

**PERCEIVED FACTORS INFLUENCING THE PARTICIPATION OF WOMEN IN
COMMUNITY WATER DEVELOPMENT PROJECTS IN MARGINALIZED AREAS
OF KENYA: A CASE OF LAIKIPIA NORTH SUB-COUNTY.**

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**A RESEARCH PROJECT REPORT SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE AWARD OF DEGREE OF MASTER OF ARTS IN
PROJECT PLANNING AND MANAGEMENT,
THE UNIVERSITY OF NAIROBI**

2021

DECLARATION

This project report is my own original work and has never been submitted for any academic award in any other institution.

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DEDICATION

This study is dedicated to my mother, Christine Wangui Mwai, for giving me the foundation and support to scale my education's heights. I also dedicate this work to my nieces Phyllis, Christine, Evelyne, Pauline, Jasmine Grace, and Olivia Hope, so that you may find the drive to always soar high and become strong women of purpose.

ACKNOWLEDGEMENT

The University of Nairobi deserves my gratitude for giving me chance and conducive environment during my studies. My acknowledgment to the Nairobi ODeI administrative office for their tireless effort and support.

I wish also to express gratitude to my accommodating supervisor, Dr. Angeline Mulwa, who tirelessly guided me throughout the process. Your unmatched guidance, contribution, and patience will forever remain a significant part of my academic journey. Thank you for supporting me despite the challenges posed by the COVID-19 pandemic.

To my family, colleagues and friends, thank you for being beside me all the way. Special thanks go to my mother, Christine Mwai, for her unending love and support; she is always a source of inspiration and strength.

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ABBREVIATIONS AND ACRONYMS

CDT: Community Development Theory

CDP: Community Development Project

CWDP: Community Water Development Project

CDPs: Community Development Projects

NACOSTI: National Commission for Science, Technology, and Innovation

NGEC: National Gender and Equality Commission

NGO: Non-Governmental Organization

SPSS: Statistical Package for Social Sciences

ABSTRACT

Participation of women in development projects entails their active contribution to project planning and decision-making for project implementation. Their participation in community development projects (CDPs) is based on culture, educational status, resources, and family obligations, among other factors. In Kenya, gender inequality has been an existing and growing phenomenon, and efforts to address it have faced many challenges. Despite the government and NGO's initiatives on the gender disparity problem and socio-cultural factors, women continue to encounter social, cultural, economic, and political challenges in their struggle towards participating in CDPS. Using the case of Laikipia North Sub-County, this study sought to identify the elements that inspire the active engagement of womankind in CDPs in Kenya's underprivileged communities based on their educational, economic, infrastructural, and the impact of social factors on their role in CDPS. A descriptive case study design was utilized and 8,252 members of the population was targeted, including 7,752 families, 30 management committee members, and 470 project members. Thus the sample size of 367 respondents were engaged. The study administered questionnaire to collect data which was pilot tested before use to ensure its validity and reliability using 15 respondents from Kirisia in Samburu County. With the guidance of trained research assistants, the researcher conducted the data collection exercise successfully. The collected questionnaires were sorted to determine their validity with the study before entering the data into SPSS 27 for analysis. Quantitative analysis in which descriptive and inferential statistics were computed was used. Presentation of data analyzed were done using frequency tables percentages, means, and standard deviations. The association of variables (hypothesis) was checked using correlation and regression analysis. The findings of the research will contribute significantly in decision making among the various stakeholders, including the research fraternity, policymakers in government, women in marginalized areas, and donors. The research findings will also help improve the welfare of women not only in marginalized areas in Kenya, but also in other parts of the world.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Participation of women in development projects entails their active contribution to project planning and decision-making for project implementation. Different influencing aspects lead to their participation in these projects including education attainment levels, resources, culture, and family responsibilities (Brenya, Mensah & Nyarko, 2018). A report released by the United Nations in 2014 suggested that women form 50 percent of the global population, and 75% of them work in projects but earn only 10% of the global income and possess less than 1% of the total world's assets. According to the world population (1995), women are still considered less valuable than men in many societies. Women's comparatively low participation in CDPs has become a global concern.

The first conference to address women's issues and the developmental agenda was organized by United Nations (UN) in 1975. Women cannot participate fully in the development processes based on the concluded report. Therefore, many women remain illiterate, impoverished, and cannot access proper healthcare; they are often victims of violence like rape, harassment, and neglect. Moreover, they are denied fundamental human rights; they face discrimination and injustice compared to men (Jaquette, 2017). There is an apparent disparity between the two genders in education, health, leadership, employment, legal affairs, health power acquisition, ownership of resources, and project development. Notably, this indicates that there is still to be done for women to take their rightful position as partners to men. It is also imperative to institute policies that ensure that women can contribute fully to the establishment of community projects.

Enhancing women participation in community development projects (CDPs) requires active engagement and participation in project planning and implementation. Evaluation of women's participation and its effectiveness is based on their ability to make decisions (Johnson, Kovarik, Meinzen-Dick, Njuki & Quisumbing, 2016). It looks into aspects such as whether the project processes are accessible, transparent, fair, and abide by laws and existing policies. The evaluation

also considers the individual features and attributes, such as specific knowledge of project activities, mobilization of resources, and raising awareness on major issues at the community level. Therefore, efficient engagement includes evaluating members' ability to improve decision-making capacity and productivity and advancing their objectives. According to Okoroba, Okodudu, and Joab-Peterside (2019), successful engagement of women in CDPs often considers how power works within the processes and how it affects their willingness in advancing their interests. The cases of biases within the project implementation can affect successful participation by all members. Biases can manifest in selection criteria, sources of information, setting the venue, and time to convene the meeting and payments.

