EXAMINING THE ROLE OF PARTICIPATORY COMMUNICATION ON DEVELOPMENT PROJECTS’ OUTCOMES: A CASE OF NAPUU DRIP IRRIGATION SCHEME

by

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APPROVAL

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EXAMINING THE ROLE OF PARTICIPATORY COMMUNICATION ON DEVELOPMENT PROJECTS’ OUTCOMES: A CASE OF NAPUU DRIP IRRIGATION SCHEME

I declare that this thesis is my original work and has not been submitted to any other college or university for academic credit.

Signed: _________________    Date: __________________

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### LIST OF ABBREVIATIONS AND ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>FGDs</td>
<td>Focus Group Discussions</td>
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<tr>
<td>HIV/AIDS</td>
<td>Human Immunodeficiency Virus/Acquired Immuno-deficiency Syndrome</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
</tr>
<tr>
<td>NDIS</td>
<td>Napuu Drip Irrigation Scheme</td>
</tr>
<tr>
<td>PMO</td>
<td>Prime Minister’s Office</td>
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<td>UNDP</td>
<td>United Nations Development Programme</td>
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ABSTRACT

This study sought to examine the role of participatory communication in development projects’ outcomes with a focus on Napuu Drip Irrigation Scheme (NDIS). The objectives of the study were to determine the extent to which participatory communication may have been used in the implementation of the NDIS, establish the benefits of participatory monitoring and evaluation (M&E) as a tool for improving the socioeconomic status of the Napuu community, and establish the perceptions of the locals on how the NDIS project was carried out. The study used in-depth interviews and Focus Group Discussions (FGDs) to collect data. This study used 22 respondents for the FGDs and 3 respondents for the in-depth interviews. Homogeneous sampling was used to purposively select the 25 respondents. Data analysis was done by generating themes and categories manually. Under each objective, the researcher created tables with repeated responses that generated common themes. The study findings showed that participatory communication is a key factor in implementing development projects, but it was not enough to sustain or bring out the best outcomes in the NDIS project. The study also showed that M&E is a key stage in development projects, as it provides an opportunity to evaluate the project and identify gaps for improvement. The study also revealed that despite the challenges, the perception of the Napuu community was that quality of life had improved because of the NDIS project. This study concluded that participatory communication is a key ingredient in the implementation of development projects, especially when all the aspects of the project cycle must be observed and followed. The study recommends the need for integration of participatory communication into every aspect of Turkana County’s project implementation processes and for further research on the role of participatory communication in development.
DEDICATION

I dedicate this study to the young boys and girls with big dreams in Turkana County and I challenge them to do better when their turn comes than I ever could. I wish to also dedicate it to my beloved parents who have always supported my dreams and trained me to be a better citizen, and my grandmother who vicariously goes to school through me.

In a very special way, I dedicate this thesis to my late grandfather who always cheered me on until he succumbed to stomach cancer in 2019.
CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

Introduction

Communication for development is the use of communication tools and media to enable people to be fully aware of their situation as well as their options for change in order to resolve conflicts, bring harmony, and help them work towards change, as well as acquire the skills and knowledge needed to improve their condition (Lennie & Tacchi, 2013). To expound further, it is important that the target community is aware of their situation first before any help can be handed to them. It is also important for them to know their options for social change; what can be done and how social change can be implemented effectively.

Ogolla (2000) noted that development agencies have the tendency to displace rather than supplement the local capacity by suggesting certain projects and programmes. This limits the people’s freedom to choose, making them incapable of maintaining the project without supervision. It is, therefore, clear that participation of the people is paramount. The author stated that participatory communication emphasizes on people’s participation right from the grassroots level, where they are part of the decision-making.

This chapter commences with a background overview of participatory communication and development. The statement of the problem is then presented, and the research objectives and questions outlined. The rationale and significance of the research are explained, and assumptions of the study stated. The chapter also describes the scope and discusses the limitations and delimitations. Various terms employed in the study are also defined before the chapter is summarized.
Background to the Study

Welborn (2018) highlighted that Kenya’s agricultural sector is the eighth largest in Africa by volume, but it has struggled to sustain consumption since the late 1990s. According to a 2018 report by the Institute for Security Studies, in Kenya, consumption exceeds production (Welborn, 2018). The report stated that the annual agricultural production must rise by an estimated 75% from 2015 levels to meet consumption needs for 2030. Agricultural consumption in Kenya will exceed production by approximately 20 million metric tonnes by the year 2040. The author added that different factors are accountable for low productivity in the agricultural sector in Kenya, with only an estimated 2% of arable land utilized under irrigation.

Echoing the above statement, Okigbo and Eribo (2004) stated that lack of development in Africa is not due to absence of resources, but rather poor coordination capacity among African groups, more so the government and the people. Sen (1999) defined development as the process of expanding the real freedoms enjoyed by individuals. It is, therefore, important that development projects are well coordinated and that the people are part of the decision-making for these projects to be sustainable.

Okafuor (2005), argued that in the African context, involving the community in project initiation and implementation guarantees project success as opposed to non-participation or forcing a project on people that they have no clue about. Community participation sustains the interest of the target groups or communities to carry on with the project on their own and for their own good. Sustainability is the ability of development to meet the present needs without compromising the future generations’ ability to meet their own needs (Carley & Christie, 2000).
In trying to help the people advance the quality of their lives in the less developed economies across the globe, attention has been focused on external help – from developed countries. This help may be necessary, but experience has shown that despite such help, most development projects have failed (Lundstrom & Thomas, 2000). The community is the most dominant partner and development workers can only work effectively if they involve the community in its development agenda. The authors added that it is of great importance to have the community fully participate in its development work.

Lundstrom and Thomas (2000) added that external resources cannot be used to sustain development. Therefore, participation is vital since it triggers change, which in turn leads to sustainable development and continuous progress in the community. Involving the members of the community in the process of change is referred to as participation. According to the authors, through the participation process, the community gets to understand how particular problems can be tackled and this boosts preparedness and willingness to support development efforts.

Development projects should be built on faith in the people’s ‘capacity to decide what works best for them as they discern how best they can contribute towards transforming the society’ (Jacobson, Servaes, & White, 1996). This means that individual participation is at the core of a development project’s success or failure. Therefore, without the participation of the people in the project that is intended for them, the project may not succeed or meet the intended goal.

According to Carley and Christie (2000), sustainable development is, therefore, a continuous process of mediation among environmental, social, and economic needs that results in positive socioeconomic change that does not undermine the social and ecological needs that communities depend on. The authors further described
development as the process through which the members of a community increase their institutional and personal capacities to mobilize and manage resources to produce sustainable and equitably distributed improvements in the quality of life, in line with their aspirations.

Sen (1999) mentioned that growth of individual incomes is highly vital as an avenue for increasing the freedoms enjoyed by the members of the target community. Development calls for the removal of major causes of bondage, such as poor economic opportunities, poverty, repressive states, systematic social deprivation, and neglect of public facilities.

Role of Communication in Development

Project management considers effective communication as a core competency, with the observation that one in every five projects that fail does so due to poor or total lack of communication (Lys, 2015). Participation is anchored on voluntary associations between different factors such as government, user groups, individual project users, non-governmental organisations, and private enterprises (Nour, 2011).

Communication lies at the root of all human development. Alternative approaches to development advocate participation by all stakeholders in decision-making processes with regard to matters that impact their lives. Melkote and Steeves (2001) argued that communication constitutes an indispensable part of participatory approaches. For development to have an impact on individuals who desire it most, it must begin by determining whether there is a real need and problem. Tufte and Mefalopulos (2009) added that participatory communication is a dialogue-based approach that allows for sharing of information, opinions and perceptions among different groups, thus facilitating development.
The role of communication in development projects cannot be ignored. The perspective of communication has, however, changed. Jacobson, Servaes, and White (1996) stated that it is now more concerned with context and process, on the exchange of meanings and on the usefulness of the process. Through this shift in gear, one no longer seeks to create a need for information to be disseminated. Instead, information is disseminated for which there exists a need. Therefore, this means that for development to serve its purposes, it should be directed to where the real needs and problems exist.

Community Participation versus Participatory Communication

Partnership, like community, is a widely abused term. It is useful when several different interests willingly come together formally or informally to achieve some common purpose. Understanding participation involves understanding power, which depends on who has information and money. Most organizations are not open to participation because they fear losing control. However, working together in many situations allows everyone to achieve more than they could on their own. This represents the benefits of participation (Wilcox, 1994).

According to Bessette (2004), community participation means facilitating active involvement of different groups together with the development agents working with the community. The author describes participatory development communication as a powerful tool in facilitating and encouraging community participation in development initiatives through strategic communication. Therefore, participation is the only connection between community participation and participatory communication, but these two terminologies cannot be used interchangeably.

This survey explored the role of participatory communication in achieving the NDIS outcomes. According to Orido (2017), the community used to be active in
pastoralism, moving from one place to another in search of greener pastures for their goats and food for themselves. This study sought to find out if any participatory communication strategies were used to convince this community to leave pastoralism and instead venture into vegetable farming. It was, therefore, important to find out if the participatory communication strategies used were effective in the running of NDIS; and if the quality of life of the Napuu community has since improved or not, based on the use of these strategies.

The Background to NDIS

The NDIS is a project that was established by the Turkana County Government to build resilience against drought (Orido, 2017). The Turkana County Government invested Kshs 72 million to facilitate the project. The project was facilitated by the Ministry of Water Services, Environment and Mineral Resources, and the Ministry of Agriculture, Pastoral Economies and Fisheries – Irrigation and Land Reclamation Department in Turkana County. The Ministry of Water oversaw infrastructure, such as digging of boreholes and installation of drip pipes and tanks – and the Ministry of Agriculture facilitated the whole process from inception to the handover of the scheme. This was also part of the United Nations (UN)/Turkana Joint Programme and is one of the 22 irrigation projects in the county.

The target group had been a pastoralist community largely known for goat keeping. Thus, the biggest challenge the scheme faced was changing the mindset of the local community from pastoralism to farming. The locals, however, embraced the idea after some time (Orido, 2017). The researcher established that Napuu is an ancestral land and the occupants have been practicing Sorghum farming for many generations; the only difference is that they would rely on rainy seasons to plant sorghum and had no prior knowledge of drip irrigation.
According to Orido (2017), the scheme faces challenges such as saline water, clogged water pipes, and lack of sufficient quality seeds. Despite the challenges, the scheme has produced a number of fruits and vegetables such as spinach, kales, tomatoes, peas, beans, and watermelons. This information was confirmed during the study and the same challenges were highlighted during the study.

The NDIS demonstrates how simple technologies can be used to promote food security using water from underground aquifers. Orido (2017) added that a solar-powered pump moves the water to a large tank from where it flows by gravity to the small tanks for the drip irrigation of vegetable fields.

Statement of the Problem

Most corporate organizations, among other institutions, donate millions of shillings to community development projects, but only a few of the projects succeed (Wessel & Greenberg, 2016). Each year, organizations around the world lose millions of dollars to failed projects for a number of reasons and later struggle to find out why the projects failed (Discenza & Forman, 2007)). Instead, most of these projects come to a quick end, leaving the communities more dependent on help from external sources.

The term participatory development communication is usually used to indicate a two-way communication process. This approach encourages dialogue centered on problem-solving and allows for bottom-up decision-making (Tufte & Mefalopulous, 2009). However, this is not usually the case in most development projects, as noted by Ascroft (1994), that many times the people are excluded from the decision-making process. This leads to a case where development projects are done for the people and not with the people. Failure to use participatory communication approaches could be the reason most development projects fail. The push for participation of and
involvement of local communities in development projects has driven most
governments to look for strategies and ways of bringing communities on board
(Ogolla, 2000).

The Turkana County Government invested Kshs 72 million in the NDIS, besides
offering the Napuu community continued support. Having the county government on
board for the first time, after the community had tried to reach out to a number of
NGOs before, was encouraging. The researcher found out that participatory
communication approaches were used to carry out the implementation of the scheme
and contributed greatly to the continued existence of the scheme.

Few studies have been done in Kenya on the role of participatory
communication on community development projects’ outcomes. Kwena (2013)
studied factors influencing community participation in the management of
development projects through Local Authority Service Delivery (LASDAP) in Narok
County. The research found low levels of community participation, due to limited
awareness and poor local involvement. Sei (2016) investigated the specific factors
influencing community participation in rural water projects in Matete sub-county. The
study found that undemocratic management could have resulted in limited community
participation.

The two studies mentioned above are important in illuminating the importance
of community participation in ensuring that development projects are sustainable, but
the studies do not focus on the contributory role of participatory communication in
aiding the same. Although the two studies were based on community participation,
this study found the two relevant because of the active community involvement aspect
of community participation, which is also key in participatory communication. This
study established that participatory communication works in the community participation context.

Progress has been made in research to improve the way development projects are carried out, but there is a need to highlight the role of participatory communication in effective management of development projects. Despite the progress being made, it is hard to measure what enables and sustains progressive community projects. There was a gap in research in terms of examining the role of participatory communication towards executing successful community projects. This study explored the role of participatory communication in the implementation and outcomes of NDIS.

Purpose of the Study

The purpose of this study was to examine the role of participatory communication in development projects’ outcomes using the case of NDIS.

Research Objectives

1. To determine the extent to which participatory communication may have been used in the implementation of the NDIS.
2. To establish the benefits of participatory M&E as a tool for improving the socioeconomic status of the Napuu community.
3. To establish the perceptions of the locals on how the NDIS was carried out.

Research Questions

1. What was the extent to which participatory communication may have been used in the implementation of the NDIS?
2. What are the benefits of participatory M&E as a tool for improving the socioeconomic status of the Napuu community?
3. What are the perceptions of the locals on how the NDIS was carried out?
Justification for the Study

This research was inspired by the researcher’s childhood experiences in Lodwar Town, Turkana County. Growing up, the researcher noted many failed community development projects in Lodwar, Turkana County; most of which failed as soon as they were launched, and millions had been invested. The researcher has always been curious to find out why some of these development projects fail to help the target communities.

Food insecurity is a serious problem in Turkana County and Kenya in general. Turkana is also one of the most affected counties during drought seasons and has, therefore, attracted many development agencies, with millions being invested every year to combat food insecurity. Hence, this study was deemed worthwhile towards finding long-term solutions through participatory communication approaches.

Lastly, to the best of the researcher’s knowledge, this study is the first of its kind to be carried out in Turkana County on the effect of participatory communication on development project outcomes.

Significance of the Study

The findings of this study may be useful to policymakers in the Ministry of Agriculture and the Ministry of Water, particularly when making policies on how to successfully implement irrigation projects in Turkana County.

