GENDER FACTORS INFLUENCING SUSTAINABILITY OF COMMUNITY WATER DEVELOPMENT PROJECTS IN BAKOOL REGION, SOMALIA

BY

HASSAN ABDIRIZAK MOHAMED

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULLFILMENT OF THE REQUIREMENT FOR THE AWARD OF MASTER OF ARTS IN PROJECT PLANNING AND MANAGEMENT OF THE UNIVERSITY OF NAIROBI.

NOVEMBER, 2017
DECLARATION

This project is my original work which has not been presented for research in any other university.

Signature………………………………………Date………………………………

HASSAN ABDIRIZAK MOHAMED
L50/84119/2012

This research project has been submitted for research with my approval as the University Supervisor.

Signature………………………………………Date………………………………

PROFFESSOR CHARLES RAMBO
CHAIRMAN
DEPARTMENT OF EXTRA MURAL STUDIES
FACULTY OF EXTERNAL STUDIES
DEDICATION

This project is dedicated to my family; Mzee Mahamoud, Hooyo Halimo, Mustaf, Khadija, and Nafisa, Nailah and Yassir for their love, support and encouragement during the entire period of my studies.
## LIST OF ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPFA</td>
<td>Beijing Platform for Action</td>
</tr>
<tr>
<td>CBOs</td>
<td>Community based organizations</td>
</tr>
<tr>
<td>CEDAW</td>
<td>The Convention on the Elimination of all Forms of Discrimination Against Women</td>
</tr>
<tr>
<td>FBOs</td>
<td>Fixed Base Operators</td>
</tr>
<tr>
<td>ILO</td>
<td>International Labour Organization</td>
</tr>
<tr>
<td>IUCN</td>
<td>International Union for Conservation of Nature</td>
</tr>
<tr>
<td>IWRM</td>
<td>Integrated Water Resource Management</td>
</tr>
<tr>
<td>MDGs</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>NFLS</td>
<td>Nairobi Forward Looking Strategies</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>UNCED</td>
<td>United Nations Conference on Environment and Development</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
</tr>
<tr>
<td>UNRISD</td>
<td>United Nations Research Institute for Social Development</td>
</tr>
<tr>
<td>URT</td>
<td>United Republic of Tanzania</td>
</tr>
<tr>
<td>WCED</td>
<td>World Commission on Environment and Development</td>
</tr>
<tr>
<td>WSSD</td>
<td>World Summit on Sustainable Development</td>
</tr>
</tbody>
</table>
# TABLE OF CONTENTS

DECLARATION ................................................................................................................................. ii 

DEDICATION ................................................................................................................................ iii 

LIST OF ABBREVIATIONS ........................................................................................................... iv 

ABSTRACT ......................................................................................................................................... ix  

1.1 Background of the study .......................................................................................................... 1  

1.2 Statement of the problem ....................................................................................................... 4  

1.3 Purpose of the study ............................................................................................................... 5  

1.4 Research Objectives ................................................................................................................ 5  

1.5 Research questions .................................................................................................................. 5  

1.6 Significance of the study ........................................................................................................ 5  

1.7 Limitations of the study ......................................................................................................... 6  

1.8 Delimitation of the study ....................................................................................................... 6  

1.9 Basic Assumptions of the Study ............................................................................................. 7  

1.10 Definition of significant terms used in the study .................................................................. 7  

1.11 Organization of the study .................................................................................................... 8  

CHAPTER TWO .............................................................................................................................. 9  

LITERATURE REVIEW .................................................................................................................. 9  

2.1 Introduction ............................................................................................................................. 9  

2.2 Concept of Gender and Sustainability of community water development projects ............ 9  

2.4 Policy and Sustainability of community Water Development projects ............................. 17  

2.5 Governance and sustainability of community Water Development Projects ........................ 18  

2.6 Diversity among Men and Women and Sustainability of community Water Development Projects ........................................................................................................................................ 20  

2.7 Presence of Gender Equality and Sustainability of community Water Development Projects ........................................................................................................................................ 22
2.8 Theoretical Framework ........................................................................................................... 24
2.9 Conceptual Framework ......................................................................................................... 26

RESEARCH METHODOLOGY ................................................................................................. 31
3.1 Introduction ......................................................................................................................... 31
3.2 Research Design .................................................................................................................. 31
3.3 Target Population ................................................................................................................ 31
3.4 Sample size and Sampling Procedure ................................................................................ 31
  3.4.1 Sample Size .................................................................................................................... 32
  3.4.2 Sampling Procedure ........................................................................................................ 32
3.5 Research Instruments .......................................................................................................... 32
  3.5.1 Pilot testing of Instruments ............................................................................................ 33
  3.5.2 Validity of Instruments .................................................................................................. 33
  3.5.3 Reliability of Instruments .............................................................................................. 34
3.6 Data Collection Procedure .................................................................................................. 34
3.7 Data Analysis technique ....................................................................................................... 34
3.8 Ethical Consideration ........................................................................................................... 35
3.9 Operationalization of the Variables .................................................................................... 36

CHAPTER FOUR .................................................................................................................... 38
DATA ANALYSIS, PRESENTATION AND INTERPRETATION ........................................... 38
4.1 Introduction .......................................................................................................................... 38
4.2 Questionnaire Return Rate .................................................................................................. 38
  4.3.1 Distribution of Respondent by Gender ........................................................................... 39
  4.3.2 Distribution of Respondent by Age ............................................................................... 40
  4.3.3 Distribution of Respondents by Employment Status ..................................................... 41
  4.3.4 Distributions of Respondents by Highest Level of Education ..................................... 41
4.4 Policies and Sustainability of Community water development projects .............................. 43
4.5 Governance and Sustainability of Community water development projects ...................... 44
4.6 Diversity among men and women and Sustainability of Community water development projects .................................................................................................................. 45
4.7 Gender Equality and Sustainability of Community Water Development Projects .................. 46
4.8 Sustainability of Community Water Development Projects ................................................. 48

CHAPTER FIVE .................................................................................................................. 50

SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS .......................................................................................................................... 50

5.1 Introduction .................................................................................................................. 50

5.2 Summary of the Findings ............................................................................................. 50

  5.2.1 Policies on Gender issues influencing Sustainability of Community water development projects .................................................................................................................. 50

  5.2.2 Governance on Gender issues influencing Sustainability of Community water development projects .................................................................................................................. 50

  5.2.3 Diversity among men and women and Sustainability of Community water development projects .................................................................................................................. 51

  5.2.4 Gender Equality and Sustainability of Community Water Development Projects ........ 51

5.3 Discussion ..................................................................................................................... 51

  5.3.1 Policies on Gender issues that influences Sustainability of Community water development projects .................................................................................................................. 51

  5.3.2 Governance on Gender issues influencing Sustainability of Community water development projects .................................................................................................................. 52

  5.3.3 Diversity among men and women and Sustainability of Community water development projects .................................................................................................................. 52

  5.3.4 Gender Equality and Sustainability of Community Water Development Projects ........ 52

5.4 Conclusions .................................................................................................................. 53

5.5 Recommendations ....................................................................................................... 53

5.6 Areas for Further Research ........................................................................................ 54

REFERENCES ................................................................................................................... 55

APPENDICES .................................................................................................................... 59

APPENDIX I: LETTER OF INTRODUCTORY ....................................................................... 59

APPENDIX II: QUESTIONNAIRE ........................................................................................ 60

vii
APPENDIX V: TABLE FOR DETERMINING SAMPLE SIZE FROM A GIVEN POPULATION
ABSTRACT

Gender is a concept that addresses the well-being of women and men. It is a strategy that is central to the interests of the whole community. Equality between women and men is seen both as a human rights issue and as a precondition for, and indicator of, sustainable people-centred development. Gender includes all aspects of planning, implementing and monitoring of any plan or project. This study intends to find out influence of Gender on community water development projects in Bakool region, Somalia. The objectives of the study included: to determine how policies on Gender influences sustainability of water development projects in Bakool region, Somalia, to assess how governance as Gender influences sustainability of water development projects in Bakool region, Somalia, to examine how the presence of gender equality and Gender society influences sustainability of water development projects in Bakool region, Somalia. Study reviewed the historical development of and rationale for Gender. The aftermath of the UN Decade for Women as seen in the establishment of national gender policies in many countries is highlighted. Institutionalization of gender issues in the country through the National Development Agenda, the current constitution, and Millennium Development Goals will be discussed. The research gap reveal the need to delve into suitable strategies for Gender at all stages of the project cycle and how to apply gender policies in projects. A descriptive survey research design will be used. Stratified sampling will be done in order to give every category of Bakool ladies residents an equal chance of being selected. Questionnaires will be used as the instruments of data collection, which will be pre-tested to check for validity and reliability. The raw data collected will be analyzed by the use of descriptive statistics which included mean, mode and median by means of Statistical Package for Social Sciences (SPSS). With effective policy, implementation of the policy and proper application of the policy will lead to effective Sustainability of Community water development projects in Bakool, Somalia. The study concludes that governance is a key pillar to the sustainability of community water development projects in Bakool. The constitution /bylaws are meant to be followed in making decisions. This will enhance accountability in return good results. The study concludes that for diversity among men and women and sustainability of community water development projects, the community leadership needs to ensure that women are allowed to make contributions in decision making, there is gender balance at all water management and decision making levels in the region, and both men and women are equally represented in community water development project.
CHAPTER ONE

INTRODUCTION

1.1 Background of the study
The concept of bringing gender issues was clearly established as a global strategy for promoting gender equality in the Platform for Action adopted at the United Nations Fourth World Conference on Women, held in Beijing (China) in 1995. It highlighted the necessity to ensure that gender equality is a primary goal in all area(s) of social and economic development. Mainstreaming a gender perspective is the process of assessing the implications for women and men of any planned action, including legislation, policies or programs, in all areas and at all levels. It is a strategy for making women’s as well as men’s concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programs in all political, economic and societal spheres so that women and men benefit equally and inequality is not perpetuated.

The ultimate goal is to achieve gender equality (UN, 1997). Since 1995 Gender as a strategy has been implemented in all sectors with varying degrees of success. Various tools have also been developed to support the strategy. Nonetheless continuing challenges remain especially linked to monitoring and evaluating the impact of Gender on the condition of women and men. Some of these challenges are related to the absence of appropriate and context-specific indicators that can capture the impact of interventions to promote gender equality and the empowerment of women. Additional challenges include the absence of methodologies that assist replicability of successful interventions in order to speed up the pace of Gender.

The visibility of European Union commitment to gender equality has risen considerably since the agreement at the Luxembourg summit in 1997 to include strengthening equal opportunities between men and women as the fourth pillar of the employment guidelines along those of employability, adaptability and entrepreneurship. The inclusion of a new guideline on Gender in 1999 that required member states to consider the gender impact on all policies under each of the pillars provided a further major impetus to the integration of equal opportunities issues in the employment framework (Jill, 2002).
The Indian Constitution is one of the most progressive in the world, and guarantees equal rights for men and women. The Constitution not only grants equality to women, but also empowers the State to adopt measures of positive discrimination in favour of women. The national Commission for women was set up by an Act of Parliament in 1990 to safeguard the rights and legal entitlements of women. The 73rd& 74th 3 Amendments (1993) to the Constitution of India have provided for reservation of seats in the local bodies of Panchayats& Municipalities for women, laying a strong foundation for their participation in decision making at the local level. This law ensured that the spouses and children of men who died intestate would have a right to the property of the man (regardless of mediating factors such the state/nature of the marriage/union, cultural norms and practices. This law was a major piece of legislation that provided the needed filling for women’s groups in the democratic era (Amoah, 2005).

In 1995, South Africa ratified the Beijing Platform for Action, an agenda towards female empowerment, and made a firm commitment to the mainstreaming of gender within the Public Service by creating the National Gender Machinery. However, appreciation for the diversity between men and women still remains limited in most government departments, and the processes currently in place are not making much of a difference (GoSA, 2006). South Africa further attempted to pledge its commitment to the fight for gender equality through the Convention for the Elimination of All Forms of Discrimination Against Women, the Southern African Development Community Declaration on Gender and Development, the African Union Protocol on the African Charter on Human and People’s Rights on the Rights of Women in Africa, and the Constitution of South Africa which clearly stipulates the rights of equality.

