COMMUNITY PARTICIPATION AND SUSTAINABILITY OF GERMAN INTERNATIONAL COOPERATION PROJECT INTERVENTIONS IN NAPAK DISTRICT, UGANDA

By

BEATRAM OKALANY

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DECLARATION

I, Beatram Okalany, declare that this Dissertation "Community Participation and Sustainability of German International Cooperation Project Interventions in Napak District" is my original work and has never been submitted to any other institute of higher learning for any award or otherwise.

Signature:…… Date:…….

Beatram Okalany

12/MMSPPM/29/020

Uganda Management Institute

APPROVAL

This Dissertation entitled "Community Participation and Sustainability of German International Cooperation Project Interventions in Napak District" was undertaken with our due supervision and has been submitted to Uganda Management institute for examination with our Approval as supervisors.

Signature:……. Date:……

MR. LUGEMOI WILFRED BONGOMIN

Supervisor

Consultant in Project Planning & Management

Signature:……. Date:……

MR. JOHN BOSCO OBORE

Supervisor

DEDICATION

I dedicate this piece of work to my dear wife, Sophie Okalany and to our ever-loving parents and extended relations that we have come to know and appreciate this far.

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List of Acronyms

AED	Academy for Educational Development
CDD	Community Driven Development
FNS	Food and Nutrition Security and Conflict Management Project
GDP	Gross Domestic Product
GIZ	German International Cooperation (former GTZ)
IRC	International Rescue Committee
M&E	Monitoring and Evaluation
NGOs	Non-Governmental Organizations
PLA	Participatory Learning Approaches
PM&E	Participatory Monitoring and Evaluation
PRA	Participatory Rural/Rapid Appraisal
SD	Sustainable Development
SDCs	Settlement Development Committees
UBOS	Uganda Bureau of Standards
UMI	Uganda Management Institute
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Program
UNECA	United Nations Economic Commission for Africa
UNHCR	United Nations High Commissioner for Refugees
USA	United States of America
WCED	World Commission on Environment and Development

ABSTRACT

The study is an examination of the influence of community participation on sustainability of GIZ project interventions in Napak district, part of the Greater Karamoja Sub-Region located in North-Eastern Uganda. The objectives that guided the study specifically sought to investigate the influence of community participation in project design, implementation, as well as in M&E on sustainability of GIZ project interventions that were undertaken in the sub-counties of Irriri, Matany and Lopoko in Napak district. The study used a cross-sectional survey design that applied both quantitative and qualitative approaches targeting a sample size of 217 respondents who were determined using systematic random and purposive random sampling techniques of sampling. Questionnaires, interviews and documentary review research methods were used for data collection and data was then analysed using Pearson's correlation coefficient techniques. Key findings among others included restricted disclosure of M&E findings and reports, which for that matter were found not to inform decisions at grass root level, community participation in allocation of organizational resources was limited to a decision of a few, coordination and synergy building with other stakeholders was also not fully explored as areas of duplication of interventions and roles were evident, and the coordinative role and mechanisms of government were not often fully exploited and, as a result parallel competing structures were formed that undermined existing government structures at all levels of government in the district. The findings of the study revealed that there was a positive relationship between community participation in project design; implementation; M&E and sustainability of GIZ project interventions in Napak district.

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

This chapter presents the background of study, the problem statement, purpose, specific objectives, research questions and hypotheses, the significance, scope and conceptualization of the research and operational definitions of key terms and concepts therein. This study examined the relationship between community participation and sustainability of Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) Food and Nutrition Security (FNS) project interventions in Napak district, found in Karamoja sub-region of Uganda. The study specifically examined the influence of the project's community participation strategies in project design, project implementation, as well as community participation in monitoring and evaluation (M&E) on sustainability of project interventions.

1.2 Background to the study

1.2.1 Historical background

The term 'sustainability' was first used in 1712 by a German forester, Hans Carls von Carlowitz in his text Sylvicultura Oeconomica (Scoones, 2007) as cited in (Komalawati, 2008). Von Carlowitz coined the word sustainability to refer to the way forest resources should be managed in the long-term basis. However, Garcia and Staples (2000) point out that it was not until 1960s and 1970s that the word became widely recognized through work of the Club of Rome, which introduced two related concepts of sustainable development and intergenerational equity.

By the end of 1980s Sustainable Development (SD) as a concept, was further developed by the World Commission on Environment and Development (WCED) under Gro Harlem Brundtland (Elliot 2006). In 1987, the commission published their report entitled, *'Our Common Future'*, better known as ''Brundtland Report'' that defined SD as ''development that meets needs of the current generation without compromising ability of future generations to meet their own needs and aspirations'' (WCED, 1987). This report initiated a lot of interest and debate about and experimentation with sustainable development, which was renewed after publication and subsequent adoption of Agenda 21, the Rio Declaration on Environment and Development, and the Statement of principles for Sustainable Management of Forests by more than 178 governments at the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro, Brazil, in 1992 (Kemp and Parto, 2005). According to (Adams, 1990) as in Elliot (2006), by this time, 'sustainable development' had gained a currency well beyond the confines of global environmental organizations.

The global challenge of sustainability is however now understood according to (Potter et al., 2004) as in Elliot (2006), to lie in the complex interdependencies of environmental, social and economic development. Reinhard Steurer et al., (2005) seem to concur with this preposition by arguing that sustainable development today is a well-known societal guiding model that asks not only for integration of economic, and social issues, but also environmental issues in all societal spheres and levels in both the short and long-term. This idea forms basis of preferred policy legislation today – legislation that is mutually beneficial to humanity and the environment. This need for a new development paradigm was widely recognized by the mid 1980s (Estes, 1993) after failure of earlier 1970s and 1980s basic needs and structural adjustment approaches by the United Nations to halt the cycle of poverty that existed in the world's poorest and slowest developing countries (Harris, 2000).

It is estimated globally that about 70% of the poor reside in rural areas (Asia Development Bank, 2006) and that the two most affected regions being Southern Asia and Sub-Saharan Africa (Mack et al., 2009). Sub-Saharan Africa has the largest proportion of the world's people living on less than $1 a day, as many African economies exhibited slowest growth in the 1990s (UNECA, 2009). Butler and Mansur (2007) point out that agriculture remains the main source of livelihood for the poor, accounting for about 20% of Sub-Saharan GDP. While, agriculture is the dominant export for East Africa (47% of exports), comparable figure for Sub-Saharan Africa as a whole is about 16% (Dixon et al., 2001), as malnutrition, disease, environmental degradation, natural resource depletion, poor and inadequate infrastructure, unemployment and weak institutional capacities continue to pose serious development challenges for Africa today (UNECA, 2009).

Like the rest of Sub-Saharan Africa, Uganda relies heavily on natural resources with agriculture accounting for 22.5% of GDP, 48% of exports and 68% of household livelihoods. Natural resource degradation is also exacerbated by climate change and its related impacts as the population continues to grow at a steady rate of 3.2%. Poverty is widespread with close to 25% of Ugandans living below the national poverty line, with rural poverty currently at about 34% (UBOS, 2010). The youthful population structure with a significantly high dependent percentage, coupled with high unemployment rate continues to pose a serious challenge to sustainable development today.

Regional disparities in achieving Millennium Development Goals (MDGs) are further amplified by prevailing security and humanitarian situation in Northern Uganda and Karamoja sub-regions (UNDP, 2007- 2010). Historically, Uganda's most marginalized and under-developed region; Karamoja depicts the worst performance on standard humanitarian and development

indicators in the country (UNDP, 2008). Poverty levels are highest at 82% compared to the national average of 31%, while literacy rates are at 11% against 67% national average (UNDP, 2008). The GIZ Mission Assessment Report (2009) highlighted Karamoja as a region with a longstanding dependency on external aid, and that is chronically insecure. Powell (2010) further argues that, even if external assistance to the sub-region especially food aid has existed for decades; it is often incongruent with the livelihoods context of inhabitants in the Sub-region. Therefore, the question of what interventions works for the targeted population links to the question of how targeted communities can better participate in setting up of development interventions. This concept of community participation originates from the gradual movement of development practice towards a more participatory approach that embraces sustainable development through community ownership of the development process (Chambers, 1994).

Community participation aims at inculcating a sense of self-reliance and ownership to create equity in resource distribution according to Awortwi (1999). It is because of this argument that today community participation is mainstreamed in most development projects, and can be seen as a mainstream management theory (Berner and Phillips, 2005). The implication is that for any rural development initiative to thrive, citizen participation is required to create empowerment and ownership amongst targeted groups (Hicky and Mohan, 2005; Kakumba, 2010). Community participation as a concept only became prominent in the 1990's whereas the movement towards enhanced ownership by receivers of development cooperation measures started in 1970th when Julius Nyerere criticized lacking participation of receiving countries and communities.

In response to the above situation that Karamoja Sub-region faces, GIZ undertook to implement the Food and Nutrition Security and Conflict Management (FNS) project to address nutritional security, conflict management and peace building challenges experienced by the Karimojong settlers in the green belt of Napak district. The project embraced community participatory approaches in its development practices to incorporate community ownership and sustainability in the interventions, the variables of this study. As modes of participation, the community participated in the development of project strategies aimed at designing project interventions, implementation, as well in its conduct of monitoring and evaluation activities through participating in assessment, identification and prioritization of community needs, planning, contribution of financial and non-financial resources for implementation of prioritized interventions, as well as partaking in collection of M&E data, in a transparent and bottom-up approach (GIZ, 2010). Community management structures such as Settlement Development Committees (SDCs) and other user groups like Water User Committees were also set up in each settlement to further enhance community participation in implementation and ownership of project interventions (GIZ, 2009).

1.2.2 Theoretical background

This study was based on Community Driven Development (CDD) model, which originates from the gradual movement of development practice towards a more participatory approach. Mahatma Gandhi (1869- 1948) was one of the first advocates for community "self-reliance" and small-scale development (Mansuri and Rao, 2004). Paolo Freire, a decade later mobilized farmers in Brazil against oppression at community level with his theories spearheading "the first-wave of participatory development" (Mansuri & Rao, 2004). In 1980s however, the likes of Amartya Sen, Chambers (1983) renewed the call for community participation in development and advocated for empowerment of local participants to identify their own needs and

solutions through Participatory/Rapid Rural Appraisal; Participatory Learning Approaches (PRA/PLA) (Chambers, 1994). This method first used as a "rapid" tool to set up development interventions with participation of targeted communities in the interventions planning phase, sets basis for community participation today (Chambers, 1994).

It is argued that CDD as a model for development grew out of these efforts to incorporate local participation into development projects. Gillespie (2004) seems to agree with the above reasoning, arguing that Community-Driven Development recognizes that poor people are prime actors in the development process, and not as targets of externally designed poverty reduction efforts. In line with the model and Gillespie (2004) reasoning, the researcher therefore thought to ascertain how GIZ engaged its targeted communities in Napak district in project design, implementation and M&E as prime actors and targets, as well establish how this might have contributed to sustainability of the interventions.

The World Bank (2003) has further defined CDD as an approach that gives control over planning decisions and investment resources for local development projects to community groups as cited in (Asian Development Bank, 2006). The underlying assumption is that people are best judges of how their lives and livelihoods can be improved and, if given adequate support, resources, and access to information, they can better organize themselves to provide for their immediate needs. Following this argument the researcher therefore undertook to examine how community participation in project design, particularly in needs assessment and prioritization as well as in activity planning, and establishing how community buy in might have influenced project decisions undertaken in terms of resource mobilization and utilization. The study also inline the model saw it important to establish how communities were organized and how their participation might have influenced the overall sustainability of project initiatives.

Individual studies have also shown that CDD can increase effectiveness, efficiency, and sustainability of projects or programs, making them more pro-poor and responsive to local priorities (Gillespie, 2004). Other CDD objectives include developing capacity, building social and human capital, facilitating community and individual empowerment, deepening democracy, improving governance, and strengthening human rights. This study in particular however is an examination of whether community participation in GIZ project influenced sustainability of intervention inform of improved skill and knowledge, replication of appropriate technologies propagated and whether community assets established continue to be functional and maintained overtime.

1.2.3 Conceptual background

This study was conceptualized based on the idea that participatory development by any organization targets to increase ownership and sustainability of its interventions (Gillespie 2004). This study specifically looked at how elements of community participation contributed to sustainability of GIZ project interventions in Napak district. Major elements of the project's community participatory approach, which could be identified, included project design through needs assessments, prioritization of needs, and activity planning; project implementation through community management structures and community resource contribution; as well as community participation in M&E in form of systems design, selection of indicators and critical reflection (Harber and Davies 1990; Moningka 2000; World Bank 2002; Chambers 2002; Rao and Ibanez 2003; and Ofuoko 2011). The study looked at how these community participatory elements in turn influenced skills and knowledge, technology replication, as well as ability of beneficiaries to maintain community established assets and, how they contributed to sustainability of GIZ interventions. Knowledge and skills was highlighted as key to continued

technological replication and functionality of community assets, a prerequisite for continued service delivery hence sustainability (Plummer, 2005).

Paul (1987) further asserts that community participation is an active process through which beneficiaries influence direction and execution of a development project with a view to enhance their well being in terms of income, personal growth, self reliance or other values that they cherish. However in this study community participation was operationalized as participation in project design, project implementation and project M&E.

The concept of sustainability in development literature has varied widely and broadened in scope. The concept arose to prominence and wider use following the World Commission on Environment and Development published report, '*Our Common Future'* (WCED, 1987) that acted as a response to economic growth models that characterized development approaches over the last half century. With recognizance that such models did not adequately address social inequalities and that they led to environmental degradation, Ricketts (2010) has urged, that sustainability as a concept emerged as a synthesis of issues of civil rights, environmentalism and anti-poverty interventions. This is different from (Abrams, 1998), who defined sustainability in relation to 'whether or not something continues to work overtime'. Similarly (IUCN Inter-Commission Task Force on Indigenous Peoples, 1997) explains sustainability as 'a characteristic of process or state that can be maintained indefinitely'. Although in regards to this research, the examination of sustainability is attributed to whether improved skills and knowledge, ability to replicate appropriate technologies propagated and whether community assets established continue to be functional and maintained overtime.

Many explanations have been given for non-sustainability to be among others; continued lack of acceptance and non-affordability of community contribution, lack of community ownership, lack of community empowerment and behavioural change. In, addition to lack of interest

and motivation by management structures like user groups and project committees (Harvey and Reed, 2007). This therefore poses a great challenge to community organization in circumstances where it is voluntary. However, the question as to whether community participation may not necessarily lead to sustainable GIZ project interventions, and yet it is a major requirement for sustainability leaves a gap that this study partly seeks to address.

1.2.4 Contextual background

For decades the populations in northern Uganda and Karamoja have suffered terrible loss of life and livelihoods through armed conflict and widespread insecurity (Gelsdorf et al., 2012). According to Powell (2010), protracted inter and intra-clan conflicts over cattle and access to pasture and other resources, cross-border conflict by groups from neighboring Kenya and Southern Sudan and a high level of small arms proliferation and violence, have all negatively affected Karamoja region's socio-economic development. Muganda (2010) further denotes that as a result of increased cattle rustling and insecurity, households have shifted from livestock to crop production as a means of livelihood. With Powell (2010) highlighting that the region still suffers from chronic poverty and has the worst development indicators in the country. Red Cross (2008) estimated that 700,000 people in Karamoja region were chronically food insecure as a result of three consecutive poor harvests; depleted food stocks; poor livestock terms of trade in relation to high cereal prices and a generally declining resource base for agro-pastoralism. Against the backdrop of growing evidence that conflict in Karamoja region is more being linked to environmental degradation, and competition for natural resources (FAO, 2006) as in (Muganda, 2010).

According (Powell, 2010) relative success of the disarmament campaign has created broader stability for basic government facilities and development organizations to reach populations of concern. But, contrary poverty among pastoralists has actually worsened and cattle raids

have become more violent (Kakande, 2007). In spite of specific development programmes targeting Karamoja, Kakande (2007) attributes this phenomenal to a lack of community involvement in 'top - down' policies and programmes. As the Karimojong have a manifested lack of knowledge and means for adaptable farming methods, as well as of equipment and utter inadequacy of post-harvest technologies that lead to high or even total loss of crops (GIZ, 2010). Powell (2010) further points out that this combined with decimation of much livestock and crops by disease, locked people into a 'vicious downward spiral' resulting in elevated food insecurity, higher malnutrition rates and an increased morbidity.

The GIZ- FNS project was thus established in response to the above situation that Karamoja region experiences to address the striking food and nutrition security and conflict management and peace building challenges faced by the Karimojong, especially among new settler communities in the green belt (GIZ Assessment Report, 2009). Settler communities have been defined as returning Karimojong communities to the region that had fled to other regions and towns due to insecurity and are now returning and taking up agriculture as an option for livelihoods in the green belt region.

1.3 Statement of the problem

Community participation as a significant factor in inculcating sustainability elements into community development interventions has been highlighted and emphasized by many scholars such as Chambers (1983, 1994), Awortwi (1999), Gillespie (2004), Hicky and Mohan (2005) and the like. Berner and Phillips (2005) go further to argue that because of this reasoning, community participation today has been mainstreamed in most development projects. This position seems to be shared by GIZ- Food and Nutrition Security and Conflict Management (FNS) project that was established in 2009 with the aim of empowering Karimojong new settler communities in Karamoja green-belt region to achieve sustainable food and nutri-

tional security, and enhanced conflict management in their communities. The project invested in and employed numerous community participatory development strategies in its project design, implementation, as well in its conduct of monitoring and evaluation activities, and undertook to make sure that, the expressed needs of settler communities were at the core of the project. Based on the community participatory approaches undertaken, settler communities' were also empowered and their local capacities developed to identify, prioritize, plan for their needs, and implement sustainable development interventions that are community demand driven to improve their livelihoods with support of the project, in a transparent and bottom-up approach (GIZ, 2010). Community management structures such as Settlement Development Committees (SDCs) and other user groups like Water User Committees constituted of targeted beneficiaries were also set up in each settlement to further enhance community participation in implementation and ownership of project interventions (GIZ, 2009).

It was expected by GIZ that such a community driven and participatory project approach would strengthen partnership with targeted beneficiary communities, and would positively impact on community uptake of project interventions, ownership and their sustainability, even when the project comes to an end (GIZ, 2009). However, in spite of GIZ-FNS efforts and participatory methodologies employed, the 2011 Project Annual Monitoring Report showed that sustainability of project interventions was low and found to be unsatisfactory, with technology adoption rate at 38% as compared to the desired 70%. Monitoring results from 2010 and 2011 further revealed that Nabwal, Lomaratoit, Okudud and Kotipe settlements, particularly lagged behind in adoption of new technologies propagated by the project and, with the community abandoning some activities, against the background that communities themselves determined processes in a participatory manner. In the event that this situation is not addressed, pits the project interventions at risk of not being sustained.

The study is therefore born out of the need to investigate the underlying factors that influence the relationship between community participation and sustainability of GIZ-FNS project interventions in Napak district.

1.4 Purpose of the study

The study was aimed at examining the relationship between community participation and sustainability of GIZ-FNS project interventions in Napak district.

1.5 Specific objectives

i) To examine how community participation in project design influences sustainability of GIZ-FNS project interventions in Napak district.

ii) To ascertain how community participation in project implementation contributes to the sustainability of GIZ-FNS project interventions in Napak district.

iii) Find out how community participation in project M&E influences sustainability of GIZ-FNS project interventions in Napak District.

1.6 Research questions

i) What is the relationship between community participation in project design and sustainability of GIZ-FNS project interventions in Napak district?

ii) Is there a relationship between community participation in project implementation and sustainability of GIZ-FNS project interventions in Napak district?

iii) What is the relationship between community participation in M&E and sustainability of GIZ-FNS project interventions in Napak district?

1.7 Hypotheses of the study

i) There is a significant positive relationship between community participation in project design and sustainability of GIZ-FNS project interventions in Napak district.

ii) There is a significant positive relationship between community participation in project implementation and sustainability of GIZ-FNS project interventions in Napak district.

iii) There is a positive relationship between community participation in M&E and sustainability of GIZ-FNS project interventions in Napak district.

1.8 Conceptual framework

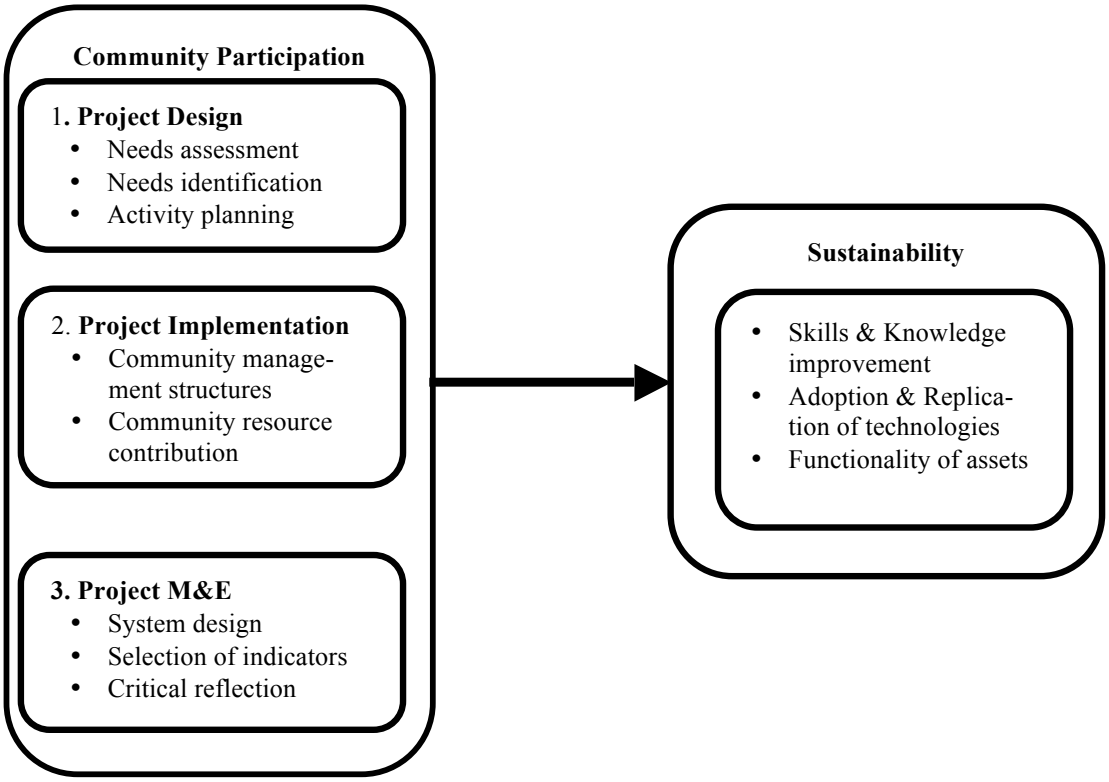


Figure 1: Conceptual framework showing the relationship between the variables.

Adopted and modified from *The Origins and Practice of Participatory Rural Appraisal*, Robert Chambers, 1994.