The engagement of women in projects for community development is a global concern being addressed in every country of the world. Women's contributions to development projects are perceived to be of great concern. Despite this, their progress has encountered some hindrances at their societal level in many countries around the world. In Nepal, Collins (2017) noted that when women participated in different community initiatives and development programs the quality of their lives was improved, and also their living conditions became better. Education was one of the factors that led to empowered women, and as their skills, capacities and competencies increased they participated more in CDPs. Rout (2018) noted that participation in and governance of forestry programs were done by the local communities but the management and handling excluded women from participation. Nhem and Lee (2019) shared that very few Cambodian women participated in natural resource sustainability projects. Many of the women were under-shadowed and likely to be left out in making critical decision due to the patriarchal structure at the local community levels.

The women in Africa lack the power to make decisions and have little influence over matters that affect their lives. Despite their hard work, politicians see women mainly as volunteers and cheap labor sources for their programs, and their significant economic and social contribution is not recognized. Women have also been marginalized in community-based initiatives, and all social sectors must ultimately appreciate their participation. According to Zikhali (2017), the Zimbabwean women participated in agricultural projects like poultry farming, vegetable growing, and animal husbandry but they did not enjoy the benefits due to gender-based violence. The women did not also participate in policy dialogue and the decision-making process. Mashapa, Zisadza-Gandiwa, Libombo, Mhuriro-Mashapa, Muboko and Gandiwa (2020) noted that few women were

in leadership positions and participated in the decision-making processes in committees that handled natural resource conservation efforts in Zimbabwe. It is important for the women to participate and hence need to leave some committee positions for them.

At the same time, Chigbu (2015) revealed that Nigeria's women contributed to development in many ways. Still, this contribution is not the maximum as their work has often tended to be confined to traditional tasks using primitive technology despite the rapid technological progress and growth. In Ghana, Mutimukuru-Maravanyika, Mills, Asare, and Asiedu (2017) share that while the women were absent in formal decision-making processes, it is important to use a process that is inclusive of them. Women at the decision-making table can speak of their needs and concerns and find solutions to them. In Tanzania, Bikuba and Kayunze (2019) noted that community participation was poor and hence the low sustainability of the irrigation projects furthermore very few women participated in any capacity in the projects. While Akello, Turyahabwe, Sseguya, Okullo, and Agea (2017) noted that the success in the restoration of the watershed project activities in Awoja, Uganda relied on the participation of the local community and the little contribution of women defiled the goal of the projects.

In Kenya, Ndambiri (2017) shared that contribution of women to community projects in Mombasa County was dependent mostly on factors including socio-cultural, educational, media, and political factors. The participation of women relied on their educational understanding of the project and how it works. Moreover, education is used within the knowledge-based economy as economic growth and development tool and also to increase the skills of staff in organizations. Similarly, formal and informal education improves equality and access to income-earning activities within the larger society. A group of well-educated women significantly contribute to the success of community projects. Halakhe (2020) asserts that the role played by women in conservation projects in Jaldesa in Marsabit County was recommended, but the challenge was in the attainment of equitable participation. Mutongu (2018) also investigated poverty reduction through their contribution in community-based organizations' projects and noted that economic factors contribute significantly to their engagement in project implementation. The women engage in revenue-generating activities through jobs and entrepreneurial projects and hence boost their socio-economic status as co-breadwinners. Similarly, social factors, such as family status and living conditions, dictate their extent of participation in CDPs since women with stable incomes

have more say and decision-making powers than the other community members and in turn plays a big role in community growth.

Different parts of the community have various approaches used in setting infrastructural requirements, and contribution of women plays a significant role in ensuring that all priorities are planned. Implementation of infrastructural projects requires designing different road elements as a basis for uniformity and as a guideline for engineering practice based on the same specifications (Ndambiri, 2017). Implementation of road infrastructural projects begins with funding because of the project's capital-intensive nature. Support comes from various sources, such as associations or the governments in which the path is to be constructed. The stakeholders set out a standard guide for executing the projects before the road projects are launched. Munyambu (2019) noted that the participation of women is an aspect of their educational level, socio-economic status, cultural and traditional factors, and structural aspects of the CDPs. These aspects determine their active role in the projects and the extent of their participation.

Various studies have revealed that women have the capacity and ability to take over leading roles and positions in handling community-based projects. However, some barriers hinder their participation and level of participation. According to surveys, many women in Kenya are still disenfranchised and due to little empowerment that could enabled them to participate in development initiative in the community. In Laikipia County, for instance, women are underrepresented in positions of authority. In addition, their access to school, jobs, and property is limited. Those who reside in disadvantaged areas spend extensive time gathering firewood and water. Consequently, they are unable to attend school and have little opportunities to earn a living or engage in other useful activities. Due to the advantages connected with women's engagement in development projects, it is imperative to expose those barriers and features that affect their participation in projects for community growth and development in Kenya's marginalized areas, such as Laikipia North.

1.2 Problem Statement

In Kenya, gender inequality has been an existing and growing phenomenon, and efforts to address it have faced many challenges. Women continue to encounter social, cultural, economic, and political challenges in their struggle towards participating in the wider community (Saprii,

Richards, Kokho & Theobald, 2015). Despite government and NGO initiatives on the gender disparity problem, social and cultural factors affecting women's effective contribution to community project implementation in Kenya prevail. Women account for more than half of Kenya's population and represent a substantial portion of the nation's human capital. Still, these women are not active in developmental projects due to a lack of representation in public institutions, top leadership roles, and capacities to make policies. Some possible reasons of this occurrence include low educational level, gender issues, and limiting cultural practices and religious beliefs held by the population (Howe-Walsh & Turnbull, 2016).

Diverse studies have examined women's engagement in CDPs. Lelelit, Macharia, and Mburugu (2017) examined the socio-cultural aspects that impact womankind roles in project that was dealing with conservation of wildlife at the Northern Rangeland Trust in Samburu County. The results noted these factors as educational level, cultural practices, religious beliefs, and traditional gender roles that negatively impacted the participation of women. The context was wildlife conservation projects and it was in Samburu County. Karamunya and Cheben (2016) investigated the socio-cultural factors that affected the involvement of community members in projects for Pokot South residents in Kenya. Findings revealed the belief system, dependency status, migration patterns, resources in the community, and governance structure in the communities led to little participation and participation in the community projects.