Tanzania recognizes that gender inequality is a major obstacle to socioeconomic and political development of its peoples. In recognition of this fact the government of the United Republic of Tanzania has taken various measures to ensure equality of all its citizens and, in particular, gender equality and gender equity. The Ministry of Community Development, Gender and Children were established in1990 as the national machinery for spearheading gender development in the country. The Ministry, among other things, has facilitated the formulation of the Women and Gender Development Policy (2000). The aim of this policy is to ensure that the gender perspective is mainstreamed into all policies, programmes and strategies. In order to meet
this objective, the national machinery initiated the establishment of gender focal points in ministries, independent government departments, regional and local authorities (URT, 2000).

Kenya signed and ratified CEDAW in 1984, the BPFA in 1995; it is also committed to MDGs (2000), United Nations declaration Violence against Women (1993), Nairobi Forward Looking Strategies for the advancement of women (NFLS)- 1985 among others. In addition, Kenya has ratified two core labour standards of the ILO: Convention No.100 on equal pay for work of equal value and Convention No.111 on Discrimination (Employment Occupation Convention 1968). The commitment of the Government of Kenya to mainstream gender in national development for equitable growth and poverty reduction is evidenced by the establishment of different national machineries with different but complementary roles (GOK, 2000).

Sydney (1985), states that the impetus for involving men in Gender is based on the recognition that men are part of the problem and part of the solution. Men also pay significant costs for gender inequality, particularly to their emotional and physical health. Gender injustice will only stop when men join with women to put an end to it. Many men’s attitudes and behaviors will need to change in order for gender equality to be achieved. Women should work with men as decision makers and service providers by men and women when they have choices from options an atmosphere where they are able to assess and change the direction of their lives. Gender addresses gender in all cycles of developing, planning, implementing and evaluating a programme. It begins by identifying the gender gaps within the sector, works to eliminate them through programmes and measures effectiveness in terms of gender in the monitoring and evaluation stage.

It also works to achieve gender balance such as more equitable task sharing. Achieving gender balance often calls for meeting the practical needs and interests of women and girls more effectively such as better access to water to reduce their workload as well as meeting strategic gender needs and interests of including women in community decision-making (Wakeman, 1995). Women and men should, therefore, be included in the planning, design, and implementation of water development interventions. Involving them in community water and related decisions can be an empowering experience. This can improve their status, creating opportunities for income generation, as well as providing them with other public and influential roles thus potentially making gender equality a reality (Protos et al, 2007).
1.2 Statement of the problem
Poor targeting, inequitable distribution of benefits and burdens of poor operation and maintenance of structures have hindered development projects aimed at addressing issues of sustainable development in water resources management. Community participation and management approaches have failed to address these issues largely because communities are often seen as a collection of people with a common purpose (UNDP, 2006).

The UNDP (2006) have shown that women’s participation was among the variables strongly associated with water project effectiveness due to failure to take gender differences and inequalities into account. In India compost pits located outside villages went unused and women have continued to deposit wastes near their homesteads even when fined for doing. This is because they did not wish to be seen carrying loads of refuse to the outskirts of the villages.

A study conducted by Protos (2007) revealed that the obstacle to successful implementation of community water development projects has been the total lack of involvement of participants, specifically in relation to women, who transport and care for water. Women who take a lead in the implementation and management of their own water projects create the conditions for them to become the agents of their own development and empowerment. In involving women, there is a need for catching up action, as women have been historically marginalized. However, when women are brought into the water world they may be stigmatized for getting involved in men’s business.

Maharaj et al, (1999) in his findings revealed that a safe, adequate and sustainable water supply for all is one of the main social goals enunciated at global level in the past few years. One-quarter of the developing world’s population still lacks clean water while millions die annually from water related diseases. As the world population continues to grow, the need and demand for water escalates. Water has become a strategic resource: its control is a source of power, a key to economic development, and a trigger to socio-political stress.

In this context therefore the current study intends to examine the extent to which Gender has been applied in the community water development projects in the case of Bakool Region, Somalia.
1.3 Purpose of the study
The purpose of the study is to establish Gender Factors influencing sustainability of community water development projects in Bakool region, Somalia.

1.4 Research Objectives
The study aims to achieve the following research objectives.

i. To determine how policies on Gender influences sustainability of community water development projects in Bakool region, Somalia.

ii. To assess how governance on Gender influences sustainability of community water development projects in Bakool region, Somalia.

iii. To establish how diversity among men and women influence sustainability of community water development projects in Bakool region, Somalia.

iv. To examine how the presence of gender equality influences sustainability of community water development projects in Bakool region, Somalia.

1.5 Research questions
The study seeks to answer the following research questions;

i. How do policies on Gender influences sustainability of community water development projects in Bakool region, Somalia?

ii. How do governance on Gender influences sustainability of community water development projects in Bakool region, Somalia?

iii. How does diversity among men and women as Gender influence sustainability of community water development projects in Bakool region, Somalia?

iv. How does the presence of gender equality influences sustainability of community water development projects in Bakool region, Somalia?

1.6 Significance of the study
The study hopefully will be of paramount importance to many development organizations who are working in Somalia and in the neighboring counties/countries for evaluation of the gender relation in the implementation of the projects. It is hoped that the findings may create a baseline data that may be very essential to the Non- Profit making organizations, CBOs, FBOs and other in the process of initiating/identifying and implementing water development activities in their communities. It will assist the organization to establish whether Gender in the overall design of
Water based activities may lead to the sustainability of the same in the project area and in any other areas of their operation. Lastly it was hoped that the findings of this study will also be very resourceful to future researchers who may like to carry out research on the same or related topics for their future academic or career advancement.

1.7 Limitations of the study
The study was faced by a number of challenges. First in the area of study, women participation is very difficult in community development projects. This is because Somalia is still mostly a patriarchal society where women are still marginalized in so many aspects and therefore trying to change the communal mindset that women ought to take lead role in areas like water development issues posed a big challenge during data collection. In this case the researcher having worked in the region for some time recruited the local people who helped in the orientation of the respondents during data collection. Several rapport sessions was created with the members of the community.

The researcher required resources in terms of money, time and manpower to assist in carrying out the research. This was not sufficiently available but the researcher cushioned this by working extra hours per day to reduce the number of days in the field.

The study faced uncooperative respondents who were suspicious of the exercise or were not willing to participate in the exercise before they understand its purpose. This was as well cushioned by providing a firm confidential statement to respondents and given the purpose of the study. Respondents especially women expected to participate in the study did not fully turn up for fear of being seen as going against the communal customs. This was minimized by having regular interactions with them and using the local administration to orient the community on the need to allow both men and women equal opportunities.

1.8 Delimitation of the study
These are the boundaries of the study. The research was confined to the Gender factors influencing sustainability on community water development projects in Bakool region, Somalia alone. The research was zeroed in the area because the researcher hails from that region and a bigger percentage of projects are water development projects. Gender is chosen because it is very sensitive among the Somali community. Similarly, due to time factor and the nature of this research, the research instrument was only limited to open and closed ended questionnaires.
1.9 Basic Assumptions of the Study
Assumptions are things that are accepted as true, or at least plausible. The researcher identified the following assumptions to the study; That the sample selected from the entire population was a representative of the whole population and it gave adequate responses needed for the research study; That the respondents were willing to give responses in relation to the Gender factors influencing sustainability of community water development projects in Bakool region, Somalia; and That there was adequate literature information and materials in relation to the Gender factors influencing sustainability of community water development projects towards enhancing the success of the research study by the researcher.

1.10 Definition of significant terms used in the study

The following are significant term used in the study

**Gender**: Gender is the range of characteristics pertaining to, and differentiating between, masculinity and femininity. Depending on the context, these characteristics may include biological sex (i.e. the state of being male, female or an intersex

**Governance**: This is a term used to describe how public institutions conduct public affairs and manage public resources. It is about the process of making and implementing decision. It is not about making “correct” decision, but about the best possible process for making those decisions.

**Policies**: A policy is a statement of intent, and is implemented as a procedure or protocol. Policies are generally adopted by the Board of or senior governance body within an organization whereas procedures or protocols would be developed and adopted by senior executive officers. In summary, Effective policies simply guide our actions. Effective Policies are effective guidelines, rules, regulations, laws, principles, or directions

**Diversity among men and women**: The concept of diversity encompasses acceptance and respect. It means understanding that each individual among men and women is unique, and recognizing individual differences. These can be along the dimensions of race, ethnicity, gender, sexual orientation, socio-economic status, age, physical abilities, religious beliefs, political beliefs, or other ideologies. It is the exploration of these differences in a safe, positive, and
nurturing environment. It is about understanding and moving beyond simple tolerance to embracing and celebrating the rich dimensions of diversity contained among men and women.

**Sustainability of community water development project:** This is the development that meets the needs of the community presently without compromising the ability of future generation to meet their own needs. A Good community development project is action that helps people to recognize and develop their ability and potential and organize themselves to respond to problems and needs which they share.

**Development:** The act or process of growing or causing something to grow or become larger or even more advanced.

**Project:** Planned set of interrelated tasks to be executed over a fixed period and within certain cost and other limitations.

1.11 *Organization of the study*

The study was organized under five chapters. The first chapter is introduction. This chapter covers the background to the study, statement of the problem and the purpose of the study has been given. The chapter has also given significance of the study as well as the limitation, delimitation, assumptions of the study and definition of term.

The second chapter is on literature review. This chapter discussed available literature about the Gender factors influencing sustainability on community water development projects. It covered Concept of Gender, Sustainability of water development projects, Effective Policy and Sustainability of Water Development projects, Governance and sustainability of Water Development Projects, Diversity among Men and Women and Sustainability in Water, Presence of Gender Equality and Sustainability of Water Development Projects, theoretical framework conceptual framework and Summary of Literature Review.

The third chapter presents the methodology. The chapter covers the research design, target population, sample size and sampling procedures, data collection instruments, validity and reliability of the instruments, data collection procedures and data analysis technique.

The fourth chapter is data analysis, interpretation and discussions. This last chapter covers summary of findings, conclusions and recommendations.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

The literature review section of the study includes the account of what scholars have written about this subject matter. The review compressively looks at what scholars have written about Gender factors influencing sustainability of water development projects, particularly in community based projects. The review lays the ground for this research study and guides the direction of gathering the research data.

2.2 Concept of Gender and Sustainability of community water development projects

Development of an adequate understanding of gender factors requires clarity on the related concepts of gender and equality.

Equality between women and men (gender equality): refers to the equal rights, responsibilities and opportunities of women and men and girls and boys. Equality does not mean that women and men will become the same but that women’s and men’s rights, responsibilities and opportunities will not depend on whether they are born male or female. Gender equality implies that the interests, needs and priorities of both women and men are taken into consideration, recognizing the diversity of different groups of women and men. Gender equality is not a women’s issue but should concern and fully engage men as well as women. Equality between women and men is seen both as a human rights issue and as a precondition for, and indicator of, sustainable people-centered development.

Gender equality is a goal that has been accepted by governments and international organizations. It is enshrined in international agreements and commitments. There are many ongoing discussions about what equality means (and does not mean) in practice and how to achieve it.

The concept of gender needs to be understood clearly as a cross-cutting socio-cultural variable. It is an overarching variable in the sense that gender can also be applied to all other cross-cutting variables such as race, class, age, ethnic group, etc. Gender systems are established in different socio-cultural contexts which determine what is expected, allowed and valued in a woman/man
and girl/boy in these specific contexts. Gender roles are learned through socialization processes; they are not fixed but are changeable. Gender systems are institutionalized through education systems, political and economic systems, legislation, and culture and traditions. In utilizing a gender approach the focus is not on individual women and men but on the system which determines gender roles/responsibilities, access to and control over resources, and decision-making potentials.

It is also important to emphasize that the concept of gender is not interchangeable with women. Gender refers to both women and men, and the relations between them. Promotion of gender equality should concern and engage men as well as women. In recent years there has been a much stronger direct focus on men in research on gender perspectives. There are three main approaches taken in the increased focus on men. Firstly, the need to identify men as allies for gender equality and involve them more actively in this work. Secondly, the recognition that gender equality is not possible unless men change their attitudes and behaviour in many areas, for example in relation to reproductive rights and health. And thirdly, that gender systems in place in many contexts are negative for men as well as for women – creating unrealistic demands on men and requiring men to behave in narrowly defined ways. A considerable amount of interesting research is being undertaken, by both women and men, on male identities and masculinity. The increased focus on men will have significant impact on future strategies for working with gender perspectives in development.