Figure 1 above shows the relationship between community participation and sustainability. Community participation, the independent variable of this study was operationalized under three broad dimensions; project design, project implementation and project M&E. However, project design was further operationalized as; needs assessment, needs identification and activity planning; while implementation was operationalized as; community management and community resource contribution; and project M&E was operationalized to include; system design, selection of indicators, and critical reflection. Whereas sustainability, the dependent variable of study was operationalized to include; skills and knowledge improvement, adoption and replication of technologies and functionality of community assets established.

1.9 Significance of the study

This study findings provide information to a wide range of stakeholders in Karamoja sub-region that is expected to influence GIZ-FNS management team, other development partners, and Napak District Local Government policy makers in both local and central government to formulate evidence based policies geared towards more sustainable community development interventions in the district and Karamoja sub-region in entirety.

The study is also envisaged to stimulate and encourage Napak District Local Government and its development partners to consider and embrace community participation as a mechanism to incorporate sustainability and ownership into development interventions, improve efficiency and effectiveness in service delivery, make development more inclusive and empower poor communities to build social capital, as well as strengthen governance structures in the district.

It is also premised that the study will contribute to the body of knowledge to be used as reference material for further research by researchers and practitioners. The study envisages to

draw attention of other scholars to seek areas of further research in Karamoja sub-region with intention to generate knowledge that will translate to appropriate strategies for increased community participation incorporation into community driven initiatives to enhance sustainability, even after project closure.

The study findings are also expected to influence and improve the Napak District Local Government partnership interface with development partners operating in the district through improved and strengthened coordination of development interventions at all levels of governance, be it at village, parish, sub-county or district levels. This avoids unnecessary duplication of structures and wastage of available meagre resources for development.

1.10 Justification of the study

The study makes an attempt to fill the existing knowledge gap in community participation and how it's attributes in project design, project implementation, as well as community participation in project M&E influence sustainability of development interventions in Napak district, which has not been covered by other scholars. Available evidence suggests that many scholars such as Longole (2007); Agaba (2007); Dolan C and Okello MC (2007); Bevan J (2007, 2008); Powell (2010) have focused their attention mainly on conflict related issues in the region, while a few like Muganda (2010) and Kirsten et al., (2012) have focused on environment and livelihood issues. Meanwhile, the prevalent insecurity and pastoralist nature of the Karimojong has been blamed for continuous vicious circle of poverty (Powell, 2010) and failure of most development interventions in the region (Kakande, 2007), little if any research has been devoted to investigate influence of community participation in as far as community development initiatives are concerned in the region and particularly in Napak district.

1.11 Scope of the study

1.11.1 Geographical scope

The study was carried out in Napak district situated in Karamoja sub region, North-Eastern Uganda which lies between Latitudes: $1^0$05' North and Longitudes: $33^0$38' and $34^0$56' East and at an altitude between 1,356m – 1,524m above sea level. It shares boarders with 5 districts namely: Kotido to the North, Lira in the Northwest, Katakwi to the West, Moroto in the East and Nakapiripirit to the South. The study however covered settlements found in Lokopo, Irirri and Matany Sub-Counties where GIZ has been implementing its programs since 2009. The settlements studied include; Apeitolim in Lokopo Sub-County; Nabwal, Alekilek and Lomaratoit in Iriiri Sub-County; and Kotipe and Nakichument found in Matany Sub-County. These settlements of study are central to the Karimojong livelihood strategy and development programmes because they are located in the green belt region that stretches from Northern Karenga Sub-County in Kaabong district to the Southern Namalu Sub-County in Nakapiripirit district.

1.11.2 Content scope

The study examines how community participation in project design attributes such as needs assessments, needs prioritization and activity planning; as well as community participation in project implementation in terms of community management structures and community resource contribution; together with community participation in project M&E in the form of systems design, selection of indictors and critical reflection; and how they in turn affect beneficiary knowledge and skills improvement, technological replication and, maintenance of established community assets as a basis for sustainability GIZ project interventions in Napak district.

1.11.3 Time scope

The study time scope under review was from July 2009 to December 2013. This time frame was characterized by significant achievements in the disarmament campaign and as highlighted by (Powell, 2010) it led to broader stability for basic government facilities and development organizations to reach populations of concern. The government among other things took advantage of the existing security to kick-start robust development of the sub-region through advocating for Linking Relief and Rehabilitation programmes to Development. It was noted that prior to this period, poverty among pastoralists had worsened and cattle raids had become more violent (Kakande, 2007). Red Cross (2008) estimated 700,000 people in Karamoja region were chronically food insecure as a result of three consecutive poor harvests; depleted food stocks; poor livestock terms of trade in relation to high cereal prices and a generally declining resource base for agro-pastoralism. With chronic poverty and food insecurity in the region there was a marked increased in cattle rustling and insecurity, and as a result, households shifted from livestock to crop production as a means of livelihood (Muganda, 2010). The study time scope therefore highlights a period of continuous communities' engagement especially in the green-belt region in supporting Karimojong communities to transition from purely pastoralist tendencies to agro-pastoral communities.

1.12 Operational definition of terms

Community: The study referred to a community as a group of people sharing common interests and living within a geographically defined area.

Participation: In this study was defined as involvement of programme targeted beneficiaries in all the processes of the project cycle of GIZ- FNS.

Community Participation: In this study was referred to as an active process whereby beneficiaries influence direction and execution of development projects rather than merely receiving a share of project benefits (Paul, 1998).

Sustainability: In regards to the study, sustainability was defined as ability of targeted beneficiaries to maintain services at a level that provides continuity of on-going interventions after transitioning of GIZ assistance.

Summary of Chapter One

Chapter One in this study covered and presents the historical, theoretical, conceptual, and contextual backgrounds to the study. The statement of the problem, purpose of the study, objectives, research questions, hypotheses, significance and justification, as well as scope of the study are also presented. The Community Driven Development Model, the model underpinning this study has also been discussed which acts to theoretically position the study. This chapter has therefore prepared adequate ground for further literature and conceptual reviews in chapter two inline with main and sub variables as presented in the conceptual framework in the Figure 1.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents literature reviewed in relation to the subject of study. The purpose of the review was to make a clarification on key concepts to understand the problem better and provide a theoretical basis for the study. Literature reviewed enabled the researcher to determine what has already been done in relation to the subject matter, and to identify existing gaps on which the research was based. Sources of literature reviewed included; text books and published research findings in journals. This chapter therefore presents the theoretical review, conceptual review, actual review and summary of literature reviewed showing the rationale of study and sources of literature.

2.2 Theoretical Review

The community driven development model (CDD) guided this study. For the past half century development practice has gradually moved towards a more participatory approach. Mahatma Gandhi (1869- 1948) is given credit as one of the first advocates for community "self-reliance" and small-scale development (Mansuri and Rao, 2004). Though, a decade later, Paolo Freire advocated for participatory development approaches (Mansuri & Rao, 2004). In the 1980s, Amartya Sen and Chambers (1983) and others renewed the call for community participatory development, which efforts grew into Community Driven Development with impetus to incorporate local participation into development projects. Theoretically CDD agitates for combining all the best practices in participatory methods and to employ them in community led projects. In agreement with the above arguments about CDD the researcher in this study was interested in finding out how community participatory approaches were applied in the

GIZ project in design and implementation interventions, including execution of M&E functions in Napak district and how in turn their participatory might have influenced sustainability of the initiatives since community participation combined all best practice of participatory methods. The CDD model thus guided the study since the project was supposed to be community led initiative.

The World Bank further defines CDD as 'a development approach that gives control over planning decisions and investment resources to community groups and local governments' (Dongier et al., 2003). Because CDD provides communities with a voice and control over all project stages, it is believed to; 1) Enhance sustainability; 2) Improve efficiency and effectiveness; 3) Allow poverty reduction efforts to be taken to scale; 4) Make development more inclusive; 5) Empower poor people, build social capital, and strengthen governance; and 6) Complements market and public sector activities (Dongier et al., 2003). This study was conceptualized on premise that CDD led to more sustainable outcomes of community initiatives in terms of communities being able to apply and replicate disseminated techniques and technologies, and keep functional and operating community established assets by the project. However for this to be possible there must be direction attempts at improving efficiency and effectiveness of targeted communities through capacity development that include embracing gender equity so as to scale up poverty eradication measures and led to better sustainable results. The research study was therefore guided theoretically by (Dongier et al., 2003) argument in light that the GIZ project was community driven.

Ideally, CDD ensures "demand-driven" projects rather than "supply-driven" projects, with the community in charge throughout every stage of the process. Good governance is seen to be promoted by greater transparency, accountability in allocation and use of resources as com-

munity participates in project decision-making processes. Some principles of CDD such as participation, empowerment, accountability, and non-discrimination are also worthy ends in themselves (Asian Development Bank, 2006). In agreement with this argument and principles of CDD the study prepositioned itself to find out whether the GIZ project aspects were indeed community driven as the project claimed to be and how aspects of good governance by communities themselves, accountability dispensation and non-discrimination in the form gender parity was undertaken and whether this had an effect on sustainability of initiatives implemented.

CDD programmes are motivated by trust in people (Naidoo and Finn, 2001) and thereby advocate people changing their own environment as a powerful force for development. Studies have further shown that with participation of targeted communities as partners in the development process, CDD is actually responsive to local demands, inclusive, and more cost-effective as compared to centrally-led NGO- based programmes. Dongier (2002), argues that CDD can further be supported by strengthening and financing community groups in a way that facilitates community access to information, and that promotes an enabling environment through policy and institutional reform. The study inline with the following argument sought to understand how the role of institutional and capacity development elements of community driven development contributed to development that is community led and responsive to their needs and gender inclusive. The researcher was also in agreement with (Dongier, 2002) preposition that CDD can be supported to strengthened and finance community groups as refers to how it was implemented by GIZ.

The CDD model has been employed by the World Bank to improve accountability and services in key areas as a means to alleviate earlier problems of overreliance on central govern-

ments as sole service providers and much more propelled by failure of earlier structural adjustment programmes, which were dominating models of service delivery in the 1980s. During the 1990s, the World Bank increasingly focused on projects that emphasized community capacity building. By 2000, CDD had become a World Bank mainstay; between 2000 and 2005 the World Bank funded 188 CDD projects with $9.3 billion in lending (Asian Development Bank, 2006). Other, large lending and development agencies have hopped onto the CDD bandwagon, including the Asian Development Bank and the Inter-American Development Bank.

2.3 Conceptual Review

2.3.1 Project design and sustainability of community development projects

Sustainability requires that community participation process itself be sustainable, with fundamental prerequisites being in place (Tam, 1995). Moningka (2000) adds that community participation can be seen as a process in which community members are involved at different stages and degrees of intensity in the project cycle like planning, design, and implementation and M&E with the objective to build capacity of the community to maintain services created during the project and after facilitating organizations have left. Community participation throughout the whole project from project design and implementation to evaluation ensures reflection of community priorities and needs in activities of the project, which motivates communities into maintaining and operating activities after the project is complete.

2.3.1.1 Needs assessment in sustaining community projects

According to Stewart (1997) views of those affected are an integral element in decisions that policy makers have to make. This argument purports to the fact that community members should be involved during needs assessments so as to come up with relevant priorities that

seek to address community most pressing need and challenges. This argument further links well with Harber and Davies (1990) preposition that direct attempts and willingness must be made to listen to communities' real needs and enter into meaningful dialogue about the relationship between needs and requirements rather than try to impose on communities a predetermined response situation that is more relevant to the situation and culture of donors than to beneficiary communities'. It is therefore imperative that targeted community members are involved at the on-set of any given project especially during need assessments and problem identification.

2.3.1.2 Needs identification and sustainability of community development

The role of community participation in needs identification is important in ensuring community interventions are sustainable. According to Carter *et al.,* (1993) one global response to non-sustainability of the UN Water Decade was to promote evolution of participatory approaches that thought local populations as 'participants' rather than 'beneficiaries' as was previously the case. WEDC (2002) seems to agree with this line of reasoning by arguing that beneficiaries be engaged in planning meetings in all stages of project inception that is representative of all those involved in the program to work together to explore issues and problems and develop solutions. This creates ownership of the program by the people who become responsible for the program or project implementation. Nonetheless, there is fear that those who attend these meetings do not necessarily represent communities' problems. Therefore practitioners' of participation experience power and power relations directly in their efforts to change power structures in society in favour of the poorest and marginalized (Chambers, 2002). This seems to reaffirms the position that communities should be given an opportunity to make decisions about their own needs and priorities at the time of planning.

Rao and Ibanez (2003) study on the Jamaica Social Fund on sampled communities about their assessment of main problems in the community before the social fund had been introduced, found out that the overall match between the project and problem identification was poor. Only two of five communities studied did the project match preferences of the majority in the community. This implies that in communities where problems had not been identified well would not be willing to participate in the given project because the project implemented will not be their priority. This argument is further supported by (Gozen, 1994; Bulle, 1999) who observed that once communities see that the project is for their benefit and feel responsible for project services, they will also show an interest in follow up of services and its continuity.

2.3.1.3 Activity planning and sustainability of community development projects

According to (Bamberger, 1996; Kamal, 2008; Mansuri and Rao, 2004), active community participation in project planning improves project design through use of local knowledge, increase in project acceptability, produces a more equitable distribution of benefits, promotes local resource mobilization and helps ensure project sustainability. Community participation is therefore presumed to improve beneficiary targeting, efficiency, impact, accountability, and transparency of poverty reduction interventions because of its use of local intelligence and resources to develop a sense of ownership amongst local communities (Bardhan, 2002) as cited in (Khan, 2013). There ought to be genuine demand by the community for all projects whether aided or not aided by the government or any international agency to eliminate tendencies to abandon projects when they are halfway completed and to sustain interest of communities to maintenance and protection of those projects.

Chambers (2002) goes further to argues that conventional wisdom recognizes that planning feeds into implementation, and forms basis for monitoring and evaluation, and again loops

back to planning. Implying that community participation should follow the project lifecycle to the end, not only stopping at one point during the development process. This can be done through mobilization and sensitization of community members on their roles during project cycle. The World Bank (2007) however sees participatory planning and budgeting to represent a direct democratic approach to development that offers communities opportunity to learn about government operations and deliberate debate so as to influence allocation of public resources. Arguing that it is imperative for communities to decide about their own needs and how to appropriate available resources.

2.3.2 Project implementation and sustainability of community development

Ofuoku (2011) defines participation is a process through which stakeholders' influence and share control over development initiatives and decisions, and resources, which affects them. Further, asserting that unless the poor communities are given an opportunity to directly participate in development interventions designed to improve their livelihoods they will continue to miss such benefits of any interventions. It is generally accepted that sustainable development implies a better integration of economic, environmental and social goals. Therefore sustainable development can be said to be designing and implementation of projects that can be kept alive even after project intervention, while its development strategies must be based on investment in future growth and not only on quick fixes to meet immediate demand (Steven-Hagen, 2000). Tam (1995) however has argued that involving the community in project implementation increases local ownership and enhances sense of responsibility for maintaining services provided by the project. These aspects are both essential for durability and continuity of projects.

However, the likes of Adamolekun (1983); Mansuri & Rao (2004) have argued that communities may lack material resources and connections to sustain their efforts even if they initially participated in creation or implementation of the project. Connoting need of a well-functioning state apparatus does not disappear with active community involvement. The community must therefore lobby for continuing support of inputs and training so as to sustain such projects. Igboeli (1992) seems to be in agreement with this preposition by contending that beneficiary communities are often too poor to find their own teachers, doctors, desks and medicine, etc. Government support is therefore needed that includes inputs, maintenance of investment and trained staff to sustain project benefits. Though, sustainability of community-based initiatives depends crucially on an enabling institutional environment that requires government commitment and accountability of leaders to their communities.

In line with the above reasoning, Ekong (2003) defined participation as playing an active though not necessarily direct role in community decisions, knowledge of local issues, attendance at public meetings, related attempts to influence proposed measures through individual and groups actions, belonging to groups and committees and financial contributions towards community programmes.

2.3.2.1 Community management structures and sustainable development

It is of importance to ensure that communities are empowered to participate in project implementation for projects to be sustainable. Empowerment in this case is therefore the expansion of assets and capabilities of poor communities to participate in, negotiate with, influence, control and hold accountable institutions that affect their lives (World Bank, 2002). According to Asian Development Bank (2006), key elements in this case include access to information, accountability, inclusiveness, transparency, and local organization capacity. The World Bank

(2002) also further stipulates that local organization capacity refers to ability of people to work together, organize themselves and mobilize resources to solve problems of common interest. This points to highlight importance of community involvement and its structures in project implementation if sustainable development is to be achieved.

2.3.2.1.1 Steering committees in sustaining community development

Community initiatives often look to some form of citizen association composed of community members who know the local culture and feel a stewardship towards their area's resources (Carlton-LaNey, Edwards, & Reid, 1999). Such a mechanism according to (Banach et al., 2006) is a community-based steering committee. It has been argued that community-based steering committees have many potential benefits of; 1) ability to engage a broad spectrum of citizens' experiences and perspectives, 2) ensure a program's relevance to the community, 3) develop indigenous leadership, 4) Creates widespread public awareness of the program, and 5) allows diverse input about evaluation and accountability. However, to maintain its credibility, steering committees must achieve high standards of performance in terms of outcomes and being open, transparent, and in participatory processes (Howell, 1999).

Effectiveness of a steering committee is therefore dependent upon the level of commitment demonstrated by its members and experience members have had in this role (Tasmania, 2008). Building of ownership and control over project activities by targeted communities is particularly crucial in the context of GIZ intervention framework (GIZ, 2009). GIZ Steering structures take place at three different levels; settlement level, inter-Sub-County level, and inter-district level. The respective steering bodies are closely linked and build on each other in the process of bottom-up monitoring (GIZ Monitoring Report, 2010). This seems to be in agreement with (Kretzmann and McKnight, 1996) argument that broad representation across

the constituent base of a community program is needed to develop feasible and sustainable solutions to complex social problems.

2.3.2.1.2 User committees in sustaining community development

The role of user committees is critical for sustainable community interventions as highlighted by the World Bank (2011) that argues there is increasing evidence that social cohesion is critical for societies to prosper economically and for development to be sustainable. Asserting that social capital is not just the sum of the institutions that underpin a society but instead the glue that holds them together. Anheier and Toepler (2010) further contend that social capital when enhanced in a positive manner can improve project effectiveness and sustainability by building community's capacity to work together to address their common needs, fostering greater inclusion and cohesion, as well as increasing transparency and accountability.

WaterAid Tanzania (2009) goes further to reiterate that sustainability depends not only on community participation in decision-making, but also in good decisions being made. Users mainly derive their sense of ownership and responsibility for sustaining their services from exercising control over planning, financing and constructing facilities, and then having services managed to their satisfaction (Gross et al., 2001). Mayo and Nkiwane (2013) found in their study that about 30% of rural water supply schemes in Tanzania were not functioning properly because of poor operation and maintenance. Users were not contributing to the cost of operation and maintenance of water supply facilities, which is an example of non-participation of beneficiary community that can constrain project sustainability. To reverse this trend, the Tanzania National Water Policy of 2002 commended a more Demand Responsive Approach (DRA) and community participation in management, operation and maintenance of water schemes as one way to achieve cost recovery and sustainably manage water

systems established. Facilitating establishment of water users' associations at community level that engages NGOs and others to support and facilitate project initiation and implementation.

Gross et al., (2001) also point out that participation linked with sustainability provides an avenue for users to influence, if not control, the process of establishing services, and it does so not just for the local leaders, but for both men and women from all major potential user groups. Rao (2003) concludes by suggesting that community participation, consultation, establishment and training of local management committees and allocation of maintenance budgets by the local governments are critical to ensure that investment projects are relevant, cost effective and sustainable.

2.3.2.2 Community resource contributions and sustainable development

Community resource contributions as defined by (AED, 2004) refer to financial and non-financial contributions to community improvement projects from local sources such as community members, local government, businesses, institutions and other actors. Local resources not only allow for implementation of successful community projects, but also contribute to long-term sustainability of initiatives by NGOs and CBOs by building lasting relationships. While it may take more work at the outset, community contributions are a valuable way to strengthen local community initiatives in a way that outside contributions cannot (AED, 2004). This argument is anchored on the premise that community contributions provide much needed skills and materials to community improvement projects, and in away build long-term relationships between beneficiary communities and development actors that creates recipe for sustainability of development interventions.

According to (Feroze and Rehman, 2000) participation helps to build knowledge and experiences in away that needs of users can be better addressed to enhance ownership. WEDC (2002) seems to agree with this presumption by arguing that it is now generally accepted that projects should respond to requirements from communities for improved services, and that communities should contribute capital costs by providing material and labour, and more increasingly cash contributions. This is seen as the surest indicator that community-based organizations truly meet local needs, manifested in their ability to mobilize people and resources in the community to improve quality of life within their communities (AED, 2004). Engineers Without Borders -USA (2013), concurs with the above argument by also compounding that international development community has found that community contributions (cash and in-kind) institute a sense of ownership amongst beneficiary community and contribute to ensuring project sustainability.

Other researchers that agree with this discourse include Dongier et al., (2003) who looks at the definition of community–driven development (CDD) and what helps foster successful CDD projects. They found that community cash contributions help decrease need for outside resources, build community ownership, ensure that choices aren't distorted by outside influences, and correctly ascertain the true demand of beneficiaries. Likewise, Khwaja (2004) study of the impact of community participation on development projects affirms importance of community contributions to project sustainability. After, reviewing 132 case study infrastructure projects in Northern Pakistan, he found that community participation is valuable for non-technical project aspects. That community participation in general, and specifically both community cash contribution and labour provided for a more sustainable (currently functioning) project.

2.3.2.2.1 Financial resources in sustaining community development

Community contributions toward capital costs are supposed to diminish risk of building inappropriate facilities in rural communities (Water Sanitation Program, 2004). The rationale is that impoverished communities may accept any project intervention that is offered for free, but will think twice before agreeing to contribute toward such an intervention. Denoting that community contributions increase users' sense of ownership of interventions, thus ensuring more interest and involvement in planning, construction, and management, and this in turn results in a more sustainable project. Willingness to pay in cash, materials, labour, and ideas can be taken as a useful indicator of demand for improved and sustained water services (Whittington et.al, 1992; Mbata, 2006; Bhandari and Grant, 2007) as cited in Beyene (2012). According to Mbata (2006), if willingness to pay for specific services increases in the community, then it is possible to conclude that awareness of the community about ownership also increases for that service. Correspondingly, if communities are willing to contribute cash useful for management of community interventions, means positive implications for sustainability.

According to Engineers Without Borders-USA (2013) El Salvadoran bridge project was successful as a result of community and government contributions to design and construction. Community cash contribution helped get key government officials involved and the municipality became the main partner. The review, 22 months after final implementation rated the project as fully functional. However, this was not the same case for the Honduran piped water project that was implemented with community labour but no cash contributions (Engineers Without Borders -USA, 2013). The community had failed to setup a monthly fee for project upkeep. It was found to be in disrepair when the chapter returned one year after construction for monitoring and evaluation.