The study may also serve as a guide for development agents within the county. It would also be useful to the Napuu community as it offers guidelines on how to actively participate in development projects. Lastly, this study is very relevant to development communication and other communication scholars who intend to study development projects.
Assumptions of the Study

In this study, the researcher assumed the following:

1. The farmers would be honest in their opinions during the interviews and FGDs.
2. The community was involved in the implementation of NDIS.
3. Participatory communication was used in the implementation of NDIS.
4. The Turkana County officials would be willing to share the project reports with the researcher.
5. The Turkana County Government would allow the study to be conducted.
6. The locals would agree to be recorded during the FGDs.

Scope of the Study

This research was an examination of the influence of participatory communication on the NDIS based in Lodwar, Turkana County. Therefore, the study was carried out in Nwoitorong, Lodwar Town, in Turkana County, where the project is located. In addition, the study considered senior project managers from the Ministry of Water and the Ministry of Agriculture in the Turkana County Government.

Limitations and Delimitations of the Study

This research used a sample of convenience as opposed to a random sample; therefore, the findings are restricted to this study and cannot be generally applied to the wider population or to any other study.

This study was not completed within the timeframe planned by the researcher. Therefore, the researcher took leave from work to create more time for research. Approvals by National Commission for Science, Technology, and Innovation (NACOSTI) and the Turkana County Government took longer than expected. Therefore, the researcher communicated the delay to the Turkana County
Government, where officials were waiting to give their approval for this study. It took the researcher over two weeks to trace the inactive farmers. Therefore, to avoid further delay, the researcher sought the help of a project manager to locate the inactive farmers within a short time.

Definition of Terms

Communication: This refers to the transfer of meaning from the sender to the recipient (Kolb, 2011). In this study, it was used to mean the passing of message and achieving a shared understanding between various project stakeholders.

Community: This refers to a group of individuals who share interests or individuals who co-habit the same locality with the same culture, where there are reciprocity and mutual concern (Kyamusugulwa, 2013). In this study, it referred to the farmers of the NDIS.

Participation: This refers to taking part in a project and playing an active role in making decisions that affect one (Usadolo & Caldwel, 2016). Therefore, for the purposes of this study, it was the active involvement of the farmers in the NDIS.

Participatory communication: Owusu (2014) defined this term as a methodology, based on dialogue, which allows for sharing of opinions and information among the various parties facilitating their empowerment. In this study, participatory communication referred to how information was shared, what communication methods were used to share knowledge and how messages were shared with the community.

Development: Sen (1999) defined development as a process of expanding the real freedoms that people enjoy. Therefore, a development project is one that leads to
the realization of real freedoms that individuals enjoy, such as improved socioeconomic status. In this study, development means the improved quality of lives of the Napuu community.

Sustainability: Carley and Christie (2000) defined sustainability as meeting the current needs without compromising the future generations’ ability to meet their needs. In this study, sustainability refers to the uncompromised continuity of NDIS.

Sustainable development: Carley and Christie (2000) defined this as the continuous process of mediation among social, economic and environmental needs, which leads to positive socioeconomic change without undermining the social and ecological needs upon which communities rely. In this case, sustainable development means continuous process of improved quality of life and socioeconomic goals for the Napuu community.

Extent: Extent in this case meant the degree to which participatory communication may have been used to implement the NDIS by stakeholders and the community.

Community participation: Bessette (2004) defined community participation as facilitating active involvement of different groups to work with development agents, the community and decision makers. In this case, community participation, just like participatory communication, is centered on the involvement of the community in their own project.

Summary

This first chapter has introduced and provided an overview of what this study was about. The problem statement indicated that this study was an examination of the role participatory communication played as reflected in the NDIS outcomes. The purpose, rationale and significance of this study emphasized on the intentions of this
study to examine the role of participatory communication on NDIS. Assumptions, scope, limitations and delimitations of this study have been outlined categorically and their importance also stated. The next chapter will focus on the literature review.
CHAPTER TWO

LITERATURE REVIEW

Introduction

This section presents a review of the theoretical and empirical literature on communication as they both relate to community development projects. The chapter deployed the participatory communication theory with a view to examining the role of participatory communication in the running of NDIS. This section also gives an analysis the empirical and general literature around the concepts of participatory communication, and development and project management cycle, and outlines the conceptual framework that was used to attain the objectives of the study.

Theoretical Framework

Participatory Communication Theory

This study was based on participatory communication theory. Paulo Freire, the proponent of the participatory communication theory, incorporated the crucial connection between theory and practice (Freire, 1970). Until the word ‘participatory’ stepped into the spotlight, it was common to describe any bottom-up or grass-root communication as Freirian (Barroso, 2002). Freire’s concepts such as ‘dialogical education’ remain widely used in development circles and grassroots movements particularly in Africa, Latin America, and Asia. Freire’s concept of liberating education – Conscientization – can be defined as the process through which humans become more conversant with the sources of their oppression (Barroso, 2002). Oppression, in this case, can be poverty, and companies taking advantage of that to exploit communities. However, unless there is clear thinking about empowerment, it is not a concept by itself to facilitate social development (Barroso, 2002).
According to Tufte and Mefalopulos (2009), participatory communication is based on dialogue and allows sharing of information and opinions between different parties facilitating their empowerment. Individual participation in one’s own development, according to McAnany (2012), is an idea that goes back to the beginning of communication for development and social change. In this study, involvement of the Napuu community in decision-making was examined as an indicator of participatory communication throughout the implementation of the NDIS.

Secondly, as a theory, participatory communication suggests that dialogue should be the primary means through which community development projects can have a lasting impact (Owusu, 2014). Participation in this sense refers to the process through which the influence is shared among parties who do not hold the same hierarchical position (Stefanovska–Petkovska, Bojadziev, & Mucunski, 2015). This is akin to what Wald (2014) referred to as, ‘development from below’, bestowing power and agency in the community. This study sought to explore the role of participatory communication in aiding the Napuu community voice their opinions towards influencing the NDIS outcomes.

Thomas and Narayan (2016), argue that participatory communication models emphasize recipient co-presence, involvement, and participation, contrary to the linear vertical paradigms of development communications. This is what is known as collective action. The theory upholds the likelihood of initiating change in recipients’ perception and intention through provision of an environment that encourages free and open expression, ownership of the change process, and voluntary participation (Thomas & Narayan, 2016).

Shahzad and Bokhari (2014) further identified four ways through which participatory communication can aid the involvement of the community. These are
participation through implementation, where communities play an active role in the implementation; participation through evaluation of projects upon completion; participation by enjoying the benefits of the project; and finally, participation through decision-making – by involving them in all the decisions.

There are various definitions of the term participation, but basically, it has to do with working with individuals, whom the same decisions will eventually affect, in contributing during the formulation, implementation and monitoring of those decisions (Bonye & Aasoglenang, 2013). Participation is, therefore, about actively involving the target community in their own development.

The ultimate end of participation is that beneficiaries become self-reliant and empowered in the quest for advancing themselves and the community as a whole. According to Bonye and Aasoglenang, (2013), participation means a more active type of public involvement, whereby decisions are taken jointly between the decision-makers and the community. People’s involvement in the formulation or implementation of a project is termed community participation and it often gives the community a sense of ownership of the project (Kyamusugulwa, 2013).

Despite its appealing nature, participatory communication is not without its shortcomings. Enns, Bersaglio, and Kepe, (2014) argued that while participatory approaches seek to empower ‘the poor’ and accord a voice to the marginalised, they do guarantee that the marginalised interests are heard. That is to say, that voice is not synonymous with influence.

Despite these claims, participatory communication theory was the anchor theory for making sense of community involvement in the NDIS. Allied concepts such as the communication message (“let’s work together”), community dialogue and grassroots channels (such as opinion leaders) were analysed to establish their significance in
explaining the project outcomes. Regardless of these limitations, this theory was applicable to this research since it emphasizes on the importance of community involvement in development projects.

General Literature Review

According to Holden, Phillips, and Stevens (2017), any kind of human interaction calls for effective communication. To succeed, a collaborative project must create an instrument for interaction among partners. Collaborative group members interact very often, keep each other up-to-date, openly discuss issues, and express all the required information to each other. Partakers in a new initiative must be willing to learn more about the other parties and make an effort towards understanding their goals, motivation, and roles (Holden, Phillips, & Stevens, 2017). This research sought to ascertain whether project proponents were willing to be immersed in the community in order to have deeper insights regarding their goals, aspirations, and roles in project realization.

Development in Africa

Africa as a basis of civilization and humanity is unique in its means of communication and not just in customs, tradition, and culture (Osho, 2011). All the channels of communication emanated from the ancient Africans in the old Egypt. This civilization later spread to India, China, India, Rome, and Greece. What makes the African means of communication stand out is their creativity, originality, culture, and the people’s traditions. These make them highly effective and enduring in personal or inter-personal dissemination of information or through group communications.

According to Servaes (2004), many scholars in Africa agree that the continent has not had much success in development. This is because the continent largely believes in development and development initiatives that are foreign in both origin
and objective. Development communication studies have adopted research procedures designed to answer the Western societies’ needs and not to suit the African context.

Okigbo and Eribo (2004) stated that development has been misinterpreted to mean change and adoption of Western production methods, resulting in a development fallacy on the African continent. Development has failed in many African countries because projects are supposed to be about the people, but the people have been failed by the development initiatives in sub-saharan Africa. Therefore, in most African countries, development continues to be seen as something that comes from outside.

According to Freire (1970), the outside facilitator’s role is defined as one in which he or she is supposed to work with and not for the oppressed. Freire argued that true participation involves subject-to-subject relationship and not subject-to-object relationship. Participation is a basic commitment based on mutuality and respect for one another and everyone has the right of say in their own development.

Rasila and Mudau (2012) came up with a communication model for rural development that fosters effective community involvement. This model creates a sense of belonging with the spirit of ‘ours’ prevailing over the spirit of ‘theirs’ between project sponsors and communities. It brings a high level of community-driven planning, which in turn leads to true participation of the community in project implementation activities. In their view, when community members are empowered with information, and are involved in the implementation process in a conducive environment, they tend to take issues pertaining to their own development into their hands. This makes them accountable to the existing developmental initiative.
Participatory Development

Participatory development is about including people who are affected by the development process as planners of that process (Thomas, 2013). In theory, participation allows the development beneficiaries to behave like experts during the development processes, thus affecting the direction of change (Enns et al., 2014). This study explored how community autonomy in decision-making was preserved. Participatory development projects that seek to promote citizen participation have attracted global attention among practitioners and researchers as a channel for enabling those hitherto excluded from the mainstream society to bring out their voices, rather than executing the tasks of specific projects (Masaki, 2010).

Trends in Communication Approaches

In the 1960s and 1970s, the dominant paradigm was the prevailing thought (Melkote & Steeves, 2001). It was initially assumed that the mere provision of information would automatically result in development.

Development communication scholars argued that the use of the dominant approach in development was the main cause of failure in the search for development through initiation of development projects in many nations (Freire, 1970). Dominant paradigm accelerated the westernization of developing countries without much regard to the needs of the local people (Servaes, 2004). This is because in dominant paradigm, development is pre-determined, irreversible, progressive, and imminent.

The dominant paradigm had its shortcomings as it accelerated the westernization of developing countries, aggravating inequality and increasing tension within societies (Melkote & Steeves, 2001). Participatory communication proponents argue that
development can only be sustained if it involves the people at the grassroots (Servaes, 2004).

Paulo Freire introduced the dialogic pedagogy concept, which was centered on participation. His method incorporated ideas on dialogue and participation, critical reflection, democracy and the crucial nexus between theory and practice. Alternative paradigm or participatory communication came about as development agents realized that they needed to do more than just transmit information to facilitate the communities’ participation in development.

Shahzad and Bokhari (2014) summarized the concept of participatory communication as the alternative paradigm to development communication based upon six principles. The six principles are; Down-top communication flow, which promotes the idea of working together, involves everyone in making policies, involves opinion leaders, fosters a systematic network of interpersonal communication, and finally makes use of traditional media.

Empirical Literature Review

This study focused on NDIS, which was a collaborative effort between a county government and the people of Napuu. The partners combined efforts and invested both time and money – Kshs 72 million – towards improving the lives of the Napuu farmers against the backdrop of the droughts that affect Turkana County every year (Orido, 2017). According to the Long Rains Food Security Assessment Report in 2016 by the Kenyan Government, Turkana County is classified as Stressed (IPC Phase 2) across all livelihood zones. This is, therefore, beyond the workplace and more about being socially responsible for a community that needs help.

Mallin (2009), stated that Korean corporations recognize that lack of integrity in the eyes of the public and the state is harmful to their business. Firms do not
habitually make any follow-up efforts after giving large donations because such donations easily attract media attention, giving them a favourable public impression. It is, therefore, interesting to note that the Turkana County Government chose to address one of the most prevalent issues in the county by establishing 22 drip irrigation schemes.

Stanton (2016), examined community development practices of the Australian government based on a case study of ‘Corporate Community Investment in Australia’, a scheme to get the Australian businesses to get more involved with the Australian society. He identified issues that had increased corporate investment in other societies that needed to be implemented in Australia. By 2014, the Australian government was backing away from the original inflated rhetoric that launched the programme; blaming an ‘economic downtown’, stating that companies were seeking a return on investment and ‘choices of engagement’ that were aligned with business issues.

Stanton added that corporations – whether locative or not – create rhetorical images of their societal responsibility. It is an addition to a business medal that ought to exist without being stated. Corporations operate within a legislative environment. Triple bottom-line accountability dictates that corporations ought to look to two additional elements of their operations as well as financial profit and loss: social and environmental accountability. The NDIS incorporated both the social and environmental concerns and set out to improve both the environment and the lives of the community members (Stanton, 2016).

Many of the world’s governments increasingly understand that they cannot achieve social goals on their own. If they are to achieve what they want politically, legislatively, and in regulatory terms, then there must be a degree of trust between governments and other organizations (Haynes, Murray, & Dillard, 2014). This study
considered the case of NDIS, which was a joint effort between the Turkana County Government and the UN. This proves that citizens can benefit greatly by reducing poverty and other societal problems when the government works hand in hand with other organizations.

Mahama and Badu-Nyarko (2014) studied community participation in water delivery services and sustainability in Savelugu/Nanton Municipality in Ghana. The study recommended that should programme planners engage the community right from the planning to the utilization level, the community members would get empowered to fully own the water delivery services in Savelugu-Nanton Municipality. However, community involvement was not examined through the lenses of participatory communication theory.