Gender is not an end in itself, but a means to an end. The calls for increased Gender in the Economic and Social Council (ESCSOC) Agreed Conclusions (1997/2) are not for increased gender balance within the United Nations but for increased attention to gender perspectives and the goal of gender equality in the work of the United Nations. Gender does not entail developing separate women’s projects within work programmes, or even women’s components within existing activities in the work programmes. It requires that attention is given to gender perspectives as an integral part of all activities across all programmes. This involves making gender perspectives – what women and men do and the resources and decision-making processes they have access to – more central to all policy development, research, advocacy, development, implementation and monitoring of norms and standards, and planning, implementation and monitoring of projects.
It is important to see the linkages between Gender in the substantive work of the United Nations and the promotion of equal opportunities and gender balance within the United Nations itself. Organizational culture and organizational values are important in terms of creating work environments which are conducive to Gender. Gender is easiest to implement in organizational environments which support approaches such as multi-disciplinary focuses, teamwork, creative thinking, flexibility and risk-taking.

Gender was established as an intergovernmental mandate in the Beijing Declaration and Platform for Action in 1995, and again in the ECOSOC Agreed Conclusions in 1997. The mandate for Gender was considerably strengthened in the outcome of the General Assembly special session to follow-up the Beijing Conference (June 2000). Gender is not being imposed on governments by the United Nations. Member states have been involved in the intergovernmental discussions on Gender since the mid-1990s and have, in consensus, adopted mainstreaming as an important global strategy for promoting gender equality.

Gender strategy does not mean that targeted activities to support women are no longer necessary. Such activities specifically target women’s priorities and needs, though, for example, legislation, policy development, research and projects/programmes on the ground. Women-specific projects continue to play an important role in promoting gender equality. They are still needed because gender equality has not yet been attained and Gender processes are not well developed. Targeted initiatives focusing specifically on women or the promotion of gender equality are important for reducing existing disparities, serving as a catalyst for promotion of gender equality and creating a constituency for changing the mainstream. Women-specific initiatives can create an empowering space for women and act as an important incubator for ideas and strategies than can be transferred to mainstream interventions. Initiatives focused on men support promotion of gender equality by developing male allies. It is crucial to understand that these two strategies - Gender and women’s empowerment - are in no way in competition with each other. The endorsement of Gender within an organization does not imply that targeted activities are no longer needed. The two strategies are complementary in a very real sense as Gender must be carried out in a manner which is empowering for women.
According to Richard and Daniel, (2010) the essence of the term sustainable is “that which can be maintained over a time”, ‘it is probably safe to assume that no human arrangement can be maintained forever’, thus sustainable is a relative term.’ According to Richard Heinberg and Daniel Lerch (2010) the first known European use of the word sustainability (German: Nachhaltigkeit) occurred in 1713 in the book ‘sylvicultura oeconomica’ by German forester and scientist Hans Carl Von Carlowitz, and later French and British foresters adopted the practice of planting Trees as a path to Sustained-yield forestry. According to (Kemp, Parto and Gibson, 2005) The concept of sustainable development arose from two main sources: increasingly worrisome evidence of ecological degradation and other biophysical damage, because of the greater wherewithal provided by economic growth, and largely disappointing record of post-WWII ‘development’ efforts, particularly the persistence, and in some places worsening, of poverty and desperation in a period of huge and overall global increases in material wealth, the United Nations and associated agencies worried about these matters separately for some decades before appointing the World Commission on Environment and Development (WCED) to address them jointly. The Commission’s conclusion was that the ecological and social failures had common causes and demanded a common response. Its final report, ‘Our Common Future’ (WCED, 1987), initiated a flood of interest in, debate about and experimentation with sustainable development, which was renewed after the publication and subsequent adoption of Agenda 21, the Rio Declaration on Environment and Development, and the Statement of principles for the Sustainable Management of Forests by more than 178 governments at the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro, Brazil, in June 1992, (Kemp, Parto and Gibson, 2005).

At the start of the twenty-first century, the problem of global sustainability is widely recognized by world leaders, and a common topic of discussion by journalists, scientists, teachers, students and citizens in many parts of the world. The World Summit on Sustainable Development (WSSD, 2002) confirmed that the first decade of the new century, at least, would be one of reflection about the demands placed by humankind on the biosphere. The idea of sustainability dates back more than 30 years, to the new mandate adopted by IUCN in (1969). It was a key theme of the United Nations Conference on the Human Environment in Stockholm in (1972).
The concept was coined explicitly to suggest that it was possible to achieve economic growth and industrialization without environmental damage. In the ensuing decades, mainstream sustainable development thinking was progressively developed through the World Conservation Strategy (1980), the Brundtland Report (1987), and the United Nations Conference on Environment and Development in Rio (1992), as well as in national government planning and wider engagement from business leaders and non-governmental organizations of all kinds. Over these decades, the definition of sustainable development evolved. The Brundtland Report defined sustainable as ‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs. This definition was vague, but it cleverly captured two fundamental issues, the problem of the environmental degradation that so commonly accompanies economic growth and yet the need for such growth to alleviate poverty. The core of mainstream sustainability thinking has become the idea of three dimensions, environmental, social and economic sustainability (Adam, 2006).

According to institute of sustainable development (2013), Sustainable development has been defined in many ways, but the most frequently quoted definition is from “Our Common Future” also known as the Brundtland Report: “Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts: The concept of needs, in particular the essential needs of the world’s poor, to which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organization on the environment’s ability to meet present and future needs.” (Adam, 2006). All definitions of sustainable development require that we see the world as a system – a system that connects space; and a system that connects time. When you think of the world as a system over space, you grow to understand that air pollution from North America affects air quality in Asia, and that pesticides sprayed in Argentina could harm fish stocks off the coast of Australia. And when you think of the world as a system over time, you start to realize that the decisions our grandparents made about how to farm the land continue to affect agricultural practice today; and the economic policies we endorse today will have an impact on urban poverty when our children are adults. We also understand that quality of life is a system too (Adam, 2006). It’s good to be physically healthy, but what if you are poor and don’t have access to education? It’s good to have a secure income, but what if the air in your part of the world is unclean? And it’s good to have freedom of
religious expression, but what if you can’t feed your family? The concept of sustainable development is rooted in this sort of systems thinking, it helps us understand ourselves and our world, the problems we face are complex and serious—and we can’t address them in the same way we created them (Adam, 2006).

Sustainability is often seen as being about protection of amenities (including cultural diversity), but it is equally about continued advancement or creation, a better and more just world, both the protection of amenities and creation of new and better services for more people require innovation in institutions of governance and socio-technical systems. Innovation can help to ease the adverse effects of some trade-offs posed by existing technology, but innovation is not without problems; it also brings risks, which should be anticipated and dealt with. (Kemp, Parto and Gibson, 2005).

The international development community interest in ‘benefit sustainability’ relates directly to the increasing evidence available in the late 1980’s and early 1990’s that expected benefit of many projects investment had failed to materialize following the completion of the projects. While the reason for this poor showing is varied, most research agrees that one factor is the focus on the life of the project, effectiveness that flows from assistance being provided in form of a project, given that projects accounts for much of the focus and structure of development activities. Researches shows that identifying, planning and implementing a project for benefit sustainability requires additional development mindset reinforced with practical management knowledge from the inception of the project ideas to the completion of the intended returns on investment (Kemp, Parto and Gibson 2005) According to, American Indian development association (2001), Sustainability is about maintaining and continuing program services after the funding is over. Sustainability means having needed services becomes a permanent part of the communities,’ resources sustainability means not starting over with the next grant, sustainability means all your hard work has long term value for your community. Sustainability doesn’t always mean the project will continue intact, new projects and programs are only part of the changing and evolving community system. The most successful component should become part of the overall process of positive change.
Developing sustainability begins with project development; the goals of any new program should be to improve individual and community well-being, this is not a short term goal. Sustainability requires structural transformation moving resources from lower to higher productivity, effective governance; competence accountability and accessibility of information (American, Indian development association, 2001). Sustainable is about change, implementing change is easy, sustaining change is very difficult, change is a process, timing is everything, expect unexpected, use your head but trust your heart, knowledge is power, and social marketing and salesmanship, there are no ending only beginning (American, Indian development association, 2001). Sustainability efforts differ for different types of projects, there will always be competing interest, and there will always be multiple view of a project goal, goal of sustainability includes integration into the community, Sustainability programs ensure that people are aware of the program from the beginning, promotes the program, promote the program result, develop the program leadership, and incorporate marketing strategies. (American, Indian development association, 2001), strategies of sustainability examine program structure, participation and stakeholders and theoretical framework, develop project infrastructure, policies, procedures, and protocols, cost effective and affordable strategies, and acknowledge the importance of program evaluation data, use your data to solicit interest and support, promote spillover effect, identify benefits to the community that results from the services you provide. Sustainability isn’t about more money, it is about continuous relationship building, finding a niche, diverse funding sources, flexibility, communication, trust, reciprocity, commitment.

Creating niche addresses a current need, be innovative and flexible, don’t duplicate existing services, and provides training and expertise that doesn’t exist elsewhere in the community, Diverse funding source; grants and contracts from other sources e.g. private sources fees for services, reimbursable services, volunteers, donation, in-kind, active fundraising programs. Community mobilization, social marketing, funding agencies continued funding, cooperation and assistance documentations, accountability, protocols policies and procedures, social marketing-special events promotional items, information materials, celebrations of success open to communications. Multiple dimensions of sustainability; the project applies systemic methods, address the needs for collective development purposes. The stakeholders develops participations and coalitions, accommodates multiple views, project sustainability is best achieved through program development that includes long term focus, ongoing policies, reliable data, community
interest and support (American, Indian development association, 2001). Sustainability in community water projects has been defined as the maintenance of an acceptable level of service throughout the design life of the water supply system (Jennifer and Travis, 1992).

Experience has shown that even a well-constructed water system needs proper institutional arrangement to keep it functioning over a time. Most system requires some sort of preventive maintenance. Hand pumps may require grease for moving parts; gravity system may require sediment to be removed from storage tanks or repair of leaky taps and cracked pipes, in addition work is required to keep the water sources free of contaminations. Because most rural water systems are shared by a number of families, providing these inputs requires some sort of community management structure such as water committee to oversee operation and management and collect money to cover the cost of these services, the sustainability of a rural water system depends on the willingness of users to provide the necessary time, money and labor to keep the system functioning. The willingness may be affected by social economic factors such as income levels, ethnic homogeneity or the willingness of the village to work together. However, the willingness will depend on consumer satisfaction with the service usually compared to previous water source in a community. When communities perceive significant improvement in the water services, they are usually more willing to pay for operation and maintenance (Jennifer and Travis, 1992). (Richard and Ronnie, 2006), in the report functional sustainability in community water and sanitation; a case study from south-western Uganda says that ‘sustainability is dynamic concept, technology or way of doing things change, but service remains in place, sustainability adds time dimension to ‘success’ or ‘effectiveness. Sustainable interventions stand the test of time, sustainable services functions continuously; Sustainability is about continued enjoyment of the benefit.

The factors that contribute to sustainability in water projects includes, meeting real needs, ensuring that the community is fully involved in decision making, building on what people already know, selecting appropriate technology, good quality construction, reliable support from private sector in terms of spare part supplies, strong community organization, ongoing support by an agency external to the community interns of community empowerment and able, energetic, skillful, knowledgeable leadership, (Richard and Ronni, 2006). The test of sustainability is whether water continues to be abstracted at the same rate and quality as when the supply system
was designed, whether the excreta and waste water disposal system continues to function and be used as planned and whether environment quality continue to improve, if the water flows, then all the many elements which are required for sustainability must have been in place, there must have been money for recurring expenses and for occasional repairs, there must have been acceptance from the consumers of the service, the source services must have been adequate, the design must have been properly done and there must have been sound construction (Richard, Carter, Sean and Peter, 1999).

2.4 Policy and Sustainability of community Water Development projects

The world faces severe and growing challenges to sustain water quality and meet the rapidly growing demand for water resources. New sources of water are increasingly expensive to exploit, limiting the potential for expansion of new water supplies. With nearly one-half of the world’s cereal production and almost 60 percent of cereal production in developing countries produced on irrigated lands, productivity growth in irrigation is essential—and the productivity of rainfed agriculture must simultaneously be boosted. At the same time, the quality of the land and water resource base must be sustained in the face of mounting pressure from waterlogging, salinization, groundwater mining, and water pollution. Pollution of water from industrial effluents, poorly treated sewage, and runoff of agricultural chemicals, combined with poor household and community sanitary conditions, is a major contributor to disease and malnutrition, particularly among children. Furthermore, the poor, women, and other disadvantaged groups have unequal access to water in many regions. Incentives and policies need to be developed to achieve access by all claimants on the resource. Water is subsidized in all sectors, reducing incentives to conserve water and threatening the financial viability of needed future investments. Finally, transboundary water issues have the potential for escalating into conflicts that will disrupt development and harm ecosystems.