In pastoralist settlements of Kenya, a low levels of education, male dominance, and limitation of women's empowerment hinder their ability to participate in communal projects. This was determined by Munyambu's (2019) study on the determinants of women's engagement in CDPs. The study covered women in pastoralist communities within Kajiado Central Constituency. In a different study by Lugendo (2019) who investigated the reasons that influenced the extent of contribution of women in CDPs in Kahama Town Council in Tanzania, the findings noted factors that influenced their participation such as gender roles and norms, education level, economic factors, and the media.

In Kenya, the 2015 report on the survey done by the NGEK identified Laikipia North Sub-County as part of the marginalized communities. This minority and marginalized communities had low education levels, poor infrastructure, persistent conflicts, lack of social amenities, and high

unemployment rates and insecurity in the region. It then calls on the local members to take part in development projects that will uplift the status of the community and its members. Since women are the most affected due to a lack of social amenities and basic items, it is important to establish their participatory role in CDPs.

The challenges encountered by marginalized and minority communities, such as those in the Laikipia North Sub-County, call for action of the community and research on the contribution of the women in CDPs. The reviewed studies have created gaps in context, concept, and methods as they have not covered the perceived reasons that influence the contribution of women in CDPs. Further research is necessary to establish how these aspects affect the participation of women in CDPs. Therefore, this study explored the participation of women in CDPs in marginalized communities and tried to fill the knowledge gaps by investigating the perceived factors that influence their participation in CWDP in marginalized areas of Kenya using the case of Laikipia North Sub-County.

1.3 Purpose of the Study

The case of Kenya's Laikipia North Sub-County was utilized to examine the perceived elements that influence women engagement in CWDP in disadvantaged areas.

1.4 Objectives of the Study

The study was guided by the objectives below:

1. To assess the influence of educational aspects on the participation of women in community water development projects (CWDP) in Laikipia North Sub-County.
2. To establish the influence of economic aspects on the participation of women in CWDP in Laikipia North Sub-County.
3. To examine how infrastructural issues influence women participation in CWDP in Laikipia North Sub-County.
4. To determine the contribution of social factors on the involvement of women in CWDP in Laikipia North Sub-County.

1.5 Research Questions

1. How much influence do educational factors have on women's participation in CWDP in Laikipia North Sub-County?
2. How much influence do economic factors have on women's participation in CWDP in Laikipia North Sub-County?
3. How much influence do infrastructure factors have on women's participation in CWDP in Laikipia North Sub-County?
4. To what extent do social aspects influence women participation in Laikipia North Sub-County in addressing CWDP?

1.6 The Importance of the Study

This study is of tremendous value to the implementers of CDPs, particularly in Laikipia North Sub-County, since it provides baseline data on the influence of educational, economic, infrastructure, and social aspects on the participation of women in such programs. Instead of setting the way for engagement of women in development initiatives that will have a good influence on the local community in the long term, policymakers may find this information useful. Additionally, it will contribute to the scholarly literature in the similar subject topic.

1.7 Scope of the Study

This research was undertaken in Laikipia North Sub-County in Kenya. Laikipia North Sub-County is one of the marginalized sub-country among the five sub-counties in Laikipia County. Although the independent variables fall within the confines of socio-economic factors, the list is inexhaustible. The study's scope was limited to four variables; educational, economic, infrastructural, and social factors. This research was conducted between August and November 2021.

1.8 Fundamental Hypotheses of the Research

A number of assumptions underlie this study, one of which was that participants would consent to participate voluntarily. In addition, it was believed that the respondents would provide accurate

and timely information that would allow the researcher to draw conclusions. Also, it was assumed that respondents would supply accurate information.

1.9 Constraints of the Study

Various challenges were anticipated. These included;

1. Suspicious respondents would feel that the questions intruded into their privacy and hence fail to answer them. To overcome this challenge, the researcher encouraged them by informing them satisfactorily about the validity of the research and how it would contribute to the knowledge base.
2. Since the findings cover the CWDP within Laikipia, the findings may not be representative of other counties. The application of results to other counties outside Laikipia County should be treated with caution.

1.10 The Delimitations of Study

This research was undertaken in the selected CWDP in Laikipia North Sub-County. While there are many CDPs in Laikipia North Sub-County, including water, conservation, and agriculture projects, the study covered 30 CWDP within Laikipia North Sub-County. It investigated the impact of socio-economic aspects on the involvement of women in CWDP within the Sub-County.

1.11 Definition of Terms

Community: A group of individuals who form a social unit, live together in the same locality, and share diverse characteristics but are connected through social ties, shared norms, values, and practices.

Community Development: A process through which members of a community take collective action to create solutions to existing community problems leading to social, cultural, economic, and environmental wellbeing.

Community Development Project: An initiative established and designed to strengthen the local community's economic status in Laikipia North Sub-County.

Marginalized Area: A geographical area excluded from mainstream economic, educational, social, and cultural life. The Laikipia North Sub-County area is recognized as one for its lack of infrastructure, educational, and health facilities.

Participation of women: Active participation of women in identifying, designing, implementing, and evaluating CWDP within the Laikipia North Sub-County.

Social Factors: Factors that focus on the extent of the participation of women in CDPs with the Laikipia North Sub-County like in the decision making, implementation, and consumption of the water projects.

Economic Factors: These are activities undertaken by the local community members to improve the social and economic wellness of people. It includes improving social amenities like healthcare and education through the support and participation of the women and other community members.

Educational Factors: Factors that aim to empower women towards project development by providing the necessary skills required to effect change in their communities.

Infrastructural factors: Factors associated with making plans regarding how women should avail themselves where the entire project is being implemented and monitored.