2.3.2.2.2 Non- financial resources in sustaining community development

Hoko et al., (2009) in their study of sustainability of a water project in Mt Darwin district in Zimbabwe found that in some cases, the community made contributions in form of labour, food, and grain instead of cash. Other scholar such as Harvey & Reed (2004) agree with this finding and recommend that communities pay in kind (for example a bag of maize) in situations where they cannot afford cash contributions. Likewise, Isham and Kahkonen (1999) study about the effectiveness of 1980s and 1990s Indonesian water projects with a focus on social capital found that when households contributed to construction and/or operation and maintenance, and these contributions were monitored, projects performed well. They also found that allowing individual households to make decision for the final design increased sustainability, but adequate cost and maintenance information must be provided to them.

The above argument syntheses with the World Bank (2011) deposition that social capital is the glue that holds societies together and without which there can be no economic growth or human well-being". Though, Isham and Kahkonen (1999) hold that making individual household contributions transparent was critical to success as it decreased the problem of free riders.

2.3.3 Project monitoring & evaluation and sustainable community development

Monitoring and Evaluation (M&E) is an on-going activity and is viewed as a valuable tool in promoting sustainability. In addition to achieving alignment of the project to needs of its stakeholders, Weiss (2002) argues that project evaluation can help in development of strategies for sustainability, to follow up their implementation and evaluate their effectiveness. Similarly, it is noted that evaluation can be useful in identifying problems in the project and in facilitating flexibility. The above definition is synonymous with (Dagnino, 2007) definition of

participatory monitoring and evaluation as a process through which stakeholders at various levels engage in finding out whether the programme is on course as planned and it will achieve its objectives. Ellsworth and Astburg (2004) view internal monitoring of activities, on-going programme development and evaluation, disseminating of evaluation findings and building of organized structures needed for program activities as important enabling strategies that lead to programme sustainability. However Dagnino (2007) in critiquing M&E argues that the community may not have required capacity to analyze M&E findings.

Rifkin (2007) however cited the importance of community participation in monitoring as a means to transfer measurement and analytical skills to the community as they learn how to define indicators, monitor and evaluate in a way that is meaningful to them. It's argued that the community becomes better able to analyze its actions and their effects and to respond appropriately. This helps maintain program effectiveness and sustainability. However, the extent to which community participation in M&E is achieved in practice remains a contested issue. Marden, Okaley and Pratt (2005) point out that there is currently little documented experience of programmes and projects that demonstrate a truly participatory approach to evaluation.

Chambers (2004) contends that proponents of participatory monitoring and evaluation (PM&E) are more cost effective, accurate and sustainable as compared to conventional approaches. Participation in decision-making process can also motivate people to want to see those decisions implemented effectively. Likewise PM&E strengthens organizational and institutional learning. While, these approaches have proved effective in some contexts, their success in empowering communities ultimately remain dependent on officials' attitudes and acceptance. Therefore this research seeks to establish the influence of community participation in M&E of GIZ project interventions and its effect on sustainability.

2.3.3.1 System design in sustaining community development projects

According to IFAD, ANGOC and IIRR (2001), developing an M&E system starts long before start-up. Initial project design strongly influences ease with which M&E is implemented later on. For example, the relationship and commitment established with partners and local people, particularly key primary stakeholders. The logic and feasibility of the project strategy, resources allocated to M&E, and degree of in-built flexibility that allows M&E findings to have a steering function, and any operational details of M&E that might be established during initial design. It is therefore important that in project formulation, abroad M&E framework should be developed and included in the formulation and appraisal documents. This framework provides for; 1) sufficient details to enable budgeting and allocation of technical expertise, 2) an overview of how M&E will be undertaken, and 3) guidance to project staff about how M&E should be set up during start-up. Much of what is developed for the M&E system during initial design phase will only be indicative of final plans and will need to be revised and refined during start-up.

Correspondingly, IFAD, ANGOC and IIRR (2001) further argue that M&E is inadvertently often set-up to fail during initial project design. For example, in cases if there is not adequate budget for M&E, insufficient time and expertise has been allocated for M&E during start-up phase, or there is insufficient flexibility in project design to enable M&E system to influence project strategy during implementation. In line with this argument, Gregory (2000) observes that labelling M&E as 'participatory' does not necessary guarantee that all stakeholder groups have participated, and often there are issues around who participates and who is excluded from these processes. Subsequently, representativeness of findings and recommendations of participatory evaluations have been criticized.

Chambers (2007) nevertheless asserts that M&E has typically been led by outside experts, measuring performance against pre-set indicators and using procedures and tools designed without participation of key stakeholders like beneficiaries. Evaluation in particular, because external consultants often conduct them can be seen as a form of control. Noting that for a number of years, there has been widespread recognition that M&E should take a more inclusive and participatory approach. Participation in this essence means involvement of stakeholders in deciding how the project or programme should be measured, in identifying and analyzing change and in acting on results.

2.3.3.2 Selection of indicators in sustaining community development

According to the Canadian International Development Agency (CIDA) (1997), most participatory development projects have involved formation of groups, and for this reason most work on indicators of participation have focused on group formation. Ideally, indicators of participation should be gathered in a participatory fashion, but in practice, as with most other indicators, this is rarely done. Time frames should be made clear for each indicator. UNHCR on the other hand argues that results-based management requires monitoring and reporting in order to be meaningful. Indicators that cannot be or are not monitored are meaningless. Therefore, choice of indicators is important as well as how they are quantified. UNHCR is however in agreement with CIDA that, indicators should be time-bound (UNHCR, 2002).

A critical task in developing a participatory community monitoring strategy is therefore to decide what information to collect, and which program parameters should be addressed. The challenge is however to consult and negotiate with the community to identify key parameters and arrive at a consensus list (Storti, 2004). Indicators as defined by Duignan et al., (2003) are measureable aspects of a project that can be used to monitor its progress and direction, often

referred to as performance indicators. Indicators are how you measure whether you have achieved your objectives and how this has been done. Indicators can be qualitative or quantitative and are identified when the project is initially written. They are either impact indicators or process indicators. Process indicators are used at input, activity and output levels, as compared to impact indicators found at purpose and objective levels (Oxfam, 2007).

2.3.3.3 Critical reflection in sustaining community development

Brown (1993) argues that while one purpose of PM&E may be to assess impact of a project or program overtime, another may be to gain in a timely and effective way information which can be used for improving project planning and implementation. As a management tool, PM&E is used by different stakeholders to analyze and reflect systematically on their experiences, and plan for future goals and activities (Upward, 1997) as cited in (Estrella and Gaventa, 1997). Jackson (1995) however defines the concept of participatory impact assessment as a process of evaluation of impacts of development interventions that is carried out under full or joint control of local communities with professional practitioners. Community representatives participate in definition of impact indicators, collection of data, analysis of data, communication of assessment findings, and, especially in post-assessment actions designed to improve impact of development interventions in the locality (Estrella and Gaventa, 1997).

Campos and Coupal (1996) seem to agree with the above preposition by arguing that one of the main functions of participatory evaluation is to provide stakeholders and program managers with information to assess whether project activities have been met and how resources have been used, in order to improve program implementation and make critical decisions about project funding. This is illustrated in Gujarat, India, where PM&E was used to aid village communities in decision making for improved planning and management of a watershed

program (Estrella and Gaventa, 1997). PM&E becomes an internalized process for local communities who use the approach in order to make decisions regarding production, investment, and technology choice. In this context, participatory monitoring is linked to project planning and management, leading to decision-making and identification of alternative action strategies.

2.4 Summary of literature review

The key gaps identified from literature reviewed showed that always targeted communities are partially engaged in the project lifecycle development process, and that often than not, beneficiaries are always seen as targets of development interventions, rather than partners in the development undertaking. It was also noted that development partners often tend not to fully engage and integrate concerned local governments structures at all levels of government in the development initiatives until later in the of development process, why sustainable challenges arise.

It can however be seen that community participation in project design, implementation and M&E is overwhelmingly advocated for by majority of scholars such as Tam (1995); Stewart (1997); Moningka (2000); Rao and Ibanez (2003); Ekong (2003); Mansuri and Rao (2004); Kamal (2008); and Ofuoku (2011) among others, arguing that active community participation in project planning improves project design through use of local knowledge which in turn increases project acceptability, producing a more equitable distribution of benefits, promotes local resource mobilization and helps ensure project sustainability. Nonetheless, some scholars like Adamolekun (1983); Igboeli (1992); Mansuri & Rao (2004) have also argued that as much as community participation in project design, implementation, and M&E is an important factor for sustainability of community development initiatives, there are certain condi-

tions that need to be fulfilled. Arguing that there must be a well-functioning state apparatus, as communities may lack material resources, and connections to sustain their efforts, even if they initially participated in creation or implementation of the project.

Conversely, some school of thought has also noted that participation of common people at planning stage has been negligible (Muhammad, 2010). Finsterbusch & Van Wicklin (1987) further asserts that development projects are too top - bottom and need to be more bottom – up. Whereas, El-Gack (2007) claims that although projects encouraged and claimed to adopt participatory approaches, people are not engaged in a process through which they could achieve empowerment or create a real change in their lives. Basing on the arguments from different schools of thought, the researcher was therefore interested to see and investigate what is happening in Karamoja region, and establishing the relationship between community participation in project design, implementation, M&E and sustainability of GIZ-FNS development interventions in Napak district.

The theoretical and conceptual review of variables under study in chapter one and two will therefore inform and influence methodology of the study including research design, study population, sampling size & selection, techniques & procedures, as well as data collection methods and tools that are covered in chapter three.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter presents an overview of the methods and techniques employed in the study. It presents among others, the research design, study population, sample size and selection, sampling techniques and procedures, data collection methods and instruments for data collection, reliability and validity, procedures used for data collection and data analysis.

3.2 Research design

The study used a cross sectional survey design to gather information on community participation and its influence on sustainability of GIZ-FSN development interventions because it helps to collect opinions and experiences from a large number of people as observed by Amin (2005). The study design was chosen because it helps to describe the relationship among phenomenal and testing of hypothesis (Polit & Hungler, 1999). The cross sectional design was also used because it is flexible and allowed for collection of both qualitative and quantitative data at the same time (triangulation). In this study, cross sectional design allowed for the collection of data from different samples and sectors such as beneficiary communities, community leaders, Napak District Local Government and GIZ-FNS officials in accordance with (Amin, 2005; Neuman, 2011; Sarantakos, 2005) who contend that cross-sectional studies use samples from different sectors and compare them basing on the criteria related to the theme of study. Arguing that this makes it possible to describe and determine differences and casual relationships among different sectors. The researcher therefore used this approach to test the relationship between community participation and sustainability of GIZ-FNS project interventions in Napak district. The cross sectional design was found to be relevant for this study be-

cause many sectors of the community such as community beneficiaries, community leaders, district leaders and GIZ-FNS officials participated in the study. The design further made it possible to collect data fast enough and to enable interaction with people that had practical experiences with the subject matter of study, as well as assess their perceptions and attitudes towards the subject (Kothari, 2004).

The study further used both quantitative and qualitative approaches. The quantitative approach was used to generate empirical statistical data for analyzing relationships (Amin, 2005) between the independent and dependent variables using information gathered from questionnaires. This approach is useful in designing questions that confine a complex problem to a limited and desired number of variables. According to (Kealey & Protheroe, 1996, and Matveev, 2011) quantitative approaches help limit biases and subjectivity of researchers and can be used to test theories and hypotheses.

The qualitative approach was also used to complement the quantitative approach and triangulate methods. This approach was used because it helps to elicit information that could not be otherwise obtained through the survey questionnaire. Qualitative procedures relied on text and image data, and unique steps in data analysis, drawn from diverse strategies of enquiry (Creswell, 2009). Phenomenal like attitudes, opinions, and experience, relationships and patterns between and among different phenomenal could not be expresses in numerical or text format (Mugenda & Mugenda, 1999; Sekaran, 2002)

The use of both approaches also ensured that data collected could be manipulated to find solutions to the research questions. Leveraging on strengthen while minimising weaknesses of

both quantitative and qualitative research methods (Creswell, 2012). The study therefore used the strength of each method to reduce deficiencies if the other as according to Amin (2005).

3.3 Study population

The accessible population for this study was 416 people from settlement communities found in the green-belt of Napak District Local Government and specifically in Sub-Counties of Iriiri, Matany and Lokopo that were engaged in GIZ programme interventions, and local government and GIZ staff. Whereas the target population totalled to 416 people, 217 respondents were sampled in accordance with Krejcie and Morgan (1970).

3.4 Sample size and selection

In accordance with Krejcie and Morgan (1970) table, the researcher sampled and reached 217 respondents chosen from the accessible population of 416. The study targeted to reach a not-too-small or too-large population as provided by Kothari (2014). The sample consisted of GIZ project implementation staff that had been instrumental in conceptualization of different project interventions, targeted beneficiary groups and their community leaders who were targets of GIZ project interventions, and local government staff who hosted these project activities in their localities. The respondents were all selected owing to their important role in ensuring that sustainability elements are incorporated into community development initiatives.

Table 1: Sample size by Respondents

Category of Respondents	Target Population	Sample Size	Sampling Technique	Rationale	Data collection Method to be used
Households from beneficiary villages	396	200	Systematic sampling	Assess the effectiveness of community participation strategies and their contribution to sustainable community initiatives	Household survey questionnaire
SDCs Leaders (C/Men)	06	05	Purposive	Assessment of their satisfaction with community participation approaches used and their role in sustaining community initiatives	Interview guide
Local government officials:					
Chief Administrative Officer	01	01	Purposive	Assess influence on community and sustainable frameworks being implemented	Interview guide
Community Development Officer	04	02	Purposive	Assess their role and influence in community and sustainable initiatives being implemented	Interview guide
Sub-County Chief	03	02	Purposive	Assess influence on community and sustainable frameworks being implemented	Interview guide
Parish Chief	04	04	Purposive	Assess influence on community and sustainable frameworks being implemented	Interview guide
Management staff	03	03	Purposive	Understand the GIZ perspectives of community participation and sustainable development	Interview guide
Total	**416**	**217**			

(Source: Researcher developed using the formula by Krejcie and Morgan, 1970, Educational and Psychological Measurement, 30, 607-610)

3.5 Sampling techniques and procedures

The sample selection was done according to Amin (2005) who asserts that sampling helps reduce the cost of study, facilitate speedy completion of work and enables attainment of accurate results. A sampling frame listing units or elements from which the study sample was drawn was developed in accordance with Mugenda & Mugenda (1999). This list was used because it guided the researcher to select respondents and locations in terms of Sub-Counties and parishes from where to collect the data.

A total of 217 respondents were chosen for the study following Kothari (2004) who asserts that for a sample to qualify as optimum, it should meet the requirements of efficiency, representativeness, reliability and flexibility. Krejcie & Morgan (1970) sampling table was used because it made it easier to select and come up with an appropriate number of respondents.

Table 2: Sample size by research method

Population Category	Sample Size Selected	Sample for Questionnaire	Sample for Key Informant Interview
Households	200	200	0
SDC Leaders (Chairpersons)	5	0	5
Chief Administrative Officer	1	0	1
Community Development Officers	2	0	2
Sub-County Chiefs	2	0	2
Parish Chiefs	4	0	4
GIZ employees	3	0	3
Total	**217**	**200**	**17**

(Source: Researcher from primary data)

Two hundred (200) respondents were targeted for questionnaires and all of them were available and questionnaires administered accordingly. Twenty-one (21) respondents were targeted for Key Informant Interviews; however only 17 respondents were interviewed.

3.5.1 Systematic Sampling

Systematic random sampling was used as a technique to obtain samples of study by selecting every *nth* household from a list that contained the total households, after a random start as recommended by Gravetter and Forzano (2012). Household lists were obtained from SDC Chairpersons and *nth* number randomly selected as the first sample and consequent samples were determined by going down the list, adding the *nth number* to obtain 10 samples per the 20 villages of study. The technique was used because it ensured that a high degree of repre-

sentativeness was obtained which is fair and unbiased (Amin, 2005, and Mugenda & Mugenda, 1999)

3.5.2 Purposive Sampling

In accordance to (Gravetter and Forzano, 2012), purposive sampling was used to target specific samples at the discretion of the researcher because of their profession, experience and job assignments. This enable the study to interact with experienced respondents that provided an in-depth understanding on community participation and sustainability of community initiatives in the region as recommended by (Amin, 2005 and Mugenda & Mugenda, 1999) who argues that purposive sampling can be used by a researcher to identify respondents that may have the necessary required information in regards to set objectives of the study.

3.6 Data collection methods

The researcher used multiple methods for data collection in this report in meeting with Sakaran (2003) who argues that use of multiple methods makes research findings robust as a result of enrich data collected. The researcher thus used questionnaires, interviews and documentary review as data collection methods in this study.

3.6.1 Key Informant Interviews

Key informant interviews were used to collect data from SDCs leaders in targeted communities, government and GIZ key staff involved in implementation of the program. This method allowed the researcher to probe for more information from interviewees in order to understand their in-depth feelings, perceptions and attitudes towards GIZ interventions in Napak district. Exploring their subjective knowledge, opinions and beliefs in regards to GIZ community participation strategies and their influence on sustainability of project interventions as suggested

by Walonick (2005). Key informant interviews also allowed the researcher to tap into the experience, opinions and attitudes of the respondents as authorities in the subject being researched for the case of the Community Development Officers, as argued by (Kvale & Brinkman, 2009).

3.6.2 Questionnaires

This method of self-administered questionnaires was chosen because they make it possible to collect data and information that is invariably uniform and consistent data (Sarantakos, 1998). It was also used because it's fairly easy to analyze data collected and generate information from a wide range of respondents. The questionnaires also when categorized, scaled and coded can minimize bias due to the interviewer influence and create confidentiality and anonymity (Kumar, 1996). A Likert scale was used in the questionnaire because it does not simply require "yes" or "no" response but rather calls for varied response. The responses therefore expected from the questionnaire were fixed on the Likert scale questionnaire in accordance with the subject of study, community participation and sustainability. This made it possible for data to be analyzed with ease. The use of interpreters further made it possible to ease communication with the majority of respondents who were illiterate and could not fill out the questionnaire on their own.

3.6.3 Documentary Review

This method was used to peruse through and extrapolate recorded and published information in the form of project offer, concept notes, project proposals, M&E reports, and GIZ-FNS project annual reports as regards to GIZ project intervention in Karamoja sub-region. This was done in accordance with (Amin, 2005) who argues that documentary review method involves carefully studying written materials or visual information called documents. The doc-

uments reviewed helped the researcher to better understand GIZ-FNS community participatory approaches that were undertaken by the project, and which also played to further assist in analyzing and understanding the relationship that subsist between the variables under study. The ease in accessing these documents saved time and money as required information was readily available in the company's website and Karamoja office.

3.7 Data collection instruments

3.7.1 Interview Guide

Semi structured interview guides were applied to community leaders, local government officials and GIZ staff because they stimulated respondents to get into detailed discussion about the relationship between community participation and sustainability of GIZ-FNS project interventions. The guide helped standardize the interview situation and to obtain required data in accordance with Amin (2005) who asserts that key informant interviews make it possible in probing in-depth information. The use of the interview guide made it possible to collect information that would have been impossible to collect using questionnaires alone, such as in-depth information on the subject matter, clarifications and captured varied opinions of respondents.

3.7.2 Questionnaire guide

A structured questionnaire was used to collect quantitative data from randomly selected sampled respondents. The questionnaire was self-administered but in cases where respondents were illiterate, research assistants administered the questionnaire to them so that the study-captured views are representative of the wider population. The questionnaire guide was further used because it generated consistent data and because it is the most appropriate instrument for a big sample (Amin, 2005). Questionnaires used a 5-point Likert scale ranging from

1-(strongly disagree) to 5-(strongly agree). The higher, the more influence on sustainability. The Likert scale provided for consistent responses and allowed participants to provide feedback that is slightly more expansive than a closed ended question, but rather easier to quantify than a completely an open ended response (Patrick, 2007). The design of the questionnaire provided for anonymity, as respondents were not required to give their names, which enhanced confidentiality and enlisted fairly valid responses to the questions asked.

3.7.3 Documentary review

The researcher used this method to peruse and extrapolate recorded and published information such as project offers, situational and evaluation reports, and other strategic project documents. Documentary review provided an insight on community participation and sustainability of GIZ interventions in Napak district. This tool was purposely used to collect secondary data that was already available in published or unpublished form in keeping with (Kellogg, 1998) who argued that document review is away of data collection through reviewing data that already inform of documents which may be internal to a program or organization.

3.8 Validity and reliability

Validity

In accordance with Amin (2005) validity may be external and internal validity. External validity refers to the application of the study elsewhere and obtaining similar results. Whereas internal validity refers to the extent to which instruments can effectively be used to collect data that can be interpreted accurately with an acceptable degree of confidence. Evaluating the extent to which measurement procedure actually measures what it claims to be measuring (Gravetter and Forzano, 2012). In this study content validity was used to ascertain extent to which the content of research instruments corresponds to the concept designed to measure

(Amin, 2005) by use of UMI based subject expert judgment by supervisors and peer review approaches. Based on their judgment necessary refines were made to the tools.

The questionnaire had fifty-four (54) items. However after review of the questionnaire by community development experts, they were reduced to forty-nine (49) items, which were eventually used for data collection. Content Validity Index (CVI) was computed as follows:

$$CVI = \frac{\text{Number of declared valid}}{\text{Total number of items}} \times 100\%$$

$$= (49/54) \times 100\%$$

$$= 90.7\%$$

The research instruments were therefore accepted based on the fact that CVI was calculated at 90.7%, above the threshold of 70% as determined by Amin (2005) for tools to provide accurate results.

Reliability

In this study the researcher assured reliability by pre-testing research instruments, having peer reviews and discussions with supervisors. The instruments were piloted on 5% (10 individuals) of the sample size, as recommended by Mugenda and Mugenda (1999). Pre-testing of tools was carried out in Lomario village, Rupa Sub-County, Moroto district where GIZ implements similar project interventions that afforded familiar characteristics as intended respondents of study. During pre-test, questions that were not clear to respondents were identified and reviewed so as to ensure research instruments actually measured what it claims to be measuring as stipulated by Gravetter and Forzano (2012). Table 3 shows the Alpha Cronbach's Coefficients computed using SPSS.

Table 3: Reliability Analysis

Variable	*Alpha Cronbach's coefficient*	*No. Items retained*
Project design	0.809	15
Project Implementation	0.716	13
Project M&E	0.708	12
Project Sustainability	0.725	9
Entire data collection tool	0.865	49

***Source**: Primary Data*

The table above shows a Cronbach's Alpha of 0.809 for project design with 15 items, 0.716 for project implementation with 13 items, as well as 0.708 for project M&E with 12 items, 0.725 for project sustainability with 9 items, and lastly, 0.865 for all variables under study totalling to 49 items. The tool therefore passed reliability test for each of the variables and for all variables since they were all greater than 0.7, given that the level of Cronbach's Alpha that is adequate is any value equal to or greater than 0.7 (Amin, 2005). The instruments were therefore suitable for data collection.

3.9 Procedure of data collection

In agreement with Padget (1998) argument on procedures for data collection, the researcher sought an introduction letter to the field from Uganda Management Institute as an academic authority after a successful defence and approval of the research study proposal. The searcher then trained research assistants for data collection and pre-tested instruments, making necessary refines where applicable.