Owusu (2014) used development communication theory to explore the communication channel used by development partners to engage communities in ongoing development projects and the changes brought about by the projects to the lives of individuals in the Ejura/Sekyedumase Municipality via communication. The study found that interpersonal communication was the most dominant means of communication employed by development partners to connect with the communities. The research established that both the communities and project implementers face challenges in sustainable development projects. However, the three elements of development communication - social mobilization, advocacy and behavior change communication – were never utilized by project implementers to contact the target beneficiaries.

It is also important to note that even though money can solve a lot of problems, sometimes the root cause may be solved through other means such as face-to-face meetings and allowing the people to speak up, which may speed up the process and
ensure the solution given to them is by them and sustainable. The experts should guide professionally and not impose. Freire (1970) – Pedagogy of the Oppressed – stated that leaders who do not act dialogically but insist on imposing their decisions, do not organize the people, they manipulate them instead. Freire added that these leaders oppress and that they do not liberate, nor are they liberated. These assumptions are at the core of participatory communication and were explored further in terms of their relationship to project sustainability.

Participation and Development

This study focused on the role of participatory communication on development projects using the case of NDIS. This, therefore, means that participation was the focal point of this study. This was based on the notion that it is through participation that the people at the grassroots can participate in decision-making.

According to Ashcroft (1994), participation can be categorized into two: pseudo participation and genuine participation. Pseudo participation is where the control of projects and decision-making power is vested in the administrators, planners, and the elite of the community. On the other hand, genuine participation is where the local elite and the common people work together in each step of the decision-making process and the ordinary persons are motivated to act and control of decisions. Genuine participation is the right way to development. However, the concept of genuine participation is but a mirage in many developing countries in Africa.

Participation as a means approach, according to Parfait (2004), holds that the power relations between the people at the grassroots and the development agencies remain untouched. This means that the project design and management are left to the traditional authorities, while the role of those mobilized to participate is limited to
rallying towards the projects’ predetermined goals. This encourages a top-down approach to development (Okigbo & Eribo, 2004).

Parfaitt (2004) stated that in participation as the end approach, there is transformation in power relations between the donors and recipients, with the recipients getting liberated and empowered. This approach seeks to ensure that there is equal power in the relations. This approach encourages an equal or down-top kind of communication, thus giving the people at the grassroots level power to engage. Mulwa (2010) argued that authentic participation seeks to empower the powerless to assume full responsibility over their own destiny within the framework of cultural and socio-economic realities.

According to Parfaitt (2004), participation has become a widespread phenomenon in today’s age. Development agencies are increasingly adopting the concept in their daily operations. It has been referred to as the new orthodoxy as scholars and bilateral development agencies emphasize on it. Lundstrom and Smith (2000), adds that participation requires everyone to share the responsibility for development. Therefore, development workers should: have the desire to understand and be involved in the community; be ready to help; spend time with the community; trust the community; to handle their own development; and, above all see the world through the eyes of the community. Both the development workers and the community have something to contribute and they must therefore cooperate.

Chikati (2009) stated that for effective participation to be attained, a proper plan must be formulated and implemented with all concerned parties. The participation of everyone in the process of planning is a determinant since little is attained without their inclusion. There are various levels of participation where information-sharing
and consultation indicate low levels of participation and collaboration and empowerment show high levels of participation as indicated in the Table.

### Table 2.1: Levels of Participation

<table>
<thead>
<tr>
<th>High-level participation</th>
<th>Low-level Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaboration</td>
<td>Information sharing</td>
</tr>
<tr>
<td>Consultation</td>
<td>Empowerment</td>
</tr>
<tr>
<td></td>
<td>Shared control over decisions and resources</td>
</tr>
<tr>
<td></td>
<td>Transfer of control over decisions and resources</td>
</tr>
</tbody>
</table>

Source: Chikati (2009)

The Concept of Project Cycle

As mentioned above, development projects need to be effectively planned to serve their purpose and to serve the intended community. According to Chikati (2009), for the successful implementation of projects, it is imperative to understand that all the concerned parties understand their problems and can pinpoint the ones that the project can address. Planning how a development project will be executed requires the use of a project cycle as a tool to ensure that the purpose of the development project has been achieved and that the quality of life in the community has improved.

Project cycle refers to the recognition of the stages within the project’s lifetime. The notion of a development project implies physical creation of assets over a specified timeframe, which in turn leads to the recognition of phases and stages within the project cycle and later to the concept of a project’s lifetime (Chikati, 2009). Many scholars have come up with different forms of project cycles, but this study referred to the one used by Chikati (2009) as depicted in Figure 1.
Identification is the first stage. It is the stage at which development agents develop ideas on possible strategies that could be utilized to counteract problematic issues; project approach could leverage a viable strategy.

In the formulation phase, the project’s details are presented for appraisal. The organization funding the project also examines its sustainability and feasibility at this stage. The approval of formulated plans calls for commitment and appraisal mechanisms. Financial commitment is vital at this stage and includes drafting the financing proposal, analysis by the finance department, financing decisions taken and finally drafting and signing the financial agreement.

In the implementation phase, one relies on the resources provided in the financing phase to attain the project’s desired outcomes. At this stage, different reports are produced as per the financing contract, operation plans developed, annual working schedules and monitoring reports. Monitoring is crucial as the progress of the
project must be checked regularly to ensure everything goes as planned and, if not, deviations can be identified in good time.

The final phase is the evaluation stage, where the outcomes and influence of the project are analyzed. Evaluation could be initiated during the implementation stage so as to identify issues and viable solutions. At this stage, recommendations are formulated for purposes of follow-up.

Conceptual Framework

Ravitch and Riggan (2017) explained that a conceptual framework is a set of assumptions and theories that support and inform research. It is a relevant part of one’s research design. Its purpose is to help the researcher learn from the experiences and expertise of others as he or she cultivates knowledge and perspective.

In this study, the conceptual framework as illustrated in the figure below will guide the research. The figure shows the relationship between participatory communication elements and project outcomes. The elements are the community’s voice, community dialogues and collective action. The outcome indicators include project sustainability/continuity, economic development and improved quality of life.
The above conceptual framework shows how use of participatory communication approaches in addition to project cycle as a guiding tool can lead to improved quality of life and socioeconomic status of the people at the grassroots. This study, therefore, examined the use of participatory communication approaches in the planning, implementation and evaluation of NDIS.

Summary

This chapter has reviewed the theoretical framework as well as empirical literature on the Participatory Communication Theory. The general review of literature also helped put to perspective communication approaches used in the African context. The conceptual framework that was used to guide the study has been presented. In the next chapter, the methodology that was used is explained.
CHAPTER THREE

RESEARCH METHODOLOGY

Introduction

This chapter explains the research methodology that was employed. This entails the research design, population and sample size. It also details the research tools, data collection techniques, data analysis procedures and ethical considerations. A summary of the methodology is presented at the end of the section.

Research Design

According to Kumar (2014), the chief function of a research design is to state how a researcher plans to get answers to research questions. The research design sets out the exact facts of the investigation. Research design should consist of study design and the logical provisions that the researcher undertakes, the measurement procedures, the analysis frame and the timeframe. This study was an examination of the role of participatory communication as reflected in the outcomes of the NDIS.

Yin (2009) defined a case study as an empirical enquiry that examines a contemporary phenomenon within the real-life context, where the phenomenon and context are not defined clearly, and where multiple sources of data collection are used.

This is a case study of NDIS. This study took a descriptive approach through an in-depth analysis of how this project was carried out by looking at whether the community was involved in the planning, implementation and decision-making regarding the NDIS from inception to its completion.
Target Population

According to the 2016 Long Rains Food Security Assessment Report by the National Drought Management Authority (NDMA), Turkana County has an estimated population of 855,399 persons as per the 2009 Census (NDMA, 2017). There are 418 households in Napuu community that were part of the NDIS as either committee members or farmers. This study also engaged three senior project managers from the Ministry of Water Services, Environment and Mineral Resources and the Ministry of Agriculture, Pastoral Economies and Fisheries – Irrigation and Land Reclamation Department – in the Turkana County Government.

The map of the study location is presented in Figure 3.

![Map of Turkana County](Figure 3.1: The Map of Turkana County by the UN)


Sample Size

The samples used in this study were obtained using purposive sampling technique. Purposive sampling is a generic term that highlights the selection of information-rich cases for in-depth study, from which the researcher can learn a great deal.
deal about the purpose of the study and the phenomena under investigation (Piekkari & Welch, 2011).

The purposive sampling technique is the deliberate choice of a participant due to the qualities the participant possesses (Ilker, Sulaiman, & Rukayya, 2016). It is a non-random sampling technique that does not need underlying theories or a set number of participants. Simply put, the researcher decides what needs to be known and sets out to find people who can and are willing to provide the information by virtue of knowledge or experience. The idea behind purposive sampling is to concentrate on people with particular characteristics who are better able to assist with the relevant research.

According to Ilker, Sulaiman, and Rukayya (2016), there are a number of purposive sampling methods, including maximum variation sampling, typical case sampling, deviant case sampling, critical case sampling, total population sampling, expert sampling and homogeneous sampling. This study used homogeneous sampling to purposively acquire the 25 samples. This form of sampling focuses on candidates who share certain traits or specific characteristics such as age, culture, jobs or life experiences. The idea is to focus on precise similarity and how it relates to the topic being researched. The samples used in this study were picked based on people’s jobs in relation to the NDIS. They had to fit one of the four categories including active farmers, in-active farmers, committee members and project managers directly involved in the implementation and planning of the scheme.

The selection of samples in purposive sampling design depends on the judgment and discretion of the researcher (Chandran, 2004). Since the study was of a qualitative nature, no probabilistic sampling was necessary (Merriam & Tisdell, 2015). However, in line with the conventional practice of undertaking qualitative studies involving
samples ranging between 10 and 30 cases, this research used purposive sampling with a total of 25 samples. Therefore, out of the total population of 418 households, this study used 22 samples from the community and 3 project managers from the Turkana County Government; a total of 25 samples.

**Table 3.1: Sample Size**

<table>
<thead>
<tr>
<th>Data Collection Tool</th>
<th>Description</th>
<th>Target Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-depth Interview</td>
<td>Senior Project Managers</td>
<td>3</td>
</tr>
<tr>
<td>FGDs</td>
<td>Active Farmers</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Community Elders</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Inactive Farmers</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>25</strong></td>
</tr>
</tbody>
</table>

**Sampling Techniques**

Lindlof and Taylor (2011) argued that no qualitative project can capture every aspect of a scene as it unfolds and that the key value of a qualitative survey lies in in-depth articulation of social reality contexts. They add that: “We recruit particular persons for interviews because they have had vital experiences (relevant) to our research questions.”

According to Kombo and Tromp (2006), purposive sampling is important when targeting a group of individuals believed to be reliable for the research. Through purposive sampling, the researcher was able to select subjects that had rich information for interviews regarding how the project was executed. The researcher used purposive sampling to determine the most suitable respondents.

**Table 3.2: Sampling Technique**

<table>
<thead>
<tr>
<th>Research Instrument</th>
<th>Sample Size</th>
<th>Sampling Technique</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-depth Interview</td>
<td>3</td>
<td>Purposive</td>
<td>Project Managers</td>
</tr>
<tr>
<td>FGDs</td>
<td>22</td>
<td>Purposive</td>
<td>Napuu community</td>
</tr>
</tbody>
</table>

This study used 22 respondents in the Focus Group Discussions (FGDs) and 3 respondents in the in-depth interviews. There were three FGDs, one for the committee/elders, another for active farmers and the last one for the in-active farmers.
The researcher had 5 committee members, 13 active farmers and 4 non-active farmers in the respective FGDs. The researcher also had three in-depth interviews with three different project managers who oversaw the implementation of the project.

The reason behind purposively selecting specific farmers was for the researcher to get the most relevant information from a group of farmers that not only understood the project well, but had also been involved in the project from its inception and could share the stories about Napuu before and after the scheme was started.

**Data Collection Instruments**

The first practical step in carrying out a research study is the construction of a data instrument. One needs to decide how the data will be collected for the proposed study and afterward construct a research instrument for data collection (Kumar, 2014).

This study used in-depth interviews and Focus Group Discussions (FGDs) to collect data. This study had guideline questions for both the interviews and the FGDs. The in-depth interviews were used to gather information on how the concerned ministries (development agencies in this case) implemented the NDIS and whether they actively involved the community members in any participatory communication approaches. On the other hand, the FGDs were used to determine the community’s perception of how the NDIS was carried out and their involvement in the process.

**Types of Data**

This study used both primary and secondary sources of data. Secondary data included project reports from the Turkana County Government’s Ministry of Water and Ministry of Agriculture. These reports offered background information. The primary data included raw information collected from farmers and the senior project
managers that was acquired through Focus Group Discussions (FGDs) and in-depth interviews.

Data Collection Procedures

The data for this study was collected through in-depth interviews in English and FGDs in Kiswahili to allow all respondents to understand the process and the questions asked.

A Research Assistant was recruited and trained to assist in the data collection process. The Research Assistant was a resident who lives in Napuu area and has worked with several NGOs within Turkana County. The Research Assistant carried out surveys and translated the questions from Kiswahili to Turkana ahead of the study. The meaning of the translations was tested through 5 native speakers from the community and colleagues of the researcher.

In-depth Interviews

Data collection through interviews requires the investigator to identify respondents and have them respond to the questions (Kombo & Tromp, 2006). This study made use of semi-structured interviews, giving control to the researcher on when to ask open-ended questions and when to ask specific ones. The researcher had formulated an in-depth interview guide to keep her in charge of the interview as indicated in the appendices. The interviews lasted approximately 1½ hours but one lasted about 2 hours and was the most detailed. The interviews were recorded on an audio recorder.

First, the researcher presented an introductory letter to the Ministry of Water Services, Environment and Mineral Resources, the Turkana County Government, seeking approval to conduct research in the NDIS in Turkana County from Daystar University, which the Ministry of Water approved.
The researcher then requested to meet three project managers for an interview via phone call. Three names and mobile numbers were shared by a contact person from the Ministry of Water: one project manager from the Ministry of Water and two others from the Ministry of Agriculture. Individual interviews with the project managers were organized and were all carried out separately and on different days. A request to review project reports on the implementation of NDIS was made and a number of reports were shared including photos, training and Baraza minutes as well as handover notes. These reports were a source of background knowledge on the project’s implementation process. One interview was carried out after the FGDs as the respondent was not available at the set time of the interview.

After the in-depth interviews had been done, a meeting with the Chief was planned to fit in her schedule. In addition, the Chief helped with purposively identifying five committee members and together they purposively sampled 13 active farmers. Since it was difficult to trace inactive farmers immediately, 4 non-active farmers were identified two weeks after the first FGDs were carried out with the help of one project manager.

