

**FACTORS INFLUENCING SUSTAINABILITY OF NON GOVERNMENT
ORGANIZATIONS FUNDED COMMUNITY PROJECTS IN KENYA: A CASE OF
ACTION AID FUNDED PROJECT IN MAKIMA LOCATION, EMBU COUNTY**

BY

KARIUKI JOHNSON MWANGI

**A Research Project Report Submitted in Partial Fulfillment of the Requirements for the
Award of Degree of Master of Arts in Project Planning and Management of the University
of Nairobi**

2014

DECLARATION

This research project report is my original work and has not been submitted to any other institution for the purpose of earning an academic qualification.

.....Date.....

Kariuki Johnson Mwangi

L50/82971/2012

The research project has been submitted for examination with my approval as University Supervisor

.....Date.....

Ms. Mercy Wambui

Department of Extra Mural studies

University of Nairobi

DEDICATION

I dedicate this research project report to my mum Faith Kariuki, dad Julius Kariuki, my brothers Paul and Gerald and my two beloved sisters Beth and Jennifer. Without their all round support, I would not have managed this task.

ACKNOWLEDGMENT

My gratitude goes to my supervisor Ms. Mercy Wambui who continually supported me and served as a source of inspiration. Completion of this research report could have been a more difficult task without her unreserved support and commitment. Special thanks go to the larger extramural centre for organizing a seminar to build the capacity of the November 2012 class in report writing and generally the requirements of the research project. I am greatly indebted to the University of Nairobi family for the conducive environment and world class facilities that facilitated my full completion of this course of Masters of Arts in Project Planning and management.

Special mention goes to Action Aid Kenya for giving me the opportunity to study their project and supplying me with relevant literature on the same. Last but not least my thanks go to my family for their technical assistance throughout the completion of this research.

TABLE OF CONTENT

DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGMENT.....	iv
TABLE OF CONTENT	v
LIST OF TABLES	x
LIST OF FIGURES	xii
LIST OF ABBREVIATIONS AND ACRONYMS	xiii
ABSTRACT.....	xiv
CHAPTER ONE: INTRODUCTION	1
1.1 Background to the study	1
1.2 Statement of the Problem.....	2
1.3 Purpose of the study.....	3
1.4 Objectives of the study.....	3
1.5 Research questions.....	3
1.6 Significance of the study.....	4
1.7 Delimitations of the study.....	4
1.8 Limitations of the study	4
1.9 Assumptions of the study.....	5
1.10 Definitions of significant terms	5
1.11 Organization of the study.....	6
CHAPTER TWO: LITERATURE REVIEW	7
2.1 Introduction.....	7
2.2 Importance of NGOs in sustainable development	7
2.3 The concept of sustainability of community based projects.....	9

2.4 Approaches to sustainability	11
2.4.1 Incorporating sustainability onto project identification	12
2.4.2 Incorporating sustainability into project design.....	12
2.4.3 Incorporating sustainability in project implementation	13
2.4.4 Incorporating sustainability in project evaluation.....	14
2.5 Factors affecting project sustainability	14
2.5.1 Community participation and project sustainability	14
2.5.2 Capacity building and project sustainability.....	15
2.5.3 Use of local resources and project sustainability	16
2.5.4 Monitoring and evaluation and project sustainability.....	17
2.6 Theoretical framework.....	18
2.7 Conceptual framework.....	19
2.8 Knowledge gap	20
2.9 Summary of literature review	20
CHAPTER THREE: RESEARCH METHODOLOGY	21
3.1 Introduction.....	21
3.2 Research design	21
3.3 Target population	21
3.4 Sample size and sampling procedures	22
3.4.1 Sample size	22
3.4.2 Sampling procedure	23
3.5 Data collection instruments.....	23
3.5.1 Pilot testing of the study	23
3.5.2 Validity of the research instruments	23
3.5.3 Reliability of the research instruments.	23

3.6 Data collection procedures.....	24
3.7 Methods of data analysis.....	25
3.8 Ethical considerations	25
CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATION ...	28
4.1 Introduction.....	28
4.2 Questionnaire return rate.....	28
4.3 Demographic information.....	28
4.3.1 Age of respondents	28
4.3.2 Gender of respondents	29
4.3.3 Formal education	29
4.4 Community participation	30
4.4.2 Community involvement in planning of the project	31
4.4.3 Community involvement in project implementation	31
4.4.4 Community opinion leaders involvement in project identification	32
4.5 Capacity building	33
4.5.1 Presence of local committees.....	33
4.5.2 Active involvement of the local committee in management of the project	34
4.5.3 Training on skills required to maintain the project.....	35
4.5.4 Community working on the project as a team	36
4.5.5 Training channeled towards improving personal contribution to the project	37
4.5.6 Topics covered in the trainings	37
4.6 Project reliance on locally available resources	38
4.6.1 Resources key to the success of this project	39
4.6.2 Project resources being available at no financial cost	40
4.6.3 Ability of community to acquire project resources without external help.....	41

4.6.4 Availability of raw materials	41
4.6.5 Community tapping the resources with the skills they have without external help.....	43
4.7 Project monitoring and evaluation	44
4.7.1 Community involvement in monitoring and evaluation	44
4.7.2 Frequency of consultation in the last 6 months	45
4.7.3 Value of project.....	46
4.7.4 Project monitoring	46
4.9 Regression Model	49
CHAPTER FIVE: SUMMARY OF FINDINGS, DISCUSSION, CONCLUSION AND RECOMMENDATIONS.....	50
5.1 Introduction.....	50
5.2 Summary of Findings.....	50
5.2.1 Community participation	50
5.2.2 Capacity building	51
5.2.3 Locally available resources.....	52
5.2.4 Project monitoring and evaluation	53
5.3 Discussion of finding	54
5.3.1 Community participation	54
5.3.2 Capacity building	55
5.3.3 Use of local raw materials and resources.....	56
5.3.4 Project monitoring and evaluation	57
5.4 Conclusions.....	58
5.5 Recommendations.....	60
5.6 Suggested areas for further research	62
REFERENCES.....	63

APPENDICES:

APPENDIX (i): Letter of transmittal of data collection instruments 68

APPENDIX (ii): Questionnaire for project beneficiaries 69

APPENDIX (iii): Interview schedule for project implementing officers 73

LIST OF TABLES

Table 3.1 Summary of the Sample.....	22
Table 3.2 Operational definition of the variables.....	26
Table 4.1 Disaggregation of respondents by age.....	28
Table 4.2 Disaggregation of respondents by gender.....	29
Table 4.3 Level of formal education attained by beneficiaries.....	29
Table 4.4 Involvement of respondent in project identification.....	30
Table 4.5 Involvement of respondent in planning of the project.....	31
Table 4.6 Involvement of beneficiaries in project implementation.....	31
Table 4.7 Response of beneficiaries on involvement of community opinion leaders.....	32
Table 4.8 Response of implementing officers on involvement of community opinion leaders ...	32
Table 4.9 Response of beneficiaries on presence of a local committee in charge of the project .	33
Table 4.10 Response of implementing officers on presence of a local committee.....	34
Table 4.11 Beneficiaries response on involvement of local committees.....	34
Table 4.12 Implementing officers' response on involvement of local committees.....	35
Table 4.13 Response of beneficiaries on training to maintain the project.....	35
Table 4.14 Response on implementing officers on training of beneficiaries.....	36
Table 4.15 Response on beneficiaries implementing project as a team.....	36
Table 4.16 Training to improve personal contribution to the project.....	37
Table 4.17 Topics trained on geared towards improving personal contribution.....	38
Table 4.18 shows the various resources key to success of the project.....	39
Table 4.19 Project resources being available for free and not bought.....	40
Table 4.20 Response of implementing officers on resources being available for free.....	40
Table 4.21 Community ability to acquire project resources without external help.....	41
Table 4.22 Response of beneficiaries on availability of resources key to project success.....	42

Table 4.23 Response of implementing officers on availability of project resources	42
Table 4.24 Response of beneficiaries on ability of community to tap resources	43
Table 4.25 Response of implementing officers on ability of community to tap resources	43
Table 4.26 Response of beneficiaries on their opinion of community sought.....	44
Table 4.27 Response of implementing officers on opinion of beneficiaries being sought.....	45
Table 4.28 Number of times beneficiaries have heard about consultations	45
Table 4.29 Response of beneficiaries on project adding value to their lives.....	46
Table 4.30 Response of implementing officers on project adding value to beneficiaries	46
Table 4.31 Frequency of project monitoring	47
Table4. 32 Coefficient of Correlation.....	48
Table 4.33 Coefficient of Regression	49

LIST OF FIGURES

Figure 1: Conceptual Framework	19
--------------------------------------	----

LIST OF ABBREVIATIONS AND ACRONYMS

CBO	Community Based Organization
FFS	Farmer Field Schools
IFAD	International Fund for Agricultural Development
IPMA	International Project Management Association
JFFLS	Junior Farmer Field and Life Schools
NGO	Non Governmental Organization
PMI	Project Management Institute
SCL	Strengthening Community Livelihoods project
SPSS	Statistical Packages for Social Scientists
U.S.A	United States of America
UN	United Nations
UNICEF	United Nations Children's Fund
WHO	World Health Organization

ABSTRACT

NGO funded community projects have been facing serious sustainability issues resulting to little impact after decades of implementation. Action Aid has been implementing a five years project called Strengthening Community Livelihoods since 2011 under Local Right Programme. The SCL project, funded by Action Aid-Australia at an estimated cost of Australian dollars 2.5 million (Kenya Shillings 195 million), aims at improving accessibility to food through promotion of sustainable livelihoods, agricultural production interventions, strengthening farmer institutions' capacity, support and advocate increased resources allocation as well as promote shared learning on climate change. This study covered the semi arid Makima location, Embu County where Action Aid worked directly with 32 FFS each with an average of 25 members. The main purpose of this study was to study factors influencing sustainability of NGO funded community projects. The objectives were to determine the influence involving benefitting communities in the different phases of the project cycle has to project sustainability, to determine the influence capacity building has to project sustainability, to establish the influence utilization of locally available resources has on project sustainability as well as determine the influence practice of monitoring and evaluation has on project sustainability. This study adopted descriptive survey design. Data collection tools whose validity and reliability had been verified were used to collect data from both implementing officers and project beneficiaries. Stratified random sampling was used to pick 75 project beneficiaries while 3 implementing officers were interviewed. Collected data was analyzed by use of both qualitative and quantitative techniques. Statistical Packages for Social Scientists version 20 was used and responses were presented in terms of percentages and frequencies. This was then presented in table format. The findings of the study revealed that majority of the stakeholders were involved in project identification, planning, implementation and project monitoring and evaluation. There was also a good attempt to build the capacity of the benefiting community with trainings targeting various topics being held and all the respondents noted that they had attended such trainings. The project relied on both locally available resources and also resources that had to be acquired commercially. The project was monitored on monthly basis and progress reports done. Majority of the beneficiaries were consulted to ensure that the project remained relevant to their needs. Spearman Correlation was used to measure the strength of influence of the independent variables on Project sustainability. Use of locally available resources showed the strongest influence on project sustainability with a coefficient of 0.777. Community participation had a coefficient of 0.578 while capacity building and monitoring and evaluation recorded a coefficient of 0.577 and 0.378 respectively. Regression model was used to determine the relationship between sustainability and the independent variables. Regression model gave a constant of 3.657 with community participation capacity building, local resources and practice of monitoring and evaluation having 1.654, 0.988, .0568 and 0.444 coefficients respectively. From the study, it was concluded that community participation, capacity building, use of locally available resources and practice of monitoring and evaluation all have positive influence on project sustainability. The study recommended that the project document should have a checklist to ensure beneficiaries are adequately involved at all stages of project lifecycle and adequate trainings and support to be done on value addition of farm and other products. The study also recommends that community based monitoring and evaluation should be adopted to ensure that communities track and guide their own development.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Project sustainability denotes the ability of a project to maintain its services, operations and benefits during its projected life time (Langran, 2002). Project sustainability aims at creating and launching a project capable of continuing to generate benefits after donor input has been withdrawn (United Nations, 2002). Efforts to develop a sustainable project should be integrated from the onset of project design (Sneddon, 2000). Project sustainability is dissected into various sustainability dimensions and this includes institutional stability, continuous flow of benefits, equitable distribution and sharing of project benefits, active community participation, continued operation and maintenance of project structure and maintenance of environmental stability.

There has been much debate in the development circles about attainment of project sustainability (Panda, 2007). History has shown that once donor funding and support structures are withdrawn, community development projects stall either due to lack of funds, community not appreciating fully the benefits of a project thus failing to properly maintain the project, lack of knowhow or basically lack of project viability in the target population (Panda, 2007). Much emphasis has been put on post project evaluation and post project impact assessment which does not change much on the sustainability of a poorly designed and planned project (Khwaja, 2003). The documentation of best practices over time has however boosted sustainability of development projects funded by Non Governmental Organizations.

Project sustainability can be boosted by empowering the benefiting community, involving the beneficiaries in project identification and design, positive involvement of community opinion leaders, exit strategies inbuilt in the project design and project relying on resources that are not locally available. A project that is not self sustaining cannot serve the needs of the community for a viable length of time making the whole project investment uneconomically, socially or environmentally viable.

Action Aid is an NGO that has been working in Kenya since 1972 to end poverty. Action Aid is a leading anti poverty agency working directly with over one million poor Kenyans in over 20

districts in Kenya. Action Aid works to protect the economic, social, cultural, civil and political rights of poor and marginalized people in the society.

1.2 Statement of the Problem

Experience in the development sector reveals that project sustainability is a major issue (Panda, 2007). Despite the numerous efforts to develop self sustaining projects in rural areas of Sub-Saharan Africa, the progress is rather slow leading to spending of massive resources on projects that have restricted benefits to the target population. This study studies factors influencing sustainability of community development projects.

Community development projects are usually marked with rapid failure once donor support is withdrawn. Unlike the profit enterprises which have been known to design and implement self sustaining projects due to the need to generate revenues, Non Governmental Organizations are mainly affected by a range of factors that affect the sustainability of their projects. Once the projects are introduced to communities, they distort the stability of socio-economic structure and upon handing over to the community for management of upon withdrawal of donor funding, the communities are left worse that they were with cases of dependability on help hitting hard on the target communities (Hibbard & Tang, 2004).

In Mbeere land, 19 percent of children who are aged between 6 to 59 months are moderately or severely underweight due to poor diet and poverty. Only 28 percent of the population in the community uses drinking water from improved sources with only 57 percent children of primary school entry age being enrolled in school (UNICEF, 2008). NGOs have flocked arid and semi arid areas including Mbeere land in the past with others still implementing development projects that ran into millions of dollars. Despite this, the communities living in this part of Embu County still face starvation and other signs of poverty with development project failing to live to their expectations with most losing their impact once they are handed over to the community (USAID, 2010).