The researcher then made appointments with key informants for interviews and with support of GIZ staff, and SDCs leaders in their respective communities, mobilized targeted respond-

ents to participate in the research study. The questionnaires were then accordingly administered to the respondents in adherence to ethical guidelines, seeking verbal consent from all respondents before carrying out the interview. Explanations were also provided to respondents regarding use of the information collected and its confidentiality of responses so given. Interviews were also executed for key informant interviews.

3.10 Data analysis

The researcher used both quantitative and qualitative data analysis. Quantitative raw data was coded, edited and entered into SPSS for analysis to ascertain descriptive statistics of frequencies and used to measure central tendency so as to describe and summarize the data. Relational statistics like correlation coefficient was further used to establish strength of the relationship between and predict invariability of the dependent variable. Multiple simple regressions were also used to further determine the least dominant independent variable.

For qualitative data, responses were transcribed, sorted and classified into trends and categories in order to support hypotheses tested. The analyses were done manually and responses summarized in a narrative form as a representation of major findings of study.

3.11 Measurement of variables

Community participation in this study was measured as participation in project design, implementation and project M&E, whereas sustainability was measured by facets of skills and knowledge improvement, adoption and replication of technologies and functionality of assets. A questionnaire with Likert scale of 5 points was used to measure respondents' perceptions and best description of their reactions to each statement classified from 1- 5, where 1- Strong Disagree (SD); 2- Disagree (DA); 3- Not Decided (ND), 4- Agree (A); and lastly 5- Strong Agree (SA).

1.12 Ethnical considerations

The researcher sought consent and approval from each respondent before proceeding with interviews and assured them of confidentiality of their information according to (Sarantakos, 2005) and, in an attempt to create anonymity and confidentiality all administered questionnaires were coded and no names were recorded. The researcher also thought consent of respondents before administering the questionnaire, giving explanations to the purpose of study so that respondents could make informed consent (Israel & Hay, 2006). Information provided by respondents has also been used purely for academic purposes and treated with utmost confidentiality.

Summary of Chapter Three

This chapter highlights the processes used for data collection, as well as the methods, and instruments used. Cross-sectional survey design and mixed methods were used. For qualitative inquiry, interview guides, questionnaire guides and documentary review were used. The data collected has been consequently presented, analysed and interpreted in Chapter Four. The same data and information has also been used for summary, discussion, conclusions and recommendations in Chapter Five, respectively.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTEPRETATION OF FINDINGS

4.1 Introduction

This chapter presents analysis and interpretation of study findings arising from data collected from respondents using questionnaires and interview guides. It presents the response rate, demographic characteristics of respondents, descriptive statistics, and correlation and regression analyses of the study of which the main purpose was to examine relationship between community participation and sustainability of GIZ-FNS supported development interventions in Napak district, Karamoja Sub-Region, Uganda. The end of this chapter, however, presents multiple linear regression analysis that was intended to assess effect of each independent variable on sustainability of GIZ project interventions. Qualitative information was also used to complement findings of quantitative analyzes.

The objectives of the study were;

i) To examine how community participation in project design influence sustainability of GIZ project interventions in Napak district.
ii) To ascertain how community participation in project implementation contribute to the sustainability of GIZ project interventions in Napak district.
iii) Find out how community participation in project M&E influence sustainability of GIZ project interventions in Napak District.

4.2 Response Rate

Out of 200 questionnaires that were distributed to respondents, 200 were returned giving an overall response rate of 100% that is internationally acceptable given that it is over and above

50% rate recommended by (Mugenda and Mugenda, 2003). In addition, 17 out of the planned 21 key informants to be accessed were interviewed giving a response rate of 81%. It can therefore be deduced from both response rates that data was collected from a reasonable number of respondents as regards to the targeted population and consequently, data collected and ensuing findings can be relied upon according to (Mugenda and Mugenda, 2009) who argues that a response rate of 50% is adequate for analysis and reporting, while a rate of 60% is good and a response rate of 70% and over is excellent. The high response rate is attributable to the high level of co-operation and enthusiasm exemplified by community settlement leaders who mobilized respondents to participate in the research study in their respective communities.

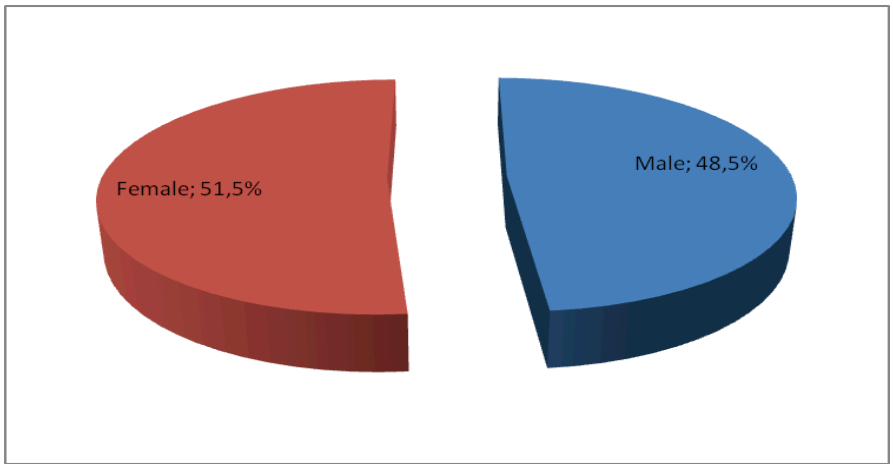
4.3 Demographic description of the Respondents

This section presents background information of respondents based on six variables for which data was collected and analyzed during the study that made it possible to understand the status quo of the respondents and enrich data collected. It presents gender distribution of respondents, their age groups, marital status, highest education level, their settlements, as well as their occupations. The demography characteristics further enhanced the researcher's ability to understand the facets' of the dependent variable.

4.3.1 Distribution of Respondents by Gender

This was intended to give an idea of distribution of study respondents by gender presented in Fig.2.

Figure 2: Demographic description by gender



(Source: Primary data from field study)

It can be seen from the findings that majority (51.5%) of respondents were female. This is indicative of the fact that women were more engaged in GIZ project activities and ensuring sustainability of the same. But 48.5% male involvement is an impressive figure, which indicates an increasing uptake of other development interventions by men as opposed to their perceived traditional norms and role as pastoralists. This seems to reaffirm the argument that community participation must be gender inclusive and should solicit active involvement of both genders for project sustainability to be achieved, as it creates a commune environment that transgresses beyond gender and where inclusive community development decisions are equally made. In light of this argument and in due consideration of this finding, the implication has been that project interventions that were gender inclusive in their design, implementation and execution of M&E activities such as in Village Saving & Loan Association and water points management, have been largely sustained by the community, with communities making cash, labour and material contributions to sustain the interventions.

The study also found out that project interventions, which were not rooted in gender inclusiveness in their nature of design and implementation like the Energy Saving Stoves (ESS)

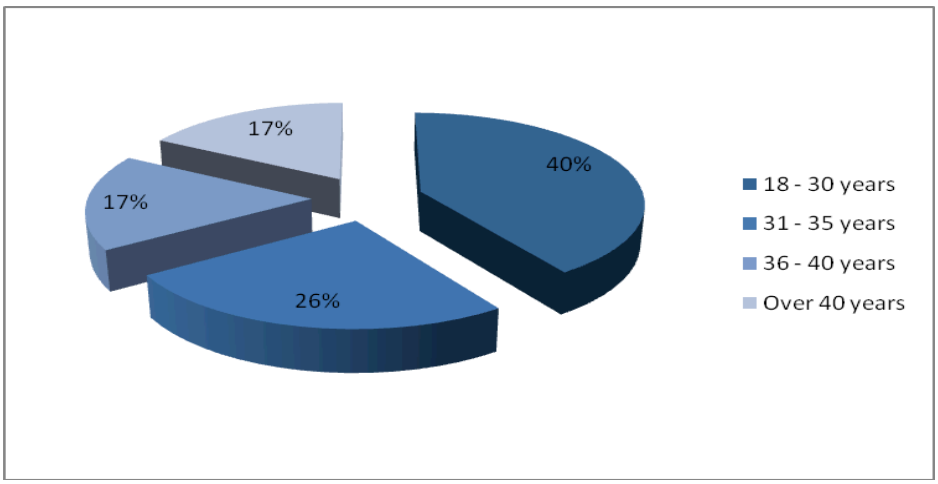
that targeted only women, were found not to be sustainable. Such interventions were found to lack moral backing within the communities and were men majorly dominated leadership of community structures. Further field findings revealed that the project was aware of this strain and took deliberate measures to ensure gender inclusiveness in its project interventions, as a key informant said that:

The election of Settlement Development Committee (SDC) members took into consideration gender balance. Each settlement elected two mature male and female as representatives

4.3.2 Distribution of Respondents by Age groups

The study assessment of distribution of respondents by age group was also conducted so as to derive a picture as regards to distribution of study respondents by age. Fig. 3 shows results of the assessment.

Figure 3: Distribution of Respondents by age groups



(Source: Primary data from field study)

The findings of the study showed that majority (66%) of respondents were aged between 18 and 35 years, followed by those aged between 36 and 40 years represented by 17%, as well as an equal representation of 17% aged over 40 years. But, also reveals that youthful adults

(66%) were highly engaged in project activities and their immense capabilities to adopt new propagated project technologies is appreciable as key to project sustainability.

4.3.3 Distribution of Respondents by Marital Status

The data collected on marital status of respondents of study and analysed revealed the following results as shown in Table 4 below;

Table 4: Distribution of Respondents by marital status

Status	Frequency	Percent (%)
Married	**165**	**82,5**
Not Married	**14**	**7,0**
Separated	**3**	**1,5**
Widow	**16**	**8,0**
Widower	**2**	**1,0**
Total	**200**	**100,0**

(Source: Primary data from field study)

The findings showed that majority of respondents (82.5%) were married, while 7.0% were not married, whereas only 1.5% were separated, 8.0% were widows and only 1.0% were widowers. It can therefore be interpreted that majority of people active in GIZ project interventions understood and appreciated their food and nutritional security status and worked towards to reverse the situation. With 66% and 82.5% of the respondents youthful and married respectively, implies that they were able to fully engage their youthful families in the project activity implementation that in turn positively affected sustainability of the project interventions.

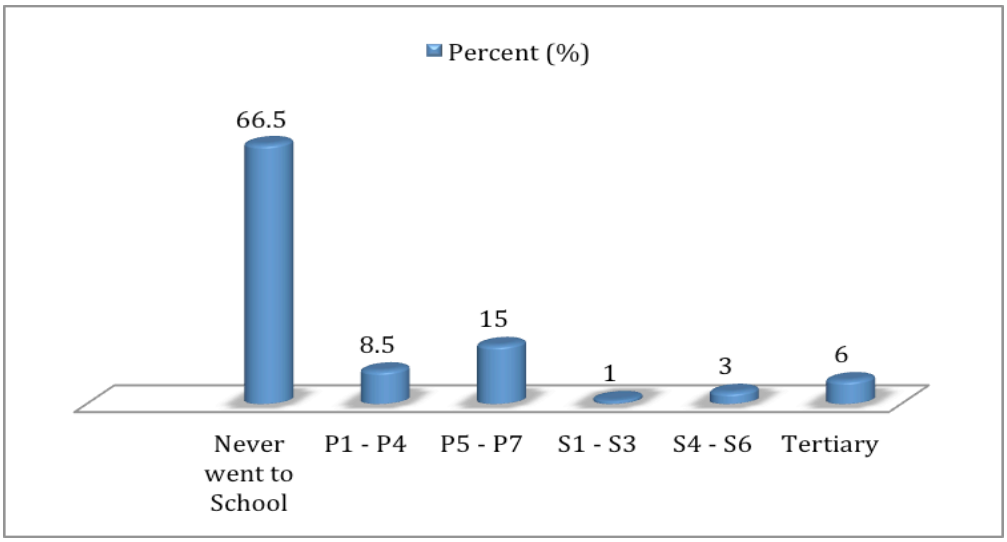
The implication of this finding is that youthful families with adequate labour force have been able to better adopt and reap from newly propagated project sustainable farming techniques

and technologies, as well as from other development interventions as opposed to families with less labour force. Study findings from the field also showed strong Karimojong belief and attachment to traditional institutions and cultural norms such as marriage that are a driving force for community cohesiveness in every society, and yet again, an essential element in this research study.

4.3.4 Distribution of Respondents by highest level of education

The study also sought to find out distribution of respondents by highest education level of those who participated in the study. Fig. 4 shows the distribution.

Figure 4: Distribution of Respondents by highest level of education



(Source: Primary data from field study)

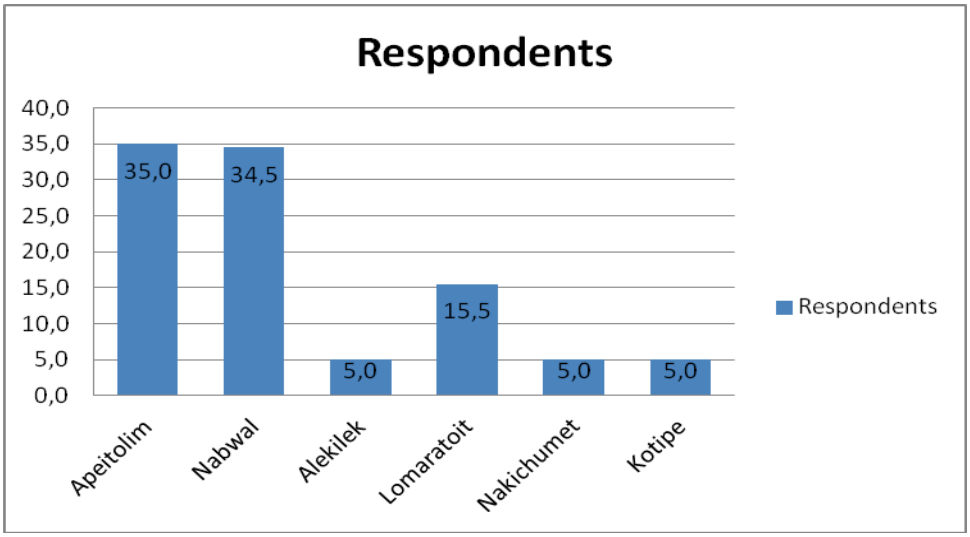
The study findings indicate that majority 66.5% of respondents never went to school and those who had completed tertiary education were a handful of only 6%. Only 8.5% studied up to between P1 and P4. While 15% studied up to between P5 and P7. With only 1% studying up to between S1 and S3, and 3% studied up to between S4 and S6. The results of the study seem to point to the fact that majority of respondents were not learned and thus were unable to read, nor write legibly and consequently unable to understand the questionnaire without assis-

tance. The implication of the results is that a greater percentage of respondents' level of understanding and appreciation of project technical aspects and implementation of new technologies propagated might have been low, which might have affected sustainability of project interventions as about 75% of respondents never went to school and plus those who studied from P1 to P4. This finding seems to explain the fact as to why GIZ opted to employ participatory approaches as a strategy to actively solicit and engage targeted communities' in its activities. Field findings also revealed that a bigger percentage of project beneficiaries still practiced traditional farming methods such as seed broadcasting as opposed to line planting for better field management. The finding from documentary review also revealed that semi literates who could read and write dominated the SDC leadership structures.

4.3.5 Distribution of Respondents by settlement

The study also collected data based on distribution of respondents by settlement. This was intended to give an impression on distribution of respondents by settlement. Fig. 5 shows results of the assessment.

Figure 5: Distribution of Respondents by settlement



(Source: Primary data from field study)

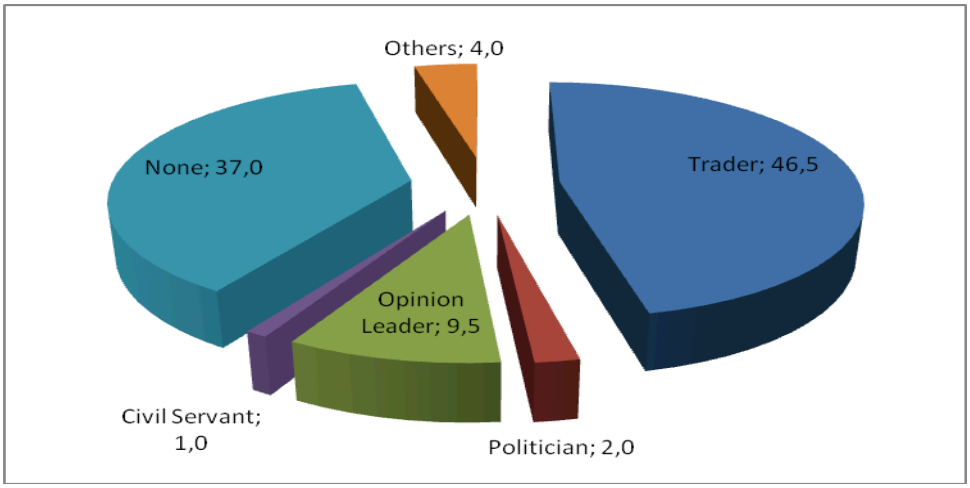
Findings revealed that majority of respondents were located in Apeitolim and Nabwal represented by 35% and 34.5% respectively. Fifteen percent (15%) were found in Lomaratoit. Nakichumet and Alekilek, while Kotipe settlements had 5% of the respondents. The field findings show that majority of project targeted beneficiaries were found in the green-belt that provided most favourable farming conditions for settlers in terms of fertile soils, available water for production and pasture for animals. Findings also showed that GIZ had undertaken numerous community interventions in Apeitolim and Nabwal settlements, which had the highest populations and potential for mass agricultural production.

The implication of this finding is that there was a deliberate attempt by GIZ to commit more resources in terms of both financial and human resources to the two big settlements as there was a high likelihood of project interventions being more sustainable in Apeitolim and Nabwal settlements as compared to the rest of the settlements. This was made possible by available vast fertile arable lands that attracted many settlers willing to take up agricultural as a source of livelihood, as well as water accessibility and pasture that appealed to both agro-pastoralists and pastoralists especially during dry spells as compared to Nakichument and Kotipe settlements, which are prone and susceptive to prolonged drought spells. In relation to argument, the study findings also found out that unfavourable climatic conditions manifested by prolonged drought and exacerbated by continuous lack of appropriate technologies and adequate water for production available to local communities in some areas has therefore played to undermine sustainability of numerous development project being implemented, including GIZ interventions. Examples were drawn from the failed GIZ school tree planting and agro-forestry projects in Napak district.

4.3.6 Distribution of Respondents by occupation

To further understand how respondents spent their productive time, respondents were asked to indicate their other occupations than farming. Fig. 6 shows distribution of their occupations.

Figure 6: Distribution of Respondents by occupation



(Source: Primary data from field study)

The study findings indicated that majority (46.5%) of respondents were traders, followed by those who are not engaged in any gainful activity represented by 37.0%. Opinion leaders were 9.5%. Whereas those involved in other occupations were 4.0%, politicians were only 2.0%, and civil servants only 1.0%. From the results, it can be deduced that majority of GIZ project beneficiaries did some trading in addition to farming which is underscored by 46.5% of respondents.

The implication of the findings is that there is an extreme high-level of dependency syndrome among respondents represented by 37% not engaged in any other occupations apart from farming and yet the region was heavily found to be challenged by climate change and affects of climate variability. The researcher also found that societal safety nets and other coping mechanisms were largely unavailable to majority of unemployed youth, as the need to strengthen societal safety shocks seemingly becomes, apparently clear. The implication of the

above findings may also point to the fact that not so much progress has been achieved as regards to creation of much needed sustainable income generating opportunities represented by numerous community project interventions targeted at unemployed youth in the region.

4.4 Relationship between community participation and sustainability of GIZ supported development interventions in Napak district

4.4.1 Objective 1: Community participation in project design and its influence on sustainability of GIZ project interventions in Napak district

In order to understand attitudes and perceptions of respondents on community participation in project design, so as to examine whether it influences sustainability of GIZ project interventions in Napak district, the researcher used a total of fifteen statements on the questionnaire to which respondents were required to show their level of agreement or disagreement. In this respect, community participation was studied using three dimensions, namely- Needs Assessment, Needs Identification and Activity Planning. Table 5 shows descriptive views of respondents on community participation in project design and project sustainability.

Table 5: Descriptive statistics on community participation on project design and project sustainability

Statements on community participation in project design	Strongly Agree	Agree	Not Decided	Disagree	Strongly Disagree	Mean	Std Dev.
	5	4	3	2	1		
Community members were sensitized about the project activities before implementation of the project	48.5%	49.5%	1.0%	1.0%	0.0%	4.45	0.57
The community was engaged in consultative meetings to identify their needs	25.0%	73.0%	1.0%	1.0%	0.0%	4.22	0.50
The project facilitated the community to identify their need	13.5%	82.5%	2.0%	2.0%	0.0%	4.07	0.48
All community members were involved identifying community needs	20.5%	77.5%	0.0 %	2.0%	0.0%	4.17	0.51
Community members were asked about problems faced by the community before implementation of GIZ interventions	52.5%	43.5%	3.0 %	1.0%	0 .0%	4.47	0.61
I attended meetings organized by GIZ during the identification of needs in our community	43.5%	45.5%	0.0%	6.0%	5.0%	4.17	1.05
Community members are able to gather and identify their needs/ problems	20.5%	78.5%	0.0%	1.0%	0.0%	4.21	0.47
Community members are involved in selecting needs to be addressed	18.5%	80.5%	0.0%	1.0%	0.0%	4.16	0.44
Community representatives are involved in deciding what project interventions to be implemented in their areas	6.5%	80.0%	12.5%	1.0%	0.0%	3.92	0.47
The community members understand problems faced by their communities	65.0%	35.0%	0.0%	0.0%	0.0%	4.65	0.48
Community members were engaged in planning meetings and workshops before project implementation	12.5%	66.5%	14.0%	7.0%	0.0%	3.85	0.72
The Community participated in deciding project activities to implement	1.5%	78.5%	17.0%	2.0%	1.0%	3.77	0.55
The Community participated in making work plans and budgets for project activities in their communities	4.5%	27.5%	0.0%	56.0%	12.0%	2.24	0.72
The project activities implemented addressed community problems that were identified together with the community	18.0%	65.0%	4.5%	12.5%	0.0%	3.88	0.85
Community indigenous knowledge and practices were considered in deciding type of technology to adopt	11.0%	83.5%	0.5%	5.0%	0.0%	4.01	0.56

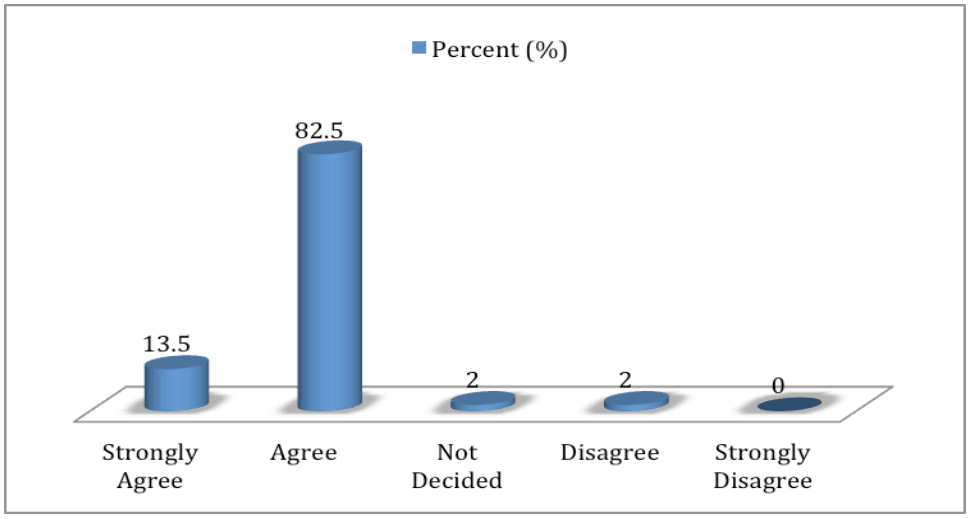
(Source: Primary data from field study)

Findings in table 5 above shows that majority of respondents (98.0%) were in agreement that community members were sensitized about project activities before implementation of the

project, 1.0% were not decided, while 1.0% disagreed with the statement. This implies that community members were sensitized on project activities prior to implementation. Also, most of the respondents (73%) agreed on the statement that the community was engaged in consultative meetings to identify their needs, while 25% strongly agreed. This seems to imply that the level of community consultation was high reflected by the fact that only 1% disagreed with the statement and another 1% was not decided.