These water challenges, if not successfully met, will threaten future prospects for sustainable poverty alleviation and food security. Meeting these challenges requires improved basic and applied knowledge on how policies and institutions influence poverty and ecosystems through water management and development. The objective of this research theme of the Challenge Program on Water and Food is to improve incomes, alleviate poverty, and enhance food security
in an environmentally sustainable manner through policies and institutions that lead to more effective water management and development and increased food production. The goals of the research under this theme are: (1) to understand the impact of alternative policies and institutions on water supply and demand, poverty and income, water quality and water-related ecosystems and food production and food security. Relevant policies and institutions include those that directly affect water resource allocation, and also broad trade and macroeconomic policies, investment and finance and environmental policies. (2) To utilize this understanding to assist national governments, stakeholders in developing countries, NGOs, and international organizations to develop policies and institutions for effective and sustainable water management and development that contributes to poverty alleviation and food security.

2.5 Governance and sustainability of community Water Development Projects

Governance like religion is a broad topic that could be subjected to varied and diversified interpretation and beliefs, and therefore may be quite difficult to measure to any reasonable degree of reliability; hence no single definition may suffice for the concept of governance (Frimpong, Jacques, 1998), however the world bank (1997) defines governance as the manner in which power is exercised in the management of countries, economic and social resources for the development, thus good governance is said to be synonymous with sound development management since it is central to creating and sustaining an environment which fosters strong and equitable development, and it is an essential complement to good economic policies, on the other hand poor governance exist where the following the following symptoms begins to noticed in a country, failure to make clear separation between what is public and what is private hence tendency to divert public resources to private gains, failure to establish a predictable framework of law and governance behavior conducive to the development, or arbitrariness in application of rules and laws, excessive rules, regulation, licensing requirements of market and encourage rent seeking, priorities inconsistence with development, resulting in misallocation of resources, excessive narrowly based or non-transparent decision making, when all these symptoms are sufficiently severe and occur together they tend to create an environment hostile to development and thus poor governance (frimpong, Jacques, 1997).
Governance refers to the evolving process, relationships, institution and structures by which groups of people, communities or society’s organizes themselves collectively to achieve things that matter to them (Hunt et al, 2008), it encompasses both formal and informal structures and processes (martin, 2003). Example; in indigenous Australian setting community governance involves actively strengthening indigenous decision making and control over the organization, and building on peoples skills, personal and collective contributions, and shared commitment to organization’s chosen governance processes, goals and identity (Hunt and smith, 2006, a, b). It is important in its own right and for improving service delivery and raising the health and prosperity of indigenous community (Dodson and smith, 2003). One of the fundamental challenges in indigenous community governance is lack of agreed understanding, each community is different and local decisions needs to be made about; Group membership and identity,(who is the “self” in their governance); Who has authority within the group and over what?; Agree rules to ensure authority is exercised properly and decision makers are held accountable; How decisions are enforced?; How rights and interest with others are negotiated?; What arrangements will best enable the achievement of goals? (Hunt et al, 2008; Hunt and Smith, 2006 a, b), Good governance is a contested issue; it is defined by culturally based values and normative codes about what is the right way to get things done (Hunt et al, 2008). It is generally agreed that, good governance comprise legitimacy, leadership, power, resources and accountability (Dodson, 2002), in contrast, poor governance is identified by factors such as corruption, favoritism, nepotism, apathy, neglect, red-tape and self-serving political leaders and public officials (Knight et al, 2002).

Allocated resources and the context in which it is to be carried out (Franks, 1999), leads to a shift in focus over time to strengthen organization through a focus on organizational culture and developing mission, vision and value statement as well as strategic change, organizational structure and effectiveness. The term water governance encompasses the political, economic and social processes and institutions by which governments, civil society, and the private sector make decisions about how best to use, develop and manage water resources (Kristen Lewis, 2004) Water governance is more than national-level water legislation, regulations and institutions, though these are important components. It also refers to the processes that exist to promote popular participation in designing water and sanitation systems and where decisions about those systems are made (in the capital city or in the community itself) as well as how and
by whom. It refers to social mobilization and other actions designed to promote ownership, co-investment, capacity building, incentives for participation, and willingness to pay for services at the community level (Kristen Lewis, 2004).

Effective water governance builds institutional capacity from the local level upwards and empowers. Stakeholders with knowledge and the ability to make decisions about matters that directly affect their lives. It promotes the equal participation of women and men in decision-making. Water governance is critical for resource planning and allocation among riparian states (those sharing a water basin) and vital for conflict resolution to defuse upstream-downstream tensions and balance the needs of different groups sharing water resources. Good water governance determines the appropriate role (Kristen Lewis, 2004). Water sector governance at micro-level is defined by global water partnership and UNDP as the range of political, social, economic and administrative systems that are in place to develop and manage water resources and the delivery of water services at different societies (Michael McGarry et. al, 2008); good water governance is based on principles of governance, which includes equity, efficiency, partnership, decentralization, integration, transparency and accountability. Sustainable services are not achieved without involvement of other stakeholders and particularly water users in the development of policies and laws for sector development. This applies equally well to water resources management with good governance backed by appropriate policies and laws being key determinant of sustainability of water resources. (Michael McGarry et. al, 2008).

2.6 Diversity among Men and Women and Sustainability of community Water Development Projects.

During the first decade of the twenty-first century, water availability and distribution have become increasingly important for sustainable development and biodiversity conservation. Issues of water scarcity, quality, and accessibility affect the livelihood of many communities across the globe, as well the sustainability of water systems and associated biodiversity. Although not the only cause, human activities are a major factor in triggering problems of water scarcity and quality. Acknowledging the intrinsic relationship between water and human culture and behaviour has led to a re-evaluation of water resource management (Whiteley et al. 2008; Blatter and Ingram 2001) and the development of new approaches, such as integrated water resource
management (IWRM) and adaptive management (Gunderson et al. 1995; Lee 1999; Pahl-Wostl 2007a; Walters 1986). These new models try to integrate social and environmental interests and to facilitate participatory and inclusive practices (Feldman 2007), recognizing that water issues involve multiple equally valid ways of understanding. The underlying rationale is to provide effective solutions through collective actions, accommodating diverse perspectives on water management (Ingram and Lejano 2010; Lejano and Ingram, 2009).

Although the benefits of these approaches are very promising, real applications have remained elusive. We argue here that this lack of traction for the new methods is related to the fact that the recent focus on participation has not been accompanied by a concomitant shift in decision-making processes. Despite the great advances in promoting participatory and inclusive practices, the new models still contain antiquated decision-making paradigms, in which the ‘natural system’ is seen as external to human experience and decisions are mainly informed by scientific or expert information, favoring technical and production-oriented solutions and evaluating feasibility mainly in economic terms (Pahl-Wostl, 2007b). Furthermore, the new management plans often reflect power asymmetries that ultimately undermine ecological considerations (Ingram and Stern 2007). The interests of indigenous peoples and small farming communities are usually overlooked in the policy processes (Boelens, 2008).

The importance of involving both women and men in the management of water and sanitation and access-related questions has been recognized at the global level, starting from the 1977 United Nations Water Conference at Mar del Plata, the International Drinking Water and Sanitation Decade (1981-90) and the International Conference on Water and the Environment in Dublin (January 1992), which explicitly recognizes the central role of women in the provision, management and safeguarding of water. Reference is also made to the involvement of women in water management in Agenda 21 (chapter 18) and the Johannesburg Plan of Implementation. Moreover, the resolution establishing the International Decade for Action, 'Water for Life' (2005-2015), calls for women's participation and involvement in water-related development efforts.

The differences and inequalities between women and men influence how individuals respond to changes in water resources management. Understanding gender roles, relations, and inequalities
can help explain the choices people make and their different options. Involving both women and men in integrated water resources initiatives can increase project effectiveness and efficiency.

2.7 Presence of Gender Equality and Sustainability of community Water Development Projects

The centrality of gender equality, women’s empowerment and the realization of women’s rights in achieving sustainable development has been increasingly recognized in recent decades. This recognition is evident in a number of international norms and agreements, including principle 20 of the Rio Declaration on Environment and Development, 1 adopted in 1992, in its statement regarding the full participation of women being essential to achieving sustainable development. In the Beijing Declaration and Platform for Action, 2 adopted by Member States in 1995, governments were called upon to integrate gender concerns and perspectives into policies and programmes for sustainable development. The centrality of gender equality has also been articulated in the outcome document of the United Nations Conference on Sustainable Development, entitled “The future we want”, adopted in 2012, which included recognition of the importance of gender equality and women’s empowerment across the three pillars of sustainable development, economic, social and environmental, and resolve to promote gender equality and women’s full participation in sustainable development policies, programmes and decision-making at all levels (General Assembly resolution 66/288, annex).

Linking gender equality and sustainable development is important for several reasons. First, it is a moral and ethical imperative: achieving gender equality and realizing the human rights, dignity and capabilities of diverse groups of women is a central requirement of a just and sustainable world. Second, it is critical to redress the disproportionate impact of economic, social and environmental shocks and stresses on women and girls, which undermine the enjoyment of their human rights and their vital roles in sustaining their families and communities. Third, and most significantly, it is important to build up women’s agency and capabilities to create better synergies between gender equality and sustainable development outcomes.

There is growing evidence of the synergies between gender equality, on the one hand, and economic, social and environmental sustainability, on the other. For example, when women have greater voice and participation in public administration, public resources are more likely to be
allocated towards investments in human development priorities, including child health, nutrition and access to employment (Chattopadhyay and Duflo, 2004). Ensuring women’s access to and control over agricultural assets and productive resources is important for achieving food security and sustainable livelihoods (Food and Agriculture Organization of the United Nations (FAO), 2011). Women’s knowledge, agency and collective action are central to finding, demonstrating and building more economically, socially and environmentally sustainable pathways to manage local landscapes; adapt to climate change; produce and access food; and secure sustainable water, sanitation and energy services.

Increasingly, women’s full participation is recognized as central to policymaking. For example, their decisive involvement in community forest management bodies yields positive outcomes for both forest sustainability and gender equality (Agarwal, 2010). Further, certain aspects of gender equality, such as female education and women’s share of employment, can have a positive impact on economic growth, although this impact is dependent on the nature of growth strategies, the structure of the economy, the sectoral composition of women’s employment and labour market segregation, among other factors (Kabeer and Natali, 2013).

Growing international attention and debate has recognized the clear need to move economies and societies onto more sustainable paths, whether to avert crisis and catastrophe, or enable prosperity through green economies. In an attempt to regulate greenhouse gas emissions, carbon emissions have been monetized and traded on world markets. Biodiversity offset schemes posit that the destruction of biodiversity can be compensated by creating similar habitats elsewhere. Payments for ecosystem services compensate communities and individuals for conserving and protecting such essential natural goods as water sources and forests. Such schemes aim to assign value to natural capital so it can be internalized in economic calculations. However, the resulting transactions and markets have often militated against equal access to and benefit from natural resources for women and men because of power differentials and the lack of participation in decision-making and negotiations (McAfee, 2012; UNRISD, 2012b). They have also further intensified pressures on natural resources through land, water and green “grabs” (Unmüßig, 2014; Fairhead, Leach and Scoones, 2012; Mehta, Veldwisch and Franco, 2012).
2.8 Theoretical Framework

The study was based on Feminist theory which is one of the major contemporary sociological theories, which analyzes the status of women and men in society with the purpose of using that knowledge to better women's lives. Feminist theorists have also started to question the differences between women, including how race, class, ethnicity, and age intersect with gender. Feminist theory is most concerned with giving a voice to women and highlighting the various ways women have contributed to society (Ritzer et al, 2004).

This theory is based on four main types of feminist theory that attempt to explain the societal differences between men and women: Firstly, the gender difference perspective examines how women's location in, and experience of, social situations differ from men's. For example, cultural feminists look to the different values associated with womanhood and femininity as a reason why men and women experience the social world differently. Other feminist theorists believe that the different roles assigned to women and men within institutions better explain gender difference, including the sexual division of labour in the household. Existential and phenomenological feminists focus on how women have been marginalized and defined as the other in patriarchal societies. Women are thus seen as objects and are denied the opportunity for self-realization (Anderson et al, 2009).