USAID (2010), rates NGO projects sustainability levels at 42.85 percent in Sub Saharan Africa. USAID (2010) describes high sustainability levels as enhanced sustainability and low sustainability levels as impended sustainability with Kenyan NGO's projects being at evolving

sustainability level. There are generally low sustainability levels of community development projects in Sub Saharan Africa (Globalgiving, 2013). The project under study is a case of community based project in Kenya and Sub Saharan Africa at large and thus no exception to poor levels of sustainability. With the continued wide spread poverty in Mbeere land despite NGO spending financial fortunes in the area, it was important to carry out this study and provide recommendations toward solving this problem.

1.3 Purpose of the study

The purpose of the study was to study factors influencing sustainability of NGO's funded projects in Kenya and issues related to project sustainability with precise reference to Action Aid funded and implemented project in Makima location, Embu County.

1.4 Objectives of the study

- i. To establish the influence of community participation in different stages of the project cycle on sustainability of Action Aid funded community project in Makima location, Embu County.
- ii. To determine the influence of building the capacity of benefiting community on sustainability of Action Aid funded community project in Makima location, Embu County.
- iii. To establish the influence of utilization of locally available resources in project implementation influence of sustainability of Action Aid funded community project in Makima location, Embu County.
- iv. To determine the influence of practicing M&E during the project cycle on sustainability of Action Aid funded community project in Makima location, Embu County.

1.5 Research questions

- i. Does participation of benefitting community in different stages of NGO funded project influence sustainability of Action Aid funded community project in Makima location, Embu County?
- ii. Does building the capacity of benefiting community influence the sustainability of of Action Aid funded community project in Makima location, Embu County?

- iii. How does utilization of locally available resources in project implementation influence sustainability of Action Aid funded community project in Makima location, Embu County?
- iv. How does the practice of monitoring and evaluation during project cycle influence sustainability of Action Aid funded community project in Makima location, Embu County?

1.6 Significance of the study

It is hoped that, the findings of this study will benefit many Non Governmental Organizations involved in community based development projects. The findings can help NGOs understand better the concept of community project sustainability and as such maximize benefits arising from such projects.

It is also hoped that the findings of the study will contributed to additional knowledge and have recommended areas for more research.

1.7 Delimitations of the study

The study was carried out in Makima Location, Embu County. It focused on factors influencing of sustainability of NGO funded community projects in Kenya, taking a case of Action Aid funded projects in Makima Location, Embu County. The study focused on the influence of community involvement, capacity building, resources used in project implementation and the practice of monitoring and evaluation on project sustainability. The target population for this study was the 800 farmers benefitting directly from the project and the 5 project implementing officers directly involved in this project. Out of the 800 farmers, the study targeted a sample of 89 beneficiaries and a census for the implementing officers.

1.8 Limitations of the study

The target population was located in environmentally harsh areas where accessibility of the target population was challenge. The researcher accessed the area by the use of a hired motorbike. To easily access the farmers, the researcher collected data during a farmer's field day

that gathered all the beneficiaries together. The researcher also met the implementing officers at their office desks to ensure conducive environment for discussion.

1.9 Assumptions of the study

One major assumption of the study was that the sample was representative of the entire target population composing of project beneficiaries and implementing officers. There was also an assumption that the participants would be willing to participate and would answer the questions faithfully and accurately.

1.10 Definitions of significant terms

Capacity building	Planned development of or increase in knowledge, output rate, management, skills, and other capabilities of a community through acquisition, incentives, technology, and/or training.
Community Participation:	Active involvement of the community in various facets of the project.
Development:	The general improvement of the lives of individuals and community at large.
Empowerment:	Progressive ability by a community or individual through external support to advance in knowledge and skill development in a particular field.
Monitoring and evaluation:	Continuous and periodic follow up to ensure project plans are followed.
NGO:	Non political and not for profit organization that advance particular set of causes in the community in public's interest.
Project sustainability:	Ability of a project to continue benefiting the community after the donor withdraws support.
Raw materials:	Basic substance in modified state or natural state used as input in a project. This may also include human resources
Resources:	Something that can be used to solve a problem and meet human needs and wants.

1.11 Organization of the study

This research report is organized into five chapters. Chapter one includes the background of the study, statement of the problem, purpose of the study, study objectives, research questions, significance of the study, delimitations of the study, limitations of the study, assumptions of the study, definition of significant terms and the summary of the chapter. Chapter two includes the literature review and the conceptual framework. Chapter three includes the research methodology including research design, target population, the sample and sampling procure, research instrument, data collection procedure and data analysis techniques applied. Chapter four includes data analysis, data presentation and interpretation while chapter five includes summary of the findings, discussion, conclusion and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter of the study is aimed at presenting a critical review on available literature on sustainability of NGO funded community development projects. The chapter introduces the concept of sustainability and how it is incorporated in to the various stages of project life cycle. Involvement of project beneficiaries, capacity building, use of locally available resources and the practice of monitoring and evaluation are identified and discussed as the factors affecting community project sustainability. The chapter also presents the theoretical framework where collective action theory and institutional theory before adopting the institutional theory. The chapter finally presents the conceptual framework which summarizes the relationship between the independent variables, dependent variable, moderating variables and attitude of the community as the intervening variable.

2.2 Importance of NGOs in sustainable development

Nongovernmental Organizations (NGOs) are a range of groups and organizations such as private voluntary organizations, civil society organizations and non-profit organizations characterized primarily by humanitarian objectives that pursue a public interest agenda (Werker & Ahmed, 2008). The role of NGOs cannot be underestimated in the societies and communities in which they operate (Hedayat & Ma'rof, 2010). In the developing countries they undertake community development, promote interests of the poor, and pursue activities that relieve suffering, provide access to social services and protect the environment. Their roles range from social development, sustainable community development, sustainable development to sustainable consumption (Young & Dhanda, 2012).

Non-governmental organizations have increasingly become important in social economic development process especially in developing nations (Brubacher, 2004). NGOs have ventured in various sectors including agriculture, water and sanitation, health care, peace and justice, education among other areas on human development (Uwhejevwe-Togbolo, 2005).

NGOs are seen as a viable agent to fill in the development gaps left by both national and county governments (Kong, Salzmann, Steger, & Ionescu-Somers, 2002). This is because these NGOs operate in the grassroots in direct contact with the people and project decisions can be made at that level. Since NGOs are known to have respectable ability to mobilize the poor at community level, they effectively can empower the poor and marginalized communities to strengthen local institutions and help the people take control of their lives (International Institute for Sustainable Development, 2013).

NGOs are known to be professionally staffed with the main aim of playing a role in the alleviation of human suffering by helping the poor and the marginalized in development. NGOs help in development in various ways including direct service provision, funding projects, capacity building and promoting other development oriented organizations. In developing counties, NGOs have a vital role to play in the support of women, children, men and households in general to achieve desirable wellbeing (Desai, 2005). Through different projects, the NGOs help the people to take a step towards achieving their skills, ability, knowledge and potential while giving them a chance to make maximum use of natural resources to achieve quality of life.

In a study conducted in Vietnam, Hibbard and Tang (2004) highlighted the importance on NGOs' part in sustainable community development. One observation was that NGOs give a balance to economic, social and environmental factors in promoting sustainable community development. In his work, Baccaro (2001) describes how NGOs promote empowerment and organization of the poor and marginalized through community development projects. In a general perspective, the major aim of NGOs it to support sustainable development in the community through activities that engage the community in their own development, capacity building and initiate self reliance (Langran, 2002).

In the poor and marginalized communities, the communities lack specialized labour and skills to do professional work and tap locally available resources that are important for particular community development projects (Nikkhah & Redzuan , 2010). Hibbard and Tang (2004) noted that sustainable development in any community is process oriented requiring extensive participation from the community members with reliance on strong networks to share knowledge, resources and expertise.

For a community development project to be self sustaining, it must meet all the three dimensions of sustainability; economic development, environmental protection and social development (United Nations, 2002). A project that does not meet the economic needs of the community will quickly become irrelevant and the community will lose interest in it (Sneddon, 2000). A project will only be sustained if it uses locally available resources and for this to be achieved a project must be sensitive to the environment (Sneddon, 2000).

2.3 The concept of sustainability of community based projects

According to Brundtland (1987), a project is sustainable if it effectively meets the needs of present population without jeopardizing the ability of the future generations to meet their needs (Keeyes, 2012). Before the work by Brundtland commission, sustainability of a project was seen as the ability of a project to maintain healthy economic records once the initial financial input has been stopped (Deland, 2009). Bagheri and Hjorth (2007) viewed a sustainable project as one whose short term outputs are highly valued by the stakeholders such that they are willing to sacrifice and commit resources to the maintenance of the project to ensure it produces outputs in the long term. With the integration of all this concepts, a holistic look at sustainability can take into account multiple indicators that can be monitored to ensure project sustainability. In this study, sustainability will be henceforth defined as the ability of a project to continue fulfilling the desired needs in the community on the long term even after external support has been withdrawn.

The sustainability of community development projects has been an important concern in developing countries (Panda, 2007). Sustainability of a project ensure that the benefits from a project are felt for extended periods of time that can justify the economic and social input invested in to the project (Hayward & Neuberger, 2010). Unfortunately, sustainability development concepts and principles are not taken much seriously in development projects (Gareis, Huemann, & Weninger, 2010). In the corporate sector, sustainability is a very import concept that is taken seriously because of the need to meet company and also customers' needs (Heap, 1998). There is however little guidelines on sustainable project management and also the role of the project team in ensuring project sustainability (Silvius & Schipper, 2010).

Ebner and Baumgartner (2010) in their work note that a project acquires sustainability if it is managed by a system that has the long term capacity to mobilize resources sufficiently. These

resources come in the form of technology, finances, manpower, information and raw materials (Ebner and Baumgartner, 2010). There are three key indicators that can be used to monitor project sustainability; these factors include project benefits, systemic indicators and social development indicators (Silvius & Schipper, 2010). From these indicators, it is possible to derive factors that affect the sustainability of community development projects. These factors can be classified into factors associated with project design and implementation, organizational factors and environmental factors (Silvius & Schipper, 2010). It is paramount for the project team to take into considerations these indicators during the planning and design phases of community development projects if sustainability is to be achieved.

Systemic indicators that can be used to monitor project sustainability include technology, the project process, structure and culture and all this are vital in ensuring sustainability (Ebner and Baumgartner, 2010). A model based on inputs should be used in project design and implementation. Project design should ensure institutional change to develop self-sustaining institutions that remain function when the projects life cycle ends. This will ensure any projects and programs coming after that are only part of a progressively evolving and changing community system. The most successful elements of such a project become part of the overall process of positive community change.

Benefit indicators basically relate to the way choice of activities to be implemented in a project will determine sustainability of such project. Failure or ability to define the benefit of a project to the beneficiaries and focus on achieving these benefits will play a significant role in the determination of failure or success of a project (Panda, 2007). Project benefit can be seen as positive and advantageous outcomes that are desirable to the project stakeholders. Any project team that just focuses on the quality, time and cost indicators without laying much focus on the benefit to the community will have to live with the memory of a failed community project. It is only when the local stakeholders are in a position to appreciate this benefits that they will mobilize resources to guard the project and ensure continuity (Panda, 2007).

Social development indicators can be seen in two folds; project financing and community participation in the project. Community participation is a social process where project

beneficiaries are involved in the identification of their needs and in the design of the solutions to these needs.

2.4 Approaches to sustainability

To understand approaches to project sustainability, it is important to visualize the project cycle. A standard community project follows these steps in a sequence: Project identification, design, implementation and finally evaluation (Chandra, 2008). Sustainability should be incorporated at each of these stages failure to which the eventual success of the project will be placed on a balance (Junbeum, Allenby & Ming, 2007). Each stage is faced by different unique issues that a project manager must be aware of (Junbeum, et al. 2007). Of all the stages of the project cycle, it is during project conceptualization and identification that basic project outline is set meaning substantial impact on sustainability can be made in this stage (Junbeum, et al. 2007). At this stage of conception, the project manager and his support team need to be fully aware of the factors that promote sustainability if they are to make good judgment from the onset.

Incorporation of sustainability into project identification stage entails various strategic approaches. The first is ensuring the project has a future orientation (Fonchingong & Fonjong, 2002). This means that the project planners have to assume that things will change and proactively plan to ensure the community benefits during and from these changes. Secondly, there must be emphasis on external factors (Fonchingong & Fonjong, 2002). Project planners have to recognize the diversity of the environment in which the project is hosted and appreciate the many dimensions that will affect outcomes of the project including policies, politics and weather among others. Thirdly, the planners must ensure the project conceptualized is environmentally fit. This means the project must be in a flowing agreement in terms of benefits and delivery institutions with the project environment including resources, structures and culture (Fonchingong & Fonjong, 2002). All this means strategic planners need to have a broader and deeper look at the environment so as to take into contemplation trends in various areas as they commit to the process of identifying project opportunities and benefit delivery methods.

2.4.1 Incorporating sustainability onto project identification

To address the problem of projects ceasing to keep delivering the desired benefits once the project funding cycle is up, strategic measures must be taken by project planners early on in the project cycle starting with project identification (Khwaja, 2003). As the planners start the process of project elimination, sustainability must be among the top themes (Nikkhah & Redzuan, 2010). This calls for the project planners to identify the long term benefits desired from the project. These are the fundamental benefits that the project must retain after funding is withdrawn for it to meet its overall objectives (Keeys, 2012). Once the long term benefits have been identified, the appropriate structure of a project will be put in place to ensure these benefits are realized.

The project planning team has to identify project stakeholders and analyze the role and expectations of each from the project (Dill, 2010). Long term stakeholders may include community authorities, community opinion leaders and the beneficiaries. As a rule, the concerns of the key stakeholders have to influence project conception (Griffiths, Maggs & Emma, 2008).

At project inception, the project planning team has to highlight and put prominence on benefits that the private sector can offer (Heap, 1998). The private sector is known to focus on the long term and lay focus on market incentives making what they do have a greater probability of being sustained (Karabulut & Demir, 2006). People who succeed in the private sector also have the potential to influence and mobilize the community towards change and support for an idea (Muriithi & Crawford, 2003).

At project conception, the planning team has to assess the institutional context with the aim of selecting a project design with the greatest chance of gaining sustainability. Institutional context here will include social morals of the target community, the policy environment, political system and economic structure (Guay, Doh & Sinclair, 2004). The design alternative chosen has to be the one with the highest compatibility with institutional context.

2.4.2 Incorporating sustainability into project design

Project design phase is vital in sustainability of any project and key decisions made at this phase should have considerations for the sustainability of project benefits beyond the funding period.

The project designing team has to determine what benefits are desired from the project and what every key stakeholder expects from the project (Stefanini, 1995). The idea at this stage is to cultivate conditions that allow for project benefit sustainability (Khwaja, 2003). In a project, all facets at play including the beneficiaries, implementing organization, project objectives and means of distributing project benefits will play a vital role in sustainability of any community project (Lewis, 2004). How all these are intermixed to acquire the desired results will depend a lot on project designing phase (Khwaja, 2003).