FGDs were organized to coincide with the time of the 2019 census, when it was convenient for the participants and the Chief. Working within the Chief’s timelines, the first two FGDs were done on the same day.

Focus Group Discussions (FGDs)

Focus Group Discussions FGDs are used by the researcher to collect rich data (Martha & Jo-Ellen, 2016). They add that the FGDs set-up normally includes an informal setting that is moderated by a researcher who uses a general guideline of questions. The FGDs are also a one-time meeting of members who share a common interest or experience. FGDs best fit people who are knowledgeable and willing to
partake in the discussion at hand, which gives a voice to their opinions. Monique (2014) added that the FGDs normally take between 60 and 90 minutes and involve between 5 and 10 pre-selected members.

The researcher met all the committee members and farmers together the very first time and shared with all of them the intentions of the study. The day of the FGD happened to be the same the day the community was getting food aid and it was easier for the Chief to assemble all of them together. Due to that, the Chief and the committee members asked the researcher to do a group briefing on what the study was about and how the researcher planned to go about the FGDs that day. The researcher also shared that the study was voluntary and should any of them feel uncomfortable they were free to leave at any point. This was followed by the signing of the consent forms, which the respondents signed individually. It was at this point that the researcher discovered that most respondents were illiterate and instead of signing, the researcher allowed them to use their fingerprints to give consent. Half of them were not able to write the dates after signing, therefore the researcher and a few committee members helped note down the dates.

The researcher then divided the group into two; one comprising the 5 committee members and the other made up of the 13 active farmers. The researcher had the first FGD session with the active farmers in a separate room and the FGD took about one-and-a-half hours. At the end of the FGD, the active farmers were each given Kshs 300 as reimbursement for their transport, as this is what had been agreed upon by everyone in the room. The researcher then carried out the second FGD with the committee members in a separate room for a period of 2 hours and at the end of the discussion, each of them got Kshs 500 as reimbursement for their transport. The Chief
received Kshs 1,000 before the FGD date and this covered the mobile-phone airtime that she used to make calls to the committee as well as her transportation.

The researcher was not able to find the inactive farmers and most committee members, and the Chief stated that most of them were hard to trace as they were doing other businesses and jobs. The researcher noted the reluctance of the respondents to share any contact and later reached out to one of the project managers who provided a contact for one inactive farmer. The researcher then organized with a contact person from the Ministry of Irrigation who asked to remain anonymous to find inactive farmers who were willing to share their stories. When four members were identified, the researcher went to the scheme’s irrigation office and had an FGD with them for a period of 1 hour. The FGDS were undertaken in mid-September 2019.

The FGDS were done in Swahili because all community members except three spoke and understood the language. The researcher had formulated an FGD guideline to guide the FGD process. With regard to the three participants who spoke only Turkana, the research assistant translated the questions and answers at the end of each question asked in Kiswahili. This only happened during the FGD with the active farmers. The FGDS were recorded using an audio recorder and the recordings were later transcribed and translated to English. The research assistant helped with note-taking during the FGDS only.

Pretesting

Dane (2011) maintains that pretesting is required to ensure that rational assumptions are made while editing. The researcher had planned to have a pre-testing exercise with 5 randomly selected farmers through a rehearsal ahead of the FGD where actual data would be collected.
The researcher had a pre-testing done with 5 community members who live in Nawoitorong, which is where the scheme is located. This group of people was knowledgeable about how NDIS was implemented as they lived in the Napuuu area during the time of the implementation to date. This group of people did not have any bias in their opinions as they were just but observers of the whole process. This is when the sound recorder was tested as well as the ability of the Research Assistant to take proper notes and translate.

Reliability and Validity of Data

Over the years, researchers have developed several methods to ensure the quality of research and data collection procedures used in research. Reliability and validity are two of the most important standards (Seliger, Shohamy, & Shohamy, 2015). Reliability provides information on the degree to which the data collection process brings out accurate data, whereas validity ensures that the procedure measures what it is expected to measure. It is important for the quality of the procedure to be inspected before the actual research is administered so that it allows for changes and revisions to be made if necessary (Seliger et al, 2015).

To ensure the reliability of the research instruments and tools, a pretest was done with a purposively selected sample. The pretesting was done to ascertain that the research instrument was reliable. The pretesting assured the researcher on the reliability of the audio recorder as a research tool by checking how long it can record before it ran out of charge as well as the memory capacity. This ensured that the researcher was prepared ahead of the actual study. The interview and FGDs guideline questions were also tested during the pretesting and some questions were later reframed for clarity purposes and to ensure meaning was not lost in ambiguity.
research expert also checked and approved the data collection instruments for this study.

Data Analysis Plan

Gupta and Gupta (2011) mentioned that data processing is a crucial stage in a survey. According to them, the data collected cannot be directly used for the analysis. After collecting the data, the researcher should process and analyze it so as to make deductions. Processing includes editing, coding, classification and tabulation of data. The collected data is analyzed to checking and reduce it into manageable proportions. The researcher used the qualitative approach to analyze the data. The analysis of this study was done by generating themes and categories manually. Under each objective, the researcher created tables with repeated responses that generated common themes.

Ethical Considerations

Punch (2016) explained that all social research involves permission and related ethical issues; because it is founded on information from people and about people. Some ethical issues like anonymity and confidentiality are found in almost all research projects while some, such as advocacy, are much more project specific.

The researcher obtained the necessary permissions from Daystar University’s Ethical Research Bureau (ERB), National Commission for Science, Technology and Innovation (NACOSTI) as well as the Turkana County Government to conduct research at the NDIS.

The respondents were informed in detail about the study they were about to participate in and that their involvement was voluntary. The researcher was working within the Chief’s timelines and, therefore, had a group briefing and signing of the consent forms in a group setting for two groups. Consent was obtained from respondents before they participated in the study. After a detailed discussion about the
nature of this study, and their anonymity and confidentiality assured despite being
tape-recorded, they agreed to take part in the study. The interviews and FGDs were
carried out afterwards. The researcher also facilitated the FGD respondents by
reimbursing their transportation.

The research assistant doubled up as a translator based on her past experience
carrying out research for some NGOs within Turkana County. She was also a Turkana
by tribe who spoke the Turkana language fluently. However, the study was not
completed as earlier anticipated because of delays in obtaining data.

Summary

This chapter has explained the research methodology used in this study. It has
described in detail how this study was carried out, stating the research methods used,
the population, target population and how the sample size was reached. This chapter
has also discussed how data was analyzed and presented in the next chapter as well as
the ethical approaches that were considered. Chapter four covers data presentation,
analysis and interpretation.
CHAPTER FOUR

DATA PRESENTATION, ANALYSIS, AND INTERPRETATION

Introduction

This chapter provides the findings of this study as obtained during the data collection exercise. This chapter also captures the data analysis and presentation of the findings. The analysis of this study was done by generating themes and categories manually. Under each objective, tables with repeated responses that generated common themes were created.

The sections presented in this chapter include response rate; a lengthy demographic information which includes gender, age, level of education; the period respondents joined NDIS; characteristics of Napuu farmers; formulation of Napuu according to the community, and the current situation at NDIS.

The findings of this study were discussed in the same order as the three research objectives of this study. The researcher also discussed the findings from all the data sets – interviews with the three project managers and the FGDs with the committee, active farmers and inactive farmers simultaneously.

Analysis and Interpretation

Response Rate

This was a qualitative study that used in-depth interviews and FGDs to obtain the responses. Initially, this study targeted a total of 25 respondents, comprising 22 community members for FGDs (10 active farmers, 6 inactive farmers and 6 committee members) and three project managers for in-depth interviews from the Ministry of Water, Turkana County. However, this study actually involved 25 respondents; including 3 FGDs with 22 community members (13 active farmers, 4
inactive farmers and 5 committee members) and 3 project managers from the Ministries of Water and Irrigation, Turkana County.

Table 4.1: Response Rate

<table>
<thead>
<tr>
<th>Data Collection Tool</th>
<th>Description</th>
<th>Target Samples</th>
<th>Actual Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-depth Interview</td>
<td>Senior Project Managers</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>FGDs</td>
<td>Active Farmers</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Community Elders</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Inactive Farmers</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>25</td>
<td>25</td>
</tr>
</tbody>
</table>

The qualitative approach allows the researcher to provide otherwise disadvantaged groups with the opportunity to be heard (Mugenda & Mugenda, 2003). This study gave the Napuu community the opportunity to give feedback on how the Napuu Drip Irrigation project was carried out.

Demographics

The researcher sought some demographic information on the respondents in order to understand what may influence their views. The following demographic information were established in this study: gender, age, level of education, the role of the participants in the project and the period the participants were involved in the scheme.

Gender of the respondents

Table 4.2: Gender

<table>
<thead>
<tr>
<th>Description</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Project Managers</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Active Farmers</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Community Elders</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Inactive Farmers</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>7</td>
</tr>
</tbody>
</table>

This study revealed that there were more male farmers than there are female farmers at the NDIS. This is because out of the 25 participants, only seven were women. Out of five committee members, there was only one woman present. Out of 13 active farmers who took part in the FGDs, there were only six women present and
none during the FGD with in-active farmers as well as in the interviews. This suggests that the NDIS has more male farmers than women.

Age bracket

<table>
<thead>
<tr>
<th>Age</th>
<th>Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>26-30</td>
<td>2</td>
</tr>
<tr>
<td>31-35</td>
<td>5</td>
</tr>
<tr>
<td>36-40</td>
<td>4</td>
</tr>
<tr>
<td>41-45</td>
<td>7</td>
</tr>
<tr>
<td>45- Above</td>
<td>7</td>
</tr>
</tbody>
</table>

The ages of the respondents show that a majority were aged 36 years and above. Out of 25 participants, 22 were married men and women with most above the age of 35. All committee members were above the age of 45. Active and in-active farmers were mostly in their 30s. Two in-depth interview participants were in their late 30s and one was 50 years old.

Level of education

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>44%</td>
</tr>
<tr>
<td>Primary</td>
<td>24%</td>
</tr>
<tr>
<td>Secondary</td>
<td>20%</td>
</tr>
<tr>
<td>Diploma</td>
<td>4%</td>
</tr>
<tr>
<td>Degree</td>
<td>8%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

The study showed that most of the participants were illiterate. This is despite the fact that all – except three active farmers – had a clear understanding of Kiswahili. Most of them were not able to sign the consent forms and instead used their fingerprints to give consent. Most of them were not able to write the dates on the consent forms and instead the researcher asked a few literate participants to help her append dates on the consent forms. The main language used during the in-depth interviews was English as all the senior project managers involved spoke fluent English.
The three participants who were unable to express themselves fluently in Kiswahili used the Turkana language to respond to questions, which would be immediately translated by the research assistant who also helped with notetaking. Out of the 25 samples, only three had a diploma or degree education.

Period respondents joined NDIS

All the respondents were part of NDIS from its inception. Most of them (approximately 15) were already settlers there who practised small-scale farming by the river Turkwel; planting maize and sorghum while some joined the scheme when they heard that plots were being shared out to allow the community to practise irrigation. Two in-depth interview participants were part of the scheme from its inception and only one joined after the handover period.

Characteristics of Napuu farmers

The study sought to find out the characteristics of Napuu farmers by asking the respondents whether they were active participants or passive receivers. The study revealed that most Napuu farmers were passive receivers. One committee member stated as follows:

_The active farmers were mostly the committee members and active farmers who were inquisitive, asked questions and asked for help as well as raised issues when things were not working well._

However, as one project manager mentioned as follows:

_Most of the farmers were passive receivers who waited to be directed, therefore when the committee gave up, they also gave up. Most of them settled until it was too late, and problems had escalated._

Formulation of NDIS according to the community

According to one committee member, Napuu has been there for a very long time and the communal land has been passed from generation to generation. The Napuu
community used to keep goats and plant sorghum. They used to wait for the rainy season to plant sorghum and feed their families. The main farming tool they would use then was arrows to dig and plant sorghum. The community used to take turns to guard their farms overnight.

The study found out that some NGOs’ officials challenged the community to form a cooperative in order to send out proposals seeking help whenever they got stuck. The farmers listed their names and formed a cooperative and elected a committee, which then began to send out proposals asking for help to divert the river to their farms.

Committee member number three shared that some NGOs responded to the proposals and chipped in by clearing the land, creating more room for farmers to plant sorghum. It was the committee that reached out to the county leadership for help with a written proposal after the formation of county governments in the year 2013. The committee had also formulated a cooperative to help farmers save money. Their lives improved once the Turkana county government informed them through representatives that they would finally have an irrigation scheme. Therefore, the county opted for an irrigation scheme, which the community agreed to.

Current situation at NDIS

After receiving the NACOSTI and ERB approvals, the researcher visited the scheme two weeks before the actual study began to analyze the situation on the ground as seen in Appendix K. The scheme is doing far worse than expected. Over ¾ of the 70-acre parcel of land is dry and deserted. Goats are now freely grazing in the scheme with some parts of the scheme overgrown with weeds and grass. On one end of the farm, people were doing their laundry next to soapy water which had evidently accumulated over time. The fence was also evidently falling apart, allowing the goats
to move to the farm. There were, nevertheless, approximately 30 thriving plots with a variety of vegetables with dry thorny bushes to protect these plots from invasion by goats.

Summary of the demographics

The demographics show that the NDIS was the idea of the people because it was the Napuu community that approached the county government and the county funded their project at Kshs 72 million. The study also showed that the current situation at Napuu is worrying as most farmers have exited their farms and with the fence falling apart, both thieves and goats have access to the vegetables and crops.

Participatory Communication

The extent to which participatory communication may have been used in the implementation of the NDIS was the first objective of this study. Some participatory approaches used are shown in Appendix I.

How the idea of NDIS came to be

When asked whose idea it was to start the scheme between the community and the county government, all the respondents, including the active and inactive farmers, committee members, and the project managers agreed that the idea of Napuu came from the community and the county only came in to help actualize their dreams. One committee members stated as follows:

\[
\text{Napuu has been in existence for many years as an ancestral land before the county came into the picture. The Napuu committee registered Napuu as a cooperative way before the county came in.}
\]

One project manager said the following:

\[
\text{This project was demand-driven; the people asked for an irrigation scheme by approaching the governor and, therefore, the governor made a political promise in line with the demand of the people. It was an agreement involving both the government and the people.}
\]
The following was stated by the second project manager:

The community presented a request to the then government stating they have a chunk of land next to River Turkwel and they needed help to get water to their farms so they can use it for farming. In 2013, the request was forwarded to the county government. The county in 2014 sent a team of surveyors to Napuu and the rest is history. According to the community, that land was only beneficial during the rainy season but that was not sustainable, so they needed something more permanent, which is why they reached out to the county.