Secondly, gender-inequality theories recognize that women's location in, and experience of, social situations are not only different but also unequal to men's. Liberal feminists argue that women have the same capacity as men for moral reasoning and agency, but that patriarchy, particularly the sexist patterning of the division of labour, has historically denied women the opportunity to express and practice this reasoning. Women have been isolated to the private sphere of the household and, thus, left without a voice in the public sphere (Ashley Crossman-sociology.about.com).

Even after women enter the public sphere, they are still expected to manage the private sphere and take care of household duties and child rearing. Liberal feminists point out that marriage is a site of gender inequality and that women do not benefit from being married as men do. Indeed, married women have higher levels of stress than unmarried women and married men. According
to liberal feminists, the sexual division of labour in both the public and private spheres needs to be altered in order for women to achieve equality (Ritzer et al, 2004).

Thirdly, theories of gender oppression go further than theories of gender difference and gender inequality by arguing that not only are women different from or unequal to men, but that they are actively oppressed, subordinated, and even abused by men. Power is the key variable in the two main theories of gender oppression: psychoanalytic feminism and radical feminism. Psychoanalytic feminists attempt to explain power relations between men and women by reformulating Freud's theories of the subconscious and unconscious, human emotions, and childhood development. They feel that conscious calculation cannot fully explain the production and reproduction of patriarchy.

Radical feminists argue that being a woman is a positive thing in and of it, but that this is not acknowledged in patriarchal societies where women are oppressed. They identify physical violence as being at the base of patriarchy, but they think that patriarchy can be defeated if women recognize their own value and strength, establish a sisterhood of trust with other women, confront oppression critically, and form female separatist networks in the private and public spheres.

Lastly, structural oppression theories posit that women's oppression and inequality are a result of capitalism, patriarchy, and racism. Socialist feminists agree with Karl Marx and Freidrich Engels that the working class is exploited as a consequence of the capitalist mode of production, but they seek to extend this exploitation not just to class but also to gender.

Inter-sectionality theorists seek to explain oppression and inequality across a variety of variables, including class, gender, race, ethnicity, and age. They make the important insight that not all women experience oppression in the same way. White women and black women, for example, face different forms of discrimination in the workplace. Thus, different groups of women come to view the world through a shared standpoint of heterogeneous commonality (Ritzer et al, 2004).
2.9 Conceptual Framework

The dependent variable is the variable that the researcher seeks to measure, explain or establish. It “depends” on the other variable “sustainability of water development projects is assumed to be dependent on effective policies, effective governance, diversity among men and women, and the presence of gender equality. The independent variables (predicator or explanatory variables) are the variables that explain, they have a role in predicting nature and amount of variation that occurs in another variable, in this study effective policies, effective governance, diversity among men and women, and the presence of gender equality are the independent variables and will seek to measure, predict or explain the amount of variation in sustainability of water development projects. The intervening variables (mediator variable) seeks to explain how external events takes internal significant in the context of the relationship between independent and dependent variables, in this study the intervening variable is political, economic and societal.
The study was be guided by the following conceptual framework;

**Independent Variable**

To determine how Policies on gender influences sustainability of community water development project Bakool region, Somalia.
- Process for formulating policies
- Outcome of the policies
- Impact of effective policies

To assess how Governance on gender influences sustainability of community water development project Bakool region, Somalia.
- Effective Decisions.
- Accountability.

To establish how Diversity among men and women on gender influences sustainability of community water development project Bakool region, Somalia.
- Ethnicity among men and women
- Socio-economic status among men and women

To examine how the presence of gender equality on gender influences sustainability of community water development project Bakool region, Somalia.
- Women and men involvement
- Women as key informants

**Dependent Variable**

**SUSTAINABILITY OF COMMUNITY WATER DEVELOPMENT PROJECTS**
- Employment rate
- Safety and security level
- Growth of GDP
- Availability of safe drinking water.

**INTERVENING VARIABLE**
- Identity among men and women
- Strength among men and women
- Engagements and cohesion

---

Table 2.1: Gender Factors and Sustainability of Community Water Development Projects
<table>
<thead>
<tr>
<th>Variables</th>
<th>Indicators</th>
<th>Author</th>
<th>Title of the study</th>
<th>Findings</th>
<th>Knowledge gaps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policies</td>
<td>• Process for formulating policies.</td>
<td>Franks, Tom.</td>
<td>Bureaucracy, organisation culture and development’, Public Administration and Development</td>
<td>Effective policy is necessary for development</td>
<td>The author has dwelt more on how public administration can enhance gender equality without necessarily looking at effective policies that constitutes Gender</td>
</tr>
<tr>
<td></td>
<td>• Outcome of the policies.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Impact of effective policies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Governance</td>
<td>• Decisions made.</td>
<td>Dodson, M., and Smith, D. E. (2003)</td>
<td>Governance for sustainable development: Strategic issues and principles for Indigenous Australian communities</td>
<td>Without effective governance, no project that can be completed</td>
<td>Effective governance has been discussed a lot by The author but the aspect of women and men involvement in project has not been emphasized.</td>
</tr>
<tr>
<td></td>
<td>• Accountability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diversity Among Men And Women</td>
<td>• Ethnicity.</td>
<td>Hunt, Juliet.</td>
<td>Introduction to Gender Analysis Concepts and 28steps</td>
<td>Men and women should be engaged better development in the community</td>
<td>Gender equality has at list been discussed in this study but slightly the issues hindering diversity among men and women has not been tackled clearly. Example is the social economic</td>
</tr>
<tr>
<td></td>
<td>• Socio-economic status.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Age.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Knowledge Gaps**
<table>
<thead>
<tr>
<th>Presence of Gender Equality</th>
<th>Women and men involvement.</th>
<th>Jill, Rubery. (2002)</th>
<th>Gender and Gender Equality in the EU: the impact of the EU employment strategy.</th>
<th>Gender equality is very necessary for any project development</th>
<th>Gender has been discussed in this study but the specific role of men vis-a-vis women needs to be looked at in particular</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women as key informants.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 2.10 Summary of Literature Review

This chapter has reviewed the past available information globally and locally which is related to the research on Gender and sustainability of water development projects in Bakool region, Somalia. The chapter has also reviewed related literature on Gender and sustainability of water development projects in Bakool region, Somalia. Reviewed literature indicated that involving both women and men in the water development projects will positively contribute towards the sustainability and operation of such facilities hence producing the intended impacts. Hunt (2004) further indicates that during implementation, monitoring and evaluation, gender analysis helps to assess differences in participation, the effect of the project on gender relations, and disparities in the benefits and impacts between males and females.

It also came out that the shortcomings in development programmes and projects is that of gender, poverty and environment are often included solely as an afterthought or as separate and mutually exclusive categories. Thus if gender issues are addressed at project conception, they can more easily be incorporated in the design, implementation and evaluation. It also emerged that programmes that do not take into consideration the differing needs of men and women and their
social, economic, cultural, linguistic realities during all their phases run the risk of being ineffective, inefficient and unsustainable (UNDP, 2006). Hence Gender is inevitable throughout the water development projects in Bakool region, Somalia.

If Gender is used, policymaking will be better informed and show that policies are never gender neutral. Buy-in of men and productive collaborative efforts between women and men utilize a diverse human resources. As the stakeholders are getting involved in the process and implementation of Gender, a clear shift will take place from isolation to integrate both genders, in particular involve men in gender equality work.

Policy-makers will have to pay attention to the broad effects of policies on citizens’ livelihood—and that, as a result, may mean a more human and less economic approach to the management of contemporary societies. Equality policies usually target women as a whole—but Gender should be able to target the diverse situations of different groups of both women and men (migrant women, young women, old men, etc).
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section presented the procedures that were used to conduct the study. The section focuses on research design, target population, sample and sampling procedures, research instruments, data collection, data analysis, ethical consideration, and operationalization of the variables.

3.2 Research Design

This study adopted a descriptive research design. This is because the study aimed at giving an accurate description on the Gender factors influencing sustainability on community water development projects in Bakool region, Somalia. A descriptive survey is more rigorous than exploratory research and seeks to find out who, what, when and how aspects of research (Cooper and Schindler, 2006).

This study was a cross sectional survey research. It was deemed appropriate because the research involved seeking information from the residents of Bakool. A cross-sectional study is done on the sample population to make measurements at a specific point in time, (Lewis, Saunders &Thornhill, 2011).

3.3 Target Population

Population is the entire group of individuals, events and objects having common characteristics (Mugenda and Mugenda, 2003). According to Cooper and Schindler (2006) population is the total collection of elements about which a researcher wishes to make some inferences. The target population of this research comprises of 3000 households of Bakool region in Somalia.

3.4 Sample size and Sampling Procedure

This section discusses the sample size and the sampling procedure. According to Welman and Kruger (2001), a sample size can be defined as a finite part of a statistical population whose properties are studied to gain information about the whole population. Sampling is the process of
selecting units (e.g., people, organizations) from a population of interest so that by studying the sample we may fairly generalize our results back to the population from which they were chosen.

3.4.1 Sample Size

A sample is a small group obtained from the accessible population, Mugenda and Mugenda (2003). The research study’s sample was 341 households of Bakool in Somalia calculated according to Krjcie and Morgan table (1970).

3.4.2 Sampling Procedure

Sampling is the procedure whereby a fraction of the data is taken from a large set of data, and then reference drawn from the sample is extended to the whole group (Raj, 1972). According to Kothari (2004) ‘a sample design is a definite plan for obtaining a sample from a given population, it refers to technique or the procedure the researcher would adopt in selecting items for the sample’. One of the real advantages of quantitative method is ability to use smaller group of people (items) to make inference about a larger groups of people (items) that would be prohibitively expensive to study (Holton & Burnett, 1997).

Random sampling was deemed suitable because it is designed to avoid biasness (Ogonda, 1991:36). This is because in such samples (random), the inclusion of an item is a matter of chance, independent of the researcher’s will and judgment or the nature of the item. (Hursh-Cesar and Roy, 1976) outline the necessity for probability sampling as arising from indefinite population, unavailable sampling frames, small budgets and lack of time among others.

3.5 Research Instruments

Instrument refers to tools used to collect information from respondents. The main data collection instrument that was used in this study was questionnaire.

Questionnaires were used for the purpose of collecting primary qualitative and quantitative data. Additionally, the questionnaires was used for the following reasons: a) it was potential in reaching out to a large number of respondents within a short time, b) able to give the respondents adequate time to respond to the items, c) offers a sense of security (confidentiality) to the respondent and d) it is objective method since no bias resulting from the researcher (Owens,
The questionnaires had open ended and closed ended questions. The structure of the questionnaires were organized into six parts, Part A; the demographic profile where it entailed the gender, age, employment status and level of education among many others. Part B included policies and sustainability of community water development projects where project policies were inquired whether they exist and it’s operational. Part C entailed governance and sustainability of community water development project where project committees are confirmed whether they have knowledge of laws governing projects and decisions are reached using these laws. Part D is about diversity among men and women and sustainability of community water development project, in this part involves gender equality and the role of women and men. In part (E) it included gender equality and sustainability of community water development project. It involved participation of men and women in sustainability of community water development project and existence of gender equality policy in the community projects. In the last part which is part F it included sustainability of community water development project, where sustainability of safe drinking water was asked as well as employment rate and the state of the security in the region.

3.5.1 Pilot testing of Instruments

The researcher administered a set of structured and unstructured questionnaires through a pilot study to appraise the questionnaire soundness of the items and to estimate time that were required to answer the items. The pilot study involved 25 respondents who were not in the sampled population. The results of the pilot study were discussed with the respondents to make the required adjustments. The aim was to test the instrument reliability and validity.

