correlation is significant at the 0.01 level (2-tailed).

The table 4.50 above shows Pearson product moment correlation (r) =0.471; p=0.000<0.01. This was a moderate positive correlation. Based on the p-value method, the null hypothesis was rejected. This means that there was a (moderate) positive correlation between stakeholder management and the sustainability of DFLPs.

Regression analysis for stakeholder management and sustainability of DFLPs in Kilifi County

The outcome of the test was used to determine the model fitness and the mathematical model for the relating variables under the objective studied.

Table 4.51: Regression Model summary for stakeholder management and sustainability of DFLPs

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.471[a]	.222	.217	.492

a. Predictors: (Constant), Stakeholder management

The model in table 4.51 above shows that 22.20% of the sustainability of DFLPs is explained by stakeholder management. When adjusted sustainability is explained by 21.70%. Before adjustment, it, therefore, implied that 77.80% of sustainability is explained by other factors.

The hypothesis testing for the model fitness was carried out using ANOVA. The null hypothesis "*The model for stakeholder management predicting the sustainability of DFLPs is not fit".* The results are shown in Table 4.52 below.

Table 4.52: Test for model fitness for predicting stakeholder management and sustainability of DFLPs in Kilifi County

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	11.105	1	11.105	45.933	.0000389
Residual	38.925	161	0.242		
Total	**50.031**	**162**			

a. Dependent Variable: Sustainability of donor-funded livelihood projects
b. Predictors: (Constant), Stakeholder management

The model fitness p-value test indicated $F_{(1,161)} = 45.933$; $P = 0.0000389 < 0.05$. The null hypothesis was consequently rejected. The model was hence concluded to be fit. Therefore, stakeholder management predicted 22.20% of the sustainability of DFLPs.

To establish the extent to which stakeholder management influenced the sustainability of DFLPs, a mathematical model was established by the SPSS generated coefficients as shown in table 4.53 below. The mathematical model followed the pattern as:

$Y = ß_0 + ß_5X5 + Ɛ$; *where* $Ɛ$ *is the random error*

Table 4.53: Mathematical model for stakeholder management and sustainability of Kilifi County

	Unstandardized Coefficients		Standardized Coefficients		
Model	**B**	**Std. Error**	**Beta**	**t**	**Sig.**
(Constant)	1.843	0.269		6.859	0.000
Stakeholder management	0.464	0.069	0.471	6.777	.0000389

a. Dependent Variable: Sustainability of donor-funded livelihood projects

The model coefficients are indicated as $ß_0=1.843; ß_5=0.464$ therefore the model looked as $Y=1.843+0.464X_5+ \mathcal{E}$ where; Ɛ is error and X_5 is the stakeholder management.

The model indicates that an increase in stakeholder management by one (1) unit automatically results in an increase in sustainability by 0.464 and a reduction in sustainability by one unit would result in a decrease in sustainability by the same margin. Because of p=0.0000389<0.05 the null hypothesis "*Stakeholder management does not significantly influence the sustainability of donor-funded livelihood projects in Kilifi County*" be rejected. It was therefore concluded that stakeholder management significantly influenced the sustainability of DFLPs in Kilifi County. The Likert computation

$Y=1.843+0.464X_5+ Ɛ$

$Y=1.843+0.464*0.222+ Ɛ$

$Y=1.843+0.103X_5+ Ɛ$

$Y=1.946+ Ɛ$

The value 1.946 falls in the rejection area therefore Likert approach the null hypothesis was also rejected.

Table 4.54: Knowledge sharing, stakeholder collaboration, communication and sustainability of Kilifi County

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	**Std. Error**	**Beta**	**t**	**Sig.**
(Constant)	1.518	0.312		4.873	0.000
Knowledge sharing	0.283	0.088	0.275	3.202	0.002
Stakeholder collaboration	0.077	0.050	0.126	1.554	0.122
Stakeholder communication	0.170	0.082	0.191	2.076	0.039

a. Dependent Variable: Sustainability of donor-funded livelihood projects

The coefficients in table 4.54 above indicate the independent contribution of knowledge sharing, stakeholder collaboration, and stakeholder communication. The table indicates that knowledge sharing and stakeholder communication had a significant influence whereas stakeholder collaboration did not have a significant influence on the sustainability of DFLPs in Kilifi County. Therefore, the expanded mathematical model for Monitoring and evaluation looked as:

$Y=1.518+0.283KS+0.077SCol+0.17SC+\mathcal{E}$; where KS=knowledge sharing, SCol=stakeholder collaboration and SC=Stakeholder communication.

The model shows that an increase by one (1) unit of knowledge sharing among stakeholders, stakeholder collaboration, and stakeholder communication would increase the sustainability of DFLPs in Kilifi County by 0.283, 0.077, and 0.17 units respectively.

4.8.5 Discussion on stakeholder management and sustainability of donor-funded livelihood projects in Kilifi county

The capacity of a project to remain functioning over an extended time is reliant on the sustainability of its stakeholder relationships (Perrini & Tencati, 2006). The composite mean stakeholder management was 3.88 falling in the agreement area. The distinct means for constructs under this variable were knowledge sharing (μ=4.16); stakeholder collaboration (μ=3.48) and stakeholder

communication (μ=4.02). Correlation analysis revealed that stakeholder management had a moderate and positive score (r=0.471). Nyandika and Ngugi (2014) and Bal et al. (2013) found a positive relationship between stakeholder involvement and project performance. The p=0.0000389<0.05) meant that stakeholder management had a significant influence on the sustainability of livelihood projects. Studies by Nyandika and Ngugi (2014) and Bal et al (2013) found out that the performance of road projects which extend into life after sponsorship in Kenya was influenced by stakeholder participation. The individual contribution of the constructs under stakeholder management indicated that knowledge sharing (p=0.002<0.05) and stakeholder communication (p=0.039<0.05) had a significant contribution to sustainability. The findings on stakeholder collaboration (p=0.122>0.05) did not have a significant influence on sustainability.

From the interview and FGDs, the three projects had impacted a lot of knowledge to the project farmers. The farmers over time had learned modern farming methods, new leadership skills of the group dynamics had approached marketing, group saving and loaning, and system operation and maintenance. The new technologies that had been introduced entailed irrigation farming by use of heavy-duty machinery (in both project areas), greenhouse technology (in Gandini), use of new irrigation methods such as basin irrigation, and use of fertilizers. It was learned through the discussions that these new methods were efficient compared to the contemporary approaches. However, the operation and maintenance of the pumps were challenging. The knowledge sharing was both vertical and lateral acquired. Vertically, the knowledge was passed from the technical point (department of agriculture, livestock and cooperatives, social services, and implementing agencies to the farmers. Laterally the knowledge has been shared among the farmers through the project leaders and the agro-volunteers. One key informant said,

> "*After the agro-volunteers get the information from the donors, agencies manage to pass the information to the community, either going door to door, phone calls and barazas*."

The knowledge was mostly acquired through training, exchange programs, field days, open days, meetings, and experience. These strategies of knowledge sharing can be simplified as codification (knowledge is exchanged through written documents and systems) and personalization (knowledge is shared through interactions) as it was with Johansson et al. (2013) case study with Volvo automotive sector. Trust played a critical role in knowledge sharing as Park and Lee (2013) found out in a cross-sectional survey on top Korean Information Technology companies that trust and knowledge sharing are strongly correlated in which much knowledge is shared between members (stakeholders) who have higher trust and dependency.

The three projects established a collaborative relationship with various county departments and agencies. The collaborations were exemplified mostly informally in which contractual relationships as explained by Cross & Parker (2004) were missing. The contractual relationships only existed for short period (quarterly). These collaborations were more intense during the life of the project. The ties got loose when the project was closed. The county departments (livestock, agriculture, social services, and cooperatives) collaborated with the implementing agencies to deliver various training to the farmers, support extension services, and follow-ups. Kenya Red Cross had entered into agreements with the departments of agriculture and livestock to conduct extension visits to the farmers twice a month. In the agreement, the officers would be facilitated by the implementing agency to deliver the services. The departments had county programs to support the field and monitoring visits to the farmers as part of their mandate to serve the community. It was understood from the discussions that the frequency of the visits reduced when the project closed. This explained the mixed reactions regarding whether the department of

agriculture and livestock constantly supported the farmers after the project closed. This corroborates with the reactions on the access of extension services through advisories and visits. The extension officers (key informants) highlighted that logistics and the limited staffing constrained the regular visitations. It was furthers picked that the partnerships saw the departments of agriculture support the farmers with farm inputs (fertilizers and seeds). Apart from the implementing agencies (Kenya Red Cross Society and ActionAid) in these respect project areas other organizations that had supported the farmers included World Vision Kenya and Anglican Development services. The organizations supported capacity building and infrastructure. However, it was noted that not all farmers had benefited from these other organizations but only those who were their beneficiaries. These agencies targeted the same communities. These findings related with Jenkins et al. (2010) collaboration of MoH, CHWs, Nursing council of Kenya, Kenya Clinical Officer Council, WHO Collaborating Centre, and Kenya Psychiatric Association (KPA) contributed to the sustainability of mental health project financed by the Department for International Development (DFID) from 2001 to 2004. The project in this study revealed that the collaboration loosened when the donor support was reduced. This was different from what was found in the complex arrangement in which Oxfam GB collaborated with local partners (Uluguru Mountains Agricultural Development Project [UMADEP], INADES Formation Tanzania [IFTz], Women and Poverty Alleviation in Tanzania [WOPATA], and Social and Economic Development Initiative of Tanzania [SEDIT]), Ministry of agriculture, and the Sokoine University of Agriculture in setting up the infrastructure, capacity building, strengthening cooperative association and markets continued even after the project closure.