Project design phase has to lay emphasis on supporting critical factors for project benefit sustainability (Khwaja, 2003). These factors include beneficiaries' responsive services where the project addresses important needs in the society (Mohan, 2001). The design team has to specify the benefits they want the project to sustain after the funding life as well as identify the factors that will threaten sustainability. This will entail the designers identifying the support necessary to allow continuity of the project benefits and create a structure that allows for this continuity (Lewis, 2004). The project should be organized in such a way that it can be monitored and evaluated at various levels including output and impact (WHO / UNICEF, 2008).

2.4.3 Incorporating sustainability in project implementation

Project implementation poses the greatest challenge to project sustainability (Al-Khalidi, 2010). During implementation, activities and objectives as stipulated by the planners have to be given life and substance by the implementing team (Chandra, 2008). Plans always look easy on paper than in the field when being implemented (Bagheri & Hjorth, 2007). The project manager must take the difficult role of delegation and also determine when local staff and community leaders are prepared adequately for managerial responsibilities in preparation to take over the project.

Project implementation that will effectively produce sustainable project benefit flows needs increased emphasis to both financial planning and local capacity building (Chandra, 2008). In this context, capacity building is meant to include use of participatory project implementation strategies, institution building, identification and strengthening of projects' sustainability constituency and finally use of environmental survey to remain informed and relevant to institutional and policy environment.

2.4.4 Incorporating sustainability in project evaluation

There are typically two formal external project evaluations in a project cycle namely midterm evaluation which is held halfway through the implementation of a project and summative evaluation usually conducted some months after the project cycle with the purpose of assessing project effectiveness and impact (James, 2000). Midterm evaluation offers the opportunity to learn the implementation process to date and allow for corrective measure to be effected in time. Evaluations are usually grounded on the project design and this means the project design must be informed and appropriate (Albert, 2004). As already highlighted, participation at every level of the project is vital for project sustainability and this is also true for project evaluation phase (Rossi, Lipsey, & Freeman). The project manager should ensure that all key stakeholders participate in the evaluation of the project. The participation of the beneficiaries and the community especially helps the evaluator have a good picture of how the project in a larger institutional context (Lipman, 2004).

2.5 Factors affecting project sustainability

There are various factors that play to influence project sustainability. Use of locally available raw materials, community participation, capacity building and monitoring and evaluation of the project are the four main factors identified in this study.

2.5.1 Community participation and project sustainability

Positive change is more likely if the stakeholders who will directly benefit from the project or the target group are an integral element of the change process (Bagheri & Hjorth, 2007). These stakeholders should be involved in the selection, design and implementation of the project (Capobian, 2004). Community participation involves the community coming together to identify their needs, plan and execute solution to these needs. Involvement of community opinion leaders and giving them appropriate training is very important in ensuring sustainability of community projects (Laura, 2004). Stakeholder participation must be based on the principles of voluntary involvement to allow full commitment to the course and full participation (Wilcox, 1994).

There is great importance in seeking the support of the community opinion leaders (Clever, 1999). These are people who have the ability to rally the community behind an idea or even

against an idea (Cleaver, 1999). Including these opinion leaders in decision making ensures that they fully take responsibility of any consequences including setbacks faced in a project life cycle. This will call for full understanding of the culture and norms of the community to ensure that valued community practices and beliefs are not challenged in a way that the community will react negatively (Mulwa, 2008).

Decades of implementation of community development projects have proved that top down approaches to development don't work (Hodgkin, 1994). The top down participation of the beneficiaries usually adopted by central governments has been challenged in the past as the government planning mechanism view beneficiary participation as a process of drawing people in to project implementation after all project decisions have been made (Mulwa, 2008). In this way people are seen as resource potential that the authorities want to mobilize and this usually includes involuntary material and financial contribution towards these public projects. Genuine community participation does not focus on participation in implementation or even in project design but rather has to start with the community identifying their needs. This ideology has been utilized a lot in the recent past where community based groups initiate development projects assisted by external entities. This has enabled the people identify their own goals and define how to attain them. This is an approach that places control and ownership squarely on the hands of the beneficiaries (Tango International, 2009). The findings of the study sought to determine the extent to which benefiting communities participate in NGO funded community projects.

2.5.2 Capacity building and project sustainability

Capacity building is a key approach used by development organs to ensure sustainability of development projects (Langran, 2002). Capacity building as an approach to community development builds independence and can be a 'means to an end' with the key goal being enabling the community to take over a project of an 'end' with the key goal being to enable parties ranging from individuals to government officers to work together to solve common problems (Temali, 2012). Capacity building requires a deep analysis of existing capacity, identifying capacity needed and designing of appropriate measure to fill the capacity gap. Capacity building can take various dimensions including human resources, social resources and financial capacity (Temali, 2012). Financial capacity will include knowledge of resources and

opportunities. Human resources dimension will include issues such as motivation of individuals and teams, skill development, development of relational abilities as well as trust within the project team and community in general to ensure equitable benefiting from the project. Social dimension of capacity building will include issues such as participation structure and shared trust (UNDP, 1997).

Capacity building increases the ability of organizations, groups and individuals to solve problems, perform key functions and finally defines and moves effectively towards achieving objectives, effectively understand and handle development needs in a wider context and in a sustainable way (UNDP, 1997). Positive capacity building leads to community and individual empowerment. This general empowerment is what assists the project team to inject sustainability into projects (Langran, 2002). Empowering the community solves a lot other issues such community participation in a project (Temali, 2012). This also leads to the concept of local solutions to local problems as the beneficiaries are in a better place to engage in productive and informed discussion with NGO staff. The study findings sought to determine the extent to which capacity building has been integrated in to NGO funded community projects.

2.5.3 Use of local resources and project sustainability

It is accepted that even the most underserved communities are rich in unique resources that have helped support human life for years (McConnell, 2002). When the resources are transformed in a minor or a major way, benefits are produced and this helps meet the needs of the community. From a human point of view, anything that can satisfy human needs is a resource (Miller & Spoolman, 2011). A well planned project has to rely on the local environment for sustainability with the aim of enhancing their use (Lewis, 2004).

To attain sustainability, a model based on inputs from the local environment while maintaining a feedback relation between the inputs and the outputs through the structures, technology, culture and process (Ebner & Baumgartner, 2010). A sustainable project must be capable of adapting to changes in the environment and stakeholders demands while still ensuring that the stakeholders continuously enjoy the desired outputs. These materials must not only be readily available and in

reliable supply but they should also be cheaply exploited without compromising the wellbeing of the community (Mekonnen, 2007).

When the project planners are designing a project, they must bear in mind issues to do with project maintenance (Lewis, 2004). Introducing a project that relies heavily on imported raw materials challenges the same balance of resources that a project intervention seeks to improve (Dill, 2010). Cheaply available resources, which are in constant supply, are the ideal resources to base a project on. This will allow the project to run at minimal economic cost and at convenience of community members. In terms of manpower, any project should effectively run on locally available labour and technological knowhow (Temali, 2012). Again, if the local resources used are seasonal, the project's benefits run the risk of seasonality and eventual failure. The finding of the study sought to establish the extent to which NGO funded community projects utilize locally available resources.

2.5.4 Monitoring and evaluation and project sustainability

Systemic and regular collection of data from projects will assist the project team to learn from experience and improve practices, allow for both external and internal accountability of the resources invested and the results realized as well as ensure planned activities are adhered to (O'Sullivan, 2004). Monitoring checks activities and progress against plans allowing documentation of project progress and this improves greatly the chances of project success and sustainability.

Evaluation focuses on systematically and objectively assessing a phase of a project or the whole project after it is completed (Rossi, Lipsey, & Freeman, 2004). Evaluation of project phases allows detect deviation from plan in time and allow for timely rectification (Valadez & Bamberger, 1994). Project phase evaluation also allows assess relevance of the project to community needs, efficiency of the project team and use of resources, effectiveness of the interventions and also impacts being realized from the project or impacts anticipated, this allows the project manager analyze the expected sustainability levels of the project (Junbeum, et al. 2007).

Evaluation, when participatory takes into consideration the opinion and suggestions of key stakeholders and enhances the factor of ownership (Mohan, 2001). When these stakeholders are involved in project evaluation, their worries are looked at and this allows for more appreciation of the project and more accountability (Lipman, 2004). Monitoring and evaluation generally allows for maximum implementation of plans as well as assessing the progress in time to allow for redirection where necessary (O’Sullivan, 2004). This plays a key role in ensuring project sustainability. The findings of the study sought to determine the extent to which Monitoring and Evaluation has been adopted as a practice in management of NGO funded community projects.

2.6 Theoretical framework

The researcher looked into collective action theory and institutional theories in an effort to demystify the concept of sustainable development. First published by Mancur Olson, collective action theory seeks to explain what causes continuity of projects and ventures (Anesi, 2009). The theory suggests that a project that meets a common need will instinctively bring people together leading to project sustainability (Mazibuko, 2007). This theory however falls short since sustainability is much more complex than a project just meeting a common need. Institutional theory was developed by Nelson Phillips, who asserts that institutionalization, which is the process of institution formation, is the backbone to sustainable development (Schneiberg and Soule, 2005). Institutions are the building units of any society and they shape human interaction as well as provide structure to everyday life. Institutions can be seen as a collection of specific behaviors and support structures that simplify or make possible the accomplishment of a task. Institutions make it possible for desirable set of actions to be realized more frequently and with repetition, these actions take root as norms (Green, Li & Nohria, 2009). People at this point cease doing things because there are rules that call them to but because it’s the norm (Scott, 1991). In their work, Edward and Hulme (1992) summarized the theory by saying “One clear conclusion is that institution building is the critical task facing all Non Governmental Organizations in their search for sustainable development” (Edwards & Hulme, 1992). The stability of institutions depends a lot on their fit with culture and values of the subjects as well as the benefits that it presents to the people (Schneiberg and Soule, 2005). This theory was adopted for this study since the process of institutionalization is multi faceted and goes beyond looking at sustainability being a factor of a project simply meeting a common need.

2.7 Conceptual framework

Independent variables

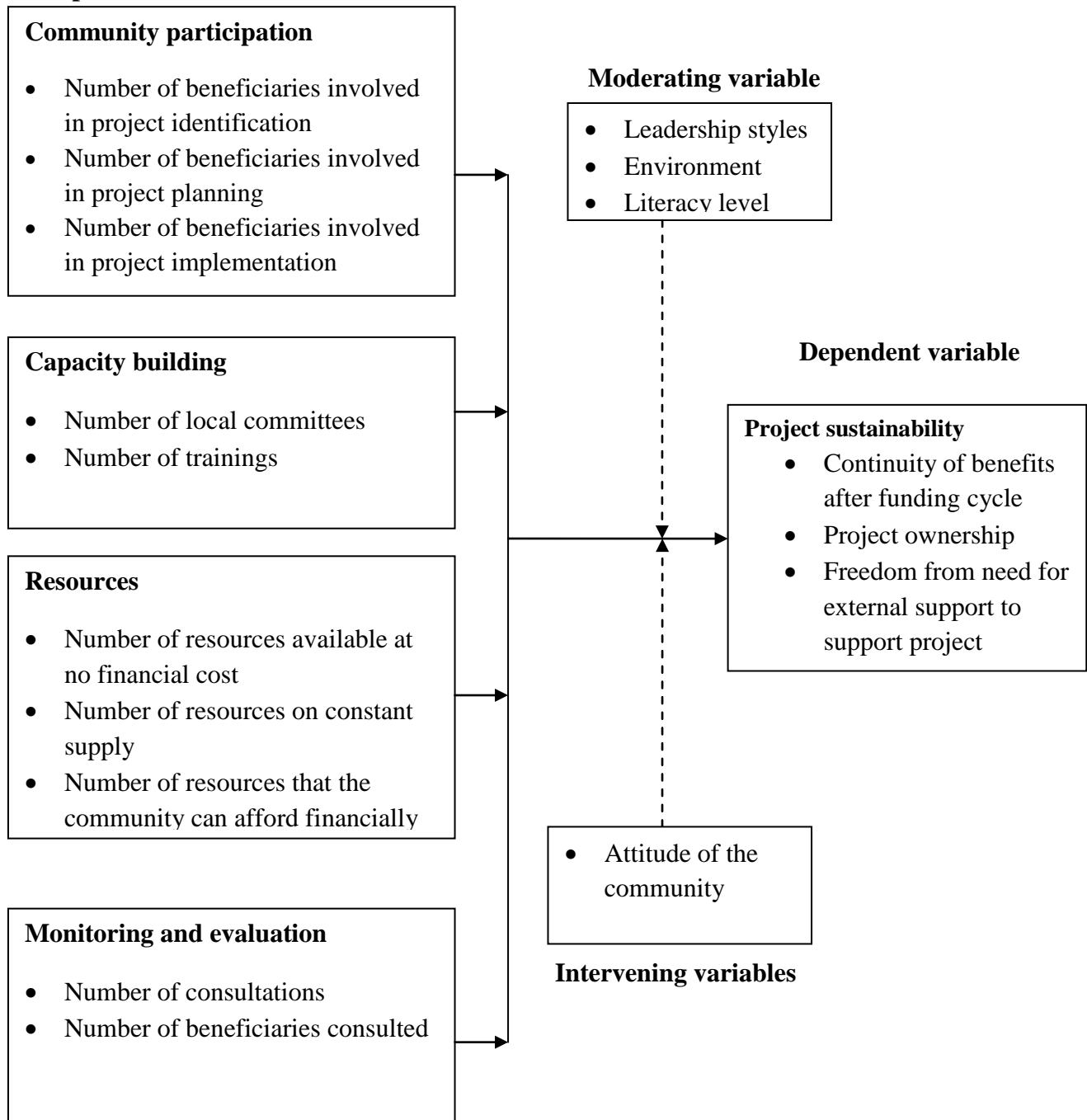


Figure 1: Conceptual Framework

Figure 1 above conceptualizes how the identified independent variables relate to project sustainability, the dependent variable. Literacy levels, leadership styles and the environment were seen as moderating variables. Community participation in the various stages of project lifecycle, use of locally available raw materials, building the capacity of the beneficiaries and practice of monitoring and evaluation were thought to influence project sustainability.

2.8 Knowledge gap

Review of literature revealed that there is limited work done towards understanding role played by NGOs in developing donations dependency in target communities. It can be noted that usually, entry of NGOs into a community eventually creates some level of dependency on donor help.

2.9 Summary of literature review

This literature review analyzed available information on sustainability of NGO funded projects and factors influencing it. The literature brings out widespread concern about low sustainability levels of NGO funded projects. From the literature, different researchers are under agreement that sustainability is an all inclusive concept that should be considered at all stages of a project life cycle and involve all stakeholders. Community participation is important to project sustainability and project beneficiaries should be involved at all stages of project life cycle. the capacity of benefiting community should be developed to bridge knowledge gaps and enable the community adopt the project concepts. Use of readily available raw materials is essential in sustainability and community projects should be based on readily available raw materials. by practicing monitoring and evaluation, the project team implements plans as required as well as injects the views of the beneficiaries ensuring the project remains relevant to the needs of the community.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter gives a brief description of the research design, target population, sampling design, data collection procedures, data collection tools, validity and reliability of the research instruments and data analysis methods. The study adopted descriptive research because of the need to describe factors affecting project sustainability in depth. The chapter concludes with operational definition of variables table that summarizes the objectives, independent variables, the indicators, how to measure the indicators, the scale of measurement of the variables, data collection methods adopted and type of data analysis adopted.