3.5.2 Validity of Instruments

Validity refers to the degree to which evidence and theory support the interpretation of the test scores entailed by use of tests. Content validity was used since it measures the degree to which the sample of the items represents the content that the test is designed to measure. The researcher based the questionnaires on the research objectives and questions. The supervisor assisted in reviewing the instrument to address its content and face validity. The supervisor also defined the extent of the specific content of the tool and determine how well this extent was sampled by its items in determining its content validity.
3.5.3 Reliability of Instruments

Reliability estimates provides researchers with an idea of how much variation to expect. Pilot study was done on the respondents to test for reliability of the research instruments. According to Mugenda and Mugenda (2003), a pre-test of 10% of the sample size is adequate for a pilot study. Based on this contention, piloting test was conducted with a sample of 25 respondents who did not form part of the sample size. The reliability of the instrument was estimated after the pilot study using Cronbach’s reliability coefficient. Cronbach’s Coefficient Alpha was computed using SPSS to determine how items correlate among themselves. According to Frankael and Wallen (2008), reliability of at least 0.70 or higher is recommended for Social Science Research. Therefore, if Cronbach’s reliability coefficient will be more than 0.7, the instruments will be deemed reliable.

3.6 Data Collection Procedure

The researcher secured a permit from the National council for science and technology, and identified one research assistant who is trained on research instrument and data collection. The research assistant and the researcher administered the questionnaires to the target population of Bakool region in Somalia. The study collected both primary and secondary data. For the primary data, a semi structured questionnaires were used to collect data. According to Mugenda and Mugenda (2003) questionnaires are suitable to obtain important information about the population. Orodho (2004) said this method reaches a large number of subjects who are able to read and write independently. The Gender factors influencing sustainability of community water development projects questions were used in order to obtain specific information by providing a list of possible alternatives from which the respondents selected the answer that best described their opinion. The questionnaires were administered through a drop and pick method since the security of the region is still not good and this as well gave them opportunity to fill the questionnaires at their own free time.

3.7 Data Analysis technique

Data from the field were edited and coded according to themes which emanated from the research objectives and questions. Descriptive statistical techniques were employed in data
analysis. The coded data were analyzed using the statistical package for social sciences (SPSS). Descriptive statistics such as mean and percentages were utilized to analyze demographic information and the Likert type of responses. Responses obtained from questionnaires were organized, tabulated and analyzed through the use of simple frequencies and percentages.

3.8 Ethical Consideration

The major ethical consideration addressed was the confidentiality issue. This is how safe the respondents were giving the information. The fact that the researcher had an authority letter from the relevant authorities gave them assurance that they will not be victimized in any way.

The researcher approached the local administration of the area where research was carried out, stating intent to carry out research in Bakool. The respondents were informed of the confidentiality of the information given and that the information was mainly for academic purposes. They were also be told not to indicate any form of identification on the questionnaires.
### 3.9 Operationalization of the Variables

<table>
<thead>
<tr>
<th>Objective</th>
<th>Variable</th>
<th>Indicator</th>
<th>Measure</th>
<th>Level of Scale</th>
<th>Data Collection</th>
<th>Approach of Analysis</th>
</tr>
</thead>
</table>
| To determine how effective policies on Gender influences sustainability of water development projects in Bakool region, Somalia. | Independent Variable (Effective Policies) | • Process for formulating policies  
• Outcome of policies  
• Impact of effective policies | Percentage frequency | Nominal Ordinal | Questionnaire Observation | Quantitative and Qualitative |
| To assess how effective governance as Gender influences sustainability of water development projects in Bakool region, Somalia. | Independent Variable (Effective Governance) | • Decisions  
• Accountability | Percentage frequency | Nominal Ordinal | Questionnaire Observation | Quantitative and Qualitative |
| To establish how diversity among men and women as Gender influence sustainability of water development projects in Bakool region, Somalia. | Independent Variable (Diversity Among men and women) | • Ethnicity  
• Socio-economic status  
• Age | Percentage frequency | Nominal Ordinal | Questionnaire Observation | Quantitative and Qualitative |
To examine how the presence of gender equality and Gender society influences sustainability of water development projects in Bakool region, Somalia.

<table>
<thead>
<tr>
<th>Independent Variable (Presence of gender equality)</th>
<th>• Women and men involvement</th>
<th>Percentages frequency</th>
<th>Nominal Ordinal</th>
<th>Questionnaire Observation</th>
<th>Quantitative and Qualitative</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Percentages frequency</th>
<th>Nominal Ordinal</th>
<th>Questionnaire Observation</th>
<th>Quantitative and Qualitative</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Sustainabilit y of community water development project</th>
<th>Dependent Variables (Sustainability of community water development project)</th>
<th>• Availability of safe drinking water</th>
<th>Percentages frequency</th>
<th>Nominal Ordinal</th>
<th>Questionnaire Observation</th>
<th>Quantitative and Qualitative</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Percentages frequency</th>
<th>Nominal Ordinal</th>
<th>Questionnaire Observation</th>
<th>Quantitative and Qualitative</th>
</tr>
</thead>
</table>

| Women as key informants | | | | | | | |
CHAPTER FOUR
DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents the study findings which has been analyzed based on themes from the study objectives; In order to put the results of the study into perspective, the findings were organized under the following categories: demographic, policies on Gender factors influence sustainability of community water development projects, governance on Gender factors influencing sustainability of community water development projects, diversity among men and women on Gender factors influencing sustainability of water development projects and the presence of gender equality influenceing sustainability of water development projects. The data analyzed is presented using tables.

4.2 Questionnaire Return Rate

The questionnaire return rate also known as the completion rate is the number of people who answered the survey visa vie the number of people in the sample. It is usually expressed in the form of a percentage.

Table 4.1: Questionnaire Response Rate

<table>
<thead>
<tr>
<th>Response Rate</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filled and returned</td>
<td>326</td>
<td>96%</td>
</tr>
<tr>
<td>Unreturned</td>
<td>15</td>
<td>4%</td>
</tr>
<tr>
<td>Total</td>
<td>341</td>
<td>100%</td>
</tr>
</tbody>
</table>

The study administered 341 questionnaires to household heads out of which 326 were returned. This marked a 96% return rate due to the fact that most of the households returned their questionnaires as requested. The reduction of the response rate by approximately 4% came about because the members of the households did not return their questionnaires. The response arrived at is acceptable according Cooper and Schlinder (2008) because a response rate of over 75 % or
more is generally considered as an acceptable response rate; hence in this study the response rate was acceptable.

4.3 Demographic characteristics of the respondents

This section presents the background information of the respondents who were the target in the study. This included distribution of respondent by; age, gender, employment, and level of education. These are further explained in the following subsequent sub-themes:

4.3.1 Distribution of Respondent by Gender

The study sought to understand the gender that was available in the area in involvement on sustainability of community water development projects and how they would influence the sustainability of such projects. The gender factor was significant because in Bakool region it is perceived that female gender are considered more responsible than male gender in terms of managing projects. The result is presented in table 4.2

Table 4.2: Distributions of respondents by Gender

<table>
<thead>
<tr>
<th>Gender of respondent</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>211</td>
<td>64.7%</td>
</tr>
<tr>
<td>Female</td>
<td>115</td>
<td>35.3%</td>
</tr>
<tr>
<td>Total</td>
<td>326</td>
<td>100%</td>
</tr>
</tbody>
</table>

From table 4.2 it shows that out of the 326 respondents who participated in the study, 211 (64.7%) were male while 115 (35.3%) were female. This implies that male could be available to provide either skilled or unskilled labour as required. In the case for Bakool region Somalia, there was a gender rule that was adopted in 1988 during Siyad Bare rule (Haaqa Dumarka 1988) but unfortunately that act is still not practiced due to the fall of Somalia in 1991. This act allowed female to be inclusively engaged with male at early stages of projects conceptualization.
4.3.2 Distribution of Respondent by Age

Age was considered an important aspect since this would determine the quality of information and also understanding on the Gender factors. This would also determine the availability of the respondents to participate actively in project implementation process in providing skilled and unskilled labor. The results of the distribution of the respondents by age are as represented in table 4.3.

**Table 4.3: Distribution of respondent by age**

<table>
<thead>
<tr>
<th>Age of respondents in years.</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>21-30 Years</td>
<td>29</td>
<td>19</td>
</tr>
<tr>
<td>31-40 Years</td>
<td>51</td>
<td>33</td>
</tr>
<tr>
<td>41-50 Years</td>
<td>60</td>
<td>24</td>
</tr>
<tr>
<td>51-60 Years</td>
<td>30</td>
<td>17</td>
</tr>
<tr>
<td>over 60 Years</td>
<td>41</td>
<td>22</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>211</td>
<td>115</td>
</tr>
</tbody>
</table>

The results from table 4.2 indicates that out of the 326 respondents interviewed, 29(9%) male and 19(6%) female aged between 21 to 30 years, 51(16%) male and 33(10%) female aged between 31 to 40 years, 60 (18%) male and 24 (7%) female aged between 41 to 50 years, 30 (9%) male and 17 (8%) female were aged between 51 to 60 years while 41 (13%) male and 22 (7%) female aged over 60 years. At the prime age of 41-50 years more male are available and therefore being the head of the household you can only administer the questionnaire to him giving few chances for the women of the same age to get the opportunity to express their views on the topic of study. From the findings, the majority of the respondents are of prime age, this implies that they can make informed decisions towards implementation process and sustainability of the project.
4.3.3 Distribution of Respondents by Employment Status

The study sought to establish the employment status of the respondents available in the area. The purpose of this was to establish how well they can contribute in terms of funding to the projects. As well the employment status could also determine whether both genders could make contributions towards the sustainability of the project management at the household level. The employment status of the respondents were sought so as to know whether they are able to get time to manage it. The results are presented in table 4.4.

Table 4.4: Distribution of Respondents by Employment Status

<table>
<thead>
<tr>
<th>Employment Status</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed</td>
<td>114</td>
<td>35</td>
</tr>
<tr>
<td>Unemployed</td>
<td>65</td>
<td>20</td>
</tr>
<tr>
<td>Self-employed</td>
<td>96</td>
<td>30</td>
</tr>
<tr>
<td>Student</td>
<td>17</td>
<td>5</td>
</tr>
<tr>
<td>Pensioner</td>
<td>34</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>326</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

From the table 4.4, it shows that out of 326 respondents in the study, 114 (35%) of the respondents are employed, 65 (20%) are unemployed, 96 (30%) are self-employed, 34 (10%) are pensioners while 17 (5%) are students. This implies that 65% of the respondents have means of generating income and they can contribute effectively towards the sustainability of community water projects.

4.4.4 Distributions of Respondents by Highest Level of Education

The study sought to establish the highest level of education of the respondents available of the study. The purpose of this was establish the skills available and whether the respondents can make informed decisions pertaining to the sustainability of community water development projects in the area. As well the level of education could also determine whether both genders
could make choices on the water development projects at the household level. The results are presented in table 4.5.

**Table 4.5: Distributions of Respondents by Highest Level of Education**

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate</td>
<td>176</td>
<td>54</td>
</tr>
<tr>
<td>Diploma</td>
<td>78</td>
<td>24</td>
</tr>
<tr>
<td>Bachelor Degree</td>
<td>49</td>
<td>15</td>
</tr>
<tr>
<td>Master Degree</td>
<td>16</td>
<td>5</td>
</tr>
<tr>
<td>PhD</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>326</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

As revealed in table 4.5, it shows that the respondents with certificate level were 176 (54%), diploma were 78 (24%), bachelor’s degree were 49 (15%), master degree 16 (5%) while 7 (2%) attained a PhD level of education. From the table 4.5 it is indicative that most respondents are knowledgeable which implies that they are in a better position to make good decision in line to the sustainability of the community water project.

The study further wanted to find out when the water project was started. The findings indicates that; finding water is a daily challenge for young girls, mothers and sons. Providing a reliable and safe water source unlocks potential by lifting this burden and returning time for study, work, and imagination. More than ten years ago, an international organization brought the local leaders together to solve the problem of finding clean water. Donors through the organization and fundraisers or the communities, the project was started to help the locals. These relationships are the heart and soul of the project. However the findings of this implies that since many of the respondents are at list learned, any negative factor that derails water project is not caused by education. Any negative factor affecting the water project cannot be caused by level of education.
4.4 Policies and Sustainability of Community water development projects

One of the objectives was to determine how policies on gender factors influences sustainability of community water development projects. The respondents were asked to give their opinions in the level of their agreement or disagreement on a likert scale of 1-5, where: 1 = strongly disagree, 2=Disagree, 3= Neutral, 4= Agree, and 5= Strongly agree. The result is presented in table 4.6.