The study findings revealed that majority of 96.0% respondents were in agreement that the project facilitated the community to identify their needs, 2.0% were not decided and 2.0% disagreed.

Figure 7: Respondents responses on whether community members were involved in community needs identification



(Source: Primary data from field study)

This study findings give strong indication that the project took due diligence to facilitate communities to identify their needs, as 96% of respondents were in agreement to being involved in identifying their needs, against 2% who disagreed with the statement.

On the statement whether community members were asked about problems they faced before implementation of GIZ interventions, 96% of respondents were in agreement with the statement. Only 3% were not sure, and 1% disagreed. By implication, it is overwhelming clear that the community participated in assessments and identification of community needs undertaken and facilitated by the project before it was implemented. Community buy-in through their participation in project development is a fundamental prerequisite to sustainable development today as communities are seen to increasingly support such interventions that address their concerns. The study findings from documentary review of project assessments also support the findings that communities were engaged in identification of their problems.

In response to the statement on whether they attended meetings organized by GIZ during identification of needs in their community, 89% of the respondents agreed with the statement against 11% who disagreed. This yet again seems to imply that majority of community members attended project meetings for needs identification. This argument is further strengthened by (100%) majority of respondents in agreement that they were able to gather and identify their needs and/or problems. This notion of community participation seems to resonate amongst study population as 99% of respondents also agreed with the statement that community members were involved in selecting needs to be addressed. 86.5% of respondents were also in agreement that community representatives were involved in deciding what project interventions are implemented in their areas. However, 12.5% of respondents were non-committal to the statement, which could have been a reflection of their ignorance of roles of community representatives in their respective communities.

Further findings reveal that majority (100%) of respondents were in agreement with the statement that community members understood problems faced by their communities. This

seems to imply that communities of study possessed vital indigenous knowledge and practices that GIZ project could benefit from in designing appropriate interventions in the different communities of project coverage.

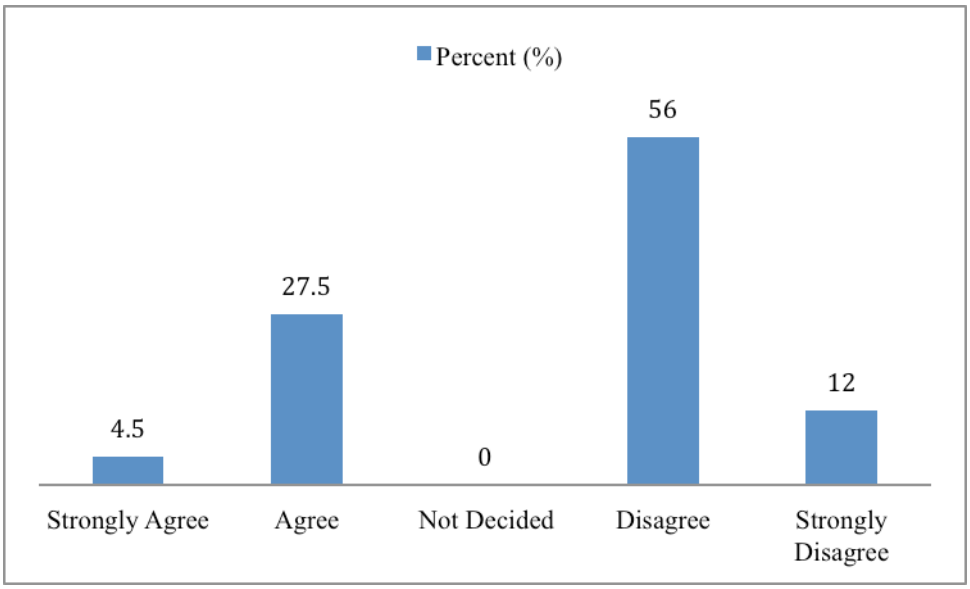
As regards to the statement whether community members were engaged in planning meetings and workshops before project implementation, a majority of 79% of respondents were in agreement with the statement. However, 14% of respondents seemed to have no knowledge in regards to the statement probably because they were not settlement residents at the time. Only 7% disagreed with the statement probably because they were not sensitized or informed about the meetings. It can therefore be argued that majority of community members participated in GIZ planning sessions by attending meetings and workshops organized by the project and as a result had an opportunity to influence project plans to their advantage to address core community challenges. This view is further supported by 80.0% of respondents in agreement that the community participated in deciding project activities to implement, though 3% were in disagreement and 17% had no knowledge probably because they were new arrivals and were not aware of GIZ project processes undertaken. Nevertheless, this seems to reaffirm that an effort was made to ensure that beneficiary communities participated in deciding projects interventions to be undertaken in their communities and in the same spirit ensure their sustainability so as to maximize accruing benefits from the project.

Study findings from key informant interviews revealed that several communities were indeed sensitized and facilitated to engage in consultative meetings aimed at assessing, identifying and prioritization of their needs. One key informant during a key informant interview said that,

"The GIZ team visited each settlement more than three times while conducting needs assessment to familiarize with settlements, collectively identifying needs to be addressed and to create effective partnership and linkages with Settlements"

However, in regards to the statement whether the community participated in making work plans and budgets for project activities in their communities, majority (68%) respondent were in disagreement against 32% in agreement.

Figure 8: Respondents responses on whether community members were involved in making project work plans and budgets



(Source: Primary data from field study)

The findings as shown in Fig. 8 above highlight that there might have been instances where community participation in work plans and budget preparations was not solicited by the project. These instances seemed to have been more than usual as reflected by 68% of respondents in disagreement. Field findings showed that although respondents participated in project assessments, identification, as well as prioritization of community needs, except for some lead-

ers, not all of them took part in making of final project work plans and budgets as one community leaders alluded that,

> "They come here and take our ideas but later ignore us when it comes to the crucial point of prioritizing and allocating available resources. They choose whatever they want to do, but what choice to we have?"

The study also found that majority (83%) of respondents agreed that project activities implemented addressed community problems identified together with the community, 12.5% were in disagreement and 4.5% had no knowledge in regards to the statement. The field finding seems to point to the fact that majority of interventions implemented were basically geared towards addressing communities' identified priorities. However, 12.5% of those who disagreed could have been because their community priorities might not have been considered by the project. Evidence from documentary view revealed that there were circumstance indeed, in which the project undertook some projects such the Interlocking Soil Stabilized Blocks (ISSB) and Energy Saving Stoves (ESS) projects deliberately regardless of community priorities, in an attempt to impart new technologies to concerned communities to curb down rapid environment degradation in the district. Though, this seemed to be important to the project, the community did not embrace these two projects, which plays to show that the interventions were not in tandem with beneficiary needs and priorities at the time.

The mean of the Likert scale data indicates that 14 (93%) out of 15 statements have means greater than 3, implying that majority of respondents indicated that they either agreed or strongly agreed with regards to the statements on community participation in project design in GIZ project interventions in Napak district. The standard deviation does not vary so much

indicating that variability among responses was low, except for the statement *"I attended meetings organized by GIZ during identification of needs in our community*" which reflects a high variability among those who strongly agreed (43.5%) and agreed (45.5%). However, on the statement that "*the community participated in making work plans and budgets for project activities in their communities"* with a mean of 2.24, less than 3, is due to the fact that majority of respondents indicated that they disagreed (56%) or agreed (27.5%). Implying, that community members were not often involved in preparation of work plans and budgets for project activities.

Pearson correlation coefficient results for project design and sustainability

To establish the strength of relationship between community participation in project design and sustainability of GIZ project interventions in Napak district, the researcher analysed correlation using Pearson correlation coefficient. Table 6 shows Pearson correlation coefficient results.

Table 6: Correlation coefficient results for project design and sustainability

Study Variables		**Community Participation in project design**	**Sustainability**
Community Participation in project design	Pearson Correlation	1	.609*
	Sig. (2-tailed)		.000
	N	200	200
Sustainability	Pearson Correlation	.609*	1
	Sig. (2-tailed)	.000	
	N	200	200

* Correlation is significant at the 0.05 level (2-tailed).

The findings in the table above show that there is a moderate positive relationship between project design and sustainability, given by Pearson's correlation coefficient of 0.609. The relationship is statistically significant at 95% confidence level (2-tailed) since the *p-value*

(Sign) is less than 0.025 (=0.000). This implies that improved community participation in project design leads to improved sustainability of GIZ project interventions in Napak district.

Regression coefficient on project design and sustainability

A linear regression model was used to further determine extent to which community participation in project design affects sustainability of GIZ project interventions in Napak district. The results are given in table 7.

Table 7: Regression coefficient of project design and sustainability

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.520	.230		6.602	.000
	Community Participation in Project Design	.617	.057	.609	10.796	.000

a. Dependent Variable: Sustainability

Findings (Table 7) from regression analysis further indicate that project design has a significant effect on sustainability of GIZ project interventions in Napak District given by (β=0.609, t=10.796, p<0.05 (=0.000)). Implying that the relationship between project design and sustainability was therefore causation implied type.

Model summary of community participation in project design on sustainability

Having established that sustainability of GIZ project interventions in Napak district is positively affected by community participation in project design, it was further prudent to estimate the proportion of variance in project sustainability that can be attributed to community participation in project design. Table 8 shows the summary results.

Table 8: Model Summary of community participation in project design and sustainability of GIZ project interventions in Napak district

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.609	.371	.367	.26162

The results show that correlation coefficient (r) = 0.609, using the predicator; project design is 0.371 and the coefficient of determination (r^2 x 100) = 37%. This means that community participation in project design as a dimension of the independent variable accounts for 37% of variation in sustainability of GIZ project interventions in Napak district, while 63% is explained by other factors.

Analysis of variance (ANOVA)

ANOVA was used to assess the total effect of community participation in project design on sustainability of GIZ project interventions in Napak district. Table 9 shows ANOVA results.

Table 9: ANOVA of project design and sustainability

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.978	1	7.978	116.562	.000[a]
	Residual	13.552	198	.068		
	Total	21.530	199			

a. Predictors: (Constant), Community Participation in Project Design
b. Dependent Variable: Sustainability

The analysis of variance shows total significance of regression results with a degree of freedom (df) of (1, 198), F-value of 116.562, which was statistically significant with a *p-value* of 0.000 (<0.05). Implying that community participation in project design as a dimension of the independent variable of *Community Participation*, has a statistically significant effect on sustainability of GIZ project interventions in Napak district.

4.4.2 Objective 2: Community participation in project implementation and sustainability of GIZ project interventions in Napak district

The descriptive statistics in table 10 shows that there was a high level of community participation in implementation of GIZ project interventions in Napak district as per the respondents' responses. The Strongly Agree (SA) and Agree (A) responses compared to Strongly Disagree (SD) and Disagree (DA) continuum affirms that there was indeed high community participation.

Table 10: Descriptive responses on community participation in project implementation

Statements measuring community participation in project implementation	Strongly Agree	Agree	Not Decided	Disagree	Strong Disagree	Mean	S.D.
	5	4	3	2	1		
Community committees (e.g. SDCs, User groups) exist in my community	54.5%	45.5%	0.0%	0.0%	0.0%	4.55	0.50
Committee member meetings take place regularly in my community	10.0%	76.5%	8.5%	5.0%	0.0%	3.92	0.62
The Community leaders in my area are trained to do their work	26.0%	61.0%	9.5%	2.0%	1.5%	4.08	0.75
The Community leaders in my area mobilize members to participate in implementation of project activities	37.0%	62.0%	1.0%	0.0%	0.0%	4.36	0.50
Community members meet to discuss management of community assets and GIZ project activities in their area	19.5%	74.5%	4.0%	2.0%	0.0%	4.12	0.55
The leaders provide the community members with feedback on progress of the project activities in our area	13.0%	78.0%	2.0%	6.0%	1.0%	3.96	0.69
Community leaders mobilized community members to contribute resources	41.0%	58.0%	0.0%	1.0%	0.0%	4.39	0.55
The community is involved in identifying required inputs for the project interventions	4.0%	81.0%	8.0%	7.0%	0.0%	3.82	0.61
The community makes cash contributions for project activities and in maintenance of community assets	16.5%	78.5%	0.0%	3.0%	2.0%	4.05	0.68
Community leaders together with the community make decisions on how to use and manage cash contributions	8.5%	80.5%	2.0%	4.0%	5.0%	3.83	0.83
The Community contributes free land for project activities	61.0%	36.0%	0.0%	1.0%	2.0%	4.53	0.74
The community shares its local knowledge and practice about the area with project management team	12.5%	69.0%	9.5%	9.0%	0.0%	3.85	0.75
The community provides free labour for community based activities	11.0%	48.5%	4.5%	34.0%	2.0%	3.32	1.11

(Source: Primary data from field study)

The findings show that 100% of respondents were in agreement that community committees exist in their communities. This was reaffirmed by field findings that revealed that indeed community structures of different committees and beneficiary groups existed. For example, the Settlement Development Committees (SDC) was found to be an umbrella committee that included other committees like the Water Users' Committee (WUC) that took charge of communal water sources management, Village Savings and Loans Associations (VSLA) that promotes community saving culture and also provides credit facilities to its members. Interviews with key informants further revealed that these committees were formed in-line with GIZ project implementation framework, which provided for overall stewardship and coordination of the groups including their capacity building and initial capitalization.

Majority of 86.5% of respondents also agreed that committee member meetings took place regularly in their communities. Only 5% disagreed and while 8.5% had no knowledge of occurrence of these meetings probably because they were not aware of existing committee meetings in their areas or did not participate in any of the committee meetings. The 86.5% respondents in agreement seem to imply that committee meetings were regularly held in regards to implementation of project interventions. Results from the field showed that some communities had weekly, bi-weekly or monthly meetings to discuss project activities and challenges met in their communities. They reported to share these meetings reports with GIZ project management monthly as basis for dialogue through their SDC Chairpersons.

In respect to the statement whether community leaders in their areas were trained to do their work, 87.0% of respondents were in agreement against 3.5% who disagreed. 9.5% were uncertain, perhaps because they were new residents in the settlements and were not aware whether leaders' trainings took place or not. Field findings however revealed that leaders and

members of different committees were trained in their roles and responsibilities including among others mobilization of their respective communities' participation in development initiatives, resource mobilization, leadership, as well as management of established community assets as part of the project capacity building and implementation policy. As such, it was found that SDC members, Water Users' Committees, Pump Mechanics, and Village Savings & Loans Association members were all trained by the project. Implying that community leaders were better able to engage in GIZ project implementation more effectively and efficiently and as a result contribute to sustainable project interventions.

The above argument is further supported by 99% respondents' agreement that community leaders in their areas mobilized community members to participate in implementation of project activities. Field findings revealed that the project worked through community leadership structures mainly in mobilization of communities to provide casual labour. For example during Nabwal- Iriiri road construction and Okot Otim water pond construction in Iriiri for water for production, including mobilization of construction materials such as sand, aggregate, and murram, and labour for construction of Nabwal Health Centre and other community assets. This finding seems to illustrate that both GIZ management team and community leaders were mindful of the communities' roles and impact of their participation in implementation and sustainability of project activities.

Similarly, majority (94%) of respondents were in agreement that community members met to discuss matters as pertains to management of community assets and GIZ project activities in their areas. 2% of the respondents disagreed, while 4% were not sure. Overwhelming evidence from the field revealed that community leaders took it as their responsibility to mobilize their community members' participation in management of project activities as seen from

meeting reports and records especially from the Village Savings & Loans Association who articulated every record of their sittings and amounts of money collected and given to members. The Water Users Committees also provided record of maintenance carried out on their water points. There is possibility therefore that those who were in disagreement and not sure of occurrence of meetings could be new settlers in the area and were unaware of community responsibilities. However, in regards to that statement whether leaders provide community members with feedback on progress of project activities in their areas, 91% agreed, whereas 7% disagreed and 2% had no knowledge on the statement. This seems to ascertain that there was transparency and community accountability in community dispensation of project activities in their respective communities.

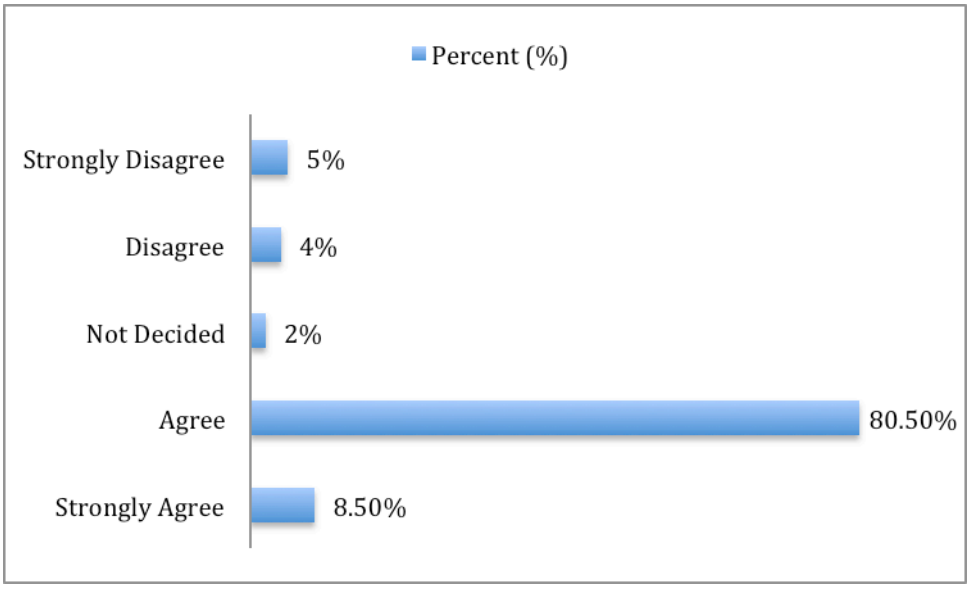
An overwhelming 99% of respondent were in agreement that community leaders mobilized community members to contribute resources for implementation if GIZ project interventions in their areas. This by implication reveals that GIZ project management and community leadership took into consideration the role of the community not only in identification of needs but also in as much as contributing resources towards addressing such identified needs is concerned. Field findings from key informant interviews revealed that community members contributed casual labour and building materials such as sand aggregate, stones, murram and fetched water for construction of community infrastructure undertaken by the project as their contribution. This is also in respect to the fact that majority of 85% agreed that the community was involved in identifying required inputs for project interventions. Field findings revealed that the community was critical in locating water points for development based on their indigenous knowledge of the area which is semi-arid, including identification of land for establishment of Farmer Field Schools (FFS) and identification of lead farmers in their communities for technology promotion and replication, as well as identification and election of their

own community leaders to lead them. The 85% respondents' in agreement reaffirms that community participation in identification of required resources is an important aspect in community development if meagre available resources are to be used efficiently and if community contributions are to be enhanced for that matter to sustain development.

The findings further show that majority of 95.0% respondents were in agreement that the community made cash contributions for implementation of project activities and maintenance of community assets, against 5% who were in disagreement perhaps because they were ignoring their role as community members or probably because they were new in the area. The implication of this finding is that there was an active community participation in cash contributions for project interventions, which further portrays the extent to which beneficiary communities viewed and valued project interventions undertaken in addressing their needs especially in contribution towards maintenance of water points and contributions towards capitalization of Village Savings & Loans Associations. Community cash contributions to these activities have shown positive progress and a deeper commitment in terms of ownership and sustainability of the interventions derived from their essentiality to the community's wellbeing and health.

As to whether community leaders together with their respective communities' make decisions on how to use and manage cash contributions, 89.0% of respondents were in agreement, while 9% were in disagreement and 2% had no knowledge of the situation as shown in Fig. 9 below.

Figure 9: Respondents responses on whether community members make decisions on how use and manage community cash contributions

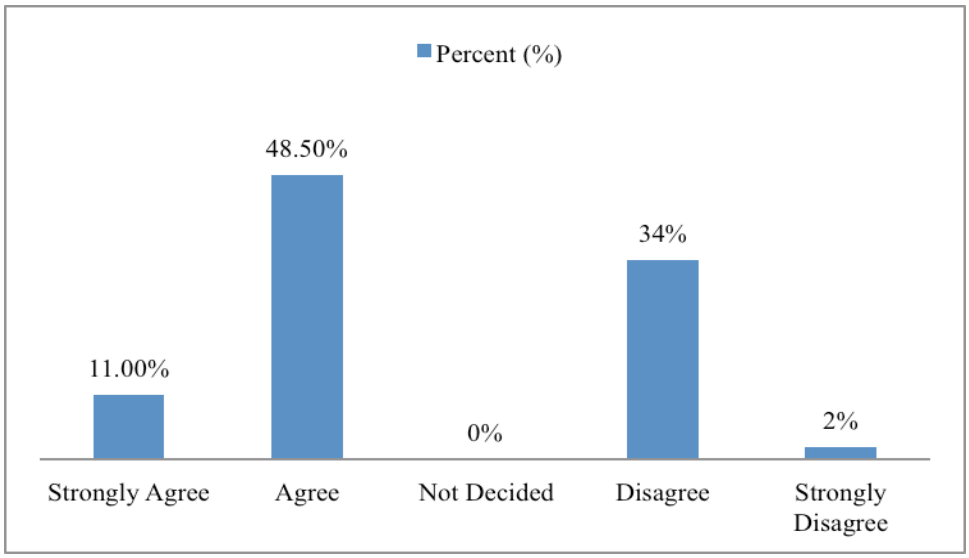


(Source: Primary data from field study)

The findings seem to reflect a percentage of beneficiaries who were probably not making contributions nor attending community management meetings. However, this finding seems to point to the extent to which communities were empowered capacity wise to manage and account for their own resources and in away attain sustainable development in their own right. In reinforcing this finding, 97% of respondents were further in agreement that the community contributed free land for project activities. This seems to further show community direct participation in implementation of GIZ project interventions in their communities through land contribution. Land is one of the most important factors of production. Field findings from interviews with key informants showed that land contributions were made for established of Farmer Field Schools, construction of market stalls, health facilities and agro-forestry demonstration fields.