3.2 Research design

The study adopted a research design that was descriptive in nature where data was collected to answer questions concerning the subject of study. This research design was desirable for this study because there great interest in answering the questions such as how, who, when, what, which and to what extent (Cooper and Schindler, 2010). The descriptive design was selected because it would allow the researcher gather numerical and descriptive data to assess the relationship between the dependent and the independent variables. This would make it possible for the researcher to produce statistical information on factors influencing sustainability of NGO funded community projects. The chosen design allowed the researcher to collect both qualitative and quantitative data.

3.3 Target population

Target population is a group of individuals, items or objects from which a sample is to be taken for desired measurement to be conducted as a way of inferring on the larger population from the small selected sample (Kombo & Tromp, 2006). This research was carried out in Makima Location, Embu County and the target population comprised the project beneficiaries and implementing officers. This covered 800 farmers working directly with Action Aid in SCL project.

3.4 Sample size and sampling procedures

According to Kombo and Tromp (2006), Sampling is the process of selecting a number of individuals from a population of concern in a way that allows the selected group to effectively represent the characteristics of the entire group. A census inquiry was targeted for the implementing officers since their population was small (Kumar, 2009). For the beneficiaries, Yamane formula was used to calculate a representative sample.

3.4.1 Sample size

The formula below provided by Yamane was used to calculate the sample size (University of Florida, 2013):

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

Where; n is the sample size,

N=the estimate of the population size,

e=error limit

At 95% level of confidence and with an error limit of 10 %

$$n = \frac{800}{1 + 800(0.1)^2} = 800 / \{(1 + 800(0.1)^2)\}$$

n=89 respondents

This gives 89 respondents as the sample size. This information is presented in the table below:

Table 3.1: Summary of the sample

Subject	Population	Sample size	Percentage
Farmers	800	89	11
Implementing officers	5	5	100
Total number of respondents	805	94	12

3.4.2 Sampling procedure

Out of the 800 farmers, a sample of 89 was targeted through stratified random sampling after creating strata based on location and this allowed an all inclusive representation of different sub groups in the sample (Mugenda and Mugenda, 2003). The study targeted to collect data from different clusters of primary stakeholders. The population was divided into sub groups that were more homogenous individually. From each stratum, a proportional sample was drawn randomly.

3.5 Data collection instruments

Interview schedule was used for the implementing officers while Questionnaires were used for the beneficiaries. The data collection tools contained both closed and open ended questions allowing the respondents to give an explanation of their answer in their own words.

3.5.1 Pilot testing of the study

Before embarking on data collection, a pilot study was carried out to pretest the instruments. This was done in order to assess the clarity of items, validity and reliability of the instruments (Mugenda & Mugenda, 2003). The pre testing was carried out on project implementing officers and any questions found to be interpreted differently during the pre testing were rephrased so that they could have the desired meaning to all respondents.

3.5.2 Validity of the research instruments

Validity is used to refer to the meaningfulness and accuracy of the inferences made by a researcher based on data collected and research findings (Mugenda and Mugenda, 2003). Validity is seen as the ability of a research instrument to measure what it is designed to measure (Kumar, 2009). To achieve desired degree of validity, the research instruments were formulated in a way to answer the objectives set for the study as stated earlier. To ensure content validity, the tools were presented to professionals including my supervisor who were requested to critique.

3.5.3 Reliability of the research instruments.

Reliability is a measure of degree to which a research instrument will give consistent data on repeated trials (Mugenda & Mugenda, 2003). The split half method was used to establish

reliability of the instruments. The split-half technique was used to test the reliability of the instrument.

The split half reliability artificially divides test into two halves and correlates the individual scores on the two halves. The Researcher administered the test to a group of implementing officers and later divided the items into two halves using odd and even numbers. Scores for each individual on the two halves were obtained and coefficient correlation calculated using SPSS version 20. To transform the split half correlation into an appropriate score reliability estimate for the entire test, the Spearman–Brown Prophecy Formula was employed;

$$r_{xx} = \frac{2r_{\frac{11}{22}}}{1 + r_{\frac{11}{22}}}$$

Where,

r_{xx} = estimated score reliability of the entire test

$r_{\frac{11}{22}}$ = Pearson r correlation between two halves

A reliability coefficient of 0.78 was obtained. According to Kumar (2009), a minimum correlation coefficient of 0.65 is recommended as it indicates that an instrument is reliable. This showed that the instrument was reliable.

3.6 Data collection procedures

This involved administration of questionnaires for all the project beneficiaries. Interview schedules were used for the implementing officers. The tools were pretested before the data collection exercise. The data collection instruments had various sub sections that were sub divided based on the research objectives. The researcher trained research assistants who assisted in data collection. To ensure maximum cooperation by the target project beneficiaries, the researcher and the research assistants were introduced to the beneficiaries by both the project implementing team and community opinion leaders.

3.7 Methods of data analysis

After data collection, the questionnaires were sorted out and edited in order to detect any inconsistencies during data collection. Data coding was done by allocating different responses falling in the ordinal scale dummy numeric values that could be computed by Statistical Package for Social Scientists software. Data cleaning was done whereby the data was finally checked for accuracy and completeness. The keyed in data was subjected to SPSS analysis and the data was presented in terms of percentages and frequencies. This was then presented in table format. Spearman Coefficient of Correlation was computed in an effort to determine the strength of the correlation between community participation, capacity building, local resources, monitoring and evaluation and community project sustainability. This was done at 95 percent confidence interval.

3.8 Ethical considerations

The researcher ensured all respondents were accorded treatment with respect and that the data collection process did not needlessly disrupt their socio economic activities. The identity of the respondents was also treated with utmost confidentiality.

3.9 Table 3.2: Operational definition of the variables

Objective	Independent variable	Indicator(s)	Measurement	Scale	Data collection method	Data analysis
To establish whether the benefiting communities participate in project identification, planning and implementation	Community participation	Involvement in project identification	Number of beneficiaries involved	Ordinal	Questionnaire/ Interview schedule	Descriptive statistics
		Involvement in project planning and design	Number of beneficiaries involved	Ordinal		
		Involvement in project implementation	Number of beneficiaries involved	Ordinal		
		Involvement of community opinion leaders	Number of beneficiaries involved	Ordinal		
To determine if the capacity of benefiting communities is developed to ensure project sustainability	Capacity building	Presence of local committee in charge of the project	Number of respondents aware of the committee	Ordinal	Questionnaire/ Interview schedule	Descriptive statistics
		Active involvement of this committee in management	Number of respondents who feel the committee is actively involved	Ordinal		
		Training of community on technical skills	Number trained	Ordinal		
		Frequency of trainings	Number of trainings	Ordinal		

To establish the extent of utilization of locally available resources in project implementation	Resources	Availability of raw materials at no cost	Number of respondents who feels they are available	Ordinal	Questionnaire/ Interview schedule	Descriptive statistics
		Affordability of raw materials to be bought	Number of respondents who feel they are affordable	Ordinal		
		Supply patterns of the resources	Number of respondents who feel the resources are in constant supply when needed	Ordinal		
		Availability of skilled labour to tap the resources	Number of respondents who feel skilled labour is available	Ordinal		
To explore the practice of monitoring and evaluation during the project cycle	Monitoring and evaluation	Involvement of the community	Respondents involved	Ordinal	Questionnaire/ Interview schedule	Descriptive statistics
		Frequency of consultation with the community on project progress	Consultations done	Ordinal		
		Use of internal or external evaluators in project midterm evaluation	Use of external consultant	Ordinal		

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents the summary of the analyzed data. The results are presented based on the objectives of the study with the aim of studying factors influencing sustainability of NGO community projects with a special focus on Action Aid funded project in Makima Location, Embu County. In order to put the results into perspective, research findings were organized under the following categories: community participation, capacity building, project resources and monitoring and evaluation.

4.2 Questionnaire return rate

The researcher targeted a sample of 89 beneficiaries and a census for the five implementing officers. After the data collection exercise, 75 fully filled questionnaires were received for project beneficiaries equating to 84.5 percent of the target while 3 implementing officers equating to 60 percent was achieved. This is a reliable response rate for data analysis as any response above 50 percent is regarded adequate (Punch, 2003).

4.3 Demographic information

This subsection describes the basic statistical characteristics of the respondents. This includes gender, age and highest level of education achieved.

4.3.1 Age of respondents

As part of the general information, the researcher requested for the age of the respondents. Table 4.1 presents the age disaggregation of the respondents.

Table 4.1Distribution of respondents by age

Age	Frequency	Percentage
Below 20	0	0.0
20-29 years	7	9.3
30-39 years	15	20.0
40-49 years	20	26.7
50-59 years	17	22.7
Above 60 years	16	21.3
Total	75	100.0

The results from Table 4.1 show that no project beneficiary was below 20 years of age, 7 of the respondents (9.3 percent) were in the 20-29 age bracket, 15 of the respondents (20.0 percent) were in aged between 30-39 years, 20 of the respondents (26.7 percent) were aged between 40-49 years and this was the most represented group, 17 respondents (22.7 percent) were aged between 50-59 years while 16 of the respondents (21.3 percent) were aged above 60 years. This shows community members below the age of 29 were less involved in this project.

4.3.2 Gender of respondents

The researcher recorded the gender of the respondents. Table 4.2 presents disaggregation of the respondents by gender.

Table 4.2 Disaggregation of respondents by gender

Sex	Frequency	Percentage
Male	20	26.7
Female	55	73.3
Total	75	100.0

The results from Table 4.2 show that majority of the respondents represented by 55 (73.3 percent) were female while 20 of the respondents (26.7 percent) were male. This shows that females were more involved in the project than their male counterparts.

4.3.3 Formal education

As part of the general information, the researcher sought to establish the level of formal education of the respondents. Table 4.3 presents disaggregation of the respondents by level of formal education attained.

Table 4.3 Level of formal education attained by beneficiaries

Level of education	Frequency	Percentage
None	10	13.3
Primary	36	48.0
Secondary	24	32.0
Technical or vocational	5	6.7
University or college	0	0.0
Total	75	100.0

Asked about whether the highest level of formal education attained was primary, secondary, technical/vocational or university/college, the results on Table 4.3 shows that majority of the respondents represented by 36 (48.0 percent) attained up to primary school education while 10 respondents (13.3 percent) did not attain any formal education. 24 of the respondents (32.0 percent) attained secondary education, 5 respondents (6.7 percent) attained technical or vocational education while none of the respondents attained college or university education. This shows that majority of the beneficiaries don't have technical training or professional training. Most beneficiaries have had some form of formal education with majority having attained primary and secondary level of education. This can be attributed to the fact that the project targeted peasant farmers working in rural semi arid set up.

4.4 Community participation

The following section presents data on community participation. This includes community participation in identification of the project, project planning and project implementation.

4.4.1 Community involvement in project identification

On involvement of the beneficiaries in project identification, the study sought to establish the proportion of beneficiaries involved. Table 4.4 shows involvement of respondents in project identification

Table 4.4 Involvement of respondent in project identification

Response	Frequency	Percentage
Yes	70	93.3
No	5	6.7
Total	75	100.0

Table 4.4 shows that 70 of the respondents (93.3 percent) were involved in project identification while 5 of the respondents (6.7 percent) felt that they were not involved in project identification. This shows majority of the beneficiaries felt that they chose the project to be pursued. By involving the community in project identification, the project targeted the needs of the people and practical gaps in the community thus boosting the level of commitment of the beneficiaries to project concepts.

4.4.2 Community involvement in planning of the project

As part of looking at the involvement of beneficiaries in the project, the researcher sought to establish the proportion of beneficiaries involved in the planning of the project. Table 4.5 presents data on respondents' involvement in planning of the project

Table 4.5 Involvement of respondent in planning of the project

Response	Frequency	Percentage
Yes	72	96.0
No	3	4.0
Total	75	100.0

Table 4.5 shows that 72 of the respondents (96.0 percent) were involved in project planning while 3 of the respondents (4.0 percent) felt that they were not consulted during planning of the project. This shows that majority of the beneficiaries were involved in project planning. By involving the beneficiaries in project planning, the support of the community is gained as the beneficiaries tend to take the roles they are given as their own responsibility and they do it knowing it is for their own wellbeing. Community involvement in planning also ensured that best practices were incorporated with strategies that don't work in the set up being avoided while adopting strategies that are known to work. This also ensured the culture and believes of the people were considered to avoid possible conflicts.

4.4.3 Community involvement in project implementation

The study further sought to establish the extent to which project beneficiaries were involved in project implementation. Table 4.6 shows involvement of beneficiaries in project implementation

Table 4.6 Involvement of beneficiaries in project implementation

Response	Frequency	Percentage
Yes	75	100.0
No	0	0.0
Total	75	100.0

Table 4.6 shows that 75 respondents (100 percent) were involved in project implementation. This shows all the beneficiaries are involved in project implementation. Community participation

builds the technical expertise of the beneficiaries as well as creates a sense of ownership. By creating a sense of ownership, participation enhances adoptability of the different concepts at personal level as well as ensures the project achieves its goals and objectives.

4.4.4 Community opinion leaders involvement in project identification

Involvement of community opinion leaders was of interest to the study. Table 4.7 presents data on response of beneficiaries on the involvement of community opinion leaders.

Table 4.7 Response of beneficiaries on involvement of community opinion leaders in project identification

Response	Frequency	Percentage
Yes	75	100.0
No	0	0.0
Total	75	100.0

Table 4.7 shows that 75 of the respondents (100 percent) feel that community opinion leaders were adequately involved in the identification of this project. By involving the community opinion leaders, the project brought in an all important support without which any idea introduced to the community had a realistic chance of failing. Community opinion leaders were in a prime position to influence the support of the community towards any concept and with the project bringing in the leaders it enlisted an all important support that is important for sustainability.

The study sought to establish project implementing team involved community opinion leaders in project identification. Table 4.8 presents data on response of the implementing officers on involvement of community opinion leaders in project identification.

Table 4.8 Response of implementing officers on involvement of community opinion leaders in project identification

Response	Frequency	Percentage
Yes	3	100.0
No	0	0.0
Total	3	100.0

Table 4.8 shows that 3 of the responding implementing officers (100 percent) feel that community opinion leaders were adequately consulted during project identification. This shows that the implementing organization made deliberate efforts to engage community opinion leaders.

4.5 Capacity building

The following section presents data on capacity building effort channeled towards ensuring sustainability of the project.