**Table 4.6: Policies and Sustainability of Community water development projects**

<table>
<thead>
<tr>
<th>Statements</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. There is a national development projects policy in the village</td>
<td></td>
<td>20</td>
<td>60</td>
<td>70</td>
<td>176</td>
<td>4.22</td>
<td>1.1</td>
</tr>
<tr>
<td>2. The water development policy is in operation fully</td>
<td>70</td>
<td>80</td>
<td>57</td>
<td>50</td>
<td>69</td>
<td>2.80</td>
<td>1.17</td>
</tr>
<tr>
<td>3. The water policy is effective and addresses issue of gender</td>
<td>8</td>
<td>30</td>
<td>71</td>
<td>87</td>
<td>130</td>
<td>4.31</td>
<td>1.25</td>
</tr>
<tr>
<td>4. Do you agree with what the policy says?</td>
<td>3</td>
<td>19</td>
<td>43</td>
<td>70</td>
<td>192</td>
<td>4.04</td>
<td>1.16</td>
</tr>
<tr>
<td>5. Water development policies have been applied in the right way</td>
<td>63</td>
<td>99</td>
<td>57</td>
<td>96</td>
<td>111</td>
<td>2.16</td>
<td>1.51</td>
</tr>
<tr>
<td><strong>Composite Mean</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>3.51</strong></td>
<td><strong>1.24</strong></td>
</tr>
</tbody>
</table>

According to the findings, the majority of the respondents were in agreement that, the water policy is effective and addresses issue of gender with a mean of 4.31, there is a national development projects policy in the village with a mean of 4.22, do you agree with what the policy says with a mean of 4.04. While others disagreed that the water development policy is in
operation fully with a mean of 2.80 and water development policies have been applied in the right way with a mean of 2.16.

This implies that with effective policy, implementation of the policy and proper application of the policy will lead to effective Sustainability of Community water development projects in Bakool, Somalia.

4.5 Governance and Sustainability of Community water development projects

The study was set to find out about the effective governance on gender factors sustainability of community water development projects in Bakool. The findings are shown in Table 4.7.

Table 4.7: Governance and Sustainability of Community water development projects

<table>
<thead>
<tr>
<th>Statements</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The project committees have the constitution/bylaws for governing projects</td>
<td>_</td>
<td>14</td>
<td>13</td>
<td>99</td>
<td>200</td>
<td>4.03</td>
<td>1.21</td>
</tr>
<tr>
<td>2. The constitution /bylaws are followed in making decisions</td>
<td>33</td>
<td>71</td>
<td>176</td>
<td>46</td>
<td>_</td>
<td>2.15</td>
<td>1.47</td>
</tr>
<tr>
<td>3. All members of the project are represented in decision making</td>
<td>_</td>
<td>56</td>
<td>14</td>
<td>89</td>
<td>167</td>
<td>4.15</td>
<td>1.20</td>
</tr>
<tr>
<td>4. Water project records are properly kept and documented</td>
<td>_</td>
<td>26</td>
<td>52</td>
<td>77</td>
<td>171</td>
<td>4.25</td>
<td>1.36</td>
</tr>
<tr>
<td>5. Failure to keep records and documents causes personal difference and failure to the project.</td>
<td>2</td>
<td>17</td>
<td>101</td>
<td>49</td>
<td>157</td>
<td>3.95</td>
<td>1.11</td>
</tr>
<tr>
<td>Composite Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.71</td>
<td>1.27</td>
</tr>
</tbody>
</table>
According to the findings of the study, the majority of the respondents strongly agreed that, water project records are properly kept and documented, all members of the project are represented in decision making, and the project committees have the constitution/bylaws for governing projects. This is supported by means of 4.25, 4.15 and 4.03 respectively. Some partly agreed that the failure to keep records and documents causes personal difference and failure to the project with a mean of 3.95 while others disagreed that the constitution/bylaws are followed in making decisions with a mean of 2.15.

This implies that, effective governance is a key pillar to the sustainability of community water development projects in Bakool. The constitution /bylaws are meant to be followed in making decisions. This will enhance accountability in return good results.

4.6 Diversity among men and women and Sustainability of Community water development projects

Issues of water scarcity, quality, and accessibility affects the livelihood of many communities across the globe, as well the sustainability of water systems and associated biodiversity. Although it is not the only cause, human activities are a major factor in triggering problems of water scarcity and quality

The study sought to find out diversity among men and women and Sustainability of Community water development projects in Bakool in Somalia. The findings are tabulated in table 4.8

Table 4.8: Diversity among men and women and Sustainability of Community water development projects

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. There is gender balance at all water management and decision making levels in the region.</td>
<td>168</td>
<td>73</td>
<td>85</td>
<td>_</td>
<td>_</td>
<td>2.24</td>
<td>1.06</td>
</tr>
<tr>
<td>2. Women are allowed to make contributions in decision making</td>
<td>112</td>
<td>99</td>
<td>57</td>
<td>56</td>
<td>_</td>
<td>2.43</td>
<td>1.28</td>
</tr>
</tbody>
</table>
From table 4.8, the findings indicate that some of the respondents agreed that there is a systematic structure in the management of community water development project, and others partially agreed that Women have made eminent contributions in the management of water projects. This is represented by means of 4.48 and 3.45 respectively.

On the other hand, some of the respondents disagreed that women are allowed to make contributions in decision making, there is gender balance at all water management and decision making levels in the region, and both men and women are equally represented in community water development project. This is represented by means of 2.43, 2.24 and 2.11 respectively.

This implies that for diversity among men and women and sustainability of community water development projects, the community leadership needs to ensure that women are allowed to make contributions in decision making, there is gender balance at all water management and decision making levels in the region, and both men and women are equally represented in community water development project.

### 4.7 Gender Equality and Sustainability of Community Water Development Projects

The centrality of gender equality, women’s empowerment and the realization of women’s rights in achieving sustainable development has been increasingly recognized in recent decades. The study set to find out about the gender equality and sustainability of community water development projects. The findings are shown below.
From the table, it can be noted that the respondents agreed that Tradition and culture restricts women to perform their duties freely, there is a written gender equality policy in the region, and women perform their project roles more effective than men with a representation of 4.52, 3.45 and 3.22 means respectively.

They also disagreed that both men and women are fully involved in the activities to sustain community water projects and Men and women perform the same task activities during community water project with a mean of 2.92 and 2.31 respectively.

This implies that for gender equality and sustainability of community water development projects the management should make sure that both men and women are fully involved in the activities to sustain community water projects and Men and women perform the same task activities during community water project.

**Table 4.9: Gender Equality and Sustainability of Community Water Development Projects**

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. There is a written gender equality policy in the region.</td>
<td>67</td>
<td>61</td>
<td>189</td>
<td>9</td>
<td></td>
<td>3.45</td>
<td>1.17</td>
</tr>
<tr>
<td>2. Both men and women are fully involved in the activities to sustain community water projects</td>
<td>44</td>
<td>100</td>
<td>161</td>
<td>19</td>
<td>2</td>
<td>2.92</td>
<td>1.01</td>
</tr>
<tr>
<td>3. Men and women perform the same task activities during community water project.</td>
<td>101</td>
<td>178</td>
<td>21</td>
<td>26</td>
<td></td>
<td>2.31</td>
<td>0.99</td>
</tr>
<tr>
<td>4. Tradition and culture restricts women to perform their duties freely</td>
<td></td>
<td></td>
<td>103</td>
<td>58</td>
<td>165</td>
<td>4.52</td>
<td>1.22</td>
</tr>
<tr>
<td>5. Women perform their project roles more effective than men.</td>
<td>52</td>
<td>70</td>
<td>170</td>
<td>27</td>
<td>7</td>
<td>3.22</td>
<td>1.71</td>
</tr>
</tbody>
</table>

**Composite Mean** | 3.28 | 1.22 |
4.8 Sustainability of Community Water Development Projects

Sustainability is of course important in setting the parameters, which are then used for measuring it and in understanding the determinant factors which may contribute to, or work against, the likelihood of sustainability. The study further wanted to find out sustainability of community water development projects. The results are shown in table 4.10.

**Table 4.10: Sustainability of Community Water Development Projects**

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Employment opportunities increase with sustainability of community water development projects</td>
<td>_</td>
<td>37</td>
<td>123</td>
<td>67</td>
<td>99</td>
<td>4.09</td>
<td>1.65</td>
</tr>
<tr>
<td>2. Security has improved during sustainability of community water development projects.</td>
<td>_</td>
<td>16</td>
<td>56</td>
<td>165</td>
<td>89</td>
<td>4.11</td>
<td>1.35</td>
</tr>
<tr>
<td>3. There is growth on the level of Gross domestic product.</td>
<td>7</td>
<td>30</td>
<td>67</td>
<td>111</td>
<td>112</td>
<td>3.59</td>
<td>1.88</td>
</tr>
<tr>
<td>4. There is quality and safe drinking water during community water development project.</td>
<td>_</td>
<td>21</td>
<td>117</td>
<td>79</td>
<td>109</td>
<td>4.29</td>
<td>1.24</td>
</tr>
<tr>
<td>5. The project activities runs in line with its plan</td>
<td>_</td>
<td>37</td>
<td>123</td>
<td>67</td>
<td>99</td>
<td>4.09</td>
<td>1.65</td>
</tr>
<tr>
<td><strong>Composite Mean</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>4.20</strong></td>
<td><strong>1.6</strong></td>
</tr>
</tbody>
</table>

From the table 4.10, the findings indicate that the respondents were in agreement that employment opportunities increase with sustainability of community water development projects, Security has improved during sustainability of community water development projects, there is quality and safe drinking water during community water development project and the project activities runs in line with its plan with means of 4.09, 4.11, 4.29 and 4.09 respectively.
They also partially disagreed that there is growth on the level of Gross domestic product with a mean of 3.59.

This implies that employment opportunities increase with sustainability of community water development projects, Security has improved during sustainability of community water development projects, there is quality and safe drinking water during community water development project and the project activities runs in line with its plan are necessary for sustainability of community water development projects.
CHAPTER FIVE

SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND
RECOMMENDATIONS

5.1 Introduction

In line with the objectives of the study, this chapter highlights a summary of findings, conclusions made on the findings and recommendations which are meant to enhance the application of Gender factors in projects. Finally suggestions for further research are given, made in line with the outcomes of the study.

5.2 Summary of the Findings

This section presents the summary or the research findings that were undertaken. The study is on Gender factors influencing the sustainability of community water development project in Bakool region, Somalia.

5.2.1 Policies on Gender issues influencing Sustainability of Community water development projects

The study found out that: 64% of the respondents agreed that with effective policy, implementation of the policy and proper application of the policy will lead to Sustainability of Community water development projects in Bakool, Somalia; while 24% disagreed otherwise while 12% were neutral.

5.2.2 Governance on Gender issues influencing Sustainability of Community water development projects

Effective governance is a key pillar to the sustainability of community water development projects in Bakool as it is agreed by 65% of the respondents while 17% disagreed while 18% decided to remain neutral. The constitution /bylaws are meant to be followed in making decisions. This will enhance accountability in return good results;
5.2.3 Diversity among men and women and Sustainability of Community water development projects

For diversity among men and women and sustainability of community water development projects, there is no gender balance at all water management and decision making levels in the region as agreed by 73% and while no one agrees that gender balance exists during decision making, the community leadership needs to ensure that women are allowed to make contributions in decision making as this is not applicable as agreed by 65% of the respondents and while 17% believe women contribute effectively. Both men and women are not equally represented in community water development project as agreed by 75% of the respondents while no one agreed with that;

5.2.4 Gender Equality and Sustainability of Community Water Development Projects

For gender equality and sustainability of community water development projects, respondents (40%) indicated that there is no written gender equality policy in Bakool region while 58% did not know whether it exists or not. The management should make sure that both men and women are fully involved in the activities to sustain community water projects and Men and women perform the same task activities during community water project;

Employment opportunities increase with sustainability of community water development projects, Security has improved during sustainability of community water development projects, there is quality and safe drinking water during community water development project and the project activities run in line with its plan are necessary for sustainability of community water development projects.

5.3 Discussion

5.3.1 Policies on Gender issues that influences Sustainability of Community water development projects

The study indicates that the project implementers managed to comply with the gender regulations and policies, as both men and women were given equal opportunities. Both men and women must be included in the planning of the project. Gender must be integrated in all the
planning phases: from problem identification (situational analysis and needs assessment), through design, implementation, monitoring and evaluation to the end-evaluation (Lorber, 1994).