1.12 Structure of the Study

The first chapter includes an introduction, a statement of the research problem, study objectives, research questions, the Importance of the Study, the scope, limitations, and definitions of terms. The second chapter discusses the theoretical context, empirical literature, and conceptual framework. The methods section of the third chapter describes the research design, target population, sampling techniques, research instruments, instrument validity and reliability, and ethical considerations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section investigates the relevant literature from past investigations. This chapter includes explicit literature on the study variables, a theoretical framework, and a conceptual framework demonstrating the relationship between the study variables and research gaps. The analysed dependent variable was women's participation in water CDPs, whereas the independent variables were social factors, economic factors, infrastructure factors, and educational factors.

2.2 The participation of women in CWDP

Women active participation in project planning, decision-making, and project implementation constitutes their participation in CDPs. Women are engaged through CBOs and sponsored by self-help groups, governments, NGOs, and other financial institutions and development projects for constituencies (Kunjuraman & Hussin, 2016). Their participation is impacted by factors such as social, economic, infrastructural, and educational factors. Most economic development projects target vulnerable people who are often overlooked and unable to obtain funds from sources other than the government. Aside from the growing popularity of community development initiatives among policymakers, there is scattered reliable data showing the actual role that women are involved in CDPs. According to Ndambiri (2017), participating in community-based development projects benefits women in several ways; including the fact that it boosts their self-esteem, enhances their social status, and ensures that they sustain their family's well-being.

Involvement of women in CDPs has become a global problem being looked into and studied in every nation in the world. An assessment of the female gender's progress toward developing their communities is a critical concern in every country (Alzuabi, 2016). Despite this, there is still an imbalance in both gender in the work force on the world today. Globally, women's participation in economic progress has encountered institutional obstacles in every country (Sam & Todd, 2020). The world's traditional societies assigned different roles to men and women. In many communities and locations, the number of women enrolling in higher level of education has

increased throughout time, which has contributed to their dominance in the economic sector through employment prospects. However, women fail to have equal access to jobs and opportunities for senior opportunities in organizations, and they also do not get equitable and fair pay. The global trend shows that women managers do not rise to top leadership roles but get stuck in middle-level positions (Shaw, Armstrong & Craig, 2016). Although many women are applying for managerial roles and the number of applications is increasing, they are still not getting the senior and top managerial positions across the globe.

2.3 Women Participation in the CWDP and Economic Aspects

The educational status has an impact on women participation in CWDPs since modern projects demand the ability of the participants to be able to read and write based on the fact that any, and all, projects have some paperwork. It would be costly to involve uneducated women in the CDPs and have to employ somebody else to handle the projects' paperwork. Furthermore, women are unlikely to get any education in marginalized and pastoralist communities like the case of Laikipia North Sub-County.

The lack of education among the older generation might hinder the participation of the women, as in the past women were groomed to be wives and home keepers. But over the years there has been an increment in the number of girls attending schools and gaining professional qualifications that have pushed them to gain meaningful employment and at the same time engage in development projects in the community. Ng'asike (2019) noted that the number of educated women within the pastoralist communities is increasing as more parents heed the advice and allow their children both boys and girls to get an education. Educated women take part in project formulation and initial decision-making process, and take a responsibility during the enactment and monitoring of the CDPs (Hassan, Ong'ayo & Osore, 2019). Water projects and water sources are essential to life and as it is the responsibility of women to fetch water, then it is prudent that they take responsive formulation, decision-making, and execution of water projects in their communities.

Kisiangani (2016) found out the factors influencing participation and implementation of projects by women while looking at gender mainstreaming projects in Nairobi County and a few selected government ministries. Despite the existence of gender equality laws, regulations, and policies,

the findings revealed that their functionality in gender mainstreaming was still poor. Educational factors aim to empower women towards project development as they provide them with the necessary skills required to effect change in their communities. Creating these skills is always achieved by forming large social groups that work for a common agenda. Women participating in the projects must be educated and understand how the projects work and what they should do to achieve the communities' positions within larger social institutions. The study was done in an urban setting –the Nairobi County and as such it might not give a true picture of the situation in rural areas and among the pastoralist community. At the same time, the empowerment of women should be done across the different backgrounds and settings.

There is a link between women's participation in CDPs and their success. Laboso (2015), who studied the factors influencing their participation in CDPs in Bureti Sub-County and Kericho County, concluded that the contribution of women had a beneficial impact. The education system at the local community level aims at uplifting the disadvantaged community's capacity to participate in collective undertakings that can contribute to the masses readiness at the community level to generate income and jobs. Community ability is a part of individual power. Therefore, high-quality education for members allows for making progress in women participation in CDPs. Therefore, education is a platform for economic development within the knowledge-based economy because it increases the workforce skills in production-related activities. The study focused on only one element –the educational aspects and how they affect participation of women in CDPs and thus a need to consider the other factors that either boost or hinder the participation of women in CDPs.

It is believed that educated individuals tend to participate in developmental work for the community. Collins (2017) investigated the integration and valuing of rural women in developing community projects using the case of Nepal. The findings revealed the involvement of women in different tasks and initiatives at the community level to improve their lives and conditions. Empowering the women and the local community members is by providing necessary resources to bring about changes in the local communities and societies. The skills acquired through education are also generated when a large social group works together towards a common goal. The value of education is that it enhances an individual's opportunity to access employment opportunities and earn an income. Community development is based on the general public's access

to educational opportunities and the education system. Integration and valuing of women can still be done and hence the need to directly look at the participation of women. The study looked at women in Nepal and because of the differences in setting, culture, and practices the cited reasons and factors might not reflect the Kenyan context. There is a need to look at the participation of women in the Kenyan context and specifically in the marginalized and minority communities in rural settings like Laikipia.

2.4 Economic Aspects and Women Participation in CWDP

Women are the pillars of their families and in essence, they are the pillars of the community and as such, they are looked upon to provide for their families. The women in traditional African societies are tasked with taking care of all the family members and ultimately covering aspects like the provision of meals for their families. Based on the societal key role that women handles, they must be economically empowered and equipped to be able to run their tasks. The pastoralist women engage in table banking schemes and merry-go-rounds where they can get money from the savings and soft loans and be able to deliver on their responsibilities.