Just like knowledge flow, communication in these projects was vertical and lateral. In the vertical communication, information flew from the implementing agencies or county departments to the

farmers through the project leadership while lateral involved sharing information among the farmers. The local leadership (the assistant chiefs) played a very vital role in conveying the messages. One of the assistant chiefs said,

> *"If there was any information I wanted to pass to the grassroots I was calling for public barazas and inform the village elders."*

The meetings were held to share reports and other vital information required by the farmers. The project progress was also reviewed during these meetings. In Gandini, the farmers held monthly meetings which however had reduced attendance towards the end of the project. Dodosa did not have planned meetings rather than ad hoc sittings. In Uvumbuzi the meetings were not regularly held. The Gandini project had tried the cooperative model but did not work as the proceeds and subscriptions were not sufficient. Farmers still practiced individualistic production and marketing. Since the Bungale Irrigation Farmers' Cooperative Society was formed in 2014 only one general meeting had been held in 2017.

4.10 Analysis of moderating influence of Stakeholder Management on the relationship between project exit strategies and sustainability of donor-funded livelihood projects in Kilifi County

Objective six of the study was to examine the moderating influence of stakeholder management on the relationship between project exit strategies and sustainability of donor-funded livelihood projects in Kilifi County. The indicators under consideration for stakeholder management were: stakeholder knowledge sharing, stakeholder collaboration, and stakeholder communication. These constructs had already been studied in the previous sub-section (4.9).

4.10.1 Descriptive analysis of the moderating influence on the relationship between project exit strategies and sustainability of DFLPs

Descriptive analysis of the project exit strategies (capacity building exit strategy, project support service linkage and monitoring and evaluation) as exemplified by the composite mean perception (in table 4.54 below) indicated that respondents agreed that the variables contributed to the sustainability of DFLPs in the order of monitoring and evaluation (mean=3.9891), stakeholder management (mean=3.889), and capacity building (mean=3.79). However, respondents concentrated around the neutral point on the contribution of Project support service linkage (mean=3.1336) on the sustainability of DFLPs in Kilifi county.

Table 4.55: Descriptives for independent variables

	Capacity building exit strategy	Support service linkages	Monitoring and Evaluation	Combined exit strategy	Stakeholder management
N	163	163	163	163	163
Mean	3.790	3.1336	3.9891	3.6378	3.8828
S. E	0.032	0.04574	0.04043	0.03271	0.04417
Std. Dev	0.406	0.58393	0.51619	0.41759	0.56390

4.10.2 Inferential analysis of the moderating influence of stakeholder management on the relationship between project exit strategies and sustainability of DFLPs

The inferential analysis under this objective was guided by the following hypothesis.

Hypothesis six

$H0_6$: Stakeholder management does not have a significant moderating influence on the relationship between project exit strategies and sustainability of donor-funded livelihood projects in Kilifi County

H1: Stakeholder management has a significant moderating influence on the relationship between project exit strategies and sustainability of donor-funded livelihood projects in Kilifi County

Model Three

Project sustainability=f (Capacity building exit strategy, Project support service linkages, Monitoring and evaluation of the exit strategy, Stakeholder management)

$Y=f\ (X_4, X_5, \mathcal{E})$

$Y=f\ (X_1, X_2, X_3, X_5, \mathcal{E})$

$Y= ß_0 + ß_1X_1 + ß_2X_2 + ß_3X_3 + ß_5X_5 + ß_{15}X_1\ X_5 + ß_{25}X_2\ X_5 + ß_{35}X_3X_5 + \mathcal{E}$; Where

$ß_0$=Constant term

X_1=Capacity building exit strategy

X_2=Project support service linkages

X_3=Monitoring and evaluation

X_4=Combined project exit strategies

X_5=Stakeholder management

$ß_1$, $ß_2$, $ß_3$ =Beta coefficients

$\mathcal{E}$ = the random error

First moderation influence of stakeholder management was tested on the relationship between combined project exit strategy and sustainability of DFLPs using a composite function of the combined independent variable (project exit strategies) model.

$Y=f\ (X_4, X_5, \mathcal{E})$

$Y = ß_0 + ß_4X_4 + ß_5X_5 + ß_{45}X_4X_5 + \mathcal{E}$ where

Moderation product was developed by centralizing the two independent variables (project exit strategy and stakeholder management). The variable outcomes were standardized to obtain the interaction product statistic (Z-scores). The two outcome standardized values of the new variables were multiplied to get the third interaction model for moderation influence.

With the introduction of stakeholder management into the model, the resultant model explained 29.4% while the combined project exit strategy alone explained 30%. This reduction meant other factors explained the contribution to the sustainability of DFLPs. When adjusted however the model explains 28.5%. The ANOVA test of the model fitness shows a test statistic of $F_{(2,160)} = 33.307$; p-value 0.00<0.05 showing that the model significantly fits to explain the contribution of the variables on sustainability.

Table 4.56: Combined project exit strategy and stakeholder management and sustainability of DFLPs

	Unstandard Coefficients		Standard Coefficients			Correlations			Collinearity Statistics	
Model	B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part	Tol	VIF
(Constant)	1.040	0.325		3.201	0.002					
Stakeholder management	0.181	0.096	0.183	1.881	0.062	0.471	0.147	0.125	0.465	2.151
Combined Project Exit Strategy	0.524	0.130	0.393	4.039	0.000	0.528	0.304	0.268	0.465	2.151

a. Dependent Variable: Sustainability of donor-funded livelihood projects
b. ANOVA: $F_{(2,160)} = 33.307$; p-value 0.000<0.05
c. Model: $R = 0.542^a$; $R^2 = 0.294$; $AdR^2 = 0.285$: Sig 0.000

As indicated in table 4.55 above combined project exit strategy had a significant influence on the sustainability of DFLPs. However, when the third product variable (moderation product) for moderation analysis was introduced the test statistics were as shown in table 4.56 below.

Table 4.57: Moderation influence of stakeholder management on the relationship between combined project exit strategies and sustainability of DFLPs

	Unstandard Coefficients		Standard Coefficients			Collinearity Statistics	
Model	**B**	**Std. Error**	**Beta**	**t**	**Sig.**	**Tol**	**VIF**
(Constant)	1.066	0.339		3.144	0.002		
Stakeholder management	0.179	0.096	0.182	1.860	0.065	.464	2.156
Combined Project Exit Strategy	0.516	0.133	0.388	3.875	0.000	.444	2.254
Moderation of SM on relationship of PES and SUS	0.011	0.039	0.020	0.277	0.782	.875	1.142

Table 4.56 above shows the moderation of stakeholder management on the relationship of project exit strategies had a p-value=0.782. The null hypothesis 'Stakeholder management does not significantly influence the relationship of project exit strategies and sustainability of DFLPs in Kilifi' was therefore not rejected. Thus, stakeholder management did not significantly influence the relationship of project exit strategies and sustainability of DFLPs in Kilifi.

The model was illustrated as follows

$$Y= ß_0+ ß_4X_4+ ß_5X_5+ ß_{45}X_4X_5+ \mathcal{E}$$

$$Y= 1.066+ 0.516X_4+ 0.176X_5+ 0.011X_4X_5+ \mathcal{E}$$

The model above indicates that a simultaneous increase in combined project exit strategies and stakeholder management by one (1) unit each automatically results in an increase in sustainability by 0.516 and 0.176 respectively. Consequently, a similar reduction by a unit will result in a drop by the same margin (0.516 and 0.176) in sustainability. A change in one unit of the interaction between project exit strategies and stakeholder only result in a 0.011 change in sustainability. In other words, stakeholder management only moderates the relationship of combined project exit strategies and sustainability to the extent of 0.011. This change is insignificant. The model fitness in predicting sustainability was significant at p-value=0.000<0.001 and $F_{(3,159)}$ =22.102.

The introduction of distinct moderation of stakeholder management on capacity building, support service linkages, and monitoring and evaluation test resulted in the statistics and indicated in table 4.57 below. The table indicated that 32.4% of the sustainability of DFLPs is explained by capacity building, support service linkages, monitoring and evaluation, stakeholder management, and the interaction between the stakeholder management and the independent variable constructs. When adjusted 29.4% of the sustainability of DFLPs is explained. The model fitness is significant at p value=0.000<0.001 and $F_{(7,155)}$ =10.609. The levels of the significant influence of moderation influences of stakeholder management from the table above were as capacity building p=0.576>0.05; support service linkages p=0.668>0.05 and monitoring and evaluation p=0.231>0.05. For the form of null hypothesis '*Stakeholder management does not significantly influence the relationship of capacity building, support service linkages, and monitoring and evaluation; and sustainability of DFLPs in Kilifi*' was consequently not rejected.