Participation requires two-way communication – from the sender to the receiver – and the receiver must understand the intended message. In this case, participatory communication is clear because the community’s voice was listened to and there evidently was a community dialogue that led the county to step and fund this irrigation project. Participatory communication, according to a number of scholars, is all about including the people in the project that is intended for them. A collective action in this case is the beginning of the irrigation scheme, with the county and the community as collaborative partners.

The Purpose and Relevance of NDIS

The researcher asked the respondents what the main purpose of the NDIS was and all the project managers mentioned that Napuu was meant to address food insecurity as well as water shortage in Turkana County. One project manager reiterated with the next statement:

Napuu began in 2013 but the irrigation began between 2014 and 2015. The initial purpose of Napuu was to provide water for domestic use. It was hoped that the Napuu boreholes would be a source of water for Lodwar Town due to perennial shortages there. Napuu was and is very relevant because of the purity of its water, which is very rare. The county is struggling with water quality and, therefore, Napuu was found to be an area of great ground water potential and basically an aquifer that can serve Lodwar town for several years to come.

Another project manager added the following:

Napuu was relevant and necessary because the prices of vegetables in Lodwar were exorbitant and there were complaints from the people and
calls for the Ministry of Agriculture to find a way of reducing the prices. There was a need to set up a vegetable venture that could support the town, bearing in mind that most vegetables come from West Pokot and Kitale.

The third project manager shared the next statement:

*The purpose of Napuu was to commercialize agriculture (Kilimo biashara), provide employment for the youth in the farms and business opportunities for people who wanted to invest in farming tools and equipment. It was relevant since Lodwar used to get vegetables from Kitale, and Napuu was to offer the option of a closer purchase point and Lodwar was a ready market and the farmers did make money the first few times.*

The responses from the three project managers are inconsistent and they all seem to give different accounts for the intended purpose of the NDIS. The first project manager mentioned that Napuu was initially intended to solve water shortage in Turkana County and that the irrigation scheme came a year after. The second project manager mentioned that Napuu was meant to address food insecurity in the county and the last project manager somewhat agreed with the second project manager concerning the high cost of vegetables from Kitale but he stated that Napuu was meant to provide the community with business opportunities through selling of vegetables.

The contradicting responses from the project managers show that the intended purpose of the scheme may not have been very specific, and it is not clear whether there was a specific purpose or whether the two ministries had different plans for the scheme. Despite the contrast, it is, however, clear that food insecurity was one of the main reasons behind the scheme as it was mentioned by two project managers, the committee members and the active farmers.

Types of vegetables and crops grown at NDIS
The most common types of vegetables grown in the scheme, according to one active farmer are the following: cowpeas (*kunde*), amaranth (*Terere*), spinach, tomatoes, kale, okras, sweet potatoes, sugarcane, onions and watermelons.

One project manager stated as follows:

*The county advised the farmers against planting crops such as maize and sorghum as such crops require a lot of water to mature and the irrigation scheme would not be ideal for them.*

During the FGD with the active farmers, one of them mentioned that the irrigation officer also advised the community against the use of fertilizers. However, 5 out of 13 active farmers interjected that they plant maize against the expert advice because of the financial benefits they bring.

Most active farmers agreed on the types of vegetables they were allowed to grow on their farms. As much as the Napuu community was involved in a number of ways, this study shows that the community did not make all the decisions and that there were rules that they needed to follow. This shows there was an element of power play, where the county was superior, as its officers made the rules and did not involve the community in all decisions. This is against what participatory communication recommends; that the community be involved in making the decisions that will affect them. Participatory communication also shifts power from the elite to the marginalized. This study, however, observed that power from the elite did not shift to the marginalized.

Despite the expert advice against maize and sorghum due to the technicalities of drip irrigation farming, most farmers decided to plant these crops anyway. This shows a challenge in communication and poses a future problem that may be a result of the lack of willingness to follow the expert advice. This also shows how the Napuu community’s group think mentality operates, where there is a lot of peer influence
that affects possible individual decisions and possibly affecting the end results during the harvest period.

Involvement of the Community

The study sought to find out at what level the county involved the community in this project. This study revealed that the county recognised the community’s voice on the need for a long-term solution to drought and the need for consistent flow of water to their farms. According to the following view by one project manager:

This project did not take time. It was soon after the elections that the discovery of the underground water aquifer was made, so it was like an immediate thing and an opportunity and a win for the county and within a short notice the county embarked on the implementation of this project.

Another project manager added the subsequent statement below:

It was during the first campaign in 2013. The community approached the governor and asked that, should he be elected, what would he offer them? He mentioned an irrigation scheme based on the knowledge UNESCO had shared, that Lodwar was sitting on an aquifer. Therefore, after the elections the ministries concerned were committed to actualise that promise.

The third project manager affirmed the above statements by adding the following:

From the inception stage, an engineer was sent to the community to relay the message that the project they had requested funding for had been approved. The community was even employed to clear the bushes and thickets and were facilitated to create several paths within the thickets. The survey and designs were done by the engineer.

The respondents agreed that the community was consulted from the beginning and that the county came in to help them achieve their dreams. It is also evident that the discovery of the water aquifer made the process easier as the boreholes were an immediate solution to getting water to their farms instead of diverting the water from
River Turkwel, which was deemed impossible. Once again, there are inconsistencies with the project managers’ responses.

The Approach

The study inquired from the respondents how the county approached the community the first time. The study revealed that the county officials held several *Barazas* on different occasions to discuss with the community the steps towards the implementation of NDIS. According to one project manager, *Barazas* were attended by the area chief, Turkana County Government representatives, committee members as well as the farmers. As explained by most committee members, these *Barazas* were meant to listen to the community’s voice as well as to give a chance for a community dialogue for all the parties to agree on a collective course of action.

One project manager mentioned as follows:

*So many community Barazas were held whenever there was a decision to be made and the opinions of the community were sought. Letters were used during allocation and handover and phone calls were made to plan for future meetings and updates on the progress on the ground.*

One active farmer agreed with that, stating, “*at the beginning of the project, we were involved through Barazas*”. This was echoed by a committee member, who said, “*The county would host Barazas to discuss arising issues and progress of the project*”.

Participatory communication is evident at this stage and this was evident during the FGDs with active and inactive farmers as the respondents’ faces would light up when they were talking about how the project began and how their lives had completely changed at the beginning. The first few minutes of the FGDs were filled with hope and excitement as the respondents discussed the beginning of NDIS. These *Barazas* are a sign that the county involved the community in the beginning and that
the county deemed the views of the community as important. The county is also seen to view the community as an equal partner, which is in agreement with the literature. These *Barazas* also indicate there was no top-down hierarchy and that all the parties involved including the county, the area Chief, the committee and the community all came together in the *Barazas* to discuss important issues that would guide the implementation of this project.

The Community’s Voice

When the researcher asked if the community had a say in the project and whether they were given a platform to share their concerns, the majority of the respondents agreed that the community had a say and the members were free to speak their minds. It was evident that the community’s voice was listened to and that there was a community dialogue with all parties involved before any collective action or decision was made. One project manager added the following statement:

*The community has a say. They are given a chance to make decisions. At Barazas their views were normally heard. Their elected leaders also played a big role in assisting by talking to them, mobilizing them, monitoring the progress of the project as well as being part of the Barazas. They were always there to give direction on whatever was taking place.*

Another project manager said as follows:

*For reporting the progress of the project, linear communication was used, where they reached out to the plumber on the ground who reached out to the Irrigation Officer who, in turn, reported to the Chief Officer and the Director. They had a say and especially during the construction they could determine what the contractor would and wouldn’t do.*

According to the statement below by another active farmer:

*Yes, we have a say. We are free to speak. For example, there is a time when we asked the irrigation officers if they ever gave our reports to the authorities because we had filed so many reports without any feedback.*
We speak when we get a chance and we are not afraid to speak our minds. However, some do not like confrontations, so they prefer being quiet.

The community’s voice was given priority during the first stages of the implementation of Napuu and this is a sign that participatory communication played a big role during this stage of the irrigation scheme. However, The Barazas were meant to give the community’s voice a place in the scheme development but it is evident that participatory communication was missing given that, despite the community sharing their opinions, there was no feedback from the county. Power play by the county is also evident at this point because the lack of feedback means the community feels powerless. This shows power has not been shifted from the elite to the marginalized as recommended by theory.

Profits and Income

One active farmer mentioned that “during the first harvest, most farmers made great profit from their farm sales that most did not deem possible initially. The first harvest was an amazing success story for both the Turkana County Government and the people of Napuu”. When the researcher asked the committee members how much they made in the first harvest, one of them shared the next account:

Some of us got up to Kshs 60,000 from sales during the first harvest. Some farmers would hawk the vegetables to different parts of Lodwar town and get money while some customers would bring themselves to the farms. It was only the few who were unlucky or lazy that remained with stale vegetables. However, there is no specific market for Napuu farmers and most experienced a lot of challenges selling their products in the second harvest and that was the beginning of our problems.

All active farmers agreed that the first harvest was an amazing experience where most made a lot of money and saw the benefits of the scheme. According to one active farmer’s sentiment below:
Produce such as watermelons, depending on size, would sell at between Kshs 150 and 500. This gave us huge returns the first time. We had jobs and financial independence before the challenges began.

When the community is involved throughout the process of implementation, there are positive outcomes. All the respondents agreed that the farmers made money after the first harvest and that everything was fine, giving the farmers great hope in the scheme. It was at this point that the farmers and the Napuu community saw the benefits of the scheme. The first harvest was also a win for the county since, after investing Kshs 72 million in this project, seeing the farmers making money made sense to their investment. The first harvest was, therefore, a win for both the county and the community. Irrigation farming was also very new to the Napuu community, so the first harvest made them enthusiastic about the project.

**Empowerment/Training**

It is evident that the farmers were trained on several things regarding vegetable and irrigation farming. All project managers mentioned that the farmers had a number of theoretical lessons at the neighboring church and a number of practical lessons on the scheme as shown in Appendix J.

As mentioned by a committee member, which is a point all the committee members agree with, the Napuu community had a background in sorghum farming where the community awaited rainy seasons to plant. One project manager stated that the drip irrigation technology was new to them and that is why training was very important to the farmers before taking up irrigation farming. Therefore, the researcher sought to find out whether the farmers were trained on irrigation technology and good farming practices before they embarked on farming. Most respondents agreed that the farmers were trained on how to take care of their crops and the irrigation equipment,
but most committee members and active farmers also raised concerns that the training was insufficient and that not all were trained.

Another project manager added the following statement:

Two months after completion, the community requested the county to retain the contractor until the first harvest as they were not familiar with the drip irrigation technology. That way they would be trained on all aspects of irrigation farming. There were three trainings: the first was on irrigation water requirement—the amount required by each crop to mature; the second training was on good agronomic practices—spacing needed, pesticides, manure and the last was about a combination of system maintenance and marketing—how to clean the tanks and filters. The contractor also trained farmers on planting, irrigation, tilling, weeding, spraying chemicals and finally harvesting.

According to the first inactive farmer’s viewpoint below:

Yes, we did several trainings at the church next to the farm. We would divide ourselves into groups and every group would have about 30 people per block. Some people were just lazy and would thus ignore cleaning and taking care of the filters. The ones who are still able to faithfully farm are the ones who planned early and don’t really lack daily needs.

This was agreed upon by all the inactive farmers. Another project manager stated as follows:

The county only offered support in the development of infrastructure and trusted the farmers with undertaking of minor operations such as cleaning the whole system and the filters by brushing the filters clean using a toothbrush.

The demographics above show that most farmers are not literate; this, therefore, puts into question whether the farmers understood the training process, especially the theoretical part of the training, which required some note taking. The demographics also showed that most farmers were old, with many above the age of 45 and their concentration span may thus have affected their understanding capacity during the training.

With most farmers being illiterate, the training given to them may not have been effective, as most may not have understood fully the technicalities of irrigation
farming. This may also indicate that the farmers were not ready to take over the project fully soon after the first harvest. The success of the first harvest may also have been an immature indication that the farmers were ready to continue by themselves. All these may be reasons why all the farmers and committee members believe that the training was not sufficient. Most respondents agreed that some farmers may have been lazy and found the cleaning process to be too much; this would indicate that they are not natural farmers and most may not have fully understood what it would take to have continued successful drip irrigation farming.

The Challenges

The study revealed the following as the challenges faced by the NDIS: poor training, lack of a fence, salty water, governance, dependence on the county government for continuity and lack of a market for their products. Most responses during the FGDs with the committee, active and inactive farmers and the interviews with project managers resonated around these points. At this point of the discussion, the mood during the FGDs changed into a sad one and most FGD respondents were emotional in their responses. During the FGD with the committee and inactive farmers, all the committee members and inactive farmers were clearly bitter at this stage of the discussions.

Despite the committee, active and in-active farmers being excited about the beginning of the project, it was evident during the FGDs that the excitement did not last long. All the committee members mentioned that despite the county listening and asking for their opinions during the Barazas, they failed to follow up on the discussions and actualize what was discussed. This was agreed upon by the active and
in-active farmers. On the other hand, during the interviews, the Project Managers disagreed with the above, stating that the county was willing and ready to work with the community but that the community was too dependent on them.

One project manager stated the following:

What they lack so much is marketing of their products, which are consumed at the community level and rarely beyond that. This could be the reason some give up on farming as profit is not forthcoming. Also, there are technical issues there which also happen to be in Napuu, such as salinity, despite the good water quality.

Another project manager added to the above statement saying:

The governance situation is currently wanting. The local leadership is overprotective. For instance, the county needed to retrain the community to get new leadership, but it all got politicized. The goats also invade the farm and feed on other farmers’ crops and only armed farmers are not affected. The affected farmers end up feeling demoralized.

It was mentioned by one project manager that when the county handed over the project to the community, they left a guide on governance and operations to the committee members, but the committee disregarded that guide. According to all project managers, the community is so heavily dependent on the county that they expect the county to fix even basic problems, which led to the escalation of their problems. The third project manager added the next statement:

There is an overdependence syndrome on the part of the farmers, so much that even a very minimal repair or breakdown, the farmers would ask the Agriculture office to fix it. This may be a case of learned helplessness or it may be a sign of insufficient training. The committee is also ineffective given that all operations and governance plans were documented and handed to them to guide them, but they do not implement them. The committee used to get allowances from the first contractor for about a year and that motivated them to take charge and responsibility, but they lost motivation and a lot of things started to go wrong when the second contractor was unable to facilitate them. During the second harvest, it was noticed that most people started abandoning their plots. The Agriculture department then sent tractors to plough the whole farm and left the responsibility of relaying the drip lines, planting and watering to the farmers, but some of the farms were never worked upon after.
Despite great use of participatory communication in the initial stages of the implementation of NDIS, there was grumbling and bottlenecks that affected the progress and continuity of this project. The Napuu community previously depended on rain for farming and would survive on food aid before the next rain season came. This irrigation project was very technical and needed a lot of technical handling of equipment in order for water to get to their farms.