These women also involve themselves in income-generating activities like agri-business ventures, starting and running micro-enterprises, and seeking employment in sedentary communities. Muhia (2020) noted that for women to take part in economic activities, they need to be trained and empowered using workshops and apprenticeships that will increase their skills, capacities, and competencies. The researcher goes on to say that for women's voices to continue to grow and be heard, there is a need to train them in income-making activities that will empower and support them, as well as give them an equal opportunity to participate in CDPs in pastoralist community areas. Lugendo (2019) shared that financially stable women are more involved in CDPs and inject their strength and financial support into the success of the CDPs.

According to research, the women financial status and their level of education also affects their role in CDPs. For instance, Nwaogwugwu, Obiaocha, and Oghenekevwe (2018) did a study on the socioeconomic determinants that influence women's engagement in CDPs in the Uvwie region of Delta State, Nigeria. The involvement of women in CDPs is highly related to their educational level, occupation, and income, according to the findings.

This initiative will help increase women's work prospects and boost their income and attitude towards economic development activities within their communities, which is realized when community development is handled using a participatory approach geared towards involving the underprivileged or the marginalized in making decisions that affect the quality of their socio-economic life. Therefore, economic factors directly relate to individual changes regarding income-generating capacity through employment and entrepreneurial ventures. These kinds of changes enhance the participation of women in CDPs. The study was based in Delta State –Nigeria and it is important to consider the Kenyan setting it combined the social and economic factors and how they affected the participation of women. This study looked at each factor individually to correlate it to the participation of women in CDPs.

Economic factors are believed to affect the local economy's capacity to create the resident's income. Agboeze, Nwachukwu, Ugwueze, and Agboeze (2020) investigated the widows' health status and their ability to participate in CDPs in Nsukka, Enugu State, Nigeria. The results suggested that the health state of widows in the region is poorer than that of non-widows, severely limiting their ability to participate in community development programmes. Economic factors through the initiatives of community development programs help improve community services such as health and education, which can significantly contribute to creating CDPs that aim to support the entire community. The processes in community development and its participation enable women to participate in CDPs. This contributes to the creation of equal content, the implementation of a programme or policy meant to transform the lives of the entire community. The study focus was widows in Enugu State-Nigeria and as such, it is crucial to consider other categorizations of women including married, unmarried, mothers, and the different age groups to get a clearer picture of the role, level, and extent of participation in CDPs.

Compared to implementing projects in the domestic setting, the execution of community projects in different nations with varying legal and political systems, security and safety concerns, socio-economic situations, and infrastructural constraints leads to increased complexities beyond those of a project (Okereke-Ejiogu, Asiabaka, Ani & Umunakwe, 2015). Furthermore, distance in geography, language barriers, and cultural differences characteristic of an international project setting pose additional challenges to leadership and additional risk. To achieve a set of organisational objectives and priorities, project managers create, plan, and execute various

strategies. Participation is regarded as the participation of a local community and, at times, other partners in developing, contenting, and implementing a program or policy intended to transform their lives. It is a kind of confidence, though, that people can successfully shape their futures. In addition, participatory development includes local decision-making and maneuvering ability, which characterizes the essence of an intrusion. In both developing and developed countries, involvement in the participation of women in CDPs is seen as an intervention for reducing poverty.

2.5 Infrastructural Factors and the participation of women in CWDP

The infrastructural elements like road network, telephone lines for communication to connect people, and transportation system must be present for proper participation of all community members. Women are likely to stop attending any meetings on CDPs if the road network is bad and there are cases of insecurity and conflicts since they cannot fight and protect themselves. It is prudent for the government both national and county to program for infrastructure development. Mbogori (2014) argues that pastoralists are unable to access health care facilities, grinding mills, and livestock markets due to the lack of effective transportation services. Water access is a major, with very many women traveling about (10 – 20) km round trip to acquire it. Therefore, due to the poor infrastructure, women spend a lot of time handling domestic chores and there is little time left to engage in remunerative activities; thus calling on the government to build, rehabilitate and reconstruct the infrastructure in the local areas. In his study on the impact of women responsibility on performance of county infrastructural projects in Moiben Subcounty in UasinGishu County, Kenya, Birgen (2018) discovered that women's labour force contribution to infrastructural projects was at a very high level, but that this was influenced by the quality of the infrastructure. He noted that even despite poor infrastructure in the interior areas, the women use donkeys for transporting their goods from the farms to the markets as there is hardly any road network and there are even fewer vehicles, which he says is even better than walking as it halves the strain of walking long distances and carrying heavy luggage. The participation of women in CDPs is pegged on access to women groups, meetings, and the actual access to the ongoing project hence the need for infrastructure systems.

In South Africa, particularly Cape Verde, notable milestones have been achieved in monitoring and evaluating road infrastructural projects. International funding agencies or financing banks

have performed implementation and monitoring and evaluation of paved and unpaved roads leading to the successful completion of projects. For example, because of the African Development Bank's participation in monitoring and evaluation, the Inter-urban construction in Cape Verde that began on 31 December 2005 was completed successfully by 11 July 2006. Not only did the bank's routine checks ensure successful implementation, but they also limited project cost variations, which resulted in cost overruns decreasing. The presence of women in CDPs contributes to correct reporting, making it easier to evaluate completed road units ex-post. Post-analysis appears as a benchmark for fixing future road implementation by identifying cost-cutting measures, and adhering to building standards was effective through the help of the participation of women. The ultimate effect is that it eliminates the possibility of faulty designs and prevents road failures, thus promoting durability and sustainability. The focus was on the road network and infrastructural projects in South Africa and thus a need to consider the road network and infrastructure projects in Kenya and the rural settings.