4.5.1 Presence of local committees

The presence or absence of local committees mandated to help manage the project was of great interest to the researcher. The researcher sought to know the proportion of respondents who knew of such committees. Table 4.9 shows response of project beneficiaries on presence of local committees in charge of the project.

Table 4.9 Response of beneficiaries on presence of a local committee in charge of the project

Response	Frequency	Percentage
Yes	75	100.0
No	0	0.0
Total	75	100.0

Table 4.9 above shows that 75 respondent (100 percent) were of the opinion that there is a local committee that is given enough responsibility on running of the project. The use of local project committees in the management of the project developed a pool of leaders capable of leading the community beyond project's lifecycle.

The study sought to establish the presence of local project committees. Table 4.10 shows response of implementing officers on presence of local committees that were in charge of the project at community level.

Table 4.10 Response of implementing officers on presence of a local committee in charge of the project

Response	Frequency	Percentage
Yes	3	100.0
No	0	0.0
Total	3	100.0

Table 4.10 above shows that 3 of the implementing officers (100 percent) feel that there is a local committee that runs the project. This shows that the implementing organization made deliberate efforts to develop leaders who can guide the community once the project comes to a close.

4.5.2 Active involvement of the local committee in management of the project

To establish if the local project committees were actively involved in project management, the researcher asked the respondents if the committees were actively involved. Table 4.11 shows beneficiaries' response on local committees' involvement in project management.

Table 4.11 Beneficiaries response on involvement of local committees in project management

Response	Frequency	Percentage
Yes	75	100.0
No	0	0.0
Total	75	100.0

Table 4.11 shows that 75 of the responding beneficiaries felt that the local committees were adequately involved in the management of the project. The active involvement of the committee developed their leadership skills and also the trust that the community have in their ability.

Involvement of the local project committees in the management of the project was of interest to the researcher. Table 4.12 shows the response of the implementing officers on the local committees being adequately involved in project management.

Table 4.12 Implementing officers' response on involvement of local committees in project management

Response	Frequency	Percentage
Yes	3	100.0
No	0	0.0
Total	3	100.0

Table 4.12 above shows that 3 of the implementing officers (100 percent) felt that the local committees were adequately involved in the management of the project at community level. This shows that the implementing organization made deliberate efforts to develop the capacity of the local committees. By developing their capacity, the implementing organization developed a pool of experts within the local community than can be agents of development.

4.5.3 Training on skills required to maintain the project

To establish if the beneficiaries were trained on skills necessary to ensure that the project activities were successfully replicated beyond the project life cycle, the respondents were asked if they received training that would enable sustainability. Table 4.13 shows the response of project beneficiaries on community members being given adequate training required to maintain the project.

Table 4.13 Response of beneficiaries on training to maintain the project

Response	Frequency	Percentage
Yes	75	100.0
No	0	0.0
Total	75	100.0

Table 4.13 shows that 75 of the responding beneficiaries (100 percent) feel that they were equipped with required skills and knowledge to maintain the project. This is an indication that the community felt that training done to ensure they adopted the concepts and sustain them without external help was adequate and effective. This was to ensure the concepts were adopted at personal level with farmers practicing the concepts in their own farms and households.

The researcher asked the implementing officers if the beneficiaries were trained on skills meant to ensure continuity of project activities after the project was cycle was complete. Table 4.14 shows the response of implementing officers on community members being given adequate training required to maintain the project.

Table 4.14 Response on implementing officers on training of beneficiaries

Response	Frequency	Percentage
Yes	3	100.0
No	0	0.0
Total	3	100.0

Table 4.14 shows that 3 of the implementing officers (100 percent) feel that beneficiaries are trained adequately on the skills and knowledge required to maintain the project. This is an indication that the implementing organization made deliberate efforts to ensure beneficiaries were trained on key aspects of the project that would help them continually benefit from project concepts without the need for external support.

4.5.4 Community working on the project as a team

Team work and ability of the beneficiaries to work together was of interest to the researcher. The respondents were asked if they worked on the project as a team. Table 4.15 shows response on beneficiaries working together on the project as a team

Table 4.15 Response on beneficiaries implementing project as a team

Response	Frequency	Percentage
Yes	75	100.0
No	0	0.0
Total	75	100.0

Table 4.15 shows that 75 of the responding beneficiaries (100 percent) were of the opinion that they worked on the project as a team. By working as a team, the chances of project success were increased while also ensuring synergy and collective learning in important project concepts like

tapping of resources and value addition of farm products. This developed the ability of the people to work together for a common cause

4.5.5 Training channeled towards improving personal contribution to the project

The study sought to establish if the beneficiaries were given training that helped them contribute more to the well being of the project. Table 4.16 present beneficiaries' response on attending training geared towards improving personal contribution to the project.

Table 4.16 Training to improve personal contribution to the project

Response	Frequency	Percentage
Yes	75	100.0
No	0	0.0
Total	75	100.0

Table 4.16 shows that 75 of the responding beneficiaries (100 percent) felt that they had attended training meant to improve their personal contribution to this project. This showed that the capacity of individuals to make an impact was developed and they could in turn replicate this at personal level. The project brought together the beneficiaries and developed their ability to initiate and develop a collective development of the community.

4.5.6 Topics covered in the trainings

The researcher asked the beneficiaries what key topics were covered in an effort to ensure the project activities out lived the presence of implementing organization. Table 4.17 shows the various topics mentioned by the respondents as having been covered in trainings meant to improve personal contribution to this project.

Table 4.17 Topics trained on geared towards improving personal contribution

Topic discussed	Frequency	Percentage
Agribusiness	17	22.7
Fodder preservation	32	42.7
Conflict management	19	25.3
Financial management	47	62.7
Food preservation	30	40.0
Group dynamics	48	64.0
Leadership	9	12.0
Manure production	33	44.0
Resource mobilization	20	26.7
Team work	17	22.7
Sales and marketing	9	12.0
Value addition	52	69.3

This table shows that majority of the beneficiaries represented by 52 community members (69.9 percent) were trained on value addition of products achieved from the project activities. It also shows that 48 respondents (64.0 percent) were trained on group dynamics and 47 respondents (62.7 percent) were trained on financial management. Only 9 of the respondents (12.0 percent) mentioned leadership. This shows that the beneficiaries were trained on various topics. This is an indication that the project developed the capacity of the beneficiaries in a wide range of topics. Training the beneficiaries on facets like team work and group dynamics developed the ability of the groups to keep working together while training on topics such as value addition ensured that the beneficiaries reaped acceptable benefits from their farm products. Training on food and fodder preservation techniques ensured that the beneficiaries took advantage of the rainy seasons by preserving enough food for themselves and for their animals' thus avoiding sudden economic downfall of households and loss of valuable animals acquired during the project life time.

4.6 Project reliance on locally available resources

The following section presents data on project utilizing locally available resources and the availability of these materials.

4.6.1 Resources key to the success of this project

The study was interested in establishing the key resources needed in the implementation of the project. Table 4.18 shows the various resources key to success of the project

Table 4.18 Resources key to the success of the project

Resources	Frequency	Percentage
Animal feeds	12	16.0
Animal medicine	17	22.7
Chicken wire	6	8.0
Dam liners	5	6.7
Diesel	10	13.3
Inorganic fertilizer	17	22.7
Fodder	54	72.0
Iron sheets	5	6.7
Manure	43	57.3
Packaging materials	19	25.3
Pesticides	27	36.0
Seeds	47	62.7
Sisal	2	2.6
Water	27	36.0

Table 4.18 above shows that 54 of the respondents (72.0 percent) mentioned fodder as key to project success, 43 respondents (57.3 percent) mentioned manure, 47 of the respondents (62.7 percent) mentioned seeds with a 2 respondents (2.6 percent) mentioning sisal. This list shows that project success depended on a wide list of resources. While some commercially acquired raw materials had locally available raw materials as substitutes as seen in the case of inorganic fertilizer and organic manure, the beneficiaries did not have local substitute for others such as iron sheets and diesel. The diversity of the raw materials is an indication of the diversity of the project activities and this means failure of one venture can be potentially supported by the other ventures.

4.6.2 Project resources being available at no financial cost

Financial cost tied to the resources needed for the implementation of the project was important for the study. Table 4.19 shows response of beneficiaries on resources needed for project implementation being available for free without being bought.

Table 4.19 Project resources being available for free and not bought

Response	Frequency	Percentage
Yes	45	60.0
No	30	40.0
Total	75	100.0

The table 4.19 shows that 45 of the respondents (60.0 percent) said that project resources were available without need to buy them. This is an indication that the project dependent significantly on both commercially available and free raw materials. The need to acquire project resources commercially may potentially affect the future of project activities as people seek more cheaply maintained alternatives in the future.

To establish if the implementing organization made efforts to ensure that the project relied on readily available resources, the researcher asked the implementing officers if the resources key to the project were available with no need to purchase them. Table 4.20 shows response of implementing officers on resources key to the success of the project being available for free without being bought.

Table 4.20 Response of implementing officers on resources being available for free

Response	Frequency	Percentage
Yes	3	100.0
No	0	0.0
Total	3	100.0

The table 4.20 shows that 100.0 percent of the implementing officers were of the opinion that they key raw materials for the project were free and could be acquired without need to purchase

them. This shows that the implementing organization made deliberate efforts to ensure that project raw materials were available to the community members for free.

4.6.3 Ability of community to acquire project resources without external help

The study was interested on ability of the community to acquire the resources necessary for the success of the project without external assistance. Table 4.21 shows response of beneficiaries on the ability of the community to acquire project resources without external help.

Table4. 21 Community ability to acquire project resources without external help

Response	Frequency	Percentage
Yes	53	70.7
No	22	29.3
Total	75	100.0

Table 4.21 shows that 53 of the respondents (70.7 percent) felt that the community members could acquire resources for the project without external help while 22 respondents (29.3 percent) felt that community members could not afford such resources without external help. This indicates that a number of those who said that key project resources had to be acquired commercially also felt that the community was in a position to meet the cost implications without external help. A number of beneficiaries felt that the community cannot afford the resources without external help showing the need to develop more locally available alternatives and the need to develop more income generating activities in the community.

4.6.4 Availability of raw materials

To establish the availability of resources key to the success of the project, beneficiaries were asked to scale the availability of the resources. Table 4.22 shows response of beneficiaries on availability of project resources.

Table 4.22 Response of beneficiaries on availability of resources key to project success

Response	Frequency	Percentage
Scarce	26	34.7
Seasonal	9	12.0
In constant supply	40	53.3
Total	75	100.0

Table 4.22 shows that 40 responding beneficiaries (53.3 percent) said that project resources were in constant supply while 26 beneficiaries (34.7 percent) said that the raw materials were scarce. This shows majority were of the opinion that raw materials were readily available. This shows some locally available were scarce and this was a challenge to the community. At the same time, seasonality of the resources was evident from the response showing the need for preservation during peak seasons.

The study sought to establish if the implementing organization made efforts to build the project around resources available as needed. Table 4.23 shows response of implementing officers on availability of resources key to the success of the project.

Table 4.23 Response of implementing officers on availability of project resources

Response	Frequency	Percentage
Scarce	0	0.0
Seasonal	0	0.0
In constant supply	3	100.0
Total	3	100.0

Table 4.23 shows that 3 implementing officers (100 percent) felt that raw materials were in constant supply. This is an indication that the implementing organization made a deliberate effort to ensure that the project relied on raw materials that the community could access continually as needed.

4.6.5 Community tapping the resources with the skills they have without external help

The ability of the community to tap the resources without external help was of interest to the study. Table 4.24 shows response of beneficiaries on ability of the community to tap resources without help using the skills they acquired.

Table 4.24 Response of beneficiaries on ability of community to tap resources

Response	Frequency	Percentage
Yes	46	61.3
No	29	38.7
Total	75	100.0

Table 4.24 shows that 46 of the responding beneficiaries (61.3 percent) believed that the community could tap the relevant resources without external help while 29 respondents (38.9 percent) felt that the community could not tap the resources without external help. This is an indication that there were key raw materials that were available but still not in a form that the community could put to use without external support. With were especially resources that needed infrastructural system to tap them including water. Tapping these resources needs financial resources on top of skills and the significant number of the community members cannot meet the financial implications.

Table 4.25 shows the response of implementing officers on the ability of the community to tap the resources without external help.

Table 4.25 Response of implementing officers on ability of community to tap resources

Response	Frequency	Percentage
Yes	3	100.0
No	0	0.0
Total	3	100.0

Table 4.25 above shows that 3 project implementing officers (100 percent) believed that the community could tap the relevant resources without any external help. This is an indication that the implementing organization made direct efforts to ensure that the project depended of easily

tapped raw materials and that the capacity of the beneficiaries was developed adequately to enable them tap the resources.

4.7 Project monitoring and evaluation

The following section presents data on practice of monitoring and evaluation. This section looks at the extent of consultations with the benefiting community and the frequency of the consultations to ensure the project remained focused on the community needs as well as project plans.

4.7.1 Community involvement in monitoring and evaluation

The study sought to establish the proportion of beneficiaries consulted during project monitoring and evaluation. Table 4.26 shows response of beneficiaries on involvement of the community in project monitoring and evaluation.

Table 4.26 Response of beneficiaries on their opinion of community sought

Response	Frequency	Percentage
Yes	66	88.0
No	9	12.0
Total	75	100.0

Table 4.26 shows that 66 responding beneficiaries (88.0 percent) felt that beneficiaries were consulted adequately during project implementation. This shows majority felt that their opinion was sought to ensure the project remained relevant to their problems. By consulting the beneficiaries, the project stood a chance or remaining of not only remaining relevant by filling gaps within the community but also improved the chances of reaping maximum benefits from lessons learned during implementation.

To establish the effort made by the implementing organization to consult the beneficiaries on various project aspects, the researcher asked the implementing officers if the opinion of the beneficiaries was sought. Table 4.27 shows the response of implementing officers on beneficiaries being consulted during project implementation.

Table 4.27 Response of implementing officers on opinion of beneficiaries being sought

Response	Frequency	Percentage
Yes	3	100.0
No	0	0.0
Total	3	100.0

Table 4.27 shows that 3 implementing officers (100 percent) were of the opinion that the opinion of beneficiaries was adequately sought to keep the interventions relevant. This is an indication that the implementing organization made deliberate efforts to ensure that beneficiaries were constantly consulted to give their opinion on the project and ensure that their opinion was incorporated in strategy reformulation.

4.7.2 Frequency of consultation in the last 6 months

The frequency of consultation between the project team and the beneficiaries was important to the study. Table 4.28 shows the number of times responding beneficiaries have heard of consultations.

Table 4.28 Number of times beneficiaries have heard about consultations

Number of times	Frequency	Percentage
None	9	12.0
One	15	20.0
Two	27	36.0
Three	5	6.7
Four	8	10.7
Five	1	1.3
Other	10	13.3
Total	75	100.0

Table 4.28 shows that 27 responding beneficiaries (36.0 percent) heard about consultations with project beneficiaries to ensure project remained relevant while 9 respondents (12.0 percent) had not heard of any consultation in the last 6 months. This shows that frequent consultation was done with a few of the beneficiaries with majority having heard of 2 or less consultations in the last 6 months. This had a potential of locking out important input by a majority of the beneficiaries thus affecting majority's interest in the project.