Before the first successful harvest, the farmers had the full support of the county government as well as the contractor; and the irrigation officer was always available to guide them. After the first harvest and the exit of both the contractor and the county, the farmers became fully aware of the technicalities of irrigation farming. Most were also not fully equipped to continue given that they may not have fully understood the training given to them. Therefore, cleaning of filters and tanks became an unwelcome task to most. This indicates that no dialogue model was used. It could explain why they were and are still very dependent on the county for maintenance of equipment and consistent help from the county.

One active farmer stated as follows:

Napuu started out so well, until after the county exited and left us in charge, when the pipes started getting blocked because of the salt. We were also not sufficiently trained. It is true that some of us were trained on pesticides and good crop culture. But instead of all, very few people were trained. Most farmers have limited knowledge on pesticide use and weed control. The water is so salty that during evaporation, the salt blocks the pipes. We received seedlings and pesticides but, at some point, the supply was discontinued. The change of pipes by the second contractor in 2016/17 also saw much smaller drip pipes installed. These pipes were not enough and, therefore, they did not get to all the farms. The county agrees to most things, but they do not make most promises happen. When county officers come for a site visit, they are disappointed as they find things are no longer going according to plan. They find such scenes as animals feeding on the farm, with no farmers in sight.

Failure by the second contractor to consult the farmers shows a lack of participatory communication approaches. The overdependence on the county by the
farmers is very clear at this point because the farmers used to get seedlings and pesticides from the contractor. According to one project manager, after the first harvest, it was expected that the farmers would use the money they made in the first harvest to purchase seedlings and pesticides. This shows a break in communication.

The inactive farmers said most of them did not exit the farm because they were lazy, but that the new drip pipes did not get to their farms when the second contractor did away with the first drip pipes. There was simply no way for them to continue, they added. They also added that the water meant for domestic use and consumption was so salty that it affected one’s throat. One inactive farmer also said as follows:

*The other big challenge is the fence. It is so weak that goats find their way in and eat all the vegetables and there is nothing you can do. It means we must guard our plots all day, which is impossible because there are other things to be taken care of. Back in the day when the fence was good, we had rules and regulations. The goats would be detained until the owner showed up and paid the affected farmer for the loss after assessing the damages caused to the farmer. This was all lost when the fence started falling apart because, how do you restrain the goats when there are so many ways through which they can get into the farm? The other problem we have is the county. We have tried telling them our problems every time they come here. We keep telling them that some of us have lost hope. The other thing is that finding a market for our products is very hard. Yes, we have planted and harvested but there is no market. Proper storage facilities are also lacking, so that even when we go out looking for the market, we can’t tell for sure that the harvest is safe.*

According to all the committee members, the farmers were to be taken round to see how other irrigation practitioners were doing so as to learn, but that never came to pass. Participatory communication is about actively involving the community in their development but despite the county having agreed with the community about benchmarking, that did not happen. This, therefore, shows the county has power over the community and can choose to go by or against all the decisions made during the *Barazas.*
There was a break in communication that led most inactive farmers to exit the scheme. A group-think mentality was also very evident as most farmers relied on the county for the continuity of this project, which saw most of the problems escalate because the needed repairs were not done in time. A good example is the fence, which was falling apart. The project managers also mentioned that most farmers were lazy and that most did not want to clean the filters as they had been shown during the training.

Participatory Monitoring and Evaluation

The second objective of this study was to determine the benefits of participatory M&E as a tool for improving the socioeconomic status of the Napuu community.

Monitoring and Evaluation (M&E)

The study sought to find out whether any M&E was done before the handover of the scheme to the community. M&E is an important stage in the project management cycle and it was important for the researcher to establish whether M&E was done before the handover of the scheme to the community. One project manager said as indicated below:

The contractor was required to document each, and every activity done daily at the end of the week. The resident engineer, whenever he visited the site, needed to undertake an assessment with the committee members on what had been done and share a report on a monthly basis with his seniors. Every report had to be accompanied with photographs showing that what the reports stated happened in every field visit. An officer was deployed to keep track of the contractor’s activities on a weekly basis. He had to list all the activities done as well as the challenges faced and recommendations.

According to the first project manager, there was weekly communication with the resident engineer, the committee members and the contractor. This shows some level of participatory communication, where the resident engineer would walk around
with the committee members checking the contractor’s progress. That also elaborates
how the community’s voice was given a chance and collective action was taken at the
end of each assessment when they approved the contractor’s progress and the
irrigation officer would report that to his seniors on a monthly basis.

However, the second project manager’s statement disagrees with the first project
manager. He said as follows:

*M&E was done but initially only at the end of every financial year. At
that time there was only one M&E unit. The county is in the process of
recruiting more M&E officers. There are lapses in M&E that could have
brought some shortcomings. The Ministry of Water has created an M&E
unit but those who work there are not trained M&E officers. What is
going on now is that every department must think on its own.*

Monitoring and Evaluation (M&E) is an important stage for any development
project. However, the above statement by the second project manager indicates that
M&E was lacking. Lack of a specific M&E unit in the two ministries involved in this
project may explain why some unforeseen challenges were not solved on time, with
repair issues escalating the situation further. This means that despite a very good
participatory communication approach at the beginning of this project, lack of proper
M&E would mean that the project managers representing the county could not get a
clear picture of where the project was headed and that explains why there began to be
a very weak form of communication at this point of the implementation of the
irrigation scheme.

The third project manager stated as follows:

*M&E was done on a monthly basis to keep track of the contractor’s
progress during the implementation. After the completion of the works
and the handover to the committee, the irrigation officer stationed at the
farm reported on a monthly basis. The officer shared reports to show the
percentage of the progress.*

At the foundation of the NDIS, there was proper participatory communication
but that changed at the M&E stage, when the communication link became non-
existent and everything began to go crumble. There is a missing link in communication and the contradicting statements by the project managers on how M&E was done show that whatever link was there was a weak one.

It is evident that there is a disconnect among the above bodies, as one project manager first reported that the contractor’s activities would be assessed on a weekly basis, but the resident engineer would share the report with his seniors on a monthly basis. On the other hand, the second project manager said that M&E units were non-existent and that the Ministry of Water had created an M&E unit of untrained M&E officers, which means that the ministry is still not prepared to handle M&E in future projects and this clearly shows that there was poor M&E of this project, further explaining why so many challenges and escalating repair issues have never been resolved to date.

Table 4.5: Monitoring and Evaluation (M&E) Summary

<table>
<thead>
<tr>
<th>Monitoring and Evaluation (M&amp;E) Inconsistent responses</th>
<th>Responses shared by</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Progress Assessment/ Review:</strong></td>
<td></td>
</tr>
<tr>
<td>Done on a weekly basis.</td>
<td>1st project manager</td>
</tr>
<tr>
<td>Done on a monthly basis.</td>
<td>1st and 2nd project managers</td>
</tr>
<tr>
<td>There was no team to do that.</td>
<td>3rd project manager</td>
</tr>
<tr>
<td><strong>M&amp;E Presence:</strong></td>
<td></td>
</tr>
<tr>
<td>Every report had accompanying photographs.</td>
<td>1st project manager</td>
</tr>
<tr>
<td>There was no M&amp;E unit.</td>
<td>3rd project manager</td>
</tr>
<tr>
<td>Ministry created an M&amp;E unit but lacked trained M&amp;E personnel.</td>
<td>3rd project manager</td>
</tr>
<tr>
<td><strong>Training:</strong></td>
<td></td>
</tr>
<tr>
<td>30 members per block were trained.</td>
<td>Active farmers</td>
</tr>
<tr>
<td>Theory lessons done in church and practical at the scheme site.</td>
<td>All respondents</td>
</tr>
<tr>
<td>Insufficient training.</td>
<td>Committee/ Active and Inactive farmers</td>
</tr>
<tr>
<td>The farmers were mostly illiterate; thus, training was ineffective.</td>
<td>Demographics</td>
</tr>
<tr>
<td>Mostly older farmers, concentration span may have been affected.</td>
<td>Demographics</td>
</tr>
<tr>
<td><strong>Community’s Voice:</strong></td>
<td></td>
</tr>
<tr>
<td>Community had a say.</td>
<td>All respondents/ Barazas</td>
</tr>
<tr>
<td>The county listened and funded the project.</td>
<td>All project managers and committee</td>
</tr>
<tr>
<td>The county became unresponsive.</td>
<td>Committee/Active and Inactive farmers</td>
</tr>
<tr>
<td>The community lost faith in the county.</td>
<td></td>
</tr>
<tr>
<td>The community is over-dependent on the county for continuity.</td>
<td>Committee/ Active farmers</td>
</tr>
</tbody>
</table>
Perceptions of the Locals on the Implementation of Project

The third and last objective of this study was to find out the perceptions of the locals on how the NDIS was carried out. The perception of the locals will be looked at following the outcome indicators in the conceptual framework of this study. The desired outcomes include sustainability, food security and improved quality of life.

To gauge whether there is food security for the people of Napuu, the researcher asked the participants whether they would prefer the life before the scheme or the life after. According to the inactive farmers, most of them are back to doing the things they used to before and most of it is very tough, especially firewood and charcoal business, where they are in constant battles with the Forestry department. One inactive farmer mentioned that he would rather go back to the farm and water his vegetables with a bottle as a sprinkler because he knows the farm has more benefits than the challenges that come with charcoal burning business.

The committee believes that despite the challenges, Napuu has brought about many benefits. One committee member said as follows:

*We cannot go back to depending on rain for farming because nowadays rain is very rare, and irrigation is a good solution. If only the Agriculture people were close to us, we would have very good progress, but they are not easily accessible now.*

According to the committee members, despite the challenges, Napuu has offered them many benefits, which include water for their vegetables throughout the year, making the situation better than when they used to depend on the rainy season for farming. When the committee mentioned that things would be easier if the county administration had continued to work with them, the other committee members agreed
with that statement, clearly showing that the committee members depend on the county for the continuity of this project.

Most farmers agreed that they have come too far to go back to the harder life they were used to before. One active farmer said as follows:

*I cannot go back to my firewood business as I am no longer as young and energetic as I used to be. Napuu has brought about a better life, exposed us to a better lifestyle and opened our minds to think bigger. Our animals have also benefited from the scheme as they get their food and water here as well.*

The active farmer mentioned above admitted that she was no longer as active as she used to be while touching her back, indicating that her current age cannot allow her to do the things she used to do before. This is also an indication that many farmers in Napuu are no longer young. Looking around the room, the researcher could see that most active farmers were not young.

To determine the benefits of the irrigation scheme to the people of Napuu, the researcher asked the participants if the scheme had helped them in any way. The majority of committee and active farmers agreed that Napuu had been beneficial to them and that it could continue to be if a few things were changed for the better. The majority also agreed that their lives had improved in so many ways and that they were now able to do a number of things they were not able to do before, such as: comfortably see their children through school and provide for their families.

One project manager stated as follows:

*The farm itself is a success to the county government based on the first two years when the harvest was great and the few farmers who have developed entrepreneurial skills and are selling their harvest profitably.*

The inactive farmers mentioned the following:

*Since Napuu began, we cannot dispute that it has helped us handle small problems like hunger. Anyone who worked hard would not lack money and something to eat. It helped in a big way for a period but not for long. Back then, some people used to fetch firewood but they now enjoy a big relief. From money to see kids through school to food, we found it*
all on this farm. The outsiders would also get their food by buying from
this farm or would sell it and make money. The group of people that was
not lucky to get plots here would be hired by those who are not capable
of farming.

The committee shared the statement below:

The county brought in pipes, drip irrigation as well as boreholes, which
have made farming much easier and we no longer depend on rain. Napuu was also useful in that some of us are no longer drunkards as our
friends challenged us to do better. We used to depend on aid a lot, but
we can now feed ourselves.

The general perception of the community on the irrigation scheme is that it was
a good project that has been beneficial to them and their families, but it faced the few
challenges mentioned. All the committee members, active and in-active farmers
agreed that they were in a better place than they were before. All the committee
members, active and inactive farmers also agreed that if the county could help and
have the few problems solved, the project would do much better. On the other
hand, all the project managers agreed that the NDIS had not achieved the purpose it
was supposed to, and they believed it was because the farmers failed to do what was
expected of them.

According to all project managers, the project was handed over to the
community and it was expected of the committee to guide the community towards
successful harvests. On the other hand, the community was still dependent on the
county for guidance, which indicated a break in communication and immature
handover to a group of farmers that were not confident enough to run the scheme by
themselves successfully. The inconsistency in responses is a clear indication of poor
collective action by the county and the farmers, which translates to poor results.

Summary of Key Findings

1. Despite consistent participatory communication at the beginning of the
implementation of the NDIS, there was a poor outcome and the scheme did
not achieve its intended purpose. This is because despite the use of participatory communication, the outcomes of participatory communication – community voice, dialogue and collective action – seems not to have worked. This is because participatory communication was effectively executed in the first two years and there was a positive project outcome as seen in financial benefits, Barazas and functional equipment.

2. Participatory communication theory recommends that all members involved in a development project should be viewed as equals but that was not the case in this project. This is because the county had an upper hand, with the project managers involved being well educated, but on the other hand dealing with a majority group of illiterate people and using very high technical tools and equipment. A thorough training would have equipped the illiterate farmers with knowledge to deal with the technicalities of irrigation farming such as cleaning filters and water tanks.

3. NDIS was the idea of the people and the people had formed a committee to help them implement their agenda. The Turkana County Government funded NDIS at a cost of Kshs 72 million. This is necessary for participatory communication.

4. M&E requires effective communication, if it is not done effectively, it may lead to poor project outcomes. Despite good participatory communication at the beginning, there was a break in communication between the county and the farmers during the M&E stage, resulting in unresolved challenges with regard to illiteracy, age factor, insufficient training, involvement of the community, an unresponsive county administration and a weak fence, all of which have negatively affected the potential of this project. The sustainability
of this project is currently being threatened by the escalating challenges, which have seen most members exit the farms.

5. Despite the challenges, most respondents agreed that the quality of life had improved for the Napuu community. All the respondents agreed that this was a very good project that opened their minds and in the beginning, they were able to take care of their families, see their children through school and be financially independent.

6. Project cycle requires effective M&E and community participation but communication in this project was carried out half-way, meaning factors such as age, illiteracy, training and politics were not put into consideration and in the end these factors affected the outcome of this irrigation scheme negatively.