The finding also found out that 59.5% of the respondents were in agreement that the community provided free labour for community based activities, 36% were in disagreement and 4.5% were non-committal to the statement as shown in Fig.10.

Figure 10: Respondents responses on whether the community provided free labour



(Source: Primary data from field study)

This seems to indicate that it was not a common thing for communities to offer free labour for community based activities. Further findings from key informant interviews revealed that community members were often compensated for their efforts inform of voucher for work or cash for work strategies. In voucher for work, the community was given food as compensation as opposed to cash for work where they were given money per unit of work done. It was noted that these strategies were used for big project construction interventions such as road construction. Provision of food was aimed at addressing food insecurity caused by inflationary tendencies of food prices at the time, while at the same time cash provisions were meant to inject cash and spur the local economy of the region. However, those in agreement reflect the majority who participated in community activities of maintaining community establish-

ments such as water points, Farmer Field Schools, demonstration fields and in the wider community sensitization in behavioural change campaigns.

The findings from table (10) also further show that majority of 81.5% respondents agreed that the community shared its local knowledge and practices about the area with GIZ project management team, while 9% disagreed and 9.5% had no knowledge in regards to the statement. This implies that community best practices were incorporated into GIZ project interventions and a possibility that the project took into account critical environmental bottlenecks that would hinder project sustainability.

The mean of the Likert scale data shows that all statements have a mean greater than 3, which implies that majority of respondents, indicated that they either agreed or strongly agreed with statements on community participation in GIZ project implementation. There was not so much variation in the standard deviations, which indicates that variability among responses was low. The statement "*the community provides free labour for community based activities"* with a standard deviation of 1.11 however, revealed there was high variability amongst respondents who agreed (48.5%) and 34% who disagreed. This seems to suggest that communities did not always provide free labour for implementation of GIZ project interventions in Napak district.

Pearson correlation coefficient results for project implementation & sustainability

To establish the strength of relationship between community participation in project implementation and sustainability of GIZ project interventions in Napak district, the researcher analysed correlation using Pearson correlation coefficient. Table 11 shows Pearson correlation coefficient results.

Table 11: Correlation coefficient for community participation in project implementation

Study Variables		Community participation in Project Implementation	Sustainability
Community participation in Project Implementation	Pearson Correlation	1	.575*
	Sig. (2-tailed)		.000
	N	200	200
Sustainability	Pearson Correlation	.575*	1
	Sig. (2-tailed)	.000	
	N	200	200

*. Correlation is significant at 0.05 level (2-tailed).

From the findings above, it is observed that correlation between community participation in project implementation and sustainability of GIZ project interventions is 0.575. The relationship is statistically significant at 95% confidence level (2-tailed) as the *p-value* (sign) is less that 0.025 (=0.000). This implies that community participation in project implementation has a significant relationship with sustainability of GIZ project interventions in Napak District. Therefore, meaning that with an improvement in community participation in project implementation there is likely to be an improvement in sustainability GIZ project interventions.

Regression coefficient on project implementation and sustainability

A linear regression model was used to determine extent to which community participation in project implementation affects sustainability of GIZ project interventions in Napak district. The results are given in table 12.

Table 12: Regression coefficient of community participation in project implementation on sustainability of GIZ project interventions

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.705	.233		7.327	.000
	Community Participation in Project Implementation	.565	.057	.575	9.888	.000

a. Dependent Variable: Sustainability

Findings from regression analysis indicate that project implementation has a significant effect on sustainability of GIZ project interventions in Napak district given by ($\beta = 0.575$, $t = 9.888$, $p<0.05$ (=0.000)). Implying that the relationship between project implementation and sustainability was therefore causation implied type. This by implication means that community participation in project implementation is positively related to sustainability of GIZ project interventions. Consequently, any alteration in project implementation attracts a corresponding effect on sustainability of project interventions.

Having established that GIZ project interventions sustainability is positively affected by community participation in project implementation, it is therefore cautious to approximate proportion of variance in project sustainability that can be explained by project implementation. Table 13 shows the summary of results.

Table 13: Model summary of community participation in project implementation on sustainability of GIZ project interventions

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.575	.331	.327	.26980

The Model Summary table above shows that R-Square, which tells how a set of independent variables explains variations of the dependent variable, is 0.331. This implies that community participation in project implementation as a dimension of the independent variable accounts for 33.1% of the variations in sustainability of GIZ project interventions. 66.9% can be attributable to other variables.

However, to further assess the overall significance of the model, Analysis of Variables (ANOVA) was used and the results are presented in table 14 below;

Table 14: ANOVA results on community participation in project sustainability and sustainability of project interventions

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	7.117	1	7.117	97.766	.000[a]
	Residual	14.413	198	.073		
	Total	21.530	199			

a. Predictors: (Constant), Community participation in Project Implementation
b. Dependent Variable: Sustainability

In determining whether a model is significant, the decision rule is that calculated *p*-value (level of significance) must be less than or equal to 0.05. Therefore, since the calculated *p*-value of 0.000 is less than 0.05, the model was found to be statistically significant ((F= 97.766), df = (1, 198), $p< 0.05$ (= 0.000)). This means that project implementation as a dimension of the independent variable - *Community Participation,* has a significant influence on sustainability of GIZ project interventions in Napak district.

4.4.3 Objective 3: Community participation in project M&E and sustainability of GIZ project interventions in Napak District

The responses on community participation in project monitoring and evaluation showed weak community participation. The continuum of Strongly Agree (SA) and Agree (A) compared

with the continuum of Strongly Disagree (SD) and Disagree (A) affirms the weak community participation in project monitoring and evaluation processes. The findings are presented in table 15.

Table 15: Descriptive statistics on community participation in project monitoring and evaluation on sustainability of GIZ project interventions in Napak district

Statements measuring system design	Strongly Agree	Agree	Not Decided	Disagree	Strongly Disagree	Mean	S.D.
	5	4	3	2	1		
Community members participated in deciding the project objectives (targets) for community interventions	1.0%	51.5%	26.0%	19.0	2.5	3.29	0.87
Community members regularly participated in monitoring of project activities	5.0%	47.0%	16.0%	31.0	1.0	3.24	0.98
The Community received regular feedback from the project staff about implementation of project activities	13.0%	59.5%	7.5%	18.0	2.0	3.64	0.99
The community had access to the project reports to aid their decision making	23.0%	13.0%	0.0%	52.0	12.0	2.47	0.98
Community members participated in deciding how to measure progress of project activities	1.0%	32.0%	23.5%	41.5%	2.0%	2.89	0.92
The community is aware of what project activities were planned and what was implemented by the project in your area	32.0%	41.5%	7.5%	10.5%	8.5%	3.78	1.24
The community members participated in the collection of monitoring data for project activities evaluation	4.5%	20.0%	4.0%	67.5%	4.0%	2.54	1.00
Reports on project indicators are shared with the community regularly	0.0%	32.0%	27.0%	36.5%	4.5%	2.87	0.92
Community members participated in discussion findings of evaluation project report and making recommendations for implementation	0.0%	3.0%	13.5%	70.5%	13.0%	2.07	0.62
Community members used the findings of the evaluation project reports to address project implementation problems faced	1.0%	0.0%	12.5%	65.0%	21.5%	1.94	0.66
Community members are aware of the factors that help or hinder achievement of project activities in their area	35.5%	62.5%	2.0%	0.0%	0.0%	4.34	0.51
Community members shared their experiences from implementing project activities	21.5%	72.5%	0.5%	4.5%	1.0%	4.09	0.70

(Source: Primary data from field study)

The findings show that a moderate majority of 52.5% respondents agree that community members participated in deciding project objectives for intervention against 21.5% in disagreement, while 26% were not sure whether the community participated in deciding project objectives or not. Field findings seem to point to the fact that 52.5% in agreement represent a section of beneficiaries who participated in initial needs assessments conducted by the project in 2009 to identify community problems, priorities and remedial action to be taken in their individual communities and settlements. Most of the community leaders interviewed attested to their participation in project assessments. However, those in disagreement and who were not certain represented part of the community that could have not participated because they were new arrivals in the settlements and found project activities on-going. Though some beneficiaries claim that in spite of their participation in setting priorities in their respective communities, the project took its own prerogative in deciding what to implement and targets to be achieved.

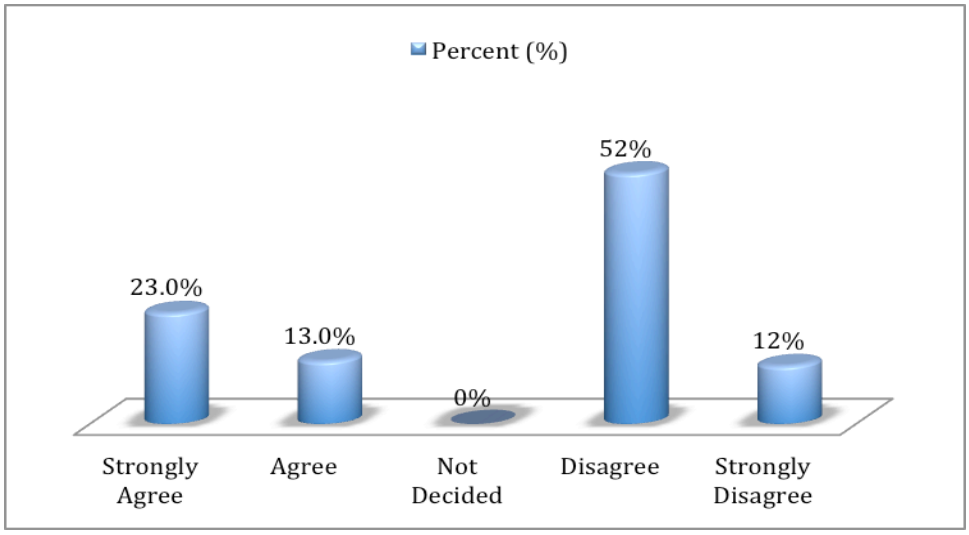
In regards to whether community members regularly participated in monitoring of project activities, 52% of respondents were in agreement with the statement, as 32% disagreed and 16% were not certain. Field findings revealed that due to the extreme expanse of settlements and project coverage area against available resources of manpower, financial and logistical considerations, project monitoring was scaled down to quarterly activities. Efforts were however made for field visits to different settlements regularly and to provide a communication kit in form of a phone and airtime to all settlement leaders for easier communication with project management team. Community leaders were therefore responsible for monitoring and reporting of such project interventions in their localities to responsible project staff. However, in areas of poor network coverage and bad road network such as Apeitolim, coordination and therefore monitoring of project interventions proved to be a difficulty. Evidenced by non-

completion of project activities such as community market and staff guesthouse structures. It can therefore be deducted from study findings that community members' participation in monitoring and evaluation of project interventions was evident but was not regular in nature.

On the statement whether the community received regular feedback from project staff about implementation of project activities, a moderate majority of 72.5% respondents were in agreement, whereas 20% disagreed, and 7.5% had no idea. Implying that efforts were made by the project to provide feedback to beneficiary communities. Field findings showed that localized Farmer Field Schools strategy applied by the project in all settlements provided for field based extension staff who regularly had face to face sessions with settler communities to develop and advance their uptake of improved agricultural methods of farming which partly explains the 72.5% agreement with the statement. But, enhanced communication with especially leaders in each settlement also explains this phenomenal. Likewise, breakdown in communication channels between community leadership such as the case of Apeitolim communities and project staff resulted into activities not being supervised and eventually failure of most project interventions in the area.

When asked whether the community had access to project reports to aid their decision-making, a majority of 64% respondents disagreed with the statement, while 36% agreed. This seems to reveal on one hand that there was quite restricted disclosure of project reports to concerned communities which meant that they could not clearly articulate project progress against set objectives and were hence curtailed in their decision making abilities. On the other hand, this could also imply that probably most leaders and GIZ project management team may have neglected their role and responsibilities in ensuring total project disclosure and accountability to targeted communities as rightful beneficiaries.

Figure 11: Respondents responses on whether community had access to project reports to aid their decision-making



(Source: Primary data from field study)

The study findings revealed that those in agreement reflected a section of beneficiaries who were privy to such reports, as was the case with Settlement Development Committee members and Farmer Field School participants and other leaders who were regularly briefed by the project including Sub-County Chief of Irriri, and the Chief Administrative Officer at the district level.

The study findings also showed 43.5% of respondents disagreed that community members participated in deciding how to measure progress of project activities against 33% who agreed, while 23.5% were not sure whether community members participated or not. This finding seems to presents a mixed reaction as to whether community members actually participated in deciding means of measurement of progress of the project activities. Field findings from interviews with key informants appear to point to the fact that the project took its own prerogative in deciding eventual project indicators based on available resources and what could be accomplished in each settlement within the project lifespan. Consequently, it was

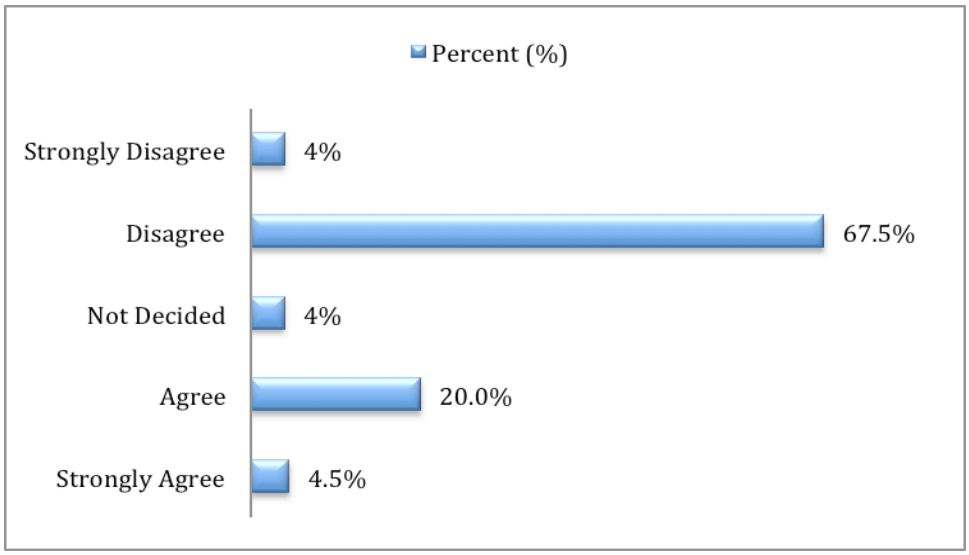
further noted that respondents were not well acquainted on which yardstick the project based to measure its project progress. For example the project considered amount of water available per person per day as well as distance to a water point in a locale as indicators for domestic water production. But, common settlers on the other hand viewed it in terms of number of boreholes drilled in their localities and their function ability to sustain such production in the dry season without necessary taking into account water available per person per day.

The study also found out 73.5% of respondents' were in agreement that the community was aware of what project activities were planned and what was implemented in their areas, 19% were in disagreement, while 7.5% had no idea of what project activities were planned and implemented in their areas. Those in agreement seem to resonate to the fact that most beneficiaries were involved in the initial project assessments. Participating to identify and prioritize their needs, which were later then incorporated in project action work plans for implementation under a community participatory approach. Implying that an effort was made to ensure communities' prioritized needs were taken into consideration and implemented. Nevertheless, 19% in disagreement seem to point to the fact that project priorities were instead implemented against community priorities. For example, the energy saving stoves project implemented by GIZ is not in tandem with needs of the community as evidenced by their persistent and continued use of the traditional three stone cook method in spite availability of energy saving stoves technology within the community. The fact that the settlements' receive new arrivals regularly also could explain this phenomenal further.

The finding also showed that 71.5% of respondents disagreed that community members participated in collection of monitoring data for project activities evaluation, 24.5% agreed, while 4% were not sure as to whether the community participated or not. The 71.5% respondents in

disagreement seems to insinuate and reinforce the fact that communities were not fully engaged in project M&E system design and indicators selection and as such were not capacitated to undertake tasks of data collection of the same.

Figure 12: Respondents responses on whether community members participated in data collection for monitoring and evaluation of project activities



(Source: Primary data from field study)

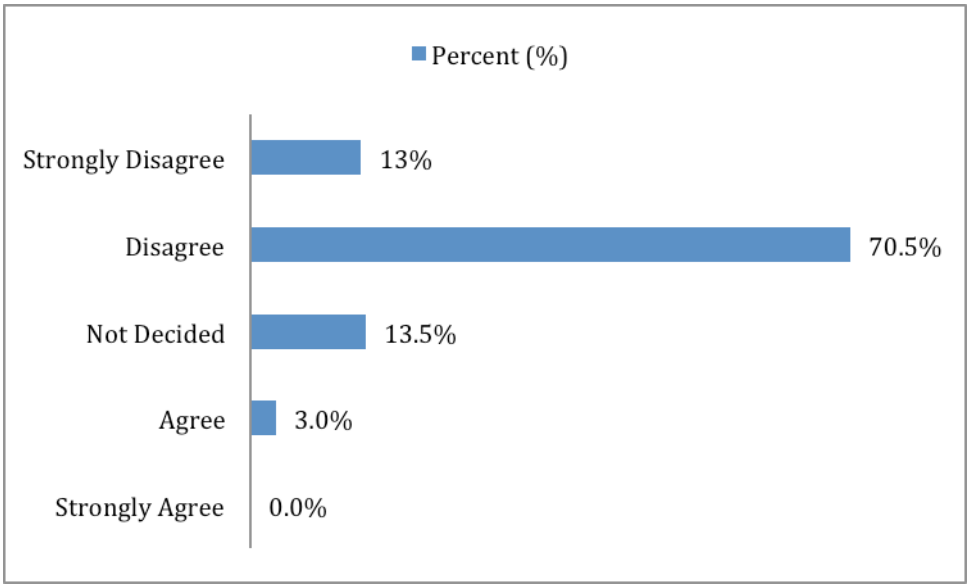
Implying that, not all community members participated in data collection exercises for project evaluation. This field finding is further strengthened by 41% respondents who disagreed that reports on project indicators are shared with the community regularly against 32% who seem to agree with the statement, whereas 27% respondents were not sure. This mixed reaction consequently casts doubt as to whether project reports were shared regularly with concerned communities. Field findings revealed that data collection was a project domain and therefore, a few selected beneficiaries participated in project surveys conducted by the project for data collection. Community leaders interviewed attested that besides their participation in project surveys, not so much was done to provide eventual feedback to the entire community as regards to status of interventions and to share lessons learnt from implementation. It was further revealed that the entire exercise was meant to facilitate project reporting mechanism to its key

stakeholders such as the Office of the Prime Minister, the district leadership and occasionally to the Sub-County leadership in the areas of operation, as attested by one Sub-County Chief who remarked that,

They were not actively involved in the GIZ project interventions and were therefore not acquainted with programs under implementation and could not report on the same

Further findings revealed that majority of 83.5% respondents disagreed that community members participated in discussion of project evaluation report findings and making of recommendations thereafter for implementation. 13.5% were not sure of community participation, and only 3% of respondents agreed to the statement as seen in Fig.13.

Figure 13: Respondents responses on whether community members participated in discussion of project M&E report findings and making of recommendations



(Source: Primary data from field study)

This study finding seem to indicate that majority of the community did not participate in discussion of evaluation reports and were thus not provided a platform to share their experiences with GIZ management team. This disagreement seems to be supported by the fact that 86.5% of respondents also disagreed that community members used findings of evaluation reports to address project implementation problems faced, though 12.5% were not sure as to whether the community applied the findings, and only a handful of 1% respondents were in agreement with the statement. The implication of these findings seems to show that majority of community members rarely if any participated in discussion of project evaluation reports and as a result therefore did not use recommendations from such findings, which they were not aware about. Findings from the field also seem to connive to support this fact as beneficiaries interviewed objected to have attended such discussions. However, interviews with key informants revealed that a few of them were from time to time invited for project review meetings in Moroto district in representation of their communities.

In response to the statement that community members were aware of factors that helped or hindered achievement of project activities in their area, majority of 98% respondents agreed, with only 2% not sure or had no knowledge as to whether the community was aware of these factors. This finding only tends to demonstrate communities' confidence in their indigenous knowledge and coping mechanisms in regards to the project environment and project interventions implemented. Highlighting that community deeper understanding and knowledge is an enormous resource in community development that GIZ could possibly tap to enhance its overall project design approach that is beneficiary inclusive right from conception, development to implementation and closure of such community interventions.

The findings also pointed to the fact that majority of 94% respondents agreed that community members shared their experiences from implementing project activities, whereas 5.5% disagreed, and only 0.5% were not sure. This seems to suggest that community members actually shared their experiences amongst themselves, which is indeed an important element for GIZ project interventions' propagation and replication if activities are to be sustained by beneficiary communities. Continued implementation of project activities even after close of project by the project beneficiaries is thus the ultimate goal of any community intervention and cradle of sustainable development, the focus of this study.

The mean of the Likert scale indicates that 6 (50%) out of 12 statements have means greater than 3, implying that there was an even mixed reaction from respondents and for that matter only 50% indicated that they either agreed or strongly agreed with statements on community participation in M&E in GIZ project interventions in Napak district. The standard deviations do not vary much, indicating that variability among responses was low. Also, notable is that all statements with means less than 3, is attributable to the fact that majority of respondents indicated that they either disagreed or strongly disagreed. This implies that community participation in monitoring and evaluation in GIZ project interventions was not common.

Pearson correlation coefficient results for project monitoring and evaluation

To establish the strength of relationship between community participation in project M&E and sustainability of GIZ project interventions in Napak district, the researcher analyzed correlation using Pearson correlation coefficient. Table 16 shows Pearson correlation coefficient results.

Table 16: Correlation coefficient between community participation in M&E and sustainability of GIZ project interventions

Study Variables		Community Participation in Monitoring and Evaluation	Sustainability
Community Participation in Monitoring and Evaluation	Pearson Correlation	1	.185**
	Sig. (2-tailed)		.009
	N	200	200
Sustainability	Pearson Correlation	.185**	1
	Sig. (2-tailed)	.009	
	N	200	200

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

The results from table 16 show that there is a weak positive relationship between community participation in M&E and sustainability of GIZ project interventions, given by Pearson's correlation coefficient of 0.185. The relationship is statistically significant at 95% confidence level (2-tailed) as the *p*-value (sign) is less than 0.05 (=0.009). Implying that improved community participation in project M&E leads to improved sustainability of GIZ project interventions in Napak district.

To explain this further, a linear regression model was employed to determine extent to which community participation in project M&E influences sustainability of GIZ interventions in Napak district. The results are given in table 17.

Table 17: Regression coefficient of community participation in project M&E and sustainability of GIZ project interventions in Napak district

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.592	.155		23.166	.000
	Community Participation in Monitoring and Evaluation	.130	.049	.185	2.646	.009

a. Dependent Variable: Sustainability

Findings from regression analysis further indicate that community participation in project M&E has a significant effect on sustainability of GIZ project interventions in Napak District given by (β=0.185, t=2.646, p<0.05 (=0.009)). Implying that the relationship between project M&E and sustainability was therefore causation implied type.