The expanded mathematical model obtained from the coefficients as indicated in table 4.47 was as:

$$Y= ß_0+ ß_1X_1+ ß_2X_2+ß_3X_3+ß_5X_5+ß_{15}X_1 X_5+ ß_{25}X_2 X_5+ß_{35}X_3X_5+ \mathcal{E}$$

$$Y= 0.662+ 0.41X_1+ 0.059X_2+0.133X_3+0.179X_5-0.025X_1 X_5- 0.022X_2 X_5+0.06X_3X_5+ \mathcal{E}$$

The contribution of support service linkages, monitoring and evaluation, and stakeholder management were positive but insignificant as informed by the p-values. The findings in Table 4.57 below also indicate that the interactions of stakeholder management and capacity building and support service linkages had a negative moderation influence.

Table 4.58: Moderation influence of stakeholder management on the relationship between distinct project exit strategies and sustainability of DFLPs

	Unstandardized Coefficients		Standardized			Collinearity Statistics	
Model	**B**	**SE**	**Beta**	**t**	**Sig.**	**Tol**	**VIF**
(Constant)	0.662	0.376		1.761	0.080		
Capacity building exit strategy	0.410	0.115	0.299	3.554	0.001	0.615	1.627
Support service linkages	0.059	0.082	0.062	0.722	0.472	0.585	1.711
Monitoring and Evaluation	0.133	0.114	0.124	1.172	0.243	0.390	2.565
Stakeholder management	0.179	0.105	0.181	1.708	0.090	0.388	2.580
Moderation of SM on relship of CB and SUS	-0.025	0.045	-0.047	-0.560	0.576	0.632	1.582
Moderation of SM on relship of SS and SUS	-0.022	0.050	-0.039	-0.429	0.668	0.542	1.844
Moderation of SM on relship of ME and SUS	0.060	0.050	0.106	1.202	0.231	0.560	1.787

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

In this chapter, a summary of the findings, conclusions, and recommendations were given. The findings were given as guided by the research objectives, research questions, and the hypotheses tested. The conclusions drawn were guided by the research objectives, research questions, research hypothesis, findings, analysis, and interpretations. The contribution of the study to the body of knowledge was also examined. Recommendations were made to guide practice, policy, methodology, and further studies.

5.2 Summary of findings

The purpose of this study was to investigate the influence of project exit strategies on the sustainability of donor-funded livelihood projects; and moderating influence of the stakeholder management on the relationship between the project exit strategies and project sustainability of donor-funded livelihood projects in Kilifi County. The attainment of this was guided by six research objectives, six research questions, and six main research hypotheses relating to capacity building exit strategy, project support service linkages, monitoring and evaluation, and stakeholder management and the interactions among the variables. Other minor hypotheses were tested to complement the inferences. The respondents of the study were drawn from three donor-funded livelihood projects in three different sub-locations of Garashi ward in Magarini sub-county in Kilifi County. The questionnaires were administered to 170 farmers (out of the population or 295) as determined by Slovin's formula in which the return rate was 95.88% (163 respondents). The qualitative data was collected from departments of agriculture, livestock, cooperatives, and interior.

Using the ANOVA (Turkey test) the perception of sustainability was examined among the independent groups based on projects, gender, age, marital status, the highest level of education attained, and duration of stay in the project. The null hypotheses were formulated to test whether there were any differences in mean perception of sustainability of donor-funded livelihood projects among respondents based on the projects, gender, age, marital status, the highest level of education attained, and duration of stay in the project. It was established that the mean perception of sustainability did not differ significantly with projects ($F_{(2,160)} = 1.670$, $p=0.192$), gender ($t_{(161)} = 0.428$, $p=0.669$), age ($F_{(4,158)}$-0.576, $p=0.724$), and marital status ($F_{(2,160)} = 1.268$, $p=0.284$). However, there was a significant difference in mean perception of sustainability of DFLPs among the different groups based on the highest level of education attained ($F_{(3,159)} = 3.812$, $p=0.011$) and duration of stay in the project ($F_{(3,159)} = 7.188$, p=000162).

Pearson's Product Moment Correlation and Multiple Regression analysis were used to test the null hypotheses. The correlation was used to test the strength and direction of associations. Pearson's product moment Correlation (r) was used to conclude associations. The interpretations were made in reference to 0.8-0.9 signifying very strong positive relations; 0.6-0.7 strong positive; 0.5 moderate positive; 0.3-0.4 weak positive; 0.1-0.2 very weak positive; and -0.8- -09 very strong negative; -0.6- -0.7 strong negative; -0.5 moderate negative; -0.3- -0.4 weak negative; -0.1- -0.2 very weak negative. Regression was used to test the existence of any influence between the variables under consideration. Rejection or failure to reject hypotheses was based on the statistics obtained in comparison with the level of significance (confidence level) at 0.05. A null hypothesis was not rejected when the p-value was greater than 0.05 whereas rejection was reached when the p-value was less than 0.05.

Of the six formulated research hypotheses, 5 hypotheses were rejected while one was not rejected. $H_0$1: y≠f (X_1, Ɛ), r=0.495, p=0.000<0.05 was rejected and concluded that capacity building exit strategy significantly influenced the sustainability of DFLPs. $H_0$2: y≠f (X_2, Ɛ), r=0.383, p=0.000027<0.05 was rejected and concluded that support service linkages significantly influenced the sustainability of DFLPs. $H_0$3: y≠f (X_3, Ɛ), r=0.458, p=0.000389<0.05 was rejected and concluded that monitoring and evaluation significantly influenced the sustainability of DFLPs. $H_0$4: y≠f (X_4, Ɛ), r=0.547, p=0.000<0.05 was rejected and concluded that combined project exit strategies significantly influenced the sustainability of DFLPs. $H_0$5: y≠f (X_5, Ɛ), r=0.471, p=0.0000389 was rejected and concluded that stakeholder management significantly influenced DFLPs.

The last hypothesis, $H_0$6 tested moderation influence on the relationship between project exit strategies and sustainability of DFLPs in Kilifi County. Three lower-level hypotheses were formulated to test how stakeholder management moderated each of the three project exit strategies (capacity building, support service linkages, and monitoring and evaluation). All three hypotheses were not rejected and concluded that there was no moderating influence between stakeholder management and the project exit strategies.

Further, under objective one, the influence of the three concepts of capacity building exit strategies on the sustainability of DFLPs was examined. Training and technological support (at p=0.000) and technological support (at p=0.000) were found to significantly influence the sustainability of DFLPs. The findings related to the findings by Cornish et al (2015) in a study in East India Plateau in a food security project (rice production) which established found that yield and returns on rice improved after farmers were trained in various aspects of production and introduced to modern methods of production. Anguko (2018) found that training and installation of new infrastructure

for poultry farming groups supported by Uluguru Mountains Agricultural Development Project, Women and Poverty Alleviation in Tanzania, and Social and Economic Development Initiative of Tanzania had supported the continuity of benefits to the farmers after donor withdrawal. However, resource capacities ($p=0.583$) did not have a significant influence on the sustainability of DFLPs in Kilifi County.

Table 5.1: Summary of research objectives, null hypotheses, findings, and remarks

Table	Objective	Null hypothesis	Findings	Remarks
	To establish how capacity building exit strategy influences the sustainability of donor-funded livelihood projects in Kilifi county, Kenya	**$H_0$1:** Sustainability of donor-funded livelihood projects in Kilifi County is not significantly influenced by the implementation of project capacity building exit strategy	r=0.495 r^2=0.245 F (1,161) =52.162 p=0.000	Positive and moderate correlation; H_0 rejected; Significant influence exist
	To determine the extent to which project support linkage services exit strategy influences sustainability of donor-funded livelihood projects in Kilifi County	**$H_0$2:** Support service linkages significantly influence the sustainability of donor-funded livelihood projects in Kilifi County	r=0.383 r^2=0.147 F (1,161) =27.684 p=0.000027	Positive and weak correlation; H_0 rejected; Significant influence exist
	To assess the influence of monitoring and evaluation of the exit strategy on the sustainability of donor-funded livelihood projects in Kilifi county, Kenya	**$H_0$3:** Monitoring and evaluation of project exit strategy does not significantly influence the sustainability of donor-funded livelihood projects in Kilifi County	r=0.458 r^2=0.210 F (1,161) =42.740 p=0.0000389	Positive and moderate correlation; H0 rejected; Significant influence exist
	To examine how combined exit strategy influences the sustainability of donor-funded livelihood projects in Kilifi county, Kenya	**$H_0$4:** The combined project exit strategy does not significantly influence the sustainability of donor-funded livelihood projects in Kilifi County	r=0.547 r^2=0.300 F (3,159) =22.684 p=0.0000042	Positive and moderate correlation; H_0 rejected; Significant influence exist

	To determine the extent to which stakeholder management influence the sustainability of donor-funded livelihood projects in Kilifi County, Kenya	**$H_0$5:** Stakeholder management does not significantly influence the sustainability of donor-funded livelihood projects in Kilifi County	r=0.471 r^2=0.222 F (1,161) =45.933 p=0.0000389	Positive and moderate correlation; H_0 rejected; Significant influence exist
	To examine the moderating influence of stakeholder management on the relationship between project exit strategies and sustainability of donor-funded livelihood projects in Kilifi County	**$H_0$6:** Stakeholder management does not significantly influence the sustainability of donor-funded livelihood projects in Kilifi County	p=0.208>0.05	H_0 sustained; No significant moderating influence
		$H_0$6a: Stakeholder management has no significant moderating influence on the relationship between capacity building and sustainability of donor-funded livelihood projects in Kilifi County.	p=0.576>0.05	H_0 sustained; No significant moderating influence
		$H_0$6b: Stakeholder management has no significant moderating influence on the relationship between project support service	p=0.668>0.05	H_0 sustained; No significant moderating influence

		linkage and sustainability of donor-funded livelihood projects in Kilifi County.		
		$H_0$6c: Stakeholder management has no significant moderating influence on the relationship between monitoring and evaluation, and sustainability of donor-funded livelihood projects in Kilifi County.	p=0.231>0.05.	H0 failed to reject; No significant moderating influence

Objective two was further examined in terms of the access to extension services, access to credit services, and market linkages as the constructs of support service linkages. Access to extension services (p=0.001), market linkages (p=0.018) had a significant contribution to the sustainability of DFLPs in Kilifi County. Access to credit services (p=0.395) did not have a significant influence on the sustainability of DFLPs in Kilifi County.