Summary

This chapter has presented the study findings obtained during the interviews and FGDs, the analysis and interpretation of data. Sections of this chapter showed the response rate, the demographics of respondents, presentation and analysis for each objective of the study. The next chapter will provide a discussion on the key findings, conclusions, recommendations and areas of further research.
CHAPTER FIVE

DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

This chapter focused on the key findings relating to the objectives, theories and literature review. This chapter also gives conclusions, recommendations and areas for further research.

The New Outlook of the Conceptual Framework

This project seems to have been implemented without a full understanding of the contextual issues. Therefore, it did not achieve its intended purpose. The situation got worse because even the M&E stage was not carried out conclusively to ensure that challenges were addressed on time. In the end, the unresolved challenges affected the outcomes as seen in the figure below.

According to Mulwa (2010), authentic participation seeks to empower the powerless towards assuming full responsibility over their own destiny within the frameworks of cultural and socio-economic realities. Therefore, this study is in agreement with literature, but it emphasizes on participatory approaches being aligned with M&E and ensuring every stage of the project cycle has been thoroughly implemented.
Discussions of Key Findings

Extent of Application of Participatory Communication in the implementation of the NDIS.

Based on this objective, the study found that participatory communication is a key factor in implementing development projects, but it was not enough to sustain or bring out the best outcomes in the NDIS project. To have a successful development project, participatory communication has to be aligned with M&E and each stage of...
the project cycle has to be thoroughly implemented. Other underlying issues such as culture, education, age and training should be considered as well.

Participation refers to the process through which influence is shared among parties who do not hold the same hierarchical position (Stefanovska-Petkovska, Bojadziev, & Mucunski, 2015). In this case, the project managers assigned to this project by the county government, the committee members, farmers and even the chief did not hold the same hierarchical position. This statement is in agreement with what Wald (2014) referred to as, ‘development from below’, bestowing power and agency in the community.

However, this study has revealed that while participatory communication demands that there should be no hierarchies and that all members involved in a project should be viewed as equals, that was not the case in this project. This is because the county had an upper hand and would make some decisions without involving the community. The project managers involved were also well educated while on the other hand a majority of the farmers and committee members were illiterate. Irrigation farming also involves very technical tools and equipment and requires very technical maintenance of this equipment. Therefore, irrigation farming was a very new technique for the Napuu community, which is made up of people who were previously into sorghum farming, goat keeping and firewood and charcoal business. For the farmers to be able to pick up this new technology, comprehensive training was necessary.

According to Tufte and Mefalopulos (2009), participatory communication is based on dialogue and allows sharing of information and opinions between different parties, thus facilitating their empowerment. Individuals’ participation in their own development, according to McAnany (2012), is an idea that goes back to the
beginning of Communication for Development and Social Change. In this case, the Napuu community was involved through a number of meetings and the community had a say and their grievances were heard at the beginning.

As a theory, participatory communication suggests that dialogue is the primary means through which community development projects can have a lasting impact (Owusu, 2014). Participatory communication models emphasize recipient co-presence, involvement and participation, contrary to the linear vertical paradigms of development communications (Thomas & Narayan, 2016). This is what is known as collective action. Participatory communication was evident during the Barazas that were held, which, according to the project managers, were attended by the area Chief, Turkana County government representatives, committee and the farmers. The committee stated that they had a say and that no decision was made without consulting with the community.

Co-presence was evident in the beginning stages, where the community was involved in Barazas, which is how they first met the contractor. The community also worked together with the contractor during bush clearing, construction of the toilet and irrigation office as well as setting up the irrigation tanks.

Consistent communication ensures smooth implementation of development projects. The Barazas at the beginning of the implementation of this project ensured the community was involved and that the community responded by being actively involved and taking part in the construction of toilets and setting up irrigation tanks. Communication failed at the M&E stage and that ended up affecting the sustainability of this project. This goes against literature because, according to Thomas and Narayan (2016), the likelihood of initiating change in the recipients’ perception lies in the provision of an environment that encourages free and open expression as well as
voluntary participation. All the committee members claimed that after the first harvest, the county became so unresponsive that even when they were given space to share their opinions, the county administration did not act on what was agreed upon in the meeting, which discouraged most farmers.

Poor communication in the M&E phase affected all the participatory communication approaches – the community’s voice, dialogue and collective action put in place in the implementation of the NDIS; resulting in poor outcomes and exit of a huge number of farmers. This is because participatory communication was effectively executed up to the first harvest, where the farmers reaped financial benefits. This is the opposite of what Owusu (2014) recommends; that dialogue is the primary means through which community development projects can have a lasting impact. Therefore, the committee members, active and inactive farmers all mentioned that the county began to pull away after the first harvest and that despite having a say at the Barazas, the county administration failed to deliver on what was agreed upon. This discouraged many farmers and most of them have now exited their farms, affecting the end result of this scheme.

Shahzad and Bokhari (2014) further identified four ways through which participatory communication can aid community involvement. They include participation through implementation, which is evident during Barazas, bush clearing as well as the construction of the toilets and irrigation office. Others are: participation through evaluation of projects upon completion – which is where communication failed and the challenges of this project began when, despite the committee checking the contractor’s progress, factors such as age and illiteracy of the farmers were not considered during the training; participation through benefits, which is evident until after the first harvest, where farmers reaped financial benefits, and, finally; through
decision-making, which is partly seen at the beginning, where farmers are involved in all decisions during the Barazas.

Participation is a basic commitment based on mutuality and respect for one another and where everyone has a right of say in their own development (Freire, 1970). Therefore, giving the community a say during Barazas and then failing to act on what was discussed, shows that the Turkana County Government as a development partner did not fully respect the right of way of the Napuu farmers in their own development.

All the participants agreed that the community had a say and that there was freedom of speech during the Barazas. This agrees with Enns et al (2014), who stated that in theory, participation allows the development beneficiaries to behave like experts during the development processes, thus affecting the direction of change.

Development communication scholars agree that the use of the dominant approach in development was the main cause of failure in the search for development through initiation of development projects in many nations (Freire, 1970). However, Melkote and Steeves (2001) stated that the dominant paradigm had its shortcomings as it accelerated westernization of developing countries, aggravating inequality and according to Servaes (2004), in the dominant paradigm, development is predetermined, irreversible, progressive and imminent. This is why participatory communication is important in ensuring the continuity of development projects by involving the community in their own development as was the case with the Napuu drip irrigation project, where farmers were involved through Barazas but, unfortunately, the communication was not consistent and that affected the outcomes of this project.
According to Holden, Phillips, and Stevens (2017), any kind of human interaction calls for effective communication. To succeed, a collaborative project must create an instrument for interaction among partners. Collaborative group members interact very often, keep each other up-to-date, openly discuss issues and express all the required information to each other. The collaboration in this project between Napuu farmers, committee members and the county administration were very effective during the many Barazas that were held, and the community members had a chance to express their grievances. However, communication failed after the first harvest, where the farmers and the committee felt the county administration had stopped responding, discouraging most of them and even seeing most of them leave their farms to pursue other occupations.

Involvement of the target communities in their own development is a key factor in participatory communication. Paulo Freire introduced the dialogic pedagogy concept, which was centered on dialogue and participation (Freire, 1970). According to the author, participatory communication came about when development agents realized that they need to do more than transmit information to encourage communities’ participation. Despite the county administration introducing the community to irrigation farming, they applied the dialogic pedagogy concept by Freire through Barazas, which gave the community a chance to speak up and also ensured that the community was involved throughout the implementation process. This involvement was, however, short-lived because communication failed at the M&E phase.

Shahzad and Bokhari (2014) summarized the concept of participatory communication based upon six principles. These are: Down-top communication flow, which in this case is communication between the county and the farmers; promotes
the idea of working together where the county and the farmers are seen to share ideas during Barazas; involves everyone in making policies, which in this case is seen in the county calling for Barazas, which ensured the farmers and the committee were involved in all the decisions; involves opinion leaders, which in this case is the committee and the area chief; fosters a systematic network of interpersonal communication where the committee would cross-check all the contractor’s progress with the resident engineer and finally; it makes use of traditional media, which in this project was the use of word of mouth, phone calls and the Barazas.

Benefits of Participatory M&E as a Tool for Improving the Socioeconomic Status of the Napuu Community

This study shows that M&E is a key stage in carrying out development projects, as this phase provides the opportunity to evaluate the project, identify gaps and provide room for improvement and changes in order to avoid potential problems. It is, however, clear that communication failed at the M&E stage of this project and instead of benefits of M&E, challenges began at this stage and the situation at the scheme turned from bad to worse, forcing most farmers to exit the scheme, with the millions of shillings invested by the county government going to waste.

Chikati (2009) stated that for effective participation to be attained, a proper plan must be formulated and implemented with all concerned parties, which in this case are the farmers, committee members and the county administration. However, this study found that there was no such plan in the Napuu project implementation. Proper M&E would have led to a strategic exit by the county, which would have seen the contractor stay a little longer to guide the farmers and ensure they were ready to continue on their own, before leaving. Participatory communication can only be effective when proper M&E strategies are in place as well as a calculated exit strategy.
The M&E stage is crucial for any development project because it is at this point that the project is evaluated and potential problems can be determined and, resolved leading to a successful project. Despite good participatory communication at the beginning of the NDIS, there was a break in communication between the county administration, the committee and the farmers during the M&E stage, which resulted in unresolved challenges such as insufficient training, a weak fence and an unresponsive county, all of which negatively affected the potential of this project.

Poor M&E is indicative of a break in communication between the parties involved. According to Freire (1970), participation is a basic commitment based on mutuality and respect for one another and that everyone has a right of say in their own development. The moment the county administration handed over the project to an unprepared community that had not been conclusively trained was the beginning of problems for this project. Chikati (2009) added further that the participation of everyone in the process of planning is a determinant since little is attained without their inclusion. If proper M&E had been carried out in this study, factors such as age and illiteracy would have been determined as potential problems to training and probably, the farmers would have been taken through a fresh and thorough training to ensure they understood exactly how to clean the filters, tanks and how to control salt in the drip pipes.

There are various levels of participation where information sharing and consultation indicate low levels of participation and collaboration and empowerment show high levels of participation (Chikati, 2009). At the beginning of this project, there was collaboration – shared control over decisions as well as consultation – transfer of control over decisions to the community, which indicate high levels of participation. However, at the M&E stage, this study shows that there was a break in
communication, thus leading to poor information sharing and short-lived empowerment, which lasted up to the first harvest for all farmers.

According to Ashcroft (1994), participation can be categorized into two: pseudo participation where the decision-making is vested in the administrators and genuine participation, where the local elite and the ordinary individuals work together through each step of the decision-making process. This study shows that this project had both genuine and pseudo participation. Genuine participation is evident in the first 3 stages of the project cycle, where the county administration and the farmers worked together for the greater good. Pseudo participation is evident at the M&E stage, where communication between the county, the committee and the farmers failed as the county made executive decisions on when to exit without consulting the farmers. The county also decided on the length and content of training, disregarding the age and illiteracy as factors that may have influenced the understanding of the contents of the training. M&E of the training tool would have been more effective with participatory communication.

Perceptions of the Napuu Community on how the NDIS was Carried Out

The third and the last objective of this study was to establish the perceptions of the locals on how the NDIS was carried out. The perceptions of the locals will be evaluated based on the conceptual framework of this study and in particular the expected outcomes. To get an understanding of how the development project was carried out, the researcher sought to find out how the Napuu community perceives the implementation and continuity of this project.

This study revealed that despite the challenges, the perception of the Napuu community was that their quality of life improved. According to the community, the scheme challenged them to think big. They were able to take care of their families,
see their children through school and a good number became financially independent. This is in agreement with Bonye and Aasoglenang (2013), who said that the ultimate end of participation is that beneficiaries become self-reliant and empowered in the quest for advancing themselves and the community as a whole.

This study revealed that the perception of the Napuu community was that they did not feel that they fully owned the project. Rasila and Mudau (2012) came up with a communication model for rural development that fosters effective community involvement, but this study shows that active community involvement took place up until the first harvest. All the committee members and active farmers perceived the scheme to have brought about food security despite all the challenges. According to Stanton (2016), corporations operate within a legislative environment and ought to look to social and environmental accountability as much as they look to financial profit and loss. The county through this scheme meant to address the problem of food insecurity in the county as well as give the farmers financial freedom. This scheme was an answer to both a financial problem and a societal problem. All active farmers perceived this scheme to have improved their lives as they were now able to feed their families and see their children through school, something most of them struggled with prior to the scheme.

The active farmers and the committee members perceived that they were not adequately trained; this had an impact on the project outcomes because most farmers exited the scheme, affecting its continuity. The committee members and active farmers wished that the training took longer than it did, to give them sufficient time to understand the maintenance procedure for the irrigation equipment. Mulwa (2010) argues that authentic participation seeks to empower the powerless towards assuming full responsibility over their own destiny within the frameworks of cultural and socio-
economic realities. Training was a tool for their empowerment as it was meant to equip them with knowledge and skills to continue farming under minimal supervision; but that was not the case in Napuu. This study shows that the farmers were not fully empowered, which is why most perceived that they did not fully own the project.

This study revealed that, according to all the respondents, the quality of the lives of Napuu farmers improved, even though the NDIS did not benefit the community to the degree it was intended to. The committee and active farmers’ perception were that farming in the scheme was beneficial. All the committee members and active farmers said their life after the project was better than it was before the scheme, the challenges notwithstanding.

The inactive farmers’ perception was that they would not hesitate to join the scheme once more if a few adjustments were made. It is, therefore, clear that the inactive farmers were willing to rejoin the scheme and continue farming, but they stated that the county had to walk with them and listen to them for the project to be sustainable.

Conclusion

This study sought to examine the role of participatory communication on development projects’ outcomes using the case of NDIS. This study has established that indeed participatory communication played a big role in the implementation of the scheme. However, the NDIS did not achieve its purpose because the participatory M&E aspect of the project were not prioritized, doing that would have helped identify the challenges that made the NDIS to fail as well as give the project managers time to make a few changes and improvements.

This study concludes that participatory communication is a key ingredient in the implementation of development projects. However, for a development project to be...
successful, all the aspects of the project cycle have to be observed and followed. In this case, the M&E stage was overlooked and in the end most farmers exited their farms due to problems such as political interference, maintenance and repair issues as well as insufficient training.

Recommendations

This study recommends that the irrigation project be started all over again and for the county to ensure that participatory communication is implemented in all aspects and stages of the project cycle. For any project to be successful, all aspects of the project cycle and participatory communication must be implemented.