4.7.3 Value of project

The study sought to establish the proportion of beneficiaries who felt that the project will add value to their personal lives. Table 4.29 shows response of beneficiaries on the impact of the project to their personal lives.

Table 4.29 Response of beneficiaries on project adding value to their lives

Response	Frequency	Percentage
Yes	73	97.3
No	2	2.7
Total	75	100.0

Table 4.29 shows that 73 responding beneficiaries (97.3 percent) felt that the project would add value to their lives. This shows majority of the beneficiaries were happy with the value the project concepts were adding to their life and they were willing to commit their resources to the project and adopt project concepts at personal level. Table 4.30 shows the response of implementing officers on project value to beneficiaries.

Table 4.30 Response of implementing officers on project adding value to beneficiaries

Response	Frequency	Percentage
Yes	3	100.0
No	0	0.0
Total	3	100.0

Table 4.30 shows that 3 implementing officers (100 percent) felt that the project would add value to the beneficiaries lives.

4.7.4 Project monitoring

To establish the frequency of official project monitoring, the implementing officers were asked how often they presented project progress reports. Table 4.31 shows the frequency of project monitoring

Table 4.31 Frequency of project monitoring

Response	Frequency	Percentage
Daily	0	0.0
Weekly	0	0.0
Monthly	3	100.0
Occasionally	0	0.0
Yearly	0	0.0
Never	0	0.0
Total	3	100.0

Table 4.31 shows that 100.0 percent of the implementing officers said that project monitoring and progress reports were done on monthly basis. This is an indication that efforts were made to ensure project plans were implemented as planned by monitoring implementation of scheduled plans.

4.8 Spearman Coefficient of Correlation

To compute the correlation between the study variables and their findings the researcher used Spearman Coefficient of Correlation at 95 percent confidence interval. From the findings, it was clear that there was a positive correlation between Community participation and sustainability of NGO funded community projects as shown by a correlation figure of 0.578. Capacity building, use of local resources and practice of monitoring and evaluation all showed positive correlation with sustainability of NGO funded community projects with correlation figures of 0.577, 0.777 and 0.378 respectively. Positive relationship indicates that there is a correlation between the factors and suitability of NGO funded community projects. The significant values for the relationship between community participation, capacity building, use of local resources and practice of monitoring and evaluation with sustainability were 0.134, 0.134, 0.023 and 0.356 respectively. Thus at 5% confidence level and at p-value ($P < 0.05$), only use of local resources was significant. Therefore, it is interpreted that with, with the use of locally available resources, sustainability will be achieved otherwise no sustainability can be attained.

Table4. 32 Coefficient of Correlation

		Sustainability	Community participation	Capacity building	Local resources	Monitoring and evaluation
Sustainability	Spearman Correlation Sig. (2-tailed)	1.000				
Community participation	Spearman Correlation Sig. (2-tailed)	0.578	1.000			
Capacity building	Spearman Correlation Sig. (2-tailed)	0.577	0.333	1.000		
Local resources	Spearman Correlation Sig. (2-tailed)	0.134	0.420		1.000	
Monitoring and evaluation	Spearman Correlation Sig. (2-tailed)	0.777*	0.207	0.690	0.632	1.000
	Spearman Correlation Sig. (2-tailed)	0.023	0.623	0.058	0.092	
	Spearman Correlation Sig. (2-tailed)	0.378	0.218	0.218	0.632	1.000
	Spearman Correlation Sig. (2-tailed)	0.356	0.604	0.604	0.092	

4.9 Regression Model

The researcher conducted a multiple regression analysis so as to determine the relationship between Sustainability and the four variables. As per the SPSS generated table 4.33, the equation ($Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$) becomes:

$$Y = 3.657 + 0.568X_1 + 0.988X_2 + 1.654X_3 + 0.444X_4 + \varepsilon$$

Where Y is the dependent variable (sustainability of NGO funded projects), X_1 is the community participation variable, X_2 is capacity building variable, X_3 is use of focal resources, X_4 is monitoring and evaluation while ε is the error term.

Table 4.33 Coefficient of Regression

Model		Un- standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.657	1.033			
	Community participation	X_1 0.568	0.097	0.145	0.970	0.013
	Capacity building	X_2 0.988	0.139	0.085	0.687	0.005
	Local resources	X_3 1.654	0.107	0.159	0.787	0.003
	Monitoring and evaluation	X_4 0.444	0.069	0.210	0.349	0.012

According to the regression equation established, taking all independent variables to be at zero, (community participation, local resources, capacity building, monitoring and evaluation) sustainability will be at a constant which equals 3.657. The data findings analyzed also show that a unit change in community participation results in 0.568 unit increase in project sustainability, a unit change in capacity building results to 0.988 increase in project sustainability, a unit change in use of local resources leads to 1.654 unit increase in project sustainability while a unit change in practice of monitoring and evaluation leads to 0.444 increase in project sustainability. This infers that use of local resources contributes more to project sustainability with practice of monitoring and evaluation contributing the least.

CHAPTER FIVE
SUMMARY OF FINDINGS, DISCUSSION, CONCLUSION AND
RECOMMENDATIONS

5.1 Introduction

This chapter is a documentation of the study summary of findings, discussion of findings, conclusions derived from the findings and recommendations for action and further research.

5.2 Summary of Findings

This study focused on factors influencing the sustainability of NGO funded community projects in Kenya with specific focus on Action Aid funded project implemented in Makima Location, Embu County. The objectives that guided this study were: To establish the influence of community participation in different stages of the project cycle on sustainability of NGO funded projects, to determine the influence of building the capacity of benefiting community on sustainability of NGO funded projects, to establish the extent to which utilization of locally available resources in project implementation influence of sustainability of NGO funded projects and to determine the influence of practicing M&E during the project cycle on sustainability of NGO funded projects.

5.2.1 Community participation

It can be noted that the benefiting community was well involved in key stages of the project cycle. The beneficiaries were involved in project identification in groups with each group forming a Farmers Field School. 93.3 percent of the respondents said that their voice was heard in the group and their opinion was adopted in one way or the other. At the same time, 96.0 percent of the beneficiaries said that they were involved in planning the design of the project and deciding what they will focus on. The beneficiaries were involved in identifying the project sites, planning the meeting dates, planning the activities and planning on the follow ups. All the beneficiaries (100 percent) cited that they were actively involved in project implementation either working in the group farm or in contributing necessary resources. This level of beneficiary participation in implementation can be attributed to involvement in project identification and the fact that the project is located within the community and is not technically complex.

The findings indicated that community opinion leaders were consulted in identification of the project. To ensure even greater support, these leaders were invited to be part of the FFS that were the key concept used to identify, plan and implement the project. This meant that the leaders consulted with the community in the design of the project and this explains why 100 percent of the respondents noted that community opinion leaders were adequately consulted. From the data analysis, it is evident that community participation has a direct positive influence on project sustainability.

5.2.2 Capacity building

The study indicated that all the 32 FFS were run by local committees with 100.0 percent of the responding beneficiaries as well as 100.0 percent of the implementing officers noting that each FFS is managed by a local committee. These committees were actively involved in planning of group activities, coordination and overall oversight of project implementation. The committee members did the ground work and they were trained by the implementing officers and they were charged with the responsibility of passing on this knowledge to the other beneficiaries.

Project beneficiaries were trained on various topics with the purpose of ensuring project benefits were realized long after the project was concluded. 100.0 percent of the responding beneficiaries said that they had attended trainings that in their own opinion would help them replicate the same project ideas in their own farms and lives with others citing the trainings would ensure the FFS outlive the project. Among the topics trained on included group dynamics, conflict resolution, financial management and value addition of farm produce.

Team work is important in ensuring sustainability of such a project. 100.0 percent of the responding beneficiaries felt that the beneficiaries worked together as a team and as such ensuring all members were actively involved in project implementation. Beneficiaries were also given training that was designed to help improve personal contribution to the project and help duplicate the same ideas in personal life and private farms. 100.0 percent of the responding beneficiaries said they had attended trainings channeled towards improving their personal contribution to the project.

To ensure that the community was empowered, the project activities include capacity building of the beneficiaries. A range of topics have been covered with a majority 69.3 percent mentioning value addition of products produced in the project farms. 48.0 percent said they have been trained on group dynamics with the intention of keeping the FFS united while 32.0 percent said they have been trained in animal feed preservation. Makima Location being a semi arid area characterized by short rain spells followed by dry spells, there is extensive growth of green vegetation followed by lengthy shortages. Beneficiaries were trained on preservation of this fodder which was meant to develop a way of supplying the community with animal feeds during dry spells. The beneficiaries were also trained on conflict management, food preservation, leadership, manure production, resource mobilization, team work as well as sales and marketing. Evidently, building the capacity of the beneficiaries has a direct positive influence on NGO funded community projects as demonstrated by Spearman correlation figure of 0.577.

5.2.3 Locally available resources

The availability of project resources has positive influence on sustainability of NGO funded community projects. This is made clear by a Spearman correlation figure of 0.777. Among the key resources that this project relied on were animal feeds which was mentioned by 16.0 percent of the responding beneficiaries, animal medicine mentioned by 22.7 percent, chicken wire mentioned by 8.0 percent, dam liners mentioned by 6.7 percent, diesel mentioned by 13.3 percent, inorganic fertilizer mentioned by 22.7 percent, fodder mentioned by 72.0 percent, iron sheets mentioned by 6.7 percent, manure mentioned by 57.3 percent, packaging materials mentioned by 25.3 percent, pesticides mentioned by 36.0 percent, seeds mentioned by 62.7 percent, sisal plants mentioned by 2.6 percent and water mentioned by 36.0 percent. This shows a diversity of raw materials both available naturally in the community and available commercially.

The results indicate that majority of the farmers felt that the raw materials keys to the success of the project were free. 60.0 percent of the responding beneficiaries were of the opinion that the raw materials were available in the village at no monetary cost while 40.0 percent were of the opinion that the key raw materials needed to be bought. The tapping of these resources is also important and the capacity of the beneficiaries should be enhanced to ensure they can easily tap

such raw materials without external help. 70.7 percent of the responding beneficiaries said that the community could tap key project raw materials without external help. Some respondents felt that even though some resources such as water are free, the financial cost and the technical knowhow available in the community was not adequate to tap this water and supply it to the farms for irrigation.

The raw materials also need to be in constant supply and available when they are needed. 34.7 percent of the responding beneficiaries were of the opinion that the raw materials key to this project were scarce, 12.0 percent felt that this raw materials were seasonal while 53.3 present were of the opinion that the raw materials were in constant supply. 100.0 percent of the implementing officers felt that the raw materials key to the success of this project were in constant supply in the target community. 61.3 percent of the responding beneficiaries felt that the community could tap the resources available resources that the project heavily relies on without external help.

5.2.4 Project monitoring and evaluation

Practice of monitoring and evaluation has a positive influence on sustainability of NGO funded community projects. Data analysis indicated Spearman coefficient figure of 0.378 meaning monitoring and evaluation had the least influence on project sustainability out of the four factors studies. The study indicated that the beneficiaries were continually consulted to ensure the project remained relevant to their needs. 88.0 percent of the responding beneficiaries noted that adequate consultation was done during project implementation. During this consultation the opinion of the beneficiaries was sought on problem facing the project and most effective ways of solving the underlying causes of the problems. 100.0 percent of the implementing officers felt that the beneficiaries were adequately consulted in an effort to ensure the project remained relevant.

The frequency of consultation with the beneficiaries is important. While 12.0 percent of the respondents said they did not hear of any consultation on the progress and relevance of the project in the last 6 months, 20.0 percent said that they heard of one such consultation, 36.0 said they heard of 2 such consultations, 6.7 percent heard of 3 such consultations, 10.7 percent heard

of 4 such consultation, 1.3 percent heard of five such consultations with 13.3 percent said they heard of more than five consultations in the last 6 months. This shows that consultations were frequently done. 97.3 percent of the responding beneficiaries said that the project would add value to their lives. This means that to them the project was still relevant to their needs. 100.0 percent of implementing officers noted that monitoring of the project and comprehensive progress reports were done on monthly basis and this ensured activities were kept on schedule.

5.3 Discussion of finding

This section gives a detailed discussion of the findings from the study.

5.3.1 Community participation

Griffith et al. (2008) noted that the concerns and needs of the key stakeholders have to influence project conception. This can be achieved through consultation and involvement of the stakeholders in project identification. With 93.3 percent of the beneficiaries noting that they were involved in project identification, this was effectively achieved. The concept of forming groups and letting these groups decide what project activities to adopt was effective in engaging the beneficiaries in project identification.

According to Lewis (2004) all facets at play in a project including the beneficiaries, implementing organization, project objectives and means of distributing project benefits play key role in ensuring project sustainability. Khwaja (2003) emphasizes that how all these facets are intermixed to acquire desired results depends heavily on project planning and stakeholders involvement in the process. 96.0 percent of the beneficiaries said that they were actively involved in the planning of the project in their groups. This shows the effectiveness of the group concept in achieving beneficiary involvement. The implementing officers noted that the beneficiaries were actively involved in selecting the main activities and the best ways to manage the groups. The study agrees with Khwaja (2003) that the planning stage is key in ensuring project sustainability by creating a platform through which various facets of the project are synchronized to achieve a common goal. The study also agrees with Griffith et al. (2008) who noted that projects should be in response to gaps that exist in the community and the best way to

identify and respond to this gaps is through involvement of the beneficiaries in project conception.

Bagheri and Hjorth (2007) noted that implementation phase is key to sustainability since plans are harder to implement though they look easier on paper. The active involvement of the beneficiaries develops ownership and also helps build the capacity of the beneficiaries (Temali, 2012). With all the responding beneficiaries saying that they were actively involved in project implementation, beneficiary involvement in project implementation has been effectively achieved. Cleaver (1999), notes that community opinion leaders have the ability to rally the community behind an idea or against an idea. Seeking the support of these community opinion leaders is important in achieving support for the project ideas. These leaders have values, practices and cultures to protect and if they feel they are being challenged they will rally against project ideas (Mulwa, 2008). 100.0 percent of the respondents noted that community opinion leaders were involved in project identification, planning and even implementation with some being incorporated into the groups. The study found that it is paramount to actively engage community opinion leaders in project implementation so as to avoid influential people turning the attention and the support of the community towards the project. At the same time, this keeps the project in line with community values and believes thus avoiding conflicts that will hinder the community adopting project concepts and eventual sustainability. This agrees with Cleaver (1999) and Mulwa (2008) who noted that community opinion leaders can influence acceptability of a project and that the leaders have some interests to protect respectively.