5.3.2 Governance on Gender issues influencing Sustainability of Community water development projects

A smaller group indicated that the gender policy was not well known by them. This concurs with Hannan (2000) who stated that a number of serious misconceptions around Gender do exist, hampering the effective implementation of the strategy. These are sometimes linked to the lack of understanding of basic concepts such as “gender” and “gender equality”. Johnsson-Latham (2004) similarly indicated that the concept of Gender is unclear and misunderstood by many.

5.3.3 Diversity among men and women and Sustainability of Community water development projects

Gender strategies are vital in every project being planned or implemented. Women need to be given fair representation as men. CEDAW Report (2009) points to Sessional Paper No.2 of 2006 entitled ‘Policy on Gender Equality and Development’ which expresses the government’s commitment to advance the status of women. The overall objective of the Policy is to ensure women’s empowerment and mainstreaming of their needs and concerns in all sectors of development in the country so that they can participate and benefit equally from development initiatives. This is in accordance with REOPA (2005), which points out that leadership would be the most important to take decision and coordination for demonstrating successful Gender.

5.3.4 Gender Equality and Sustainability of Community Water Development Projects

Lack of finances, inadequate knowledge of Gender strategies and inadequate facilities for each gender act as limiting factors in effectiveness of Gender efforts. This concurs with Sedibelwana (2008) that Gender efforts in government projects are still facing serious challenges in relation to implementing Gender as a tool to achieving gender equality and that there still appears to be a lack of a common understanding within government departments on what Gender entails. It also concurs with the views of Hammam (2004) that existing power structures hinder women’s empowerment, particularly at the management level. Clisby (2005) points out that much more work still needs to be done to ensure that Gender is translated into tangible results on the ground.
The current campaign by the government for gender equality is far from realizing the intended results. Leadership in every organization would be the best and most effective way of ensuring that gender issues are well understood up to the grass root level.

5.4 Conclusions

These conclusions were drawn in line with the objectives of the study. In line with objective one, with effective policy, implementation of the policy and proper application of the policy will lead to effective Sustainability of Community water development projects in Bakool, Somalia.

In objective two, the study concludes that governance is a key pillar to the sustainability of community water development projects in Bakool. The constitution /bylaws are meant to be followed in making decisions. This will enhance accountability in return good results.

Objective Three, the study concludes that for diversity among men and women and sustainability of community water development projects, the community leadership needs to ensure that women are allowed to make contributions in decision making, there is gender balance at all water management and decision making levels in the region, and both men and women are equally represented in community water development project.

In objective four, the study specifically concludes that for gender equality and sustainability of community water development projects the management should make sure that both men and women are fully involved in the activities to sustain community water projects and Men and women perform the same task activities during community water project.

5.5 Recommendations

The study makes the following recommendations in line with the objectives of the study:

1. Every project management team should engage a gender expert in a project to steer and advise on gender- related aspects in the project. The government should simplify the gender policy for it to be easily understood and operationalized. More importantly, the project teams should be sensitized on gender balancing practices and be encouraged to adhere to gender policy guidelines and set targets to be assessed as part of performance contracting.
2. Gender experts together with all those with information on Gender strategies should engage other stakeholders in sensitization efforts. In addition, more comprehensive measures should be devised by the government to make Gender strategies friendlier, such as undertaking sensitization exercise and public recognition of best- in- class organization as far as Gender is concerned. At the local level, those in management should develop simple workable Gender strategies. Project beneficiaries should be included in the decision – making process and in the problem solving forums.

3. The study indicates a need by the government and stakeholders to sensitize all those in organizational management that women should be empowered at all levels and funds be availed to train all employees on gender issues at their workstations. Leadership in every organization should be trained on the most effective way of integrating gender concerns in projects thereby ensuring that gender issues are well understood by all up to the grass root level.

5.6 Areas for Further Research

For the purpose of enhancing research activities and general public awareness, other researchers and scholars may carry out studies in the following areas:

(i) Analysis of factors affecting application of gender policies in government funded projects in Bakool region, Somalia.

(ii) Impact of Gender strategies on effectiveness of government funded projects in Bakool region, Somalia.

(iii) Role played by organizational management in effective implementation of Gender of projects in Bakool region, Somalia.
REFERENCES

Adam, G. (2006). *Community Participation in Development*; University of the Witwatersrand Course Notes, Environmental Health Engineering, Department of Civil Engineering, Johannesburg.


Jill, R. (2002), *Gender and Gender Equality in the EU: the impact of the EU employment strategy*.  


Knight et al. (2002). *Submission to the Standing Committee on Legal and Constitutional Affairs into an Examination of Structural Relationships in Indigenous Affairs and Indigenous Governance within the Northern Territory, Darwin.*


Richard Carter and Ronnie Rwamwanja (2006); *Functional Sustainability in Community Water and Sanitation; a Case Study from South-West Uganda*; Diocese of Kigezi, Church of Uganda.


Ronnie Rwamwanja (2006); *Functional Sustainability in Community Water and Sanitation; a Case Study from South-West Uganda*; Diocese of Kigezi, Church of Uganda.


WCED, (1987). *Water Benefit Sharing for Poverty Alleviation and Conflict Management; Topic 3 Synthesis Paper CGIAR Challenge Program on Water and food; Colombia 15 PP.*

APPENDICES

APPENDIX I: LETTER OF INTRODUCTORY

ABDIRIZAK HASSAN

University of Nairobi,

Po Box 30197 – 00100,

Nairobi.

Dear participant

This is to inform you that I am undertaking a research study leading to master’s degree in project planning and management at the University of Nairobi. The study focuses on the impact of Gender on community water development projects in Bakool Region, Somalia, when successfully completed the finding will help to enhance and improve the management of community water project’s for sustainability. In this regard please take some time and complete this questionnaire, accurate and frank responses will highly be appreciated.

All information received will be treated with confidentiality. The finding for this study will be used only for the research purpose.

Yours faithfully,

HASSAN ABDIRIZAK M.

L50/84119/2012
APPENDIX II: QUESTIONNAIRE

PART A: Demographic Profile

1. Gender
   - Male [ ]
   - Female [ ]

2. Age
   - 18-36 years [ ]
   - 37-55 years [ ]
   - 56-74 years [ ]
   - Above 74 [ ]

3. Employment status
   - Employed [ ]
   - Unemployed [ ]
   - Self-employed [ ]
   - Student [ ]
   - Pensioner [ ]

4. Level of education
   - Certificate [ ]
   - Diploma [ ]
   - Bachelor Degree [ ]
   - Master Degree [ ]
   - PhD [ ]

5. When was the community water project started? ____________________________

6. Who started the project? ____________________________

7. Has the project been operational? ____________________________

Sections B - F requires you to select the statement that best addresses your opinion based on the Likert scale of 1 – 5, where: strongly disagree = 1, Disagree = 2, Neutral = 3, Agree = 4 and Strongly agree = 5.

Part B: Policy and Sustainability of Community water development projects

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is a national development projects policy in the village</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The water development policy is in operation fully</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The water policy is effective and addresses issue of gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you agree with what the policy says?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water development policies have been</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
applied in the right way

**Part C: Governance and Sustainability of Community water development projects**

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>The project committees have the constitution/bylaws for governing projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The constitution /bylaws are followed in making decisions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All members of the project are represented in decision making</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water project records are properly kept and documented</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Failure to keep records and documents causes personal difference and failure to the project.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Part D: Diversity among men and women and Sustainability of Community water development projects**

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is gender balance at all water management and decision making levels in the region.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women are allowed to make contributions in decision making</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Women have made eminent contributions in the management of water projects.

There is a systematic structure in the management of community water development project.

Both men and women are equally represented in community water development project.

**Part E: Gender Equality and Sustainability of Community Water Development Projects**

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is a written gender equality policy in the region.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Both men and women are fully involved in the activities to sustain community water projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men and women perform the same task activities during community water project.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tradition and culture restricts women to perform their duties freely</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women perform their project roles more effective than men.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Part F: Sustainability of Community Water Development Projects

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment opportunities increase with sustainability of community water</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>development projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security has improved during sustainability of community water development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>projects.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is growth on the level of Gross domestic product.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is quality and safe drinking water during community water development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>project.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The project activities runs in line with its plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX V: TABLE FOR DETERMINING SAMPLE SIZE FROM A GIVEN POPULATION

<table>
<thead>
<tr>
<th>N</th>
<th>S</th>
<th>N</th>
<th>S</th>
<th>N</th>
<th>S</th>
<th>N</th>
<th>S</th>
<th>N</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>10</td>
<td>100</td>
<td>80</td>
<td>280</td>
<td>162</td>
<td>800</td>
<td>260</td>
<td>2800</td>
<td>338</td>
</tr>
<tr>
<td>15</td>
<td>14</td>
<td>110</td>
<td>86</td>
<td>290</td>
<td>165</td>
<td>850</td>
<td>265</td>
<td>3000</td>
<td>341</td>
</tr>
<tr>
<td>20</td>
<td>19</td>
<td>120</td>
<td>92</td>
<td>300</td>
<td>169</td>
<td>900</td>
<td>269</td>
<td>3500</td>
<td>246</td>
</tr>
<tr>
<td>25</td>
<td>24</td>
<td>130</td>
<td>97</td>
<td>320</td>
<td>175</td>
<td>950</td>
<td>274</td>
<td>4000</td>
<td>351</td>
</tr>
<tr>
<td>30</td>
<td>28</td>
<td>140</td>
<td>103</td>
<td>340</td>
<td>181</td>
<td>1000</td>
<td>278</td>
<td>4500</td>
<td>351</td>
</tr>
<tr>
<td>35</td>
<td>32</td>
<td>150</td>
<td>108</td>
<td>360</td>
<td>186</td>
<td>1100</td>
<td>285</td>
<td>5000</td>
<td>357</td>
</tr>
<tr>
<td>40</td>
<td>36</td>
<td>160</td>
<td>113</td>
<td>380</td>
<td>181</td>
<td>1200</td>
<td>291</td>
<td>6000</td>
<td>361</td>
</tr>
<tr>
<td>45</td>
<td>40</td>
<td>180</td>
<td>118</td>
<td>400</td>
<td>196</td>
<td>1300</td>
<td>297</td>
<td>7000</td>
<td>364</td>
</tr>
<tr>
<td>50</td>
<td>44</td>
<td>190</td>
<td>123</td>
<td>420</td>
<td>201</td>
<td>1400</td>
<td>302</td>
<td>8000</td>
<td>367</td>
</tr>
<tr>
<td>55</td>
<td>48</td>
<td>200</td>
<td>127</td>
<td>440</td>
<td>205</td>
<td>1500</td>
<td>306</td>
<td>9000</td>
<td>368</td>
</tr>
<tr>
<td>60</td>
<td>52</td>
<td>210</td>
<td>132</td>
<td>460</td>
<td>210</td>
<td>1600</td>
<td>310</td>
<td>10000</td>
<td>373</td>
</tr>
<tr>
<td>65</td>
<td>56</td>
<td>220</td>
<td>136</td>
<td>480</td>
<td>214</td>
<td>1700</td>
<td>313</td>
<td>15000</td>
<td>375</td>
</tr>
<tr>
<td>70</td>
<td>59</td>
<td>230</td>
<td>140</td>
<td>500</td>
<td>217</td>
<td>1800</td>
<td>317</td>
<td>20000</td>
<td>377</td>
</tr>
<tr>
<td>75</td>
<td>63</td>
<td>240</td>
<td>144</td>
<td>550</td>
<td>225</td>
<td>1900</td>
<td>320</td>
<td>30000</td>
<td>379</td>
</tr>
<tr>
<td>80</td>
<td>66</td>
<td>250</td>
<td>148</td>
<td>600</td>
<td>234</td>
<td>2000</td>
<td>322</td>
<td>40000</td>
<td>380</td>
</tr>
<tr>
<td>85</td>
<td>70</td>
<td>260</td>
<td>152</td>
<td>650</td>
<td>242</td>
<td>2200</td>
<td>327</td>
<td>50000</td>
<td>381</td>
</tr>
<tr>
<td>90</td>
<td>73</td>
<td>270</td>
<td>155</td>
<td>700</td>
<td>248</td>
<td>2400</td>
<td>331</td>
<td>75000</td>
<td>382</td>
</tr>
<tr>
<td>95</td>
<td>76</td>
<td>270</td>
<td>159</td>
<td>750</td>
<td>256</td>
<td>2600</td>
<td>335</td>
<td>100000</td>
<td>384</td>
</tr>
</tbody>
</table>

Note: “N” is population size
      “S” is sample size.