Under objective three participation in M&E, tools used in M&E, and frequency and timing of M&E were examined further. Participation in M&E (p=0.000) and frequency and timing (p=0.024) had a significant influence on the sustainability of DFLPs. However, tools used in M&E (p=0.459) in these projects did have a significant influence on the sustainability of DFLPs in Kilifi County.

Objective five examined the individual influence of knowledge sharing, stakeholder collaboration, and stakeholder communication on the sustainability of DFLPs. Knowledge sharing (p=0.002) and stakeholder communication (p=0.039) showed a significant influence on the sustainability of DFLPs. Conversely, stakeholder collaboration did not significantly influence the sustainability of DFLPs in Kilifi County.

Objective six examined the presence of moderation influence of stakeholder management on the relationship between project exit strategies (capacity building, project support service linkages, and monitoring and evaluation) and sustainability of DFLPs in Kilifi County. The finding uncovered that there was no significant moderation influence between the two variables under study. However, there was some level of moderation or interaction.

5.3 Conclusion

This segment presents the conclusions drawn from the study as guided by six objectives, six research questionnaires, and six hypotheses. Three types of variables were studied namely independent, dependent and moderating variables. The independent variable, project exit strategies, was indicated by a capacity-building exit strategy, support service linkages, and monitoring and evaluation. The dependent variable, sustainability of donor-funded livelihood projects, was indicated by continued implementation, continued benefits, and continued active participation. The moderating variable, stakeholder management, was indicated by knowledge sharing, stakeholder collaboration, and stakeholder communication.

The descriptive statistics on the sustainability of donor-funded livelihood projects in Kilifi County was identified predominantly through continued active participation in project planning, decision making, and contribution towards the project. This was followed by continued implementation of

project activities through functioning systems. Continued benefits in terms of yields, income, and other emerging benefits were lower. It was concluded that the sustainability of donor-funded livelihood projects was better understood through continued participation of the communities in planning and decision making which ultimately resulted in continued implementation hence continued dividends through yields and income generation. This implied that the project should focus most on ensuring that farmers or communities participate in all processes of planning and decision making to undertake to reach a given socio-economic goal by consciously analyzing the problems and outlining a course of action to resolve those problems while the government and implementing agency and private sector acting as facilitators. This will eventually translate to continued implementation and reaping dividends.

Objective one of this study sought to establish how capacity building influenced the sustainability of donor-funded livelihood projects in Kilifi County. There was a positive moderate correlation between capacity-building exit strategy and sustainability of DFLPs. As much as capacity-building exit strategy had a significant influence on the sustainability of DFLPs in Kilifi, this indicator was more pronounced in terms of training and technological support from the implementing agency. Resource capacities did not significantly contribute to sustainability though descriptive they seemed to contribute. This implies that if much concentration is put on training the farmers in all aspects of project management and best practices and ensuring that these skills are applied; and support with appropriate technology and technical support to ensure that the systems are maintained operational will enhance project sustainability. Financial resource capacities in DFLPs did not significantly contribute to capacity building. This means that pumping direct financial resources did not necessarily translate to sustainability. Skills required for

community resource mobilization are critical. It was concluded that capacity-building strategy influences the sustainability of donor-funded livelihood projects.

Objective two sought to determine the extent to which project support linkage services exit strategy influences sustainability of donor-funded livelihood projects in Kilifi County. In as much as the correlation of support service linkages and sustainability was positive it was weak. However, the influence of support service linkages on sustainability was significant. The contribution of access to extension services and market linkages was significant in a similar order. It was concluded that access to extension services and market linkages were critical in the sustainability of these projects however limited access to credit services reduced the overall contribution of support service linkages (r=0.147; 14.7% prediction). This was contributed by agency and department contractual agreements and provision of advisories to the farmers. Conversely, credit services did not have a significant contribution. This implied that a relative equal focus on credit service would have increased the contribution of support service linkages to the sustainability of these DFLPs in Kilifi County. There were no sufficient facilities around to offer the services that contributed to only a handful of the farmers acquire informal loans which had unaffordable interest rates. Nonetheless, it was concluded that support service linkages influence the sustainability of donor-funded livelihood projects. However, there was a need for a formal agreement between the implementing agencies, farmers and the line departments, and other private institutions for extension services. Market information provided on the quantities, quality, pricing, and source of the market were found to be very vital in the market linkages.

Objective three assessed the influence of monitoring and evaluation of the exit strategy on the sustainability of donor-funded livelihood projects in Kilifi County. The correlation between M&E and sustainability was positive and moderate. M&E significantly influenced the sustainability of

DFLPs in Kilifi County. Participation in M&E and frequency and timing of M&E were very critical to the sustainability of these projects. The involvement of the farmers in the M&E processes, review, and feedback saw continued participation in planning and decision making. The periodic monitoring by the implementing agency and line department contributed to sustainability. Despite tools used in M&E being descriptively influencing the sustainability of DFLPs, the influence was insignificant. This implied that corporate and individual knowledge of the project objectives, targets, and means of measuring project results were still critical in ensuring sustainability is attained. Giving more attention to making sure that the community (farmers) understand project objectives, targets, and means of measuring the performance can significantly influence project sustainability. It was concluded that monitoring and evaluation influence the sustainability of donor-funded livelihood projects.

Objective four of this study pursued to examine how combined exit strategy influences the sustainability of donor-funded livelihood projects in Kilifi county. Capacity-building strategy, support service linkages, and monitoring and evaluation were combined. The combination of exit strategies and sustainability of DFLPs had a positive and moderate correlation. This correlation was stronger than any of the individual indicators as well as the highest percentage contribution. This implied that each factor has an incremental contribution to sustainability hence the more the critical factors are considered the more sustainability is attained. The combined project exit strategies had a significant influence on the sustainability of the donor-funded livelihood in Kilifi. The combined model ($Y=0.722+0.435X_1+0.096X_2+0.244X_3+ \mathcal{E}$) showed that capacity building had the highest contribution to sustainability, followed by monitoring and evaluation. Support service linkage had the least contribution. This means that much sustainability would be reaped with much effort directed to capacity building (training, technological and technical support) and

monitoring and evaluation (participatory M&E, knowledge of objectives, targets, and intensified monitoring visits). However, since individually support service linkages were significantly influenced sustainability it, therefore, deduced that additional focus on the service linkages enhances sustainability.

Objective five determined the extent to which stakeholder management influence the sustainability of donor-funded livelihood projects in Kilifi County. Knowledge sharing, stakeholder collaboration, and stakeholder communication were examined. Stakeholder management and project sustainability had a positive and moderate correlation. Stakeholder management significantly influenced the sustainability of DFLPs in Kilifi. Further delving pointed out that knowledge sharing had the greatest contribution to sustainability followed by stakeholder communication. Stakeholder collaboration had the least. The conclusion is that a project is an avenue through which communities learn a lot. The learning that takes place through training, practical applications, and experience is very critical for sustainability. Putting communication channels is very critical in passing information both horizontally (farmer to farmer, organization to organization, institution to institution) and vertically (from technical teams to farmers, donors to implementing agencies, implementing agencies to the communities and back). Though the contribution of collaboration was insignificant, an increased focus on the collaboration arrangements can help communities diversify their resource mobilization, expert mobilization, and support. Therefore, the study concluded that combined project exit strategies influence the sustainability of donor-funded livelihood projects.

Objective six examined the moderating influence of stakeholder management on the relationship between project exit strategies and sustainability of donor-funded livelihood projects in Kilifi County. While analyzing the moderation of stakeholder management, the interaction of capacity

building, support service linkages, and monitoring and evaluation were examined separately. From the model ($Y= 1.066+ 0.516X_4+ 0.176X_5+ 0.011X_4X_5+ \mathcal{E}$) it was evident that there were interactions but they were insignificant. It was therefore concluded that the stakeholder management did not moderate the relationship between project exit strategies and sustainability of donor-funded livelihood projects. It was further concluded that other factors would moderate the relationship other than stakeholder management. Stakeholder management was therefore concluded as a typical independent variable rather than moderating.

5.4 Contributions of the Study to Knowledge in Sustainability of Projects

The study found that each factor has an incremental contribution to the dependent variable when other elements are constant. For instance, each of the indicators of project exit strategies (capacity building, support service linkages, and monitoring and evaluation) had a contribution lower than the combined exit strategies.