Adediran (2015) examined the influence of a community education programme on rural self-help CDPs in the Nigerian state of Osun. The study unveiled that women were more motivated to socialize with other women, seek government aid, seek community comfort, and improve the local economy. Implementation of road infrastructure projects starts with funding because such a project is capital intensive. The funding will mainly come from the national and state governments and firms from where the road is designed. Before the road projects are initiated, the stakeholders set out a standard guide for implementing the projects. Women are crucial to completing infrastructure projects in all Community regions, because infrastructure requirements are determined differently. As a basis for consistency and as a guide for engineering practice, the implementation of infrastructure projects requires the design of various road parts based on the same criteria. The requirements used in a dominant area will shape the special conditions used to establish contracts and conclude road projects with contractors. The study was specific to the community education program and self-help development projects and it was based in Osun State in Nigeria. Expansion in literature will consider other kinds of CDPs and the participation of women especially in the Kenyan context.

Women involved in infrastructural projects adopt similar roles, such as cleaning and serving in development projects. This was revealed by a study by Ndambiri (2017) on the determinants of

the participation of women in CDPs within Mombasa County. The women's participation in CDPs supports the development of practical procedures for carrying out infrastructural development. The procedures include making plans for the entire project, procurement of materials and inspection, survey of traffic, hydrology, and engineering, making reports on geotechnical, drawing of the preliminary plan, establishment, monitoring, and assessment, and post-examination of completed road projects. There are limiting factors in each cycle, which will affect the overall success and execution of the road infrastructure project. It is imperative to conduct a project needs assessment as a pre-condition for telling the design engineer and stakeholders about the project's resources and activities. The design approach emerges as a factor shaping road infrastructure project execution as it influences the consistency and intensity of the finished road surface. The study was based on the cosmopolitan and urban county of Mombasa and need to conduct a similar study but with a county that is in a rural area and with a general population type.

Across Africa, infrastructure construction is seen as the key to bridging the continent's current economic gap, and involving women in the projects is a key contributing factor that leads to project success. The Ernest and Young report (2014) shares that the private sector has invested \$12.8 billion towards implementing infrastructure projects. There are differences within the African region on road network project implementation, and unlike the global situation, the funding institutions are directing the implementation of road projects in Africa. Due to the project's capital intensiveness and the need for infrastructure growth, funding comes from various sources, such as African national governments, bilateral agencies, multilateral agencies, and official development assistance. These agencies fund and also control how the infrastructure programs are performed and implemented. For example, if the government's funding comes, the National Transport Authority can decide the design methodology.

2.6 The Impact of Social Factors on Women Participation in the CWDP

Women are frequently required to undertake secondary roles in their households and communities, and they are subordinate to husbands, fathers, and sons. In most instances, they are left out from participating in socio-economic activities and public life due to cultural norms and practices that assign women the role of childbearing and taking care of the home. Women are more susceptible to gender discrimination and they are likely to be left out in all important discussions that affect

their lives and the role they play at the household and community levels. The status and welfare of the women are rarely considered of value and worth any negotiations and discussions, surrounding that is downplayed and not given the attention that it deserves. Lugendo (2019) noted that women over the years have always fought for their rights and space in the community and as such the women in Laikipia and other marginalized areas have to stand up, and form women groups that will help demand the space and place in the community setting. It is challenging and difficult based on the traditions and cultural practices among the pastoralist communities that bar the voice and dim or undermine the strength and efforts of the women (Ajayi, Abiodun & Oluwatusin, 2019). Successful CDPs will be based on efforts from both the male and female genders and each should give room for the other gender to flourish.

A study by Razafindratsima and Dunham (2015) on increasing the participation of women in community-based conservation suggested that equal contribution of both men and women has a responsibility of ensuring that there is an enhanced longstanding attainment of both conservation and development goals. The focus of social factors is to improve people level of participation and lifestyle. At the same time, family status determines the extent and mode of participation, and people who have good occupations are likely to get involved in projects for the community. Social factors contribute to enhancement of CDPs and their impact on promotion of living standards among the citizens. The family's status in society also has a high impact on how it participates in development projects. Women with high incomes tend to be more active in participatory group projects than those who lack stable incomes. The study focuses on women's engagement in community-based conservation initiatives, indicating the need to investigate other forms of community projects in the future, such as water projects.

The participation of women in community projects helps make project plans and their implementation successful, positively impacting their social welfare. Koros (2017) researched the determining factors for the women participation in the agri-business sector within Sotik Sub-County in Bomet County in Kenya. Their participation in the expansion of agricultural initiatives was substantially influenced by culture, education, funding, technology, and government legislation, according to the study findings. The CDPs are motivated by the community desire to improve their lives by utilizing locally available resources to suit their needs. Community development is about pooling the community's resources in a structured manner with or without

direct funding from state agencies and NGOs to enhance the community members' living conditions. The focus was on projects in the agri-business sector in Sotik Sub-County in Bomet County and it is imperative to contemplate the participation of women in other types of CDPs such as water projects in other counties to get variability in the women and social and cultural factors.

The social and cultural features of a local community are of great importance and need to be considered in practicing them in a community. A study by Majedi, Andalib, and Mosharzadeh (2015) on identifying effective factors of women's contribution to urban development projects suggested that community development leads to the cycle of building democracy and human growth, fostering popular culture and education, expressing the ideals and attitudes required to transform and improve conditions both locally and nationally, and making community members the protagonists of their lives. It also injects positive changes into the societal social and physical structure. For a successful community development process, all group members are anticipated to be actively involved. Participation plays a significant role in community development. It provides all members with an opportunity to have a say in the development that affects them and helps identify the people's need to provide the service, with information about what is required. Community development promotes opportunities for individuals to learn and develop their expertise and experience. It requires respect for and fair treatment of all stakeholders, irrespective of their gender. Notably, women are one of those players in community development initiatives, and their presence plays a significant part in ensuring the project's progress is achieved. The study considered the contribution of women to urban development projects and as such there was the need to investigate the contribution and participation in rural-based CDPs.