5.3.2 Capacity building

Building the capacity of a community helps the community take over development projects successfully and helps the community members work together to solve common problems (Temali, 2012). Capacity building should help develop knowledge on resources utilization and identification of opportunities amongst the community members (UNDP, 1997). Capacity building in any community should also aim at developing leaders who can take responsibility within the community. 100.0 percent of the responding beneficiaries noted that there were committees in charge of the project with all the respondents having the opinion that the committees were actively involved in project management. This shows that there are leaders who

have been developed to manage the community affairs in the absence of the implementing organization. 100.0 percent of the respondents said that the beneficiaries were trained on skills and knowledge needed to keep reaping benefits from the project.

The beneficiaries were trained on various topics that were designed to help the community members adopt the things learnt in their own farms. These trainings were also meant to keep the FFSs active. 22.7 percent of the responding beneficiaries said that they had attended training on doing agriculture as a business, 42.7 percent said that they had attended training on animal feed preservation, 62.7 percent had attended training on financial management, 69.3 percent had attended training on value addition while only 12.0 percent attended training on leadership. Makima Location being a semi arid area characterized by short rains during which green vegetation grows significantly well followed by dry spells, the skills on preservation of food and fodder for animals is well appreciated by the beneficiaries. The training on leadership has been targeted on a small number of the beneficiaries showing it could be preserved for the group leaders. A wider target should be considered so as to develop an environment where the leaders can exercise their mandate easily and with support. The study found that important resources such as pastures are seasonal and the community can only reap maximum benefits if they learn to preserve and make maximum use of the scarce resources. Without the skills to preserve these resources, all benefits gained through the project would be watered down thus challenging sustainability of the project. The study thus agrees with UNDP (1997) who noted that project sustainability is heavily dependent of the capacity of the community to continue making use of available resources to maintain project benefits.

5.3.3 Use of local raw materials and resources

Communities cannot survive in areas with no resources and the fact that a community is n existence means that there are resources that support human life (McConnell, 2002). According to Ebner and Baumgartner (2010), for sustainability in community development to occur, any efforts for development must be based on utilization of locally available resources. This project relied on a wide range of resources. 16.0 percent said that animal feeds were key to the success of the project, 22.7 mentioned animal medicine, 8.0 percent mentioned chicken wire, 13.3 percent mentioned dam liners, 13.3 percent mentioned diesel fuel, 72.0 percent mentioned

fodder, 6.7 percent mentioned iron sheets and 57.3 percent mentioned manure with 62.7 percent mentioning seeds. 60.0 percent of the responding beneficiaries said that the raw materials are available locally with no need to purchase them commercially. 40.0 percent on the other hand said that these raw materials had to be acquired commercially. This shows diversity as the list of resources needed is lengthy.

For sustainability of project ideas and activities, the benefiting community must be in a position to acquire the raw materials without external help. 70.7 percent of the responding beneficiaries were of the opinion that the community members could afford the raw materials without external help. This shows that a part of respondents who said that these materials could only be acquired commercially felt that the community was in a position to meet the financial implications. 29.3 percent felt that community members' needs external help in order to acquire the resources required. This shows the need to develop more income generation from the project activities. 34.7 percent of the responding beneficiaries felt that the raw materials needed for the project to succeed were scarce, 12.0 percent felt that they were seasonal while 53.3 felt that they were in constant supply. All the implementing officers were of the opinion that the resources are in constant supply. The response from the beneficiaries shows the need to preserve resources that can be preserved for future use. The study found that some community members felt that there is need to maintain external support for resources that are not available locally and there is need to acquire them commercially. The study thus agrees with Ebner and Baumgartner (2010), who noted that community project sustainability can only be achieved if a project relies on locally available raw materials. In case where there is need to acquire raw materials commercially, cheaper or locally available alternatives should be sought.

5.3.4 Project monitoring and evaluation

Project monitoring helps ensure timely implementation of all activities planned (O'Sullivan, 2004). According to James (2000), project evaluation helps project stakeholders to look at the relevance of a project, suitability in the environment and the impacts of a project and as such helping the project gain more prospects for sustainability. It is important for the implementing organization to keep seeking the opinion of the beneficiaries to ensure a project remains focused on community needs and to ensure capacity building efforts are bearing fruits. 88.0 percent of

the responding beneficiaries said that the beneficiaries were consulted adequately on matters affecting the project. 100.0 percent of the implementing officers said that the beneficiaries were adequately consulted to ensure the project remained relevant to their needs and to ensure sustainability.

20.0 percent of the responding beneficiaries said that they heard of one consultation with beneficiaries on project matters in the last 6 months, 36.0 percent said they heard of two consultations, 6.7 percent had heard of three consultations, 10.7 had heard of four consultations, 1.3 had heard of five consultations with 13.3 percent noting that they had heard of more than five consultations. This shows that adequate consultation was done with the beneficiaries. 97.3 percent of the responding beneficiaries noted that the project added value to their lives. The 2.7 percent who said that the project did not add value to their lives could be attributed to those who felt that their opinions were not considered in project identification and those who feel that the project activities cannot be sustained without external assistance. Project monitoring was done on monthly basis as 100.0 percent of the implementing officers noted. These ensured monthly plans were evaluated internally on monthly basis.

The study agrees with James (2000) who notes that monitoring and evaluation is important in ensuring sustainability of community development projects. Monitoring and evaluation provides a mechanism through which the implementing organization and beneficiaries can analyze the project progress and impacts and determine the current relevance of a project to the community needs. This will also provide a platform on which the beneficiaries can give their opinion and share their experience thus helping record best practices, lessons learned and also drive recommendations for alteration of the project plans.

5.4 Conclusions

With a correlation coefficient of 0.578, community participation at the various stages of project life cycle has a strong positive influence on project sustainability. Beneficiaries' participation should be incorporated at all key project stages including project identification, planning, implementation and in monitoring and evaluation. The involvement of community opinion leaders in project identification is important in the success and sustainability of community

development projects. This project adequately involved both the beneficiaries and community opinion leaders. The FFS concept that is participatory in nature gave a platform where beneficiaries could participate in key decisions and create ownership of the project. The community was involved in identifying their needs, prioritizing them and identifying solutions to these problems. There are beneficiaries who felt strongly that their opinions were ignored and this can be a challenge to a project under different circumstances.

The study concludes that capacity building is vital to project sustainability having showed a correlation coefficient of 0.577 which represents a strong correlation with project sustainability. Capacity building enables the beneficiaries to adopt the activities of a development project at personal level. Capacity building also helps check development of dependency which makes communities helpless without external help. By beneficiaries selecting committees to oversee the wellbeing of the project, leadership and management skills are developed among community members reducing dependency on the leadership offered by implementing organizations. By building the capacity of the benefiting community, the community is empowered to develop local solutions to local problems. Training the communities on team work and knowledge sharing is important to sustainability of community development projects. This training must include skills on how to tap available resources and make maximum use of available raw materials. The capacity of the beneficiaries was adequately done but more community members should be targeted for the leadership trainings. The concept of FFSs is based on a concept where the farmer is an expert not a student of project implementing officers with the farm being used as a class.

Use of locally available resources showed the strongest influence to project sustainability with a correlation coefficient of 0.777 which reflects a strong correlation with project sustainability. The resources used in a project should be adequately available in the community, they should be constantly available and the capacity on the beneficiaries should be developed to ensure they can tap the resources effectively and efficiently. In cases where the raw materials have to be acquired commercially, community members can make use of local resources to generate the finances required. At the same time, cheaper and local alternatives can be devised. Where raw materials are seasonal, technology available to the benefiting community can be used to preserve the

materials for later use. This project used relied on a mixture of locally available raw materials and materials available locally. More efforts should be done to ensure commercial viability of the activities adopted by the various FFS to ease their burden in acquiring some materials commercially. At the same time, alternative such as thatching instead of using iron sheets can be adopted where necessary.

Finally, the study concludes that with a correlation coefficient of 0.378, monitoring and evaluation also influences project sustainability but to a moderate level. Good plans if not implemented count for nothing. Monitoring and evaluation help the stakeholders ensure plans are implemented and also ensure project activities and plans are changes as appropriate when needed to adopt to the prevailing conditions. The methodology used in monitoring and evaluation should be participatory taking in to consideration opinions and input of all key stakeholders. The beneficiaries were consulted adequately in project monitoring and evaluation with their suggestions being incorporated in project management.

5.5 Recommendations

1. The study recommends that since beneficiaries involvement is key so sustainability, project designers should ensure there is a check list to check and ensure beneficiaries are involved adequately at all project stages. This checklist should ensure that a significant number of the beneficiaries especially community opinion leaders are satisfied with the project choices made. This will avoid sabotage and slow diversion on beneficiaries' interest in a project.
2. The study further recommends that there should be an analysis of capacity needed for the community to run a project without external help and as such sustain project benefits. This should be the guiding factor that will ensure that the right training is offered. The beneficiaries should appoint a local project committee that will be in charge of the project and ensure such a project continues to be beneficial to the community.
3. Training on value addition is vital to ensure that the community reaps maximum benefits from project activities and personal lives. There should be direct efforts to ensure that projects bring

economic value to the community as this will ease the burden of maintaining the project once donor help is withdrawn.

4. The study also recommends that projects should as much as possible look for local alternatives to commercially acquired raw materials. This can include grass thatching for domestic animal sheds in place of iron sheets. At the same time, local resources that have economic value can be made part of the resources that will supplement beneficiaries' financial injection in to the project. The capacity of the community to tap these raw materials should be developed with mechanization where possible to ensure that this can be done at large scale. This mechanization can be simple and locally made to tap resources such as sisal which is readily available and can do well if planted commercially.

5. Project implementing organizations should adopt community based monitoring and evaluation. This will enable them focus on tracking their own development thus ensuring they develop in an all inclusive manner. This will not aim at making a statement about the impact of a certain community development project but rather it will be a tool for building communities' capacity to direct their own overall development.

6. Water projects should rely on more sustainable methods and strategies. Water pans and earth dams need constant maintenance and de-silting which is unaffordable to many rural communities. Sinking boreholes and use of pipes to tap river water which can then be supplied by gravity is a more sustainable solution to water shortage. At the same time, water generators have significant recurrent costs attached to them and they cannot be a foundation for sustainable water supply.

7. Finally, the study recommends that the project document should be clear on the project benefits that the implementing organization will seek to sustain and the strategies to be used to ensure this is achieved.

5.6 Suggested areas for further research

1. The study report recommends that much research be done to establish factors leading to community dependency on donations. It would be important to look at the role that NGOs play in creating this dependency and how this interacts with other factors to create donor dependency in communities.
2. Further research should be done to establish how social economic factors influence community project sustainability.
3. The researcher proposes that more studies be done to determine the impact that partnership between the government and NGOs has on sustainability of community projects.
4. The study also suggests more studies be done to establish how locking out of the youth in most NGO funded community projects affect project sustainability.

REFERENCES

- Albert, H. (2004). *Handbook of Project Management Procedures*. Washington, D.C: TTL Publishing, Ltd.
- Al-Khaldi, M. (2010). *Sustainability of externally donated projects*. Retrieved from <http://www.slideshare.net/mohammedalkhaldi735/sustainability-of-externally-donated-projects-mohammed-alkhaldi-2010>.
- Anesi, V. (2009). Moral hazard and free riding in collective action. *Social Choice and Welfare*, 32 (2) 199-200.
- Baccaro, L. (2001). Civil society, NGOs, and decent work policies: Sorting out the issues. *The Discussion Paper Series presents the preliminary results of research undertaken by the ILS in Geneva*. Retrieved from http://www.ilo.org/wcmsp5/groups/public/---dgreports/--inst/documents/publication/wcms_079070.pdf.
- Bagheri, A., & Hjorth, P. (2007). Planning for sustainable development: a paradigm shift towards a process-based approach. *Sustainable Development*, 15, 83-96.
- Brubacher, B. (2004). NGOs and the Challenge of Maintaining Humanitarian Principles in Complex Humanitarian Emergencies Retrieved from <http://www.intrac.org/data/files/resources/33/NGOs-and-the-Challenge-of-Maintaining-Humanitarian-Principles.pdf>.
- Capobian, L. (2004). *Communication for social change. A powerful tool for community safety and crime prevention*. Retrieved from www.crimeprevention.intl.org
- Chandra, P. (2008). *Projects, planning, Analysis, selection, financing, implementation and review*. New Delhi: Tata McGraw Hill.
- Cleaver, F. (1999). Paradoxes of participation: Questioning participatory approaches to development. *Journal of International Development*, 11, 597-611.
- Cooper, D. & Schindler, P. (2010) *Business Research Methods* (11th ed.) New York: McGraw.
- Deland, D. (2009). *Sustainability through project management and net impact. PMI Global Congress proceedings*. Available from <http://marketplace.pmi.org/Pages/ProductDetail.aspx?GMProduct=00101225200>.
- Desai, V. (2005). NGOs, gender mainstreaming, and urban poor communities in Mumbai. *Gender and Development*, 13(2): 90-98.
- Dill, B. (2010). Community Based Organization (CBO) and norms of participation in Tanzania:

- Working against the grain. *African Studies Review*, 53 2 23-45.
- Ebner, D., & Baumgartner, R. (2010). Corporate sustainability strategies: Sustainability profiles and maturity levels. *Sustainable Development*, 18, 76-89.
- Edwards, M. & Hulme, D. (1992). Making a difference: NGOs and development in a changing world. Eastbourne, UK: Earthscan Publications Limited.
- Fonchingong, C.C., & Fonjong L.N. (2002). The Concept of self-reliance in community development initiatives in the Cameroon grass fields. *Geo Journal*, 57: 83-94.
- Framework. *PM World Journal*, 1 (2), 1-12.
- Gareis, R., Huemann, M., & Weninger, C. (2010). *The consideration of sustainability principles in the project assignment process: An analysis of project management approaches*. New York: McGraw-Hill, 1-7.
- GlobalGiving, (2013). Empower 250 women in extreme poverty in Kenya Retrieved from <http://www.globalgiving.org/projects/empower-poor-women-in-kenya/>.
- Green Jr., Sandy Edward, Li, Yuan and Nohria, Nitin (2009). Suspending in self-spun webs of significance: A rhetorical model of institutionalization and institutionally embedded agency. *Academy of Management Journal*, 52 (1), p11-36.
- Griffiths, J., Maggs, H. & Emma, G. (2008). *Stakeholders' involvement*. Dalian: WHO/WEF.
- Guay, T., Doh, J., & Sinclair, G. (2004). Non-Governmental Organizations, shareholder activism, and socially responsible investments: Ethical, strategic, and governance implications. *Journal of Business Ethics*, 52(1), 125-139. Doi.
- Hayward, L.R., & Neuberger, S. (2010). *A New era of sustainability*. Washington, D.C: UN Compact-Accenture. Available from <http://businessinsociety.eu/resources/4111>.
- Heap, S. (1998). NGOs and the private sector: Potential for partnerships? *INTRAC Occasional Papers Series Number 27*. Oxford: Intrac Publications.
- Hedayat, N.A. & Ma'rof, R.B. (2010). The Role on NGOs in Promoting Empowerment for Sustainable Community Development. *J Hum Ecol*, 30 (2):85-92.
- Hibbard, M., & Tang, C. C. (2004). Sustainable Community development: A social approach from Vietnam. *Community Development Society*, 35(2): 87-105.
- Hodgkin, J. & WASH Project staff (1994). *The Sustainability of donor assisted rural water supply projects*. Washington, DC: U.S. Agency for International Development.
- International Institute for Sustainable Development. (2013). *The Rise and Role of NGOs in*