Capacity building exit strategies, support service linkages, monitoring and evaluation, and stakeholder management as strategies that contributed to the continued benefits, participation, and implementation of the donor-funded livelihood projects in Kilifi County. Different exit strategies interact and how they impact sustainability. This study found that capacity building, linkages to support services and monitoring and evaluation, and stakeholder management contribute to influence the sustainability of projects. The study, therefore, confirmed the Complex systems theory which explains how interrelated components (in science, technology, nature, and scope) affect each other in a system towards achieving the goal.

A project comes with a lot of learning and experiences. The three projects studied demonstrated that the farmers had learned so much. They had acquired various skills through the capacity-

building initiatives including the training, exchange programs, field and open days supported by the donors through the implementing agencies. The challenges that the farmers faced also was an opportunity to learn how to solve issues locally ranging from conflict resolutions, complaints and feedback management, and local resource mobilization as supported by Bruner (1960) and Mayer (2004) that active learning takes place when the learner is confronted with a problem and left to find solutions with or without guidance. The participation of the farmers in monitoring and evaluation processes and meetings provided avenues for more learning too. The new knowledge as highlighted by farmers through focus group discussions and in-depth interviews included: group management, best crop and animal husbandry practices, new methods of irrigation, system operation and maintenance, resource mobilization, financial management, and saving and loaning. The implementing agency (Kenya Red Cross and Action Aid) played the role of scaffolding by providing the support technologies and materials to support the learning as noted by Chambers, Thiekotter & Chambers (2013). These findings confirm the Discovery theory of learning by Jerome S. Bruner (1960). The varying levels of adoption and practice of these new technologies varied along with the style, age, and literacy levels. This indicated that adoption of the new idea or skill does not happen simultaneously but different people in the social system do so at different times or some are quicker to adoption than others as they possess different features that enable them to do so. These features were further enumerated by Nyandika and Ngugi (2014) as dissimilar degrees of willingness and capabilities to adopt innovations, or new ideas or change. Thus, this study confirms the Diffusion of innovation theory by Rodgers (1962).

This study found out that many theories can be used to explain various concepts regardless of the origin of the theories. For instance, the theory of diffusion of innovation which originated from the communication sector attempts to explain how a new idea or skill or technology gains thrust

and spreads through a given community or social system over time. Adoption and acceptance as being the continuous use of technology or innovation. Effective adoption is reached when adopters are supported with resources, technology (or systems), technical skills, and incentives (George et al., 2010) by change agents (Mitchell, 2013). This study found that this theory can also be used to explain project sustainability which oftentimes comes with the introduction of new ideas or technology and later the project with new technology or idea is expected to continue benefiting the targeted population even at a later stage. The involvement of the target population in planning and decision-making is very critical in the initial stages and subsequent stages for the technology or new idea to continue benefiting the intended population. These findings further confirm the Diffusion of Innovation Theory.

Ward (2013) criticized the Diffusion of innovation theory for failing to differentiate technological, environmental, and human factors which limits its applicability. The in-depth interviews and focus group discussion during this study found further that financial resources also impeded its applicability. For instance, financial resources limited access to extension services (which is a critical factor in the performance and sustainability of projects) by farmers.

This study shows clearly that a project is a system that is made up of the target or intended population, the implementing agency, government departments, other institutions in the neighborhood. From the findings, the goal of sustainability was achieved by each of the sub-system playing its role. For instance, the implementing agency supported the installation of new technologies, facilitation for monitoring by the government agencies, supported the training; the government department offered training and extension services, market information, and linkages; while the community (farmers) implemented the activities, contributed labor, locally available resources and security; while the neighborhood provided the market for the produce.

Stakeholder directly influences project sustainability rather than moderating as such this study found that four critical factors of sustainability were capacity building, support service linkages, and monitoring and evaluation and stakeholder management. However, other factors predict sustainability other than these four. Horisch et al. (2014) developed a conceptual framework to foster mutual interest; strengthening sustainability mindset; and empowering the interest groups education (training, knowledge, and skills) and incentives (finances and awards) were illustrated as vital ingredients.

5.5 Recommendations

This section gives the recommendations as informed by the study findings, the analysis, interpretation, and discussions. The recommendations are categorized as policy and practice, methodology, and further studies.

5.5.1 Recommendations for policy and practice

The findings of the study have implications on the practice and policies guiding the implementation of donor livelihood projects and other related projects in Kilifi county and other areas. These projects are supported by donor agencies and later left to communities to implement after donor withdrawal. It was revealed that there was a significant difference in mean perception of sustainability of DFLPs among the different groups based on the highest level of education attained and duration of stay in the project. Although it is difficult to target and screen target project population-based on level of education it is recommended that during the formation of committees and sub-committees the community can be guided to include a large proportion, if not all, with a relatively higher level of literacy in such units to articulately guide the concept of project sustainability.

The findings showed that capacity building of farmers in various modern methods of agriculture, financial management, and group dynamics, and leadership had a significant influence on project sustainability. This implies that the policies of line ministries charged with the responsibility of capacity building and providing a conducive environment for such projects should be reviewed to ensure that resources are allocated to support capacity building initiatives in a cost-sharing approach between the implementing agencies and the line departments. These approaches and programs should ensure continuity of the provision of training, technological support, and strengthening resource capacities. The programs to support the transfer of skills may include exchange programs, open days, and field days. The choice of the appropriate technologies should bear in mind the local knowledge of the people. This means when the implementing agencies and the donors are developing the project proposal documents should be participatory. This was revealed during the interviews and discussion the locals had opted for the solar-powered pumps instead of the fuel-powered which were expensive to run and maintain.

Project support service linkages are very critical in cementing the transfer and applicability of acquired knowledge and skills while growing the economic base of the targeted community. While making decisions on these aspects very critical stages of project inception should never be underestimated. Feasibility studies are should be undertaken before introducing the new aspect of cooperative societies that never succeeded yet more resources were used in establishing the concept which was overtaken lately by the group saving associations that had started performing well before the project closed. Just six months before the project closure several farmers in Gandini had acquired loans from the associations unlike from Bungale Irrigation farmers' cooperative society which had been formed in 2016 and no one had any loan.

Since the line departments of agriculture and livestock production and fisheries of the county government of Kilifi were grappling with understaffing and financing the extension programs, the use of trainer of trainers (ToTs) approaches proved to be relieving. Required is basic training in fundamental knowledge areas in crop and livestock husbandry with little incentives to support basic needs and costs. The use of local ToTs is profitable as the knowledge is disseminated in the local language which is understood by the majority of the communities. The availability of these resource persons in the community means cases needing emergency response will be acted upon. To support this approach, the county governments, need to set aside some funds to support such initiatives and or work collaboratively with projects that support such activities.

Projects have a start and an end. As a way to ensure the provision of extension services is unending even after the project has closed it is important that implementing agents, the communities, and the relevant department enters into formal agreements (memorandum of understanding) detailing the roles and responsibilities. The parties in the agreements should put mechanisms to ensure that their commitments are honored. The county government should also put policies in place to provide a conducive environment for the engagement of private partners.

Access to credit facilities and services has been shown in this study as vital for enhancing the capacity of the farmers to expand their projects. The government and the commercial banks and other financial institutions need to provide an enabling environment to have these facilities closer to the communities. For instance, the farmers had opted to acquire loans from local and informal institutions (the SILC and GSLA) because they are readily available in the community. Other reasons for local loan acquisition are on the process and interest rates. Procedures and requirements require to acquire loans from formal or commercial institutions. The interest rates required for financial institutions and mobile loaners are relatively higher than the local loaners. According to

World Trend Plus's Global Economic Monitor (2019), Kenya's Bank Lending Rate was reported at an average of 12.380 % per annum in November 2019 whereas local loaning attracted at most 10% interest. The government through the Central Bank of Kenya and regulatory bodies should review the loaner to enable easy and affordable loan acquisition.

Whereas monitoring and evaluation is a key aspect in ensuring sustainability as revealed by this study the tools used in M&E did not significantly influence sustainability unlike the other facets examined (participation, frequency, and timing). This means that projects should ensure that understanding project objectives, targets, and means of measuring performance and sustainability is known by all the primary stakeholders (target community). The boardroom goal setting should change to participatory goal setting where the community is at the forefront in setting the scorecard. Simple templates of the logical framework should be used for the farmers to understand the theory of change, that is, how inputs are converted into activities, outputs, outcomes, and goals.

The study found that stakeholder management significantly influenced the sustainability of DFLPs in Kilifi. Stakeholder collaboration as a component of stakeholder management had the least contribution to sustainability. This insignificant contribution as there had been no collaborative efforts to ensure continuity of service delivery beyond project implementation. This implies that an increased focus on the collaboration arrangements can help communities diversify their service delivery, resource mobilization, expert mobilization, and other forms of support. These efforts should start at the onset of the project's inception throughout the project life. In this dispensation of devolution, the county department seriously recognizes that the donor projects exist to complement their efforts. The implementing agencies and county governments should collaborate geared towards the phase down and phase over exit strategies in which as the project progresses

toward the end the support reduces and later handover the project to the county government to continue thereafter.

Finally, the findings of this study revealed there are vital interactions between the examined variables (project exit strategies, stakeholder management, and project sustainability. Each of the indicators under investigation had an incremental contribution to the overall project sustainability. This further implies that these aspects should be considered, discussed, planned early in the project development stages, and implemented throughout the project to pave way for an easier transition when projects are closed.