2.7 Theoretical Framework

The theoretical review helps readers understand a phenomenon that helps a researcher fully understand the main points of specific events. Various factors affect contribution of women in CDPs, including education attainment levels, resources, culture, and family responsibilities (Brenya, Mensah & Nyarko, 2018). Participation in CDPs can provide numerous benefits to both women and the larger community. This includes raising their socioeconomic status as breadwinners, increasing project sustainability and durability, and encouraging better project planning and implementation. Their participation in CDPs has a positive impact on individual and

social welfare while also promoting long-term development for the entire community. Different studies have established the positive impact of involving women in CDPs. For instance, Laboso (2015) established that the participation of women positively affected the CDPs growth. Furthermore, Razafindratsima and Dunham (2015) suggested that equal participation of both women and men contributes significantly to the long-term success of conservation and development objectives.

There are various theories related to the participation of women in CDPs. However, the research was hinged on three theories; Theory of Constraints, Community Development Theory, and Stakeholder Theory, as discussed below.

2.7.1 Theory of Constraints

This theory is premised on the fact that at least one factor that may limit a system's ability to achieve its desired results exists. Through this theory of constraints, it is possible to determine the key factors that slow down the system and processes to improve project development (Puche, Ponte, Costas, Pino & De la Fuente, 2016). For any structure or process to make progress toward its goals, the constraint under consideration must be identified, and the entire system must be managed in accordance with this defined constraint, according to the theory. Five key steps form the basis of this theory: identification of the constraint in the system, deciding on how best to exploit these constraints in the system, ensuring that everything else is subordinated to the above decision, the elevation of the constraints in the system, and giving a chance for inertia to cause constraint in the system (Aguilar-Escobar & Garrido-Vega, 2016). These five steps are critical success factors.

Therefore, to improve the development goal and success of projects, it is the job of the management team to identify the major variables that function as restraints and the possibilities that make it simpler to eliminate the constraints (Panizzolo, 2016). Project managers, therefore, have the responsibility of ensuring that the constraints in the projects are identified and managed throughout the phases of the project life cycle. This plays a vital role in reducing complexity and uncertainty, minimizing possible delays, and augmenting the quality of the end products from the project, which are key indicators of project performance. According to Gundogar, Sari, and Kokcam

(2016), the successful development of project activities is informed by how well the constraints are identified and managed by the project management teams. Successful constraint identification and removal from the system creates free space and resources that can be used to enhance the project's processes performance further. This theory applies to the study because it shows how project constraints can hinder its development.

2.7.2 Human Capital Theory

This theory states that individuals have inherent capabilities, behaviors, and personal resources, and the manpower resource they offer is made up of these elements. The theory states that people's intelligence, abilities, and skills produce value (Holden & Biddle, 2017). As a result, the process of attracting, maintaining, and training workforce must be the center of attention. Individuals make, maintain, and use the information and construct intellectual capital. The person's knowledge and skill is then reinforced by experiences, such as the social capital between them, and produces valuable organizational knowledge. Armstrong (2010) posit that human capital theory views people as assets and that companies invest in individuals to boost employee efficiency, which positively impacts the organization.

This human capital theory suggests that education determines labor productivity and earnings (McClanahan, 2017). In the recent past, the connection between education and work has dominated economics, policy, and organizational understanding. The theory believes that intellectual formation is equivalent to a model of economic capital, that higher education becomes job readiness, and that education ultimately determines graduation results. The human capital theory is, nevertheless, limited by the test of realism. This indicates that a single theoretical lens, closed system modeling, and multivariate analysis of independent variables are employed (Hsu & Chen, 2019). A single linear pathway for the composite advancement between diverse education and work is based on this principle. Therefore, it cannot clarify how education increases efficiency or why salaries or ranking characteristics become more distinct.

However, John Stuart Mills rejected the human capital theory. He argued that citizens of a nation could not be regarded as the wealth of a country "because wealth existed only for the benefit of citizens," and expenditure on science, training and other improvements was deliberated as a large

family or government spending (Armstrong, 2010). There was no incorporation of this expenditure into the cost of production. According to Schultz, however, it was the critical mistake of economists that followed this spending with misinterpretation and only human capacity (human labor which gives output). The theory is pertinent since it demonstrates how women's intelligence, abilities, and skills contribute to CDPs.

2.7.3 Stakeholder Theory

Freeman (1994) developed the stakeholder theory, and Jones (1995) advanced it. The concept was more concerned with the connection between the ripple effect and the company's stakeholders. The model mainly develops morals and values in managing the project process by discovering the core people within the firm's operations. The thoughts were established in the Lockheed Company's planning department by Ansoff and Steward. Jones and Wicks (1999) had a diversified method of the model, where the concept was divided into normative stakeholder theory and unique partner hypothesis. Under the normative stakeholders' theory, Jones and Wicks (1999) share that the model essentially describes how the manager and the shareholders make rules and strategies on the organization's morals. The second argument, the unique partner hypothesis, focused on how partners and management act on their roles and responsibilities. It mainly emphasized how supervisors should manage their partners.

The stakeholder concept explains the impact of considering partners in administration (Miles, 2017). It is done by investigating what the partners have achieved and its impact on overall organizational goals. Its primary concern is how the administrators present themselves while performing a duty. According to Freeman, shareholders are vital for the survival of an organization. It is critical to map these groups and establish a complete list to classify the interest of stakeholders. The list entails stakeholders, employees, shareholders, suppliers, and the local community. The shareholder theorist equally provided this. However, this theory was also disapproved because it fails to give direction and improve governance in terms of accountability, but it focuses on incorporating shareholders in their events.

The second model of the instrumental stakeholder model describes the effect of having partners in the management sector. This is achieved by investigating the partners' achievement and their

activities to realize the set objectives of the firm. This model applies to the study because it exposes the contribution of different stakeholders. In this case, women are the key stakeholders because they are involved in CDPs.

2.8 Conceptual Framework

The conceptual framework permits a graphical or diagrammatic representation of the interplay between study factors (Green, 2014). The independent variables are educational, economic, infrastructural, and social factors. The dependent variable is the participation of women in CDPs.