This project needs a well-trained M&E unit that should include the various stakeholders in the project. Therefore, the Ministry of Irrigation and the Ministry of Water Resources in Turkana County Government need to identify some members of staff and pay for a M&E course or training for them.

For a development project to be sustainable, the people have to be involved from the inception to the evaluation stage. The Napuu community should be given another opportunity to express their concerns and the county should be willing to listen to these concerns with regard to how this project was carried out in order for them to fully own the project and take responsibility for it.

For sustainability of the project, the political and technical issues around the project need to be addressed. From the outcome of this project, it is advisable that a contractor should be hired by the county and put in charge of the re-training of the Napuu farmers and committee. It is recommended that he or she should stay around
for 2 or 3 cycles of harvesting to ensure the community is fully equipped to run the scheme on its own.

The NDIS may require a fresh crop of leaders, where participatory communication is used to select and vote for a new team of committee members who can offer new insights to the development of this scheme.

The county can set aside land around the fish and livestock market that will be purely dedicated to Napuu farmers to sell their products. To add onto that, new ideas of generating income could be disseminated, such as joining a cooperative society to save money for buying refrigerators for storage of their vegetables within the irrigation office.

The county government can retrain the farmers using their own language as well as divide the farmers by age and level of education to allow for better understanding of the contents of training. An interactive model of communication could be used during the training to ensure maximum participation.

Recommendations for Further Research

The study recommends the following for further research:

1. Examining the role of participatory communication in areas of development.
2. Communication of innovation training for illiterates involved in development projects.
3. Communication strategies ahead of a calculated exit strategy towards sustainable development projects.
REFERENCES


mobilization and consultation through public participation. *Journal of Media and Communication Studies, 4*(7), 134-141.


APPENDICES

Appendix A: In-depth Interview Guide for Project Managers

Introduction: Welcome and thank you for volunteering to take part in this focus group. My name is Esther Njeri Mwangi. I am a final-year student at Daystar University, pursuing a Masters of Arts Degree in Development Communication. As part of my programme, I am conducting a research on the role of participatory communication on development project outcomes, the case of Napuu Drip Irrigation Scheme (NDIS), of which you are a part.

This interview is designed to assess your opinions as a development agent working in the Ministry of Water Services, Environment and Mineral Resource in the Turkana County Government, on the role of participatory communication in relation to the Napuu Irrigation Scheme outcomes. Your opinion and your time are much appreciated. Thank you.

Anonymity: Despite being taped, I would like to assure you that the discussion will be anonymous.

Time: This interview will last between 45-60 minutes.

Ground Rules: There is no right or wrong answers but I request that you respond truthfully to the questions asked. The researcher will ask the questions and you will respond in your understanding. There may be follow-up questions in some cases.

Date:
Venue:
Start Time:
Finish Time:
Warm Up: Kindly tell me your role in the NDIS, your age and level of education.
Guiding questions:

1. For how long has the NDIS been in existence and what was the purpose and was Napuu really relevant?
2. Whose idea was it to start the scheme – the community or the county government?
3. What are the policies of the county with regard to the participation of the beneficiaries in the design of the project activities?
4. Did the county use any participatory communication approaches to plan, implement and monitor and evaluate NDIS?
5. Please explain how the community was approached the first time with the idea of an irrigation scheme? How would you describe their first reaction to the idea?
6. At what level did the county involve the target group in the project?
7. The Turkana people have always been pastoralists who move from one location to another to find greener pastures for their livestock. What were some of the challenges at the beginning, with regard to the community adopting the idea?
8. What was the main mode of communication with the farmers?
9. How would you describe the flow of communication between the county and the farmers? Does the community have a say?
10. What communication approaches were used to include the farmers in decision-making during the implementation process?
11. In your view, please describe the characteristics of Napuu farmers in terms of whether they are passive receivers or active participants who push for their voice to be heard in the project implementation?
12. Please explain how M&E are done to keep track of the project’s progress? When was the last time the organization paid the community a visit?

13. In your words, is the management of NDIS pleased with how the project turned out? Do you think the project has helped the target community?

14. Citing a success story, are there plans to expand the scheme to include more farmers?
Appendix B: Focus Group Discussion Guide for Farmers/Committee

Introduction: Welcome and thank you for volunteering to take part in this focus group. My name is Esther Njeri Mwangi. I am a final-year student at Daystar University, pursuing a Masters of Arts Degree in Development Communication. As part of my programme, I am conducting a research on the role of participatory communication in shaping development project outcomes, using the case of Napuu Drip Irrigation Scheme (NDIS), of which you are a part.

This Focus Group Discussion is designed to assess your current thoughts and feelings about the influence of community involvement on the NDIS. Your point of view on how you were involved in the running of the scheme is important to this research. I appreciate your opinion and your time. Thank you.

Anonymity: Despite being taped, I would like to assure you that the discussion will be anonymous.

Ground rules:

- The most important rule is that only one person speaks at a time. There may be a temptation to jump in when someone is talking but please wait until they have finished.
- There are no right or wrong answers
- You do not have to speak in any particular order
- When you do have something to say, please do so. There are many of you in the group and it is important that I obtain the views of each of you
- You do not have to agree with the views of other people in the group but I kindly request that we respect each other’s views
- Does anyone have any questions? (Answers).

OK, let’s begin

Warm up: First, I’d like everyone to state who he or she is in this project, your age and level of education.

Introductory question: I am just going to give each of you a couple of minutes to think about your experience as farmers in the NDIS from the beginning up to this point. Is anyone willing to share his or her experience?
Guiding questions:

1. Describe how your life and that of your family was before you became a farmer here at NDIS?

2. Describe what your main economic activity was before you became a farmer?

3. Kindly explain how the county officials first approached you as a community with the idea? In your opinion, was the NDIS necessary to you at that time?

4. What are some of the challenges you have experienced as a farmer throughout the implementation of the project?

5. What are some of the ways that the county officials have involved you in this project?

6. Given a chance, would you go back to being a pastoralist? If so, what would push you to leave vegetable farming?

7. In what ways have you been able to freely express your opinions and ideas?

8. Do you believe you as the farmers own the project? How much control do you as farmers have over the scheme?

9. How has farming changed your life? Giving examples, what are some of the things you are able to do now that you were unable to do before the project?

Concluding Question

- Of all the things we’ve discussed today, what would you say are the most important issues you would like to express about your experience?
Appendix C: Ethical Clearance

Daystar University Ethics Review Board

Our Ref. DU-ERB/16/07/ 2019 /00307

Date: 16-07-2019

Esther Njeri Mwangi
Dear Esther,

EXAMINING THE ROLE OF PARTICIPATORY COMMUNICATION ON DEVELOPMENT PROJECTS OUTCOMES: A CASE OF NAPUU DRIP IRRIGATION SCHEME

Reference is made to your request dated 05-07-2019 for ethical approval of your proposal by Daystar University Ethics Review Board.

We are pleased to inform you that ethical review has been done and approval granted. In line with the research projects policy, you will be required to submit a copy of the final research findings to the Board for records.

This approval is valid for a year from 16-07-2019

This approval does not exempt you from obtaining a research permit from the National Commission for Science, Technology and Innovation (NACOSTI).

Yours sincerely,

Mrs. Purity Kiambi,
Secretary, Daystar University Ethics Review Board
Appendix D: Daystar University Approval Letter

Director
Ministry of Water Services, Environment and Mineral Resources
Department of Water Services
Turkana County

26th July, 2019

Dear Sir,

RE: ESTHER NJERI MWANGI, STUDENT NO. 13-8374

Esther is a fully registered student in the School of Communication at Daystar University. She has completed her course work towards a Masters of Arts in Communication. She is now working on the research for her thesis.

Esther’s thesis topic is:

“Examining the role of Participatory Communication on Development Projects Outcomes: a case of Napum Drip Irrigation Scheme.”

The purpose my writing is to request that you give Esther any necessary assistance to enable her to complete this important academic exercise.

We assure you that any information collected will be used strictly for academic purposes and will remain absolutely confidential. Upon completion of the research, her thesis will be available at our library.

We appreciate your support for our student towards the successful completion of her thesis research.

Yours Sincerely,

DR. KINYA MWITHIA
HOD, STRATEGIC & ORGANISATIONAL COMMUNICATION
Appendix E: Research Permit

This is to certify that Ms. Esther Mwangi of Daystar University, has been licensed to conduct research in Turkana on the topic: EXAMINING THE ROLE OF PARTICIPATORY COMMUNICATION ON DEVELOPMENT PROJECTS OUTCOMES: A CASE OF NAPU DIP IRIGATION SCHEME for the period ending 02/September/2019.

License No: NACOSTIP/1W185

Daystar University

Verification QR Code

NOTE: This is a computer-generated license. To verify the authenticity of this document, scan the QR Code using a QR scanner application.
Appendix F: Napuu Drip Irrigation Scheme Plot Allocation Map
Appendix G: Turkana County Research Permit

TURKANA COUNTY GOVERNMENT

MINISTRY OF WATER SERVICES, ENVIRONMENT AND MINERAL RESOURCES
Website: www.turkana.go.ke
Mobile: 245723860932
Email: napeyokmoses@yahoo.com
When replying quote:
Ref. No. TCG/WEMIR/CO/ WP&GM 3/1 VOL 1(01)

County Chief Officer,
P.O. Box 11-30500,
Lodwar, Kenya.
Date: 5th August, 2019

Esther Njeri Mwangi,
DAYSTAR UNIVERSITY
Nairobi Campus,
P.O BOX 44000-00100,

Dear Madam,

RE: MINISTRY OF WATER SERVICES, ENVIRONMENT AND MINERAL RESOURCES SUPPORT IN ACCESSING NAPUU DRIP IRRIGATION SCHEME AND WATER SUPPLY PROJECT

Following your request to this office in your letter dated 31st July, 2019 on assistance in accessing Napuu Drip Irrigation Project and the Water Supply there, I am pleased to inform you that the Ministry will support you carry out your research titled “Examining the role of Participatory Communication on Development Projects Outcomes: A case of Napuu Drip Irrigation Scheme” by providing access to the water project where the Drip Irrigation Scheme farms have been established.

The Director Water Services will help you get information about the project including borehole yields and other relevant data.

Please keep us informed about your findings when the research is completed.

Regards,

Natome Moses
County Chief Officer,
Ministry of Water Services, Environment and Mineral Resources,
Turkana County Government.

County Chief Officer
TURKANA COUNTY GOVERNMENT
P. O Box 11, 30500, Lodwar.
### Appendix H: Participatory Communication Implementation (Evidence)

#### Allocation of plots letter

TURKANA COUNTY GOVERNMENT

MINISTRY OF WATER, IRRIGATION, AND AGRICULTURE
IRRIGATION DEPARTMENT, TURKANA CENTRAL SUB-COUNTY

Date: 17th December, 2015

Re: Allocation of plots to individual farmers in NAPUU 1 Drip Irrigation Project

The Committee of NAPUU 1 Drip Irrigation Project
P.O. Box 100, Lodwar

Following the completion of farmers training process, I hereby recommend you as the committee of NAPUU 1 drip irrigation project to organize for a public briefing to verbally inform the rest of the members’ farmers that construction process of the scheme is at its completion stages, thus plots can be allocated to respective farmers.

In the public briefing, you are to discuss and come up with all the names of farmers who will benefit from 419 plots that has been developed and the method that would be used to assign each farmer to a particular plot.

The Department of agriculture has a repo of seeds that would be used to develop seed beds from which farmers will get seedlings to plant in their respective plots.

The biasa can be scheduled in the first week of January 2016 and allocation of plots to follow immediately within the same week. This will ensure that land preparation and planting process is achieved within the month of February.

You are advised to liaise with the Member of County Assembly, Ward Administrator and the Head Chief to ensure the process is achieved successfully and within the stipulated period.

Thank you,

Yours sincerely,

Mr. Pius Opuru
Resident Engineer Irrigation Officer
Turkana Central.

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### Training Programme

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<td>Edward Mukha - AO</td>
<td>Pius Opuru - ENG</td>
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<td>Pius Opuru - ENG</td>
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Appendix I: Training of Farmers on Irrigation Farming (Pictures)

The contractor training farmers on pesticide control.

Farmers going through practical lessons at the irrigation site.

Theory training sessions at the church next to the farm.

Fumigation training.
Appendix J: Current Situation at Napuu Drip Irrigation Scheme (Pictures)

- Soapy water around the tank.
- Dysfunctional pipes on an abandoned plot.
- Dry and abandoned plots.
- Weeds and grass growing on abandoned plots.
- New tanks that have never been replaced and abandoned outside the irrigation office.
- A filter picked from the ground.
- Goats feeding within NDIS.
- A makeshift dry thorny fence.
Appendix K: Results During the Implementation (Pictures)
Appendix L: County Government & Napuu Farmers Barazas (Evidence)

TURKANA COUNTY GOVERNMENT

MINISTRY OF WATER, IRRIGATION AND AGRICULTURE
IRRIGATION DEPARTMENT, TURKANA CENTRAL SUB-COUNTY

NAPUU 1 DRIP IRRIGATION PROJECT PUBLIC BARAZA/MEETING HELD ON 26TH JANUARY 2016

VENUE: Aquifer shed

MEMBERS PRESENT
Pius Oburu……………………… Resident Engineer
Chris Ekukuli…………………. GIZ Representative
Andrew………………………… Kanamkener Ward Administrator
Paulina Lotula……………….. Scheme Chairperson
Lodi……………………………. Assistant Chair Person
Farmers

ABSENT WITH APOLOGIES
Anne …………….. Area Chief
Ikeny ………………… Member of county assembly Kanamkener ward

AGENDA

1. Overview on the project progress
2. Over view of the ministry
3. Input from the invited guests
4. Input from the area Chief
5. Opinion from the community committee
6. Opinion from farmers
7. Way forward

The meeting commenced with a word of prayer from Mr. Lodi at 11:00 AM, who welcomed the committee chair person Mrs. Lotula who took the opportunity to welcome all the guests and farmers for responding to

Farmers attending a public baraza discussing about distribution of plots

Scheme committee addressing the farmers
Appendix M: Plagiarism Report

EXAMINING THE ROLE OF PARTICIPATORY COMMUNICATION ON DEVELOPMENT PROJECTS OUTCOMES: A CASE OF NAPUU DRIP IRRIGATION SCHEME

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**PRIMARY SOURCES**

1. Submitted to University of Queensland
   Student Paper
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2. Submitted to Eiffel Corporation
   Student Paper
   <1%

   Publication
   <1%

4. Submitted to United States International University
   Student Paper
   <1%

5. Submitted to Leeds Beckett University
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   <1%

6. Submitted to North West University
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   <1%