5.5.2 Recommendation for methodology

The respondents of the study were drawn from three donor-funded livelihood projects in three different sub-locations of Garashi ward in Magarini sub-county in Kilifi County. The findings indicated that there is no significant difference in mean perception of sustainability of donor-funded livelihood projects among the three projects. Two of the projects (Gandini and Dodosa projects) were implemented by one agency (Kenya Red Cross). Each of the three or even more projects should have been implemented by a different agency for generalizability purposes.

Whereas it was expected that because there was participation in M&E the farmers in the projects studied ought to have equally understood M&E in terms of project objectives, targets, and means of measuring performance; the findings indicated that this was not so. Inferential analysis showed that participation significantly contributed to sustainability but the tools used did not. The implication is that the farmers did not understand the Likert items denoting tools in M&E. Therefore, simple and direct Likert items need to be chosen.

During the analysis of the findings, some inadequacies were noted. Each indicator studied had nine Likert items. Future studied should have more items for adequate delving into the subject of study. The descriptive analysis on tools used in monitoring and evaluation indicated that respondents perceived the tools in M&E influenced the sustainability of donor-funded livelihood projects while the inferential analysis showed that tools used in M&E did not significantly influence the sustainability of the projects. This inadequacy was uncovered by the integration of the qualitative approaches (in-depth interviews, focus group discussions). It was found out that respondents understood the mission, vision, and objectives stipulated in their constitutions rather than the specific project objectives, targets, and means of measuring sustainability. This implies that such studies have a growing need for the employment of a pragmatic paradigm that involves the use of mixed research methods and triangulation to uncover the hidden meaning of a phenomenon.

Two items (SUS2 and CB5) seemingly measured one concept [optimal operational which means most desirable and satisfactory functioning meaning contentment with the level of]. SUS2 pursued to establish whether the system installed or supplied functioned satisfactorily at the time of the study. Item CB5 sought to establish whether the laid infrastructural system was optimally operational at the time of the study. The fact that these items were measuring the same concept of functioning they ought to have scored the same mean in perception but SUS2 had a mean perception of $\mu=2.90$ while CB5 had a mean perception of $\mu=3.84$. Two implications are that it poses a challenge influence and interpretative challenges. For the influence challenge, SUS2 was an item under the dependent variable while CB5 was an item under the independent variable. The interpretative challenge means that the respondents interpreted ‘satisfactory and optimally differently.

5.6 Suggestions for Further Research

This study delimited itself in investigating the influence of project exit strategies on the sustainability of donor-funded livelihood projects; and moderating the influence of the stakeholder management on the relationship between the project exit strategies and project sustainability of donor-funded livelihood projects in Kilifi County. It was found that sustainability did not only depend on capacity building, support service linkages, monitoring and evaluation, and stakeholder management but other factors that influence sustainability. Further studies can investigate such factors as community ownership.

The study was delimited to the three donor-funded livelihood projects in Magarini sub-county. To be able to generalize these results across projects further studies can be carried out in other parts under diverse project environments. The studies can further increase the number of projects and sample sizes.

The study found that stakeholder management did not moderate the relationship between the project exit strategies and project sustainability of donor-funded livelihood projects in Kilifi County but rather it was an independent variable indicator. Such factors as project control systems and diverse project contexts may be studied as moderating variables.

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APPENDICES

Appendix A: Letter of Transmittal

Ndombi, Cornel Likale,

P.O. Box 1369-80200,

MALINDI

Mobile Phone: 0724020528

Email: cornellykks@gmail.com

Date: 3rd September 2019

KENYA RED CROSS MALINDI

TO WHOM IT MAY CONCERN,

Dear Sir,

RE: REQUEST FOR DATA COLLECTION

I am a student at the University of Nairobi undertaking a post-graduate degree in PhD in Project Planning and Management. As part of the requirement for this program, it is necessary that I undertake research and submit a thesis.

I humbly request you to consent me to undertake my research taking Gandini Food Security, Dodosa projects as cases for my study. The purpose of these questionnaires, interview guide, checklist, and focus group discussions are strict to collect data solely for academic purposes. All the data gathered will be treated with strict confidence.

Thank you.

Yours faithfully

Ndombi Cornel,

PhD PPM (PPDI) Student, University of Nairobi, Mombasa Campus

Appendix B: Kenya Red Cross Society Authorization for Data Collection

Kenya Red Cross

Coast Region
All correspondence to be addressed to: -
Regional Manager,
Along Suli Suli Road, off Lamu Road
P. O. Box 1369 - 80200 Malindi, Kenya
Mobile. **+254 743 898 792**
Email: **coast@redcross.or.ke**
Website: **www.redcross.or.ke**

3RD SEPTEMBER 2020

REF.NO: KRCS/COAST/KLF/RESEARCH/SEP/001

CORNEL LIKALE NDOMBI,
UNIVERSITY OF NAIROBI

RE: AUTHORIZATION FOR DATA COLLECTION

The above subject matter refers.
This is to inform you that your request to collect data at Gandini and Dodosa projects in Kilifi county as cases for your study has been granted.
Ensure you observe academic ethics as required by the institution.
Kindly share your findings once you are through with the analysis for utilization.
Thank you.

Sincerely

FOR: HASSAN MUSA
REGIONAL MANAGER
COAST REGION

Appendix C: NACOSTI Research Authorization

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone:+254-20-2213471,
2241349,3310571,2219420
Fax:+254-20-318245,318249
Email: dg@nacosti.go.ke
Website : www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Waiyaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref: No. **NACOSTI/P/19/71304/31379**

Date: **24th July, 2019**

Cornel Likale Ndombi
University of Nairobi
P.O. Box 30197-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Project exit strategies, stakeholders management and project sustainability of donor funded livelihood projects in Kilifi County, Kenya"*** I am pleased to inform you that you have been authorized to undertake research in **Kilifi County** for the period ending **23rd July, 2020.**

You are advised to report to **the County Commissioner and the County Director of Education, Kilifi County** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

GODFREY P. KALERWA MSc., MBA, MKIM
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Kilifi County.

The County Director of Education
Kilifi County.

Appendix D: NACOSTI Research License

THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013

The Grant of Research Licenses is guided by the Science, Technology and Innovation (Research Licensing) Regulations, 2014.

CONDITIONS

1. **The License is valid for the proposed research, location and specified period.**
2. **The License and any rights thereunder are non-transferable.**
3. **The Licensee shall inform the County Governor before commencement of the research.**
4. **Excavation, filming and collection of specimens are subject to further necessary clearance from relevant Government Agencies.**
5. **The License does not give authority to transfer research materials.**
6. **NACOSTI may monitor and evaluate the licensed research project.**
7. **The Licensee shall submit one hard copy and upload a soft copy of their final report within one year of completion of the research.**
8. **NACOSTI reserves the right to modify the conditions of the License including cancellation without prior notice.**

National Commission for Science, Technology and innovation
P.O. Box 30623 - 00100, Nairobi, Kenya
TEL: 020 400 7000, 0713 788787, 0735 404245
Email: dg@nacosti.go.ke, registry@nacosti.go.ke
Website: www.nacosti.go.ke

REPUBLIC OF KENYA

National Commission for Science, Technology and Innovation

RESEARCH LICENSE

Serial No.A 25983

CONDITIONS: see back page

THIS IS TO CERTIFY THAT:
MR. CORNEL LIKALE NDOMBI
of UNIVERSITY OF NAIROBI, 1369-80200 MALINDI,has been permitted to conduct research in *Kilifi County*

on the topic: *PROJECT EXIT STRATEGIES, STAKEHOLDERS MANAGEMENT AND PROJECT SUSTAINABILITY OF DONOR FUNDED LIVELIHOOD PROJECTS IN KILIFI COUNTY, KENYA.*

for the period ending:
23rd July,2020

Permit No : NACOSTI/P/19/71304/31379
Date Of Issue : 24th July,2019
Fee Recieved :Ksh 2000

.....
Applicant's Signature

.....
Director General
National Commission for Science, Technology & Innovation

Appendix E: Research Authorization by the County Commissioner Kilifi County

THE PRESIDENCY

MINISTRY OF INTERIOR AND CO-ORDINATION OF NATIONAL GOVERNMENT

Telephone:
Fax:
Email **cckilificoordination@gmail.com**
When replying/telephoning
Quote: EDUC.12/7/VOL.IV/43

COUNTY COMMISSIONER'S OFFICE
KILIFI COUNTY
P. O. BOX 29 - 80108
KILIFI

And Date: 29th August, 2019

All Deputy County Commissioners
KILIFI COUNTY

RE: RESEARCH AUTHORIZATION
CORNEL LIKALE NDOMBI

The above named person from Nairobi University has been authorized to carry out research on ***"Project exit strategies stakeholders' management and project sustainability of donor funded livelihood projects in Kilifi County, Kenya"*** for the period ending 23rd July, 2020.

Any assistance accorded to him is highly appreciated.

Thank you.