Model Summary of community participation in project M&E and sustainability

Table 18: Model summary of community participation in project M&E and sustainability of GIZ project interventions in Napak district

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.185	.034	.029	.32407

The results show that correlation coefficient (r), using the predictor variable of community participation in project M&E is 0.034 and coefficient of determination (r^2 x 100) = 3.4%. Implying that community participation in project M&E explains 3.4% variance in sustainability of GIZ project interventions in Napak district, while 96.6% is attributable to other factors.

Analysis of Variance (ANOVA)

Table 19: Analysis of variance of community participation in project M&E and sustainability of GIZ project interventions in Napak district

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.735	1	.735	7.001	.009[a]
	Residual	20.795	198	.105		
	Total	21.530	199			

a. Predictors: (Constant), Community Participation in Monitoring and Evaluation
b. Dependent Variable: Sustainability

The analysis of variance shows total significance of regression results with a degree of freedom (df) of (1, 198), F-value of 7.001, which was statistically significant with a *p-value* of 0.009 (<0.05). This finding implies that community participation in project M&E as a dimension of the independent variable, *Community Participation*, has a statistically significant effect on sustainability of GIZ project interventions in Napak district.

4.4.4 Findings on sustainability of GIZ project interventions in Napak District

Sustainability of GIZ project interventions as a dependent variable was operationalized as ability of the project to impart skill and improve knowledge of beneficiaries, replicate technologies, as well as functionality of community assets established. The study therefore sought respondents' perceptions about sustainability of GIZ interventions amidst community participation. In this regard skill and knowledge improvement was conceived to imply change in attitudes and practices of beneficiaries, while replication of technologies was conceived to imply adoption and application of propagated new technologies. Functionality of assets was conceived to imply continuous usage and maintenance of community assets. The findings are shown in table 20.

Table 20: Respondents views on sustainability of GIZ interventions in Napak district

Statements measuring sustainability	Strongly Agree	Agree	Not Decided	Disagree	Strongly Disagree	Mean	S.D.
	5	4	3	2	1		
Community members have skills in various enterprises within the locality	42.5%	57.5%	0.0%	0.0%	0.0%	4.43	0.50
Community members have learnt improved farming production techniques and technologies	22.0%	75.0%	1.0%	2.0%	0.0%	4.17	0.53
Community members' production has increased due to use of improved production techniques and technologies	14.5%	66.5%	8.0%	10.0%	1.0%	3.83	0.83
The community committees manage and maintain the functionality of community assets	20.0%	68.5%	7.5%	4.0%	0.0%	4.05	0.66
The community feels as being owners and are responsible for community assets built by GIZ	39.5%	57.5%	1.0%	2.0%	0.0%	4.34	0.61
Funding by GIZ programme met all community needs and identifies community problems	2.0%	50.0%	15.5%	31.0%	1.5%	3.20	0.96
Community members have developed capacity to continue implementing the GIZ activities	5.0%	94.0%	1.0%	0.0%	0.0%	4.04	0.24
The community sustains all the project interventions without GIZ support	8.5%	88.5%	2.0%	1.0%	0.0%	4.05	0.38
Community members will be able to provide resources to maintain the project interventions in the community	5.0%	81.5%	9.5%	4.0%	0.0%	3.88	0.54

(Source: Primary data from field study)

The findings from table 20 show that there was a unanimous (100%) respondent agreement that community members have skills in various enterprises within their localities. This plays to indicate that the project undertook numerous interventions to impart skills to targeted beneficiaries. Field findings from interviews with beneficiaries revealed that they received skill trainings in bee-keeping, vegetable growing, energy saving stove technologies, bakery, and agro-forestry, as well as building skills in regards to use of interlocking soil stabilized blocks. These trainings were further acknowledged and justified by key informants interviewed who viewed it as away to enhance community coping mechanisms as opposed to reliance on farming alone which is susceptible to climate change and climate variability faced by the region.

As such numerous small-scale traders trading in vegetable, tree seedlings, and energy saving stoves, honey and other food items could be seen in all settlements visited and particularly in Nakichumet community market were they displaced their products.

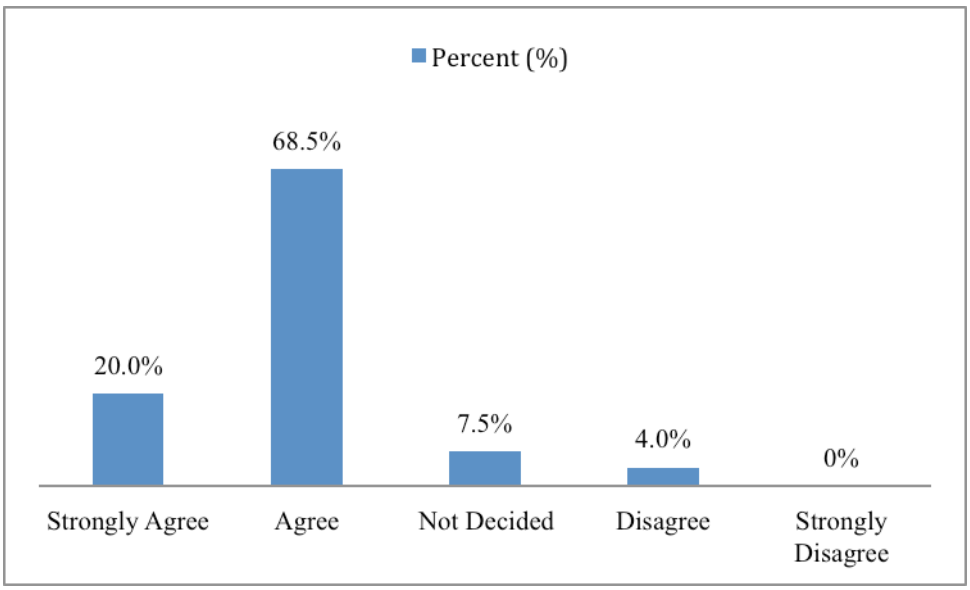
Likewise, majority of 97% respondents alluded to the statement that community members had learnt improved farming production techniques and technologies, while 2% disagreed and only 1% were not sure. This seems to echo the fact that majority of community members underwent rigorous training conducted by the project to introduce to them improved farming technologies. This fact is further strengthen by field findings that revealed existence of Farmer Field Schools (FFS) in every settlement and used as community learning centres for propagation of improved techniques and technologies. It was found that every beneficiary member belonged to a FFS that was facilitated by an extension worker paid by the project. Community members were practically taken through application of improved technologies and thereafter supported with farm implements and improved seed for their farm units. A combination of which has played a key role in sustenance of project interventions.

As to whether the community members' production had increased due to application of improved production techniques and technologies propagated by the project, 81% of respondents were in agreement, while 11% disagreed and only 8% were not sure. This finding seems to imply that indeed the community's production had increased and in support this finding, community members attributed it to various factors such as use of improved seed, pest control and management methodologies employed, use of irrigation technology, embracement of intercropping as a method of production, opening of more land through use of project advocated ox-ploughing, as well as involvement in other enterprises such as bee-keeping, vegetable growing among others that were driven by advisory services from the project. Those in disa-

greement however and who were not sure could have been because they did not apply improved technologies advanced and some of them were not actively involved in farming. By implication, this is an indication that community income generation opportunities widen as opposed to when they only practiced agro-pastoralism for livelihood. Thus, with improving incomes and food security in targeted communities, there has been a marked improvement in standard of living driven by sustainable approaches adopted by the project.

When asked whether community committees managed and maintained functionality of community assets, 88.5% of respondents were in agreement with the statement against 4% in disagreement, while 7.5% were not sure as represented in Fig.14.

Figure 14: Respondents responses on whether community committees managed and maintained functionality of community assets



(Source: Primary data from field study)

In support of this finding, results from key informant interviews revealed that every community asset such boreholes, water ponds, among others had a management structure of users

called the User Committee. It was noted that this committee oversaw community usage, management and maintenance of the concerned asset in question. The committee is empowered to collect community contributions in form of usage fee and solicit in-kind contributions in form of labour and building materials in the process of maintaining the asset. The levied usage fees was often used to acquire necessary materials that the community could not provide such pipes for boreholes, but also used to pay locally available pump mechanics trained by the project to undertake repair of water points in case of failure to function. Suggesting that the community had capacity to manage and maintain its established assets. However, those who disagreement and who were not sure could have experienced break down of assets in their localities and because of weak management structures were unable to maintain them as necessitated. This, however makes a clear distinction that well managed committee structures have a big say and contribution to sustainable community service delivery and therefore deserve necessary due attention of project success.

The findings also shows a very high sense of community ownership for community assets established by GIZ represented by 97% respondents agreeing that the community feels as being owners and are responsible for community assets. This seems to reinforce the fact that for community-based interventions to be sustainable, targeted beneficiary communities must own up the interventions and have capacity to self-organise so as to manage interventions undertaken. This argument is further supported by results from field interviews that ascertained that communities managed all functional water facilities by themselves. Other facilities managed by the community included farmer field schools, markets structures and water ponds. Additional results from key informant interviews further reiterated that community ownership was manifested in their ability to establish management structures, report break downs of assets to responsible authorities for immediate repairs, and undertaking cash and/or in-kind contribu-

tions towards establishment of community assets like boreholes, markets, health facilities, farmer field schools and demonstration sites among others. It can therefore be depicted from the actions of the community that ownership of community assets was fundamental and viewed as a community responsibility, which is key to sustainable community development.

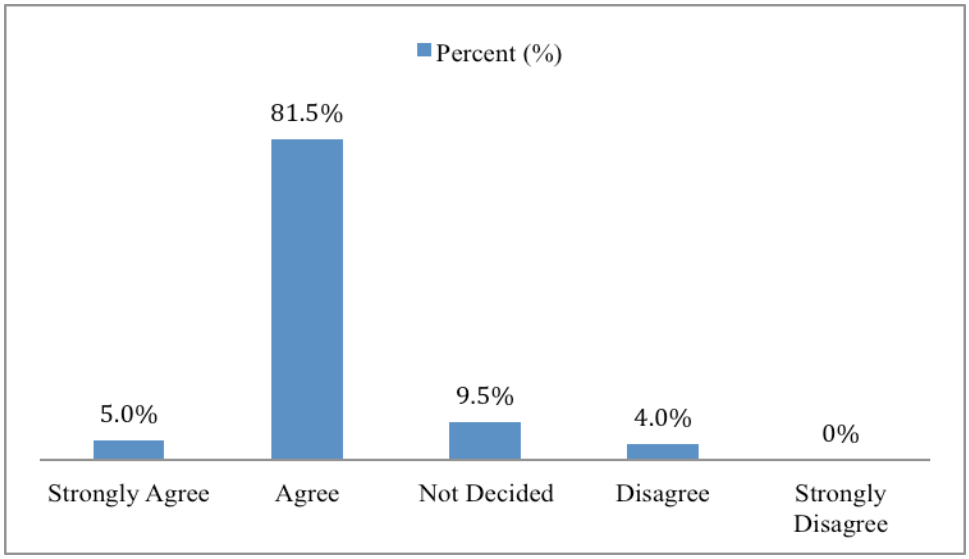
In respect to the statement whether GIZ project funding met all community needs and identified community problems, 52% of respondents were in agreement, while 32.5% respondent were in disagreement and 15.5% had no knowledge whether the funds were adequate or not. Based on qualitative findings collected from the field, it can be argued that the project reasonably met community needs and problems identified through implementing community identified needs and recommendations from initial project assessments such as provision of agriculture implements and improved seeds, improvement of accessibility to clean drinking water and water for production through construction of boreholes and water ponds, provision of numerous attitude and perception changing trainings in agricultural production, water and sanitation, and health and nutrition programming, as well as introduction of numerous community income generating opportunities like bee-keeping, vegetable growing, energy stoves production, agro-forestry, building skills, and improving targeted community access through road construction to mention by a few. However, 32.5% of responds who disagreed could have been because of failure of the project to conclude initiated community projects as witnessed in Apeitolim where two important projects; building of a community market structure and a staff outreach post were abandoned with materials at the site to date which has for sure continued to agitate the community as needless wastage of precious resources. The 15.5% who were not sure could have been new settlers in the area and who did not know of the initial planned GIZ project interventions in the area. However, the mixed reactions seem to point to the fact that probably not all community needs in targeted communities fully were met. It

may also seem resonate that targeted communities may have had other priorities; to those that GIZ took into consideration.

The findings further indicate an overwhelming majority of 97% respondents were in agreement that they are able to sustain project interventions in their communities after GIZ departure. Likewise another overwhelming 99% respondents equally agreed that community members had developed capacity to continue implementing GIZ activities. This tends to imply that community members' capacities were enormously developed by the project and because of that the community felt capacitated to undertake project interventions without the project's further support.

The above argument is further reinforced by a majority of 86.5% respondents in agreement that community members were able to provide resources to maintain project interventions in their communities'.

Figure 15: Respondents responses on whether community members were able to provide resources to maintain project interventions in their communities'



(Source: Primary data from field study)

Implying that community members were willing to contribute resources for sustaining projects interventions. Results from the field and interviews with key informants revealed that most functional water sources in the community were community self-managed and that government and development partners were merely facilitators. The implication of this is that sustainable community development is community driven and as such communities will always contribute to projects that they see to serve their most valued need.

The Likert scale readings further shows that all statements have a mean greater than 3, implying that for each of the statements, majority of respondents' indicated that they either strongly disagreed or agreed that community participation contributes to sustainability of GIZ project interventions in Napak district. Though this seems to be inconclusive when respondents were asked, "*whether GIZ funding met all community needs and identified community problems"* 50% agreed while 31% disagreed. This tends to imply that there is possibility that GIZ funding did not meet all community identified needs and problems. The standard deviations however do not seem to vary a lot indicating that variability among responses was minimal and therefore estimates are reliable. However, statements with standard deviation of 0.24 and 0.38 are due to the fact that majority of respondents either strongly agreed or agreed. This further implies that development of targeted community capacities was a common practice in the project implementation strategy and so was community participation in sustaining established project interventions.

4.5.1 Multi-linear regression

The hypotheses were further tested using multiple linear regression analysis. The justifications for using multiple linear regression analysis was that this was a prediction study with many variables, and multiple linear regression analysis provides net effects and explanatory

power in form of Adjusted R Square. Level of significance was set at less than or equal to 0.05. Using the Enter method, a statistically significant model emerged. The model summary is presented below in table 21.

Model Summary of multiple regression

Table 21: Model Summary of community participation on sustainability

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.636	.404	.395	.25580

The model summary above shows that the co-efficient of determination (Adjusted R Square) is 0.395. This implies that this model accounts for 39.5% of variance in sustainability of GIZ project interventions in Napak district. This could be attributed to the fact that sustainability has far more factors that influence it than what the study has undertaken.

To further assess overall significance of the model, Analysis of Variables (ANOVA) was done and the results presented in the table 22.

Table 22: Analysis of variables (ANOVA)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	8.705	3	2.902	44.345	.000[a]
	Residual	12.825	196	.065		
	Total	21.530	199			

a. Predictors: (Constant), Monitoring and Evaluation, Project Implementation, Project Design
b. Dependent Variable: Sustainability

In determining whether a model is significant, the decision rule is that calculated *p*-value (level of significance) must be less than or equal to 0.05. Since calculated *p*-value of 0.000 is less

than 0.05, the model was found to be statistically significant (F=44.345, df = 3, $p< 0.05$ (=0.000)). Implying that at least one of the predictor variables (Project Design, Project Implementation, Monitoring and Evaluation) has a significant influence, contribution or influence on the dependent variable, Sustainability.

To determine which of the predictor variables were significant, the researcher examined the standardized beta co-efficient, t values and significance values that give a rough indication of the impact of each predictor variable. These are presented in table 23 below.

Table 23: Regression coefficient

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.296	.242		5.365	.000
	Project Design	.420	.085	.415	4.927	.000
	Project Implementation	.273	.082	.278	3.315	.001
	Monitoring and Evaluation	-.031	.041	-.044	-.741	.460

a. Dependent Variable: Sustainability

The decision rule for multi-linear regression is that the t value must not be close to 0 and the *p*-value must be less than or equal to 0.05. The findings from the table shows that *p-values* for the Constants; project design and project implementation are each less than 0.05 and their t values (5.365, 4.927, and 3.315) are not close to zero (0). This implies that community participation in project design and project implementation each have a significant effect on sustainability of GIZ project interventions in Napak District.

However, results from the table also show that *p-value* for community participation in monitoring and evaluation is greater than 0.05 (=0.460) and the t value (-0.741) is close to zero (0). Implying that community participation in M&E has no significant effect on sustainability of GIZ project interventions in Napak district.

Table 24: Correlation coefficient for community participation and sustainability of GIZ interventions in Napak district

Study Variables		Community Participation in Project Design	Community Participation in Project Implementation	Community Participation in Monitoring and Evaluation	Sustainability
Community Participation in Project Design	Pearson Correlation	1	.750*	.333*	.609*
	Sig. (2-tailed)		.000	.000	.000
	N	200	200	200	200
Community Participation in Project Implementation	Pearson Correlation	.750*	1	.324*	.575*
	Sig. (2-tailed)	.000		.000	.000
	N	200	200	200	200
Community Participation in Monitoring and Evaluation	Pearson Correlation	.333*	.324*	1	.185*
	Sig. (2-tailed)	.000	.000		.009
	N	200	200	200	200
Sustainability	Pearson Correlation	.609*	.575*	.185*	1
	Sig. (2-tailed)	.000	.000	.009	
	N	200	200	200	200

*. Correlation is significant at the 0.05 level (2-tailed).

The findings from the table show that there is a moderate positive relationship between community participation in project design, project implementation and sustainability of GIZ project interventions given by Pearson's correlation coefficient of 0.609 and 0.575 respectively. The relationship is statistically significant at 95% confidence level (2-tailed) since the *p-value* (sign) is less than 0.025 (=0.000).

There is however a weak positive relationship between community participation in project M&E and sustainability given by Pearson's correlation coefficient of 0.185. The relationship is statistically significant at 95% confidence level (2-tailed) as the *p-value* is less than 0.025 (=0.000).

Nevertheless, it is clear from the findings that there is no multi-collinearity between the independent variables as none of the correlations between any two independent variables is greater 0.60, the threshold for multi-collinearity. This therefore implies that each of the independent variables' relationship with the dependent variable is based on its own merit and not influenced by another independent variable.

Summary of Chapter Four

The chapter presented findings of the study. The study major finding revealed that there was a positive correlation between community participation and sustainability of GIZ project interventions in Napak district.

The study findings also showed that there is a positive relationship between community participation in project design and sustainability of GIZ project intervention in Napak district. Community involvement in planning and allocation of resources can result to improved sustainability.

There is a positive relation between community participation in project implementation and sustainability of GIZ project interventions in Napak district. Synergy building with other stakeholders, as well as with government coordination mechanisms at all levels of governance can enhance sustainability of GIZ intervention in Napak.

There is a positive relationship between community participation in project M&E and sustainability of GIZ interventions in Napak district. The use of monitoring and evaluation in learning and basis for remedial action, accountability, as well as transparency has a positive effect on sustainability.

The data presented, analysed and interpreted in this chapter has been used in chapter five for drawing summary, discussion, conclusions and recommendations of this study.

CHAPTER FIVE

SUMMARY OF FINDINGS, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents summary of findings by objective. The detailed discussions are also presented, as well as conclusions and recommendations based on the study findings. Limitations, contributions and areas for further research are also highlighted.

The conclusions and recommendations were drawn from literature reviewed, field findings and discussion in relation to the general and specific objectives of the study taking into consideration research questions and hypothesis that guided the study.

5.2 Summary of the findings

5.2.1 Community participation in project design and sustainability

Findings from descriptive data analysis evidently showed that an overwhelming majority of respondents strongly agreed to having participated in project design of interventions. This is reflected in the 98% of respondents who agreed that they were sensitized, and engaged in consultative meetings and were further involved in identifying community needs to be addressed, as well as 96% that agreed communities were facilitated to identify their needs. While 99% were in agreement that communities were able to gather, identify, and select their needs to be addressed. This is, in addition to 79% of respondents that agreed to have taken part in project planning meetings and workshops. Therefore, in consideration of the above reasoning, would serve to suggest that community participation in project design was very strong and the fact that 94% of respondents were in agreement that community indigenous knowledge and practices were incorporated into project interventions highlights that this may have had a positive effect on sustainability of project interventions in Napak district.

Community participation in project design was found to have a significant positive effect on sustainability of project interventions with a t-value of 10.796, β=0.609 and p-value = 0.000 (p<0.05). This implies that improvement in community participation in project design is associated with improvements in sustainability of GIZ project interventions in Napak District. Similarly, a decline in community participation in project design is associated with a decline in sustainability of GIZ project interventions. Therefore the hypothesis was accepted and a conclusion made that community participation in project design has a significant positive effect on sustainable GIZ interventions in Napak district. The correlation coefficient (r) using project design as the predicator variable is, 0.609 and the coefficient of determination (r^2x100) is 37%. This implies that community participation in project design explains 37% of variance in sustainability of GIZ project interventions in Napak district.

Results obtained from key informant interviews also point to the fact that targeted communities participated in project initial assessments and identification of needs, as well as activity planning, as basic steps in project design. Though, it is also noted that majority of beneficiaries did not partake in making project intervention work plans and budgets represented by 68% of respondents in disagreement. As one key informant alluded that,

> "The GIZ team visited each settlement more than three times while conducting needs assessment to familiarize with settlements, collectively identifying needs to be addressed with concerned communities and to create effective partnership and linkages with settlements"

The SDC leaders and other key informants also made generalized statements, as was alluded by one key informant that,

> "They come here and take our ideas but later ignore us when it comes to the crucial point of prioritizing and allocating available resources. They choose whether they want do but what choice to we have?"

The study findings from documentary review also showed that GIZ management team decided on the behalf of the community which interventions to be implemented and what resources to be commented to each intervention after the needs prioritization processes. This finding therefore revealed that was a distinguished difference between documented and implemented project strategies.

The implication of this finding is that communities have been less supportive in terms of their resources contributions (cash, labour and material support), implementation, and sustenance of such project interventions that are not in tandem with their immediate pressing needs. By the fact that they were not involved in budget allocation according to their priorities can also be linked to the comparably high negative response on whether GIZ funding met community needs (sustainability). On the other hand however, community leadership has been seen to be at the forefront in mobilization of their respective communities in as far as addressing their basic needs are concerned and undertaking sustainability of such interventions. Examples can be drawn from interventions geared towards provision of safe drinking water and Village Saving & Loan Association projects being sustained by beneficiary communities.

5.2.2 Community participation in project implementation and Sustainability

The respondents unanimously (100%) agreed that community committees exist in their communities. 99% of respondents also agreed that community leaders in their areas mobilized members to participate in implementation of project activities, whereas another 99% agreed

that community leaders mobilized community members to contribute resources, of which 95% and 97% agreed that communities' made cash and land contributions respectively towards project implementation.

The study findings also revealed that 59.5% of respondents were in agreement against 36% in disagreement that communities' provided free labour for community based activities. This seems to reveal that though communities' provided free labour, it was not always the case and field findings attest to this fact that communities were engaged in voucher for work and cash for work, where they received food items and cash as payment for their labour.