- Sustainable Development*. Retrieved from <http://www.iisd.org/business/ngo/roles.aspx>.
- James P. (2000). *The project manager's desk reference: A comprehensive guide to project planning, scheduling, evaluation, and systems*. New York: McGraw-Hill.
- Junbeum, K., Allenby, B. & Ming, X. (2007) Sustainability Network Theory and Industrial Systems. Ann Arbor: University of Michigan, Center for Sustainable Engineering.
- Karabulut, A. & Demir, O. (2006). The rising trend for NGO and the private sector cooperation: Corporate social responsibility. *Journal of Turkish Weekly*.
- Keeyes, L. (2012). Emerging Sustainable Development Strategy in Projects: A Theoretical Framework. *PM World Journal*, 1 (2), 1-12.
- Khwaja, A.I. (2003). "Can good projects succeed in bad communities? The determinants of collective success in maintaining local public goods." KSG Working Paper RWP01-043.
- Kombo K & Tromp L. (2006). *Proposal and Thesis Writing, an introduction*. Nairobi: Pauline Publications.
- Kong, N., Salzmann, O., Steger, U., & Ionescu-Somers, A. (2002). Moving Business/Industry Towards Sustainable Consumption:: The Role of NGOs. *European Management Journal*, 20(2), 109-127.
- Kumar, R. (2009). *Research methodology: A step – by step Guide to Beginners*. London: SAGE Publications.
- Langran, L.V. (2002). *Empowerment and the Limits of Change: NGOs and Health Decentralization in the Philippine*, Department of Political Science. Ph.D. Thesis, Toronto: University of Toronto.
- Lewis, J. (2004). *Project Planning, Schedule and Control*. (3rd ed). Prentice Hall, Great Britain: Pearson Education.
- Lipman, A. (2004). Community Participation, Hope and Reality. Transformation: Critical Perspectives on Southern Africa. Washington, D.C: National Center for Public Policy and Higher Education. Pp. 46-70.
- Mazibuko, J.B., (2007). *Enhancing project sustainability beyond donor support. An analysis of grassroots democratization as a possible alternative*. Johannesburg, University of South Africa.
- McConnell, C. (2002). Community Learning and Development: The Making of an Empowering Profession. Glasgow: Community Learning Scotland, [ISBN 0 947919 75 9](#).
- Mekonnen, Z. (2007). *Roles of NGOs in Community Empowerment for Natural Resource*

- Conservation: A case study of two NGOs in North Wollo, Ethiopia*: Kimmage Development Studies Centre.
- Miller, G. & S. Spoolman (2011). *Living in the Environment: Principles, Connections, and Solutions* (17th ed.). Belmont: Brooks-Cole. ISBN 0-538-73534-1.
- Mohan, G.B. (2001) participatory development. In: Desai, Vandana and potter, Rob (eds) *The Arnold companion to development studies*. London, UK: Hodder Publishers.
- Mugenda, O.M. & Mugenda, A.G. (2003). *Research Methods Qualitative and Quantitative Approaches*. Nairobi: ACTS Press.
- Mulwa, F. (2008). *Demystifying participatory community development*. Nairobi: Paulines Publications Africa.
- Muriithi, N. & Crawford, L. (2003). Approaches to project management in Africa: Implications for international development projects. *International journal of project management* 21: 180-200.
- Nikkhah, H., & Redzuan, M. (2010). The role of NGOs in promoting empowerment for sustainable community development. *Journal of Human Ecology*, 30(2), 85-92
- O'Sullivan, R. G. (2004). *Practicing Evaluation: A Collaborative Approach*. London: Sage Publications.
- Panda, B. (2007). Top down or bottom up? A Study of grassroots NGOs' approach. *Journal of Health Management*, 9(257): 257–273.
- Punch, K. F. (2003). *Survey Research: The Basics*. London: Sage Publications Ltd.
- Rossi, P., Lipsey, M. & Freeman, H. (2004). *Evaluation: A Systematic Approach* (7th ed.) London: Sage Publication.
- Schneiberg, M. & Soule, S.A. (2005). Institutionalization as a contested, multilevel process. In Davis, Gerald F., McAdam, Doug, Scott, W. Richard and Zald, Mayer N. (Eds.). *Social movements and organization theory* (p122-60). Melbourne: Cambridge University Press.
- Scott, W. Richard (1991). Unpacking institutional arguments. In Powell, Walter W. and DiMaggio, Paul J. (Eds.) (1991), *The new institutionalism in organizational analysis* (164-182). Chicago: The University of Chicago Press.
- Silvius, A., & Schipper, R. (2010). Sustainability in Project Management: A maturity model for integrating sustainability in projects and project management. *24th IPMA World Congress*.2(2). 1-10.

- Sneddon, C.S. (2000). Sustainability in ecological economics, ecology and livelihoods: A review. *Progress in Human Geography*, 24(4): 521-549.
- Stefanini, A. (1995). Sustainability : the role of NGOs. *World Health Forum*, 16(1), 42-46.
- Tango International. (2009). Sustainability of rural development projects *Best practices and lessons learned by IFAD in Asia* (pp. 65). Retrieved from <http://www.ifad.org/operations/projects/regions/pi/paper/8.pdf>.
- Temali, M. (2012). *The community economic development: strategies and tools to revitalize neighborhood*. Nashville: Fieldstone Alliance.
- UNICEF (2008). *Multiple indicator cluster survey; Monitoring the situation of children and women*. Retrieved from http://www.childinfo.org/files/Mbeere_Report.pdf .
- United Nations (2002). Report of the World Summit on sustainable development, plan of implementation. *A/CONF.199/20* New York: United Nations.
- University of Florida (2013). Determining sample size. Retrieved from <http://edis.ifas.ufl.edu/pd006>.
- USAID (2010). 2009 NGO sustainability index for Sub Saharan Africa (1st. ed). Available from <http://www.icnl.org/research/resources/regional/NGOSIAfrica2009.pdf>.
- Uwhejevwe-Togbolo, S. (2005). The Role of Non Governmental Organizations (NGOs) in Development. Retrieved from <http://www.nigeriavillagesquare.com/articles/samuel-uwhejevwe-togbolo/the-role-of-non-governmental-organizations-ngos-in-development.html>.
- Werker, E., & Ahmed, F. (2008). What do Non-Governmental Organizations do?. *Journal of Economic Perspective*, 22 (2), 73-92.
- WHO / UNICEF (2008). *Joint Monitoring Program for Water Supply and Sanitation report*. Geneva: JMP.
- Wilcox, D. (1994). Guide to effective participation. From <http://www.partnerships.org.uk/guide/index.htm>.
- Young, S.T, & Dhanda, K.K. (2012). Sustainability: Essentials for business. London: SAGE Publications.

APPENDIX 1
LETTER OF TRANSMITTAL OF DATA COLLECTION INSTRUMENTS

Kariuki Johnson Mwangi,
Box 60-10300,
Nairobi.
jmkariuki24@yahoo.com
0724845523

Dear respondent,

I am a student pursuing Masters of Arts Degree in Project Planning and Management at the University of Nairobi. I am conducting an academic research on the Factors Influencing Sustainability of NGO Funded Community Projects in Kenya and this questionnaire is designed to obtain information needed to achieve the objectives of the study.

Kindly note that all the information provided will be used for research purposes only and your identity will be treated as confidential. Answering all the questions faithfully will be highly appreciated.

Yours Faithfully,

Johnson Mwangi Kariuki.

L50/82971/2012

APPENDIX 2
QUESTIONNAIRE FOR PROJECT BENEFICIARIES

Instructions:

Please tick appropriately in the multiples given and fill in the blank spaces provided for the questions requiring elaborate answers. Please answer all the questions objectively and as honestly as possible. For each page, the back side is left blank in case you need more writing space.

Respondent's profile

1. How old are you?	Below 20	<input type="checkbox"/>
	20-29 years	<input type="checkbox"/>
	30-39 years	<input type="checkbox"/>
	40-49 years	<input type="checkbox"/>
	50-59 years	<input type="checkbox"/>
	Above 60 years	<input type="checkbox"/>

2. What is your gender?	Male	<input type="checkbox"/>
	Female	<input type="checkbox"/>

3. What is your marital status?	Single	<input type="checkbox"/>
	Married	<input type="checkbox"/>
	Divorced	<input type="checkbox"/>
	Widowed	<input type="checkbox"/>

4. Level of education attained?	None	<input type="checkbox"/>
	Primary	<input type="checkbox"/>
	Secondary	<input type="checkbox"/>
	Technical or vocational	<input type="checkbox"/>
	University or college	<input type="checkbox"/>

SECTION A: COMMUNITY PARTICIPATION

5. Were you involved in the identification of this project?	Yes	<input type="checkbox"/>
	No	<input type="checkbox"/> If No, skip to 107

6. How were you involved in project identification?

7. Were you involved in the planning of this project?

Yes	<input type="checkbox"/>	If No, skip to 109
No	<input type="checkbox"/>	

8. How were you involved in the planning process?

9. Were you involved in project implementation?

Yes	<input type="checkbox"/>	If No, skip to 211
No	<input type="checkbox"/>	

10. How were you involved in project implementation?

11. Were community opinion leaders involved in project identification?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>

SECTION B: CAPACITY BUILDING

212. Is there a local committee in charge of this project?

Yes	<input type="checkbox"/>	If No, skip to 214
No	<input type="checkbox"/>	

13. What is the role of this committee?

14. Are members of these committees actively involved in management of this project?

Yes	<input type="checkbox"/>	If No, skip to 216
No	<input type="checkbox"/>	

15. How are these committees involved?

16. Are community members given technical training on skills required to maintain this project? Yes
No

17. Does the community work on the project as a team Yes
No

18. Have you attended any training channeled towards improving your contribution to this project? Yes If No, skip to 321
No

19. What was the topic of discussion?

20. How many of such trainings have you attended in the last 12 months? 1
2
3
4
other

SECTION C: LOCAL RESOURCES

21. What raw materials are key to the success of this project?

22. Are all this material free (they are not bought) Yes If Yes, skip to 324
No

23. Can the community afford to purchase adequate materials Yes If No, skip to 214

to sustain the project without assistance from external donors?

No		

24. Are these raw materials in a constant supply?

Scarce	
Seasonal	
In constant supply	

25. Can the community tap these resources with the skills they have without external help?

Yes	
No	

SECTION D: MONITORING AND EVALUATION

26. Is the opinion of the community sought as the project is being implemented to ensure it is still focused on community needs??

Yes		If No, skip to 428
No		

27. How is this done?

28. How many times have you heard of such a consultation in the last 6 months?

1	
2	
3	
4	
5	
other	

29. Do you personally think this project will add value to your life?

Yes	
No	

APPENDIX 3
INTERVIEW SCHEDULE FOR PROJECT IMPLEMENTING OFFICERS

Instructions:

Please answer all the questions objectively and as honestly as possible.

SECTION A: COMMUNITY PARTICIPATION

1. Were the community members involved in project identification?	Yes	<input type="checkbox"/>	If No, skip
	No	<input type="checkbox"/>	to 107

2. How were they involved?

3. Were the community members involved in planning of this project?	Yes	<input type="checkbox"/>	If No, skip to 109
	No	<input type="checkbox"/>	

4. How were they involved in the planning process?

5. Are community members involved in project implementation?	Yes	<input type="checkbox"/>	If No, skip to 211
	No	<input type="checkbox"/>	

6. How are they being involved in project implementation?

7. Were community opinion leaders involved in project identification?	Yes	<input type="checkbox"/>	
	No	<input type="checkbox"/>	

8. In a scale of 1-10 (10 being the highest score), rate the voluntary participation of the beneficiaries to project at personal level.	Score	<input type="text"/>	
---	-------	----------------------	--

SECTION B: CAPACITY BUILDING

9. Is there a local committee in charge of this project?

Yes	<input type="checkbox"/>	If No, skip to 214
No	<input type="checkbox"/>	

10. What is the role of this committee?

11. Are members of these committees actively involved in management of this project?

Yes	<input type="checkbox"/>	If No, skip to 216
No	<input type="checkbox"/>	

12. How are these committees involved?

13. Are community members given technical training on skills required to maintain this project?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>

14. Does the community work on the project as a team

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>

15. Has there been any training channeled towards improving community's contribution to this project?

Yes	<input type="checkbox"/>	If No, skip to 321
No	<input type="checkbox"/>	

16. What was the topic of discussion?

17. How many of such trainings have been held in the last 12 months?

1	<input type="checkbox"/>
2	<input type="checkbox"/>
3	<input type="checkbox"/>
4	<input type="checkbox"/>
other	<input type="checkbox"/>

18. In a scale of 1-10 (10 being the highest score), rate the ability of the project to run project activities without external help

Score	
-------	--

SECTION C: LOCAL RESOURCES

19. What raw materials are key to the success of this project?

20. Are all this material free (they are not bought)

Yes		If Yes, skip to 324
No		

21. Can the community afford to purchase adequate materials to sustain the project without assistance from external donors?

Yes		If No, skip to 214
No		

22. Are these raw materials in a constant supply?

Scarce	
Seasonal	
In constant supply	

23. Can the community tap these resources with the skills they have without external help?

Yes	
No	

24. In a scale of 1-10 (10 being the highest score), rate the ability of the community to acquire the required resources

Score	
-------	--

SECTION D: MONITORING AND EVALUATION

25. Is the opinion of the community sought as the project is being implemented to ensure it is still focused on community needs?

Yes		If No, skip to 428
No		

26. How is this done?

27. How many times have you heard of such a consultation in the last 6 months?

1	<input type="checkbox"/>
2	<input type="checkbox"/>
3	<input type="checkbox"/>
4	<input type="checkbox"/>
5	<input type="checkbox"/>
other	<input type="checkbox"/>

28. Do you personally think this project will add value to this community?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>

29. How often is monitoring done?

Daily	<input type="checkbox"/>
Weekly	<input type="checkbox"/>
Monthly	<input type="checkbox"/>
Occasionally	<input type="checkbox"/>
Yearly	<input type="checkbox"/>
Never	<input type="checkbox"/>

30. Midterm evaluation of this project was done in what month of project implementation?

Was never done	<input type="checkbox"/>
Done in the month of:	<input type="checkbox"/>

31. How often do you do a progress report or get progress report from the project team?

Weekly	<input type="checkbox"/>
Once every 2 weeks	<input type="checkbox"/>
Monthly	<input type="checkbox"/>
Other	<input type="checkbox"/>

32. In a scale of 1-10 (10 being the highest score), rate implementation of the planned activities as stipulated in quarter plans.

Score	<input type="text"/>
-------	----------------------