COUNTY COMMISSIONER
KILIFI COUNTY
P. O. Box 29-80108,
KILIFI

MAGU N. MUTINDIKA, OGW
COUNTY COMMISSIONER
KILIFI COUNTY

c.c.
Director of Medical Services
KILIFI COUNTY

Abdulhafid Abdullahi Yarrow
Management University of Africa
NAIROBI

Appendix F: Research Authorization by the County Commissioner Kilifi County

MINISTRY OF EDUCATION
State Department of Early Learning and BasicEducation
KILIFI COUNTY

Telephone 041-7522432
EMAIL:cdekilificounty@yahoo.com
Fax no. 7522432
When replying/telephoning quote

County Education Office
P O Box 42 -80108
KILIFI

Ref: KLF/CDE/G10/2/ 121

2nd September, 2019

TO WHOM IT MAY CONCERN

RE: RESEARCH AUTHORIZATION – CORNEL LIKALE NDOMBI

The above has been authorised to carry out research on ***"Project exit strategies, stakeholders management and project sustainability of donor funded livelihood projects in Kilifi County, Kenya"*** for period ending July, 2021.

Any assistance accorded to him will highly be appreciated.

Thank you.

FOR COUNTY DIRECTOR OF EDUCATION
02 AUG 2019
P.O. Box 42 - 80108, KILIFI

HARRISON NJENGA KIMANI
FOR: COUNTY DIRECTOR OF EDUCATION
KILIFI

Appendix G: Consent Form

PROJECT EXIT STRATEGY IMPLEMENTATION, STAKEHOLDER MANAGEMENT AND SUSTAINABILITY OF DONOR-FUNDED LIVELIHOOD PROJECTS IN KILIFI COUNTY, KENYA.

Researcher: Ndombi, Cornel Likale

PhD Student at University of Nairobi, School of Open and Distance Learning

Department: Extra Mural Studies, Mombasa Campus

Address: 1369-80200, Malindi; Phone: 0724020528; Email: cornellykks@gmail.com

You are kindly requested to take part in this research study. Before you decide to participate in this study, it is important that you understand why the research is being done and what it will involve. Please I request that you carefully listen to the following information. Kindly ask the researcher if there is anything that is not clear or any more information.

The purpose of this study is purely for academic purposes and will be treated with the utmost confidentiality. The risks of study are minimal. The questions in the survey are not intended to upset you. Just in case you feel compromised, feel free to terminate it.

There will be no direct benefit to you for your participation in this study. However, I hope that the information which will be obtained from this study may help inform the project implementers, trainers, and even the farmers of how to improve the future and transfer of the training especially farmers in Kilifi County. Thank you.

Respondent's declaration:

By signing this form, I confirm that I have understood the information and I have had an opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason and without cost. I voluntarily agree to take part in this study.

Signature……..Date…….....

Thank you.

Appendix H: Questionnaire for the Farmers

Please tick or fill in the blank spaces where appropriate to you.

SECTION A: DEMOGRAPHIC INFORMATION			**NOTES**
DI0	Questionnaire serial number	**[___|___|___]**	
DI1	Date of survey	**[___/___/___]**	
DI2	Name of the Project	Gandini Food security……1 Dodosa Project……2 Uvumbuzi Project……3	
DI3	What is your gender (*Circle appropriately*)	Male……..1 Female……..2	
DI4	What is your age? (*Circle your age group*)	18-25 years……1 26-35 years……2 36-45 years……3 45-55 years……4 Above 55 years…..……5	
DI5	What is your marital status? (*Circle appropriately*)	Single…….1 Married……..2 Single parent……..3	
D16	What is your highest level of education? (*Circle appropriately*)	Did not attend school……..1 Lower primary school…….2 Upper Primary school…….3 Secondary school……4 Tertiary college……..5	
DI7	How long have you been in this project? (*Circle appropriately*)	1 year or less……1 2 years……..2 3 years……..3 4 years……..4 5 years……..5	

SECTION B: SUSTAINABILITY OF DONOR-FUNDED LIVELIHOOD PROJECT

Sustainability refers to continued implementation, continued benefits, and continued active participation after the withdrawal of the donor (or external support).
This section contains items on the sustainability of donor-funded projects.

Please rate statements using a scale of 1-5 to denoting SD – Strongly Disagree; A – Disagree; N – Neutral; D –Agree; and SA – Strongly Agree

	Statement	**Strongly Disagree….1**	**Disagree……..2**	**Neutral……..3**	**Agree……..4**	**Strongly Agree……5**
	Continued implementation					
SUS1	The project activities have continued normally	1	2	3	4	5
S2	The laid infrastructural system is optimally operational	1	2	3	4	5
S3	The number of beneficiaries has not reduced since the donor withdrew	1	2	3	4	5
	Continued benefits					
S4	There are continued farm yield since the donor support stopped	1	2	3	4	5
S5	There is continued income generation since the donor support stopped	1	2	3	4	5
S6	Other benefits have emerged as a result of this project	1	2	3	4	5
	Continued active participation					
S7	You frequently take part in planning of the project	1	2	3	4	5
S8	You continually take part in decision making	1	2	3	4	5
S9	You regularly contribute towards project improvements	1	2	3	4	5

SECTION C: CAPACITY BUILDING EXIT STRATEGY

Capacity building refers to enhancing the ability of the local community to make informed decisions and allocate resources to carry on its developmental plans with minimum external assistance)**.**

This section contains items on capacity building.

Do you think the capacity building is essential for project sustainability?

YES ☐ NO ☐

Please rate statements using a scale of 1-5 to denoting SD – Strongly Disagree; A – Disagree; N – Neutral; D –Agree; and SA – Strongly Agree

	Statement	**S D….1**	**D…..2**	**N…..3**	**A…..4**	**S A….5**
	Training					
CP1	You were adequately trained before the project closed	1	2	3	4	5
CP2	You have the skills required to carry out crop husbandry	1	2	3	4	5
CP3	You apply the skills I received in previous training before project closure	1	2	3	4	5
	Technological and Technical Backstopping					
CP4	The project installed/supplied the required system for production	1	2	3	4	5
CP5	The system installed/supplied is functioning satisfactorily	1	2	3	4	5
CP6	The system is maintained as required	1	2	3	4	5
	Resource capabilities					
CP7	Since project closure other institutions or individuals have supported	1	2	3	4	5
CP8	You contribute financially towards the project activities	1	2	3	4	5
CP9	You have budgeting skills	1	2	3	4	5

SECTION D: SUPPORT SERVICE LINKAGES

Support service linkages refer to the created interrelationship between providers and users of critical services such as but not limited to extension, credit, and market services.

This section contains items on support service linkages as a project exit strategy.

Do you think access to support services is essential for project sustainability?

Yes ☐ No ☐

Please rate statements using a scale of 1-5 to denoting SD – Strongly Disagree; A – Disagree; N – Neutral; D –Agree; and SA – Strongly Agree

	Statement	**S D….1**	**D…..2**	**N…..3**	**A…..4**	**S A….5**
	Access to Extension services	1	2	3	4	5
SS1	There is a formal agreement with extension service providers	1	2	3	4	5
SS2	I often receive advisory on crop husbandry	1	2	3	4	5
SS3	Access to extension services is affordable	1	2	3	4	5
	Access to credit facilities					
SS4	There are adequate credit facilities from which you can get a loan around you	1	2	3	4	5
SS5	You frequently acquire loan to support your project activities	1	2	3	4	5
SS6	The interest rate for credit is affordable	1	2	3	4	5
	Linkage to markets					
SS7	There is sufficient production for the market	1	2	3	4	5
SS8	There is adequate market for the produce	1	2	3	4	5
SS9	The market prices are favourable	1	2	3	4	5

SECTION E: MONITORING AND EVALUATION EXIT STRATEGY

Monitoring and Evaluation refer to routine tracking of the project as it progresses toward attaining its goals and assessing how efficient and effective the process is achieving the goals. This section contains items on Project Monitoring and Evaluation exit strategy.

Do you think monitoring and evaluation are essential for project sustainability?

YES ☐ NO ☐

Please rate statements below using a scale of 1-5 to denoting SD – Strongly Disagree; A – Disagree; N – Neutral; D –Agree; and SA – Strongly Agree

	Statement	**S D….1**	**D…..2**	**N……3**	**A……4**	**S A….5**
	Participatory Monitoring and Evaluation	1	2	3	4	5
ME1	You regularly participated in monitoring the progress of this project before the donor withdrew	1	2	3	4	5
ME2	You regularly participated in reviewing the progress of this project before the donor withdrew	1	2	3	4	5
ME3	Your feedback informs the future implementation of this project	1	2	3	4	5
	Tools used in monitoring and evaluation	1	2	3	4	5
ME4	The project has well outlined objectives	1	2	3	4	5
ME5	The project has well outlined targets	1	2	3	4	5
ME6	The project has a well spelled out means of measuring performance	1	2	3	4	5
	Timing for monitoring and evaluation					
ME7	Frequent monitoring can contribute to good project results	1	2	3	4	5
ME8	There has been frequent monitoring for the project	1	2	3	4	5
ME9	The project prepared time schedules to track progress	1	2	3	4	5

SECTION F: STAKEHOLDER MANAGEMENT

Stakeholder management refers to managing relationships and meeting the expectations of the interest parties in a project.

This section contains items on stakeholder management.

Do you think stakeholder management is essential for project sustainability?