It was further established that community participation in project implementation had a significant positive effect on sustainable GIZ project interventions with a t-value of 7.327, β=0.575 and *p-value* = 0.000 (p<0.05), implying that any alteration in project implementation attracts a corresponding effect on sustainability of project interventions and vice versa. The hypothesis was therefore accepted and a conclusion made that community participation in project implementation has significant positive effect on GIZ project interventions.

The correlation coefficient of community participation in project implementation as the predicator variable is 0.575 and the coefficient of determination (r^2x100) is 33.1%. Implying that community participation in project implementation explains 33.1% of variance in sustainability of GIZ project interventions in Napak district, whereas 66.9% can be attributable to other variables.

Field findings from interviews with key informants also pointed to the fact that community structures existed in the community and that communities equally contributed to development interventions in their localities. As one key informant highlighted that,

Community committees exist in our communities that have been formed by development agencies to support implementation of their project activities in different areas.

Another key informant further alluded that,

> "The several community committees created by different partners operating in the region were undermining government efforts and structures in coordinating community development interventions in the area. Each development partner hurried to form its own structures instead of utilizing government structures already in place. That this had created a coordination and reporting challenge at the grassroots level"

On a related note several key informants were in agreement with one key informant who had insinuated that,

> "They were not actively involved in implementation process of GIZ project interventions and were therefore not acquainted with programs under implementation and could not report on the same"

The study findings from documentary review showed that the project documented strategies on community participation and in practice were not in tandem. The study found that communities had no influence on crafting implementation approaches undertaken and were often used as tools to legitimize the project ideologies. For example the ISSB technology was too

costly for pastoralists to adopt and the energy saving stoves were not in tandem with pastoralists traditional norms.

5.2.3 Community participation in project M&E and sustainability

Results from descriptive statistics showed that there was an overall mixed reaction as to whether the community actually participated in M&E activities of the project. Whereas a moderate majority of respondents agreed to have participated in project M&E systems design reflected by 52.5% stating their participation in deciding project objectives, 52% agreeing to have participated in monitoring activities, and 62.5% to have received regular feedback from project staff about implementation of project activities, a moderate number of respondents also disagreed to participating in selection of indicators for M&E. For example 71.5% respondents disagreed that they participated in collection of monitoring data for project activities.

It was also noted with keen interest that community members were aware of factors that affected progress of project activities in their respective areas such effects of climate change, pest and diseases, as well as increasing lack of community capacity to undertake modern methods of farming to counteract negative effects of climate variability. The communities further shared their experience in implementation of project activities represented by 98% and 94% of respondents in agreement to both statements, respectively.

Community participation in project M&E was also found to have a significant effect on sustainability of GIZ project interventions in Napak District, given by ($\beta = 0.185$, $t = 2.646$, $p<0.05$ (=0.009)). The hypothesis was therefore accepted and a conclusion made that community participation in project M&E has a significant positive effect on GIZ project interven-

tions. Implying that improvement in community participation in project M&E is associated with an improvement in sustainability of GIZ project interventions in Napak District and vice versa. Community participation in project M&E however does not influence sustainability of GIZ project interventions in Napak District.

The correlation coefficient (r) using the predictor variable of community participation in project M&E is 0.185 and coefficient of determination (r^2x100) = 3.4%. This implies that community participation in project M&E explains 3.4% variance in sustainability of GIZ project interventions in Napak district, while 96.6% is attributable to other factors.

Results from key informant interviews point to the fact that beneficiary participation in project M&E was not common represented by the mixed reaction from majority of respondents. It was noted that though many leaders from GIZ formulated community committees agreed to having participated mainly in data collection, district leaders and Local Councils (LCs) were adamant on the same. As one key informant asserted that,

They were not actively involved in GIZ project interventions and were therefore not acquainted with programs under implementation and could not report on the same

Related to this, key informants affirmed that poor supervision and coordination of project activities in settlements such as Apeitolim had led to poor performance that had resulted into some projects being abandoned by GIZ with materials on-site and eventual pulling out of implementation of project activities in the area.

Study findings from documentary review also revealed that targeted communities had limited or no influence on the project's M&E processes because it was externally driven aimed at providing information for project use and external reporting. The findings from documentary review therefore also point to the fact that most aspects of the project participatory monitoring strategy were not implemented in practice and this may have affected sustainability of interventions undertaken.

5.3 Discussion of the findings

5.3.1 Community participation in project design on sustainability

Results from study findings showed that community participation in project design was indeed very common in GIZ project interventions in Napak district, which in turn impacted positively on sustainability of the same. For example 98% respondents stated to have been sensitized and consulted in identification of their needs, 99% were involved in selection of needs to be addressed based on their knowledge community needs, all attributes significant for project sustainability. In support of the findings, RDI (2003) argues that initial stakeholder analysis is the first step in project design and entails agreeing on how best they can be involved as basis of understanding their needs.

In support of the same results, Moningka (2000) also observes that community participation is evident only when community members are involved at different stages and degrees of intensity in the project cycle with the objective to build capacity of the community to maintain services created during the project and after facilitating organizations have left. This preposition as well seems to synthesize with Olukotun (2008) who arguments that communities who are the beneficiaries of projects should not be seen as targets of poverty reduction efforts but should be seen as *assets* and *partners* in the development process.

The results also indicate there is a positive significant relationship between community participation in project design and sustainable GIZ interventions given by (β = 0.609 and *p-value = 0.000* (p<0.05), is supported by Rao and Ibanez (2003), Williams (1998) and Mangin (1991) who point to the fact that project sustainability improves when communities are allowed to take a central role during all stages of the project, including design and planning. This view is further supported by Bredillet (2006) who argues that emphasis should be put on community participation at all levels of the project lifespan including project design if things are to be done right.

Okafor (2005) further reaffirms that people will only change if they participate in decisions that bring about change and experience has manifested that given clear rules of the game, access to information of design and appropriate support, poor communities can effectively organize to meet their priority needs. This is because communities have considerable capacity to plan and implement their own programmes when empowered (Tade, 2001).

The finding that majority (68%) did not participated in work plan and budget preparation is supported by Igboeli (1992) who urges that no matter what level of technical and financial assistance offered to self-help groups, members should share actively in decisions undertaken as opposed to imposing development projects on them. In support of this argument, Olukotun (2008) summarizes it by advancing a point of view that development is meaningless if it does not harness the potentials of the beneficiaries who are the primary stakeholders.

5.3.2 Community participation in project implementation on sustainability

The finding from this objective confirms community participation in project implementation significantly affects sustainability of GIZ project interventions given by (β=0.575 and *p-value*

= 0.000 (p<0.05). In support of the findings, Ofuoko (2011), Olukotun (2008), Ekong (2003), and the alike argue that through participation of stakeholders, they influence and share control over development initiatives, decision and resources, which affect them. They argue that unless the poor are given an opportunity to participate in development of interventions designed to improve their livelihood, they will continue to miss benefits of any intervention. Sustainable development can therefore be regarded as the design and implementation of projects that can be kept alive even after close of the intervention, but its development approaches must be based on investment in future growth and not only on quick fixes to meet immediate demand (Steven- Hagen, 2000) as cited in Ofuoku, 2011.

In further support of these findings Tam (1995) observes that involving the community in project implementation increases local ownership and enhanced sense of responsibility for maintaining services provided by the project as represent by 99% participation of leaders in community mobilization, as well as 95% and 97% community cash and land resource contributions respectively. These aspects are both essential for the durability and continuity of projects.

The unanimous existence of community committees amongst targeted beneficiaries represented by 100% respondents in agreement is supported by Mansuri and Rao (2013) who assert that by giving the poor a greater say in decisions that affected their lives and involving them in at least some aspects of project design and implementation would result in a closer connection between development aid and its intended beneficiaries leading to better designed development projects, more effective service delivery, and improved targeting of benefits.

Contrary to the above finding and in-line with findings from key informant interviews, and scholars such as Mansuri & Rao (2004), Adamolekun (1983) and the alike, have argued that communities may lack material resources and connections to sustain their efforts even if they initially participated in creation or implementation of the project. Connoting need of a well-functioning state apparatus does not disappear with active community involvement. Igboeli (1992) seems to be in agreement with this preposition by contending that beneficiary communities are often too poor to find their own teachers, doctors, desks and medicine, etc, and that government support is therefore needed in form of inputs, maintenance of established investment and provision of trained staff to sustain project benefits.

5.3.3 Community participation in project M&E on sustainability

The findings indicate that community participation in project M&E significantly affects sustainability of GIZ project interventions in Napak district given by ($\beta = 0.185$, $t = 2.646$, $p<0.05$ (=0.009)). In support of the above findings, IFAD, ANGOC and IIRR (2001) assert that development of an M&E system starts long before start-up. That the initial project design strongly influences the ease at which M&E is implemented later on through, for example, the relationship and commitment established with partners and local people, local and feasibility of project strategy, resources allotted to M&E activities and degree of flexibility that allows M&E results to have a steering function.

The mixed reaction however reflected in the findings on whether beneficiary communities actually participated or not in M&E project processes is supported by (Rubin 1995) who observes that stakeholders directly involved in or affected by the very development activities meant to benefit them have little or no input in the evaluation, either in determining questions asked and types of information obtained, or in defining measures of 'success'. In support of

this argument Marden, Okaley and Pratt (2005) further point to the fact that there is currently little documented experience of neither programmes nor projects that demonstrate a truly participatory approach to evaluation, further alluding to findings of the study. This view is also shared by Dagnino (2007) who asserts that the community may not have the capacity to participate and in analyses of M&E findings.

In support of the findings of 71.5% respondents in disagreement to have participated in M&E data collection, Chambers (2007) clearly affirms that M&E has typically been led by outside experts, measuring performance against pre-set indicators using procedures and tools designed without participation of key stakeholders like targeted beneficiaries and their leadership as highlighted by findings from key informant interviews. Stating that evaluations have in particular often been conducted by external consultants, and as such seen as a form of control mechanism. The question as to how to operationalize participation and as to which methodology is more efficient and effective in which particular context is subject of raging debate. However, proponents of participatory M&E urge that it is more cost effective, accurate and sustainable as compared to conventional approaches (Chambers 2007).

Contrary to findings that 83.5% respondents affirming non-participation in discussion of M&E evaluation reports, as well as making recommendations, and 86.5% not using M&E project reports to address implementation challenges, Chambers (2004) alludes that community participation in decision making process can motivate people to want to see those decisions implemented effectively. Likewise M&E strengthens organizational and institutional learning. In support of this preposition, Gregory (2000) asserts that labelling M&E as 'participatory' does not necessary guarantee all stakeholder participation, subsequently representativeness of such findings and recommendations of participatory evaluations have been criticized.

5.4 Conclusion

The study made the following conclusions based on the discussions made above, as well as in consideration of the study findings.

5.4.1 Community participation in project design on sustainability of GIZ project interventions

Basing on the discussion of findings, it is observed that community participation in project design was evidently common in GIZ project interventions as shown by 98% of respondents in agreement to have been sensitized and consulted in identification of their needs, as well as 99% that agreed to have been involved in selection of needs to be addressed centred on their indigenous knowledge in an attempt by the project to craft community sustainability elements into intervention. Though, the findings also showed that 68% disagreed to have participated in development of project work plans and budget.

The findings also indicated that there was a positive significant relationship between community participation in project design and sustainability of GIZ interventions given by ($\beta = 0.609$ and *p-value = 0.000* ($p<0.05$)), which by implication means that project sustainability improves when communities are allowed to take a central role during all stages of the project, including design and planning.

Therefore, flowing from the above findings, it can be concluded that community participation in project design significantly influences sustainability of GIZ project interventions in Napak district. Though, the relationship is moderate, the significant nature of correlation shows that for enhanced project sustainability, more directed efforts must be made to improve participation of targeted communities' in project conceptualization and design stages. Beneficiary communities' input should thus be solicited to facilitate design of better integrated and inclu-

sive projects that seek to address real needs of targeted beneficiaries so as to foster increased sense of community ownership and sustainability of interventions.

5.4.2 Community participation in project implementation to sustainability of GIZ project interventions

Resultant from the findings, it was noted that involving the community in project implementation increases local ownership and enhanced the sense of responsibility for maintenance of services provided by the project as represented by 99% participation of leaders in community mobilization, as well as 95% and 97% community cash and land resource contributions respectively. These aspects are both essential for the durability and continuity of projects, hence their sustainability.

The findings also revealed that community participation in project implementation significantly affects sustainability of GIZ project interventions given by (β=0.575 and *p-value* = 0.000 (p<0.05)). Implying that GIZ project interventions sustainability is corresponding improved with an improvement in community participation in the implementation process.

The findings also show that community structures existed among targeted beneficiaries represented by 100% respondents in agreement. These structures were noted to facilitate beneficiaries participation in some aspects of the project's design and implementation and, as result acted, as a connecting bridge between development aid and its intended beneficiaries leading to better designed development project that breed more effective and efficient service delivery, and improved targeting of benefits.

However, contrary to the above findings, interviews with key informant also revealed that communities may lack material resources and connections to sustain established community interventions, and for this matter the central role local government and support of government is needed to sustain the interventions.

Thus, deriving from the above findings on community participation in project implementation, it can be concluded that an enabling environment and all stakeholders inclusive institutional framework is fundamental to sustainable community interventions. This enabling framework however should not only be seen to enhance participation and capacities of targeted communities, but most importantly to create, consolidate and add value to already existing community and government structures for better coordination of development interventions, as well as mobilization of necessary required financial and non-financial resources. This will heighten local community ownership of interventions and spur a sense of responsibility for established project interventions, essential for sustainability of development interventions in Napak district.

5.4.3 Community participation in project M&E on sustainability of GIZ project interventions

Findings from previous discussions show that community participation in project M&E significantly affects sustainability of GIZ project interventions in Napak district given by (β = 0.185, t = 2.646, p<0.05 (=0.009)). Implying that improved community participation in project M&E leads to improved sustainability of GIZ project interventions.

However, the mixed reactions reflected in the findings cast doubt on whether beneficiary communities' actually participated in the project M&E exercises or not. As 71.5% respondents were noted to be in disagreement to have participated in M&E data collection. While

83.5% of respondents affirmed their non-participation in discussion of project M&E evaluation reports, as well as making recommendations, and 86.5% not using M&E project reports to address implementation challenges.

Therefore, in line with the above findings, it can be concluded that there is an imminent need to refocus efforts to developing an M&E system that takes into consideration needs of various key stakeholders like the local government and beneficiaries structures in a manner that enables the framework to provide much needed information so as facilitate prompt decision making by all actors. The overall overview should provide for how M&E shall be undertaken and by whom. Guidance on community participation and project supervision at different levels of community governance, as well as sharing of lessons learnt and transformation of challenges into opportunities should be elucidated accordingly. This will enhance community participation in project M&E that will eventually translate into improved and sustainable community managed outcomes.

5.5 Recommendations

The study made following recommendations based on conclusions, as well as findings therein.

5.5.1 Community participation in project design and sustainability of GIZ project interventions

Considering that community participation in project design significantly influences sustainability of GIZ project interventions in Napak district and that given an improvement in participation of targeted communities in project conceptualization and design stages, project sustainability is equivalently improved. The study therefore recommends that GIZ management

team take into consideration that beneficiary communities and other key stakeholders like the respective local governments in areas of project coverage are fully engaged not only in as far as project assessments and needs identification is concerned, as was mostly the case. But, most importantly in project planning in totality, including, in aspects of work plans and budgets allocations. This will allow for a sector-wide coordinative planning and synergy building with targeted communities, local government structures and interventions, as well as with other development initiatives and partners, and in so doing establishing prerequisite mechanisms necessary to sustain project interventions. The study findings also revealed that beneficiary and key stakeholders participation acts to brings into fruition their reinforced commitment to project objectives and interventions manifested in their financial and non-financial contributions and commitment to sustain interventions after close of the project.

5.5.2 Community participation in project implementation and sustainability of GIZ project interventions

Bearing in mind that an enabling environment and inclusive institutional framework that creates, consolidates and enhances value addition of already existing community and local government structures is fundamental in heightening community ownership and better coordination, as well as mobilization of necessary financial and non-financial resources to sustain project interventions, the study recommends that GIZ project diligently takes into consideration the central role and responsibility of Napak District Local Government in enhancing its service delivery working with different levels of government in the areas of project coverage. The study also revealed that though efforts were made by the project to establish and develop capacities of its own community structures, it ignored the fact that similar structures already existed in targeted communities. In addition, to duplicating government and other community structures, efforts to fully collaborate and coordinate with these structures at Village, Parish

and Sub-County levels were not explored. The study therefore finds it critical and recommends that GIZ works closely with and to uplifts capacities of Napak District Local Government and other necessary structures in the areas of operation so as to provide leadership essential at grassroots level, mobilize required resources and build synergy with other initiatives aimed at sustaining project interventions after GIZ.

5.5.3 Community participation in project M&E and sustainability of GIZ project interventions

Considering that community participation in project M&E has a significant effect on sustainability of GIZ interventions in Napak district though it was noted that M&E did not necessarily influence sustainability of GIZ interventions and given the imminent need to refocus efforts of the project to M&E functions and take into consideration needs of various key stakeholders like the local government and beneficiaries in a manner that enables the framework to provide much needed information that facilitates prompt decision making by all actors, the study recommends that the GIZ management team reviews and undertakes to redesign its M&E approaches to that, which is beneficiary inclusive and takes other key stakeholders considerations into account, as well as facilitates full disclosure of project plans, progress reports and financial resources. The study is therefore of a view that an M&E system which enhances participatory approaches, and provides full disclosure of project M&E reports and opportunity to deliberate, reflect, as well as learn from findings and recommendations of M&E exercises so as to implement corrective measures should be adopted. In addition to the need to enhance its organizational capacity of field staff and key stakeholders to undertake project M&E. This will act to improve community participation in project M&E that will eventually translate into improved and sustainable community managed outcomes.

5.6 Limitations of the study

The limitation experienced by the study included the following;

First and foremost, the study time scope covered only periods from 2009 – 2013. This time duration was characterized by stable security that heightened government efforts to stimulate development in the region. The problem may have however been rooted in the long-term ethnographic dynamics. The study may therefore not be so exhaustive to explain the social phenomenal.

Secondly, the geographical scope of the research study covered only Napak district and yet GIZ project interventions were implemented in three other districts in Karamoja sub-region, including Amudat, Nakapiripirit, and Moroto districts. Therefore the study findings may not be representative enough to explain the situation in the rest of Karamoja sub-region.

Thirdly, the approach and method used for the study were limited to the case study and the tools were also limited to questionnaires and key informant interviews. Implying that the data and information gathered was therefore limited to only these methods and tools. However, if other approaches, methods and tools were to be used for the same study, it is very possible that findings might have varied.

Finally, the research was also limited by its design that in turn determined the tools to be used. Other designs might have called for use of different tools that could have affected type and quality of data collected.

5.7 Contributions of the study

The study findings showed that GIZ project framework was not linked with that of Napak district and as a result there was poor collaboration and coordination. This study's contribution is that Napak District Local Government needs to take necessary measures to ensure partner community development initiatives and structures are linked to those of the district at all levels of governance for improved sustained community initiatives.

The finding of this study shows also that there is a relationship between community participation and level of education in sustaining community development interventions in Napak district. Therefore this study contributes to the debate and supports application of community participatory approaches as a strategy to actively solicit and engage illiterate communities to partake in development initiatives.

The study also found respondents to be in an extreme high-level of vulnerability that translates into dependency syndrome represented by 37% not engaged in any other occupations apart from farming. Yet climate change and its related effects of climate variability heavily challenge the region. The study thus contributes to the discourse that societal safety nets and coping mechanisms must strengthen to uplift the livelihoods of Karimojong communities not only in Napak district but the entire sub-region.

Theoretically the study has contributed to the body of knowledge as refers to the criticality of community participation in improving sustainability of community interventions in Napak district by highlighting the positive role played by gender inclusiveness in imparting sustainability elements into project design, as well as implementation of community driven initiatives. The study findings revealed that projects, which were not rooted in gender inclusiveness in

their nature of design and implementation lacked moral backing of the community and were men dominated leadership of community structures.

This study has also provided empirical evidence of the need for more youth engagement in reconstructive programs and community development initiatives and the need further to use participatory and right-based approaches in formulating, implementing, and review of formulated strategies. This would help fight rampant youth unemployment that has been orchestrated by cattle rustling where Napak district remain the worst hit, as it is location in the peripheries cattle raiding routes.

Further the study recognizes the important need for involvement of targeted communities in mobilization and resource allocation as refers to community driven initiatives. The study contributes to the body of knowledge that concurs with the fact that communities best know what their pressing needs are and how they should be addressed. The study therefore contributes to the idea that development actors' role in community driven initiatives be reduced to that of a facilitator. It was also noted that communities' contributions in turn positively affected their ownership and sustainability of interventions undertaken. The project does not therefore need to take its own prerogative in deciding what to implement and targets to be achieved.

The findings of the study demonstrates that community participation in monitoring and evaluation, learning from it and using it as a basis for remedial action, accountability, as well as transparency has a positive effect on sustainability of community driven initiatives. This study therefore contributes to the discourse of strengthening community participation in design of result-based community managed and sustainable monitoring and evaluation systems that

provide disclosure of project progress reports to concerned stakeholders and that can be referred to for decision making.

The study findings also demonstrate that existence of parallel community structures among targeted communities breed poor coordination that leads to wastage of meagre resources. The study therefore contributes to debate that community structures formed by development partners should feed into government overarching structures and programming to promote sustainability of community initiatives at grass root levels.

5.8 Areas recommended for further research

The results from regression summary model showed that community participation in project design, implementation, and project M&E contributed to variation in project sustainability by a magnitude of 39.5%. The remaining 60.5% of variance can be explained by other factors. Therefore taking into consideration resources constraints inform of time, human and financial costs, and methodological constraints. The study could not exhaust all aspects of community participation and sustainability of GIZ project interventions. In line with the above reasoning, the researcher recommends as follows;

The research study was confined to Napak district and to only three Sub-Counties yet the project was implemented in three other districts in the region. Therefore the researcher recommends that a similar study be carried out in the different districts where the project was implemented so as to be able to draw comparisons on how community participation may have influenced sustainability.

The study also used Napak district as a case study and thus the researcher recommends that regional studies be carried out to draw comparison and lessons on how the different regions in Uganda view community participation and its related influence on sustainability of development interventions as an area for further research.

The study findings revealed that there was a mixed reaction when respondents were subjected M&E questions and gaps were highlighted in critical reflection and learning from M&E reports reflected by 83.5% and 86.5% of respondents respectively in disagreement with both statements. The researcher therefore recommends that further research be done in the area of knowledge management and sustainability of community interventions in Uganda.

Basing on the fact that the study used mixed method and a case study situation, the researcher recommends that further research be carried out on a similar subject using different methodology.

The findings also revealed that about 66% of respondents have never enrolled into formal education in their lives and were thus unable to neither read nor write. The researcher would like to recommend a further study that could investigate to see if there is any relationship subsist between community level of education and sustainability of development interventions.

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