YES ☐ NO ☐

Please rate statements below using a scale of 1-5 to denoting SD – Strongly Disagree; A – Disagree; N – Neutral; D –Agree; and SA – Strongly Agree

	Statement	**S D….1**	**D…..2**	**N…..3**	**A…..4**	**S A….5**
	Stakeholder knowledge sharing culture					
SM1	There is adequate accessibility to project knowledge	1	2	3	4	5
SM2	I have learned so much from this project	1	2	3	4	5
SM3	There is a high level of trust among the stakeholders	1	2	3	4	5
	Stakeholder collaboration					
SM4	Apart from the lead sponsor, other institutions have supported the project	1	2	3	4	5
SM5	The department of agriculture has constantly supported farmers after the project closure	1	2	3	4	5
SM6	The department of cooperative development has worked with the project since the withdrawal of the donor	1	2	3	4	5
	Stakeholder communication					
SM7	The project has a clear communication within the project	1	2	3	4	5
SM8	The project has an accessible reporting system	1	2	3	4	5
SM9	Meetings are held frequently to update members	1	2	3	4	5

SECTION G: PROJECT EXIT STRATEGIES, STAKEHOLDER MANAGEMENT, AND PROJECT SUSTAINABILITY

This section contains items on the influence of stakeholder management on the relationship between project exit strategy implementation and sustainability of donor-funded livelihood projects

Do you think project exist strategy and stakeholder management play a role in project sustainability all together?

YES ☐ NO ☐

Please rate statements using a scale of 1-5 to denoting SD – Strongly Disagree; A – Disagree; N – Neutral; D –Agree; and SA – Strongly Agree

	Statement	**S D….1**	**D…..2**	**N…..3**	**A…..4**	**S A….5**
	Capacity building and stakeholder collaboration					
ESS1	Government department and sponsor adequately collaborated in training the farmers	1	2	3	4	5
ESS2	Government with sponsor collaborated adequately in providing the required technologies for the farmers	1	2	3	4	5
ESS3	The community collaborated with other institutions in mobilizing resources for the project	1	2	3	4	5
	Knowledge sharing and support service linkages					
ESS4	Department of agriculture has continually provided husbandry information to the farmers	1	2	3	4	5
ESS5	Financial institutions have continually provided credit information to the farmers	1	2	3	4	5
ESS6	Department of cooperatives has supported market linkages with farmers	1	2	3	4	5
	Communication and monitoring and evaluation					
ESS7	There has been clear communication within the project	1	2	3	4	5
ESS8	There has been timely giving of feedback by the sponsor on the progress of the project	1	2	3	4	5
ESS9	There was a constant reminder of the project closeout	1	2	3	4	5

Thank you very much for your time!!!

Appendix I: Focus Group Discussion Guide

PART ONE

Introduction

Hello everyone. Thank you so much for finding time for this exercise and welcome to this discussion. My name is _____. I am undertaking a PhD course in Project Planning and Management (Project Planning Design, Implementation) at the University of Nairobi. I am studying the project exit strategy implementation, stakeholder management, and sustainability of donor-funded alternative livelihood projects in Kenya. A case of Kilifi County.

The purpose of the study

Over the next two hours, we will discuss a variety of issues relating to project capacity building, support service linkage, stakeholder management, and sustainability of donor-funded alternative livelihood projects specific to the Gandini Project. Each one of you has a right to his/her point of view.

PART TWO

Questions

1. How do you think training before project closure influences the sustainability of this project? Explain
2. Do you think the system installed is adequate for the project? Explain
3. How do you support project activities since the project was closed?
4. How have the farmers been able to access extension services?
5. What is the role of market linkages in the sustainability of this project?
6. Describe how monitoring has been conducted since the project closed.
7. How have the following been involved in the project since the project closed?
    - Community,
    - Department of Agriculture,
    - Department of cooperative development
8. What are some of the partnerships created during the project implementation?
9. How is the information flow in the project?

Appendix J: Interview Guide for the Key Informant Persons
PART ONE

Introduction

Hello. My name is _____. I am undertaking a PhD course in Project Planning and Management (Project Planning Design, Implementation) at the University of Nairobi. I am studying the project exit strategy implementation, stakeholder management, and sustainability of donor-funded alternative livelihood projects in Kenya. A case of Kilifi County.

The purpose of the study

The purpose of this appointment is to discuss a variety of issues relating to project capacity building, support service linkage, stakeholder management, and sustainability of donor-funded alternative livelihood projects specific to Gandini Project.

PART TWO

Questions

1. How has this department supported training after the project closed?
2. Do you think the systems installed in Gandini, Dodosa, and Uvumbuzi Projects are adequate for the project? Explain
3. How do you support project activities since the project was closed?
4. How have the farmers been able to access extension services?
5. What has your department done to link farmers to markets?
6. Describe how your department was and has been engaged in monitoring during the project implementation and after the project closed.
7. What are some of the partnerships created during these projects' implementation?
10. How does information flow from your department to the grassroots and from the project to the department?

Appendix K: Observation Checklist

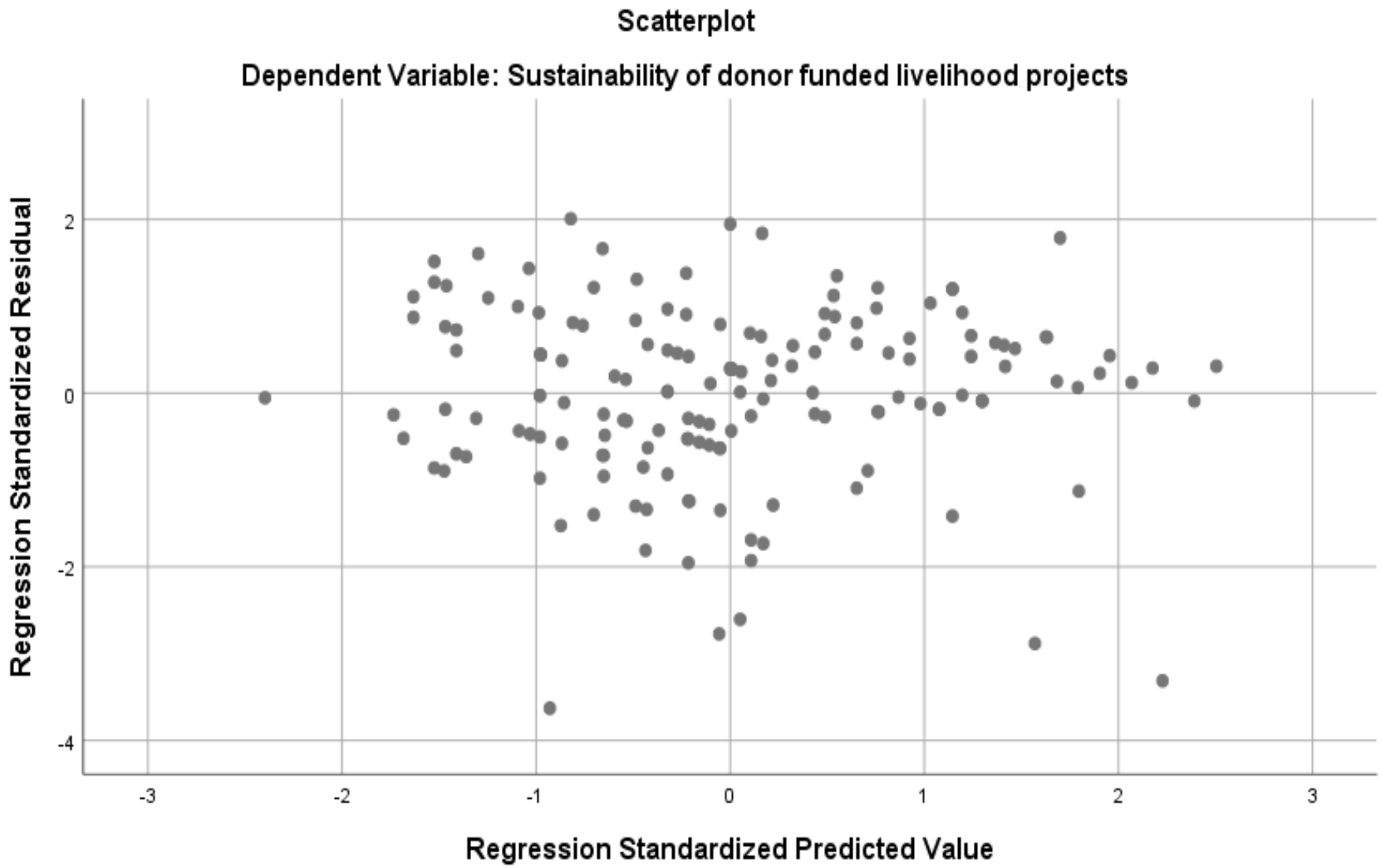
PROJECT EXIT STRATEGY IMPLEMENTATION, STAKEHOLDER MANAGEMENT AND SUSTAINABILITY OF DONOR-FUNDED LIVELIHOOD PROJECTS IN KILIFI COUNTY, KENYA.

Site of observation_____

Date _____

Time period_____

Observe and record the following attributes

	Attribute	Notes (description)
A	**Project exit strategy**	
1	Methods of land preparation	
2	Condition of the crops	
3	Type of system installed	
4	The functionality of the system	
5	Condition of the system	
6	Filing system	
7	Project reports	
8	Minutes of the meetings	
9	Project partnerships	
B	**Project Sustainability**	
10	Acreage of land under production	
11	The daily average number of farmers	
12	Other secondary emerging projects	
13	Organization of farmers	
14	Environmental issues	

Appendix L: Heteroscendasticity and homoscedasticity test scatter plot