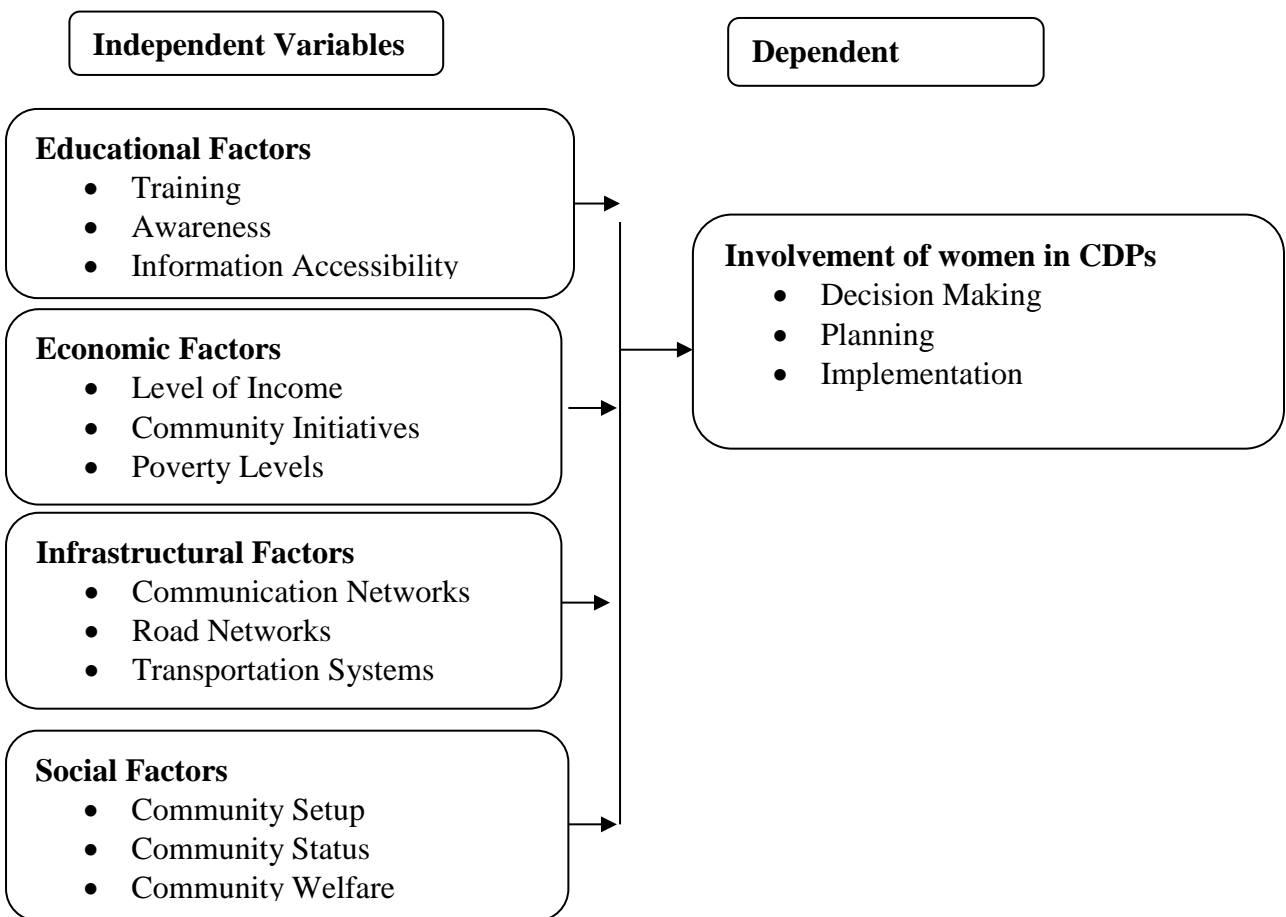


Figure 1: Conceptual Framework

The hypothesis of the investigation was that independent variables had an impact on dependent variable. The conceptual framework depicts the aspects believed to effect women's participation in CDPs. These factors; Educational- (Training, Awareness, and Information accessibility); Economic- (level of income, community initiative, and poverty levels); Infrastructural- (Communication networks, road networks, and transport systems) and Social- (Community setup, community status, and community welfare) were presumed to influence the contribution of women in CDPs in terms of decision making, planning, and implementation.

2.9 Literature Review Summary and Research Gaps

Kisiangani (2016) investigated the factors that impact women's participation and project implementation while looking at gender mainstreaming projects in Nairobi County and a few selected government ministries. Despite the existence of gender equality laws, regulations, and policies, the study found that their functionality in gender mainstreaming was still poor. Laboso (2015) examined the issues that impact the contribution of women in CDPS in Bureti Sub-County and Kericho County. According to the study, women's engagement positively affected the progress of projects. Collins (2017) investigated the inclusion and value of rural women in the creation of CDPs using a case study of Nepal. Findings unveiled that women participated in numerous community projects and efforts aimed at enhancing their living conditions. Nwaogwugwu, Obiaocha, and Oghenekevwe (2018) explored the socioeconomic determinants that influence Nigerian women's participation in CDPs in Delta State. It was noted that their contribution was significantly correlated with their level of education, occupation, and income. In Nsukka, Enugu State, Nigeria, researchers, Agboeze, Nwachukwu, Ugwueze, and Agboeze (2020) did a cross-sectional study on the well-being of widows and their ability to engage in CDPs. The study was carried out on windows and non-windows from six communities in the state and made use of a descriptive research design. The findings indicated that the health status of widows in the region is worse than non-widows, hence limiting their chance to take part in CDPs within their communities to a large extent. Adediran (2015) investigated community education programs and their impact on the participation of rural women in self-help CDPs within Osun State. The findings found that women were significantly compelled by a need to mingle and associate with other women, to seek government assistance and community comfort, and stimulate the local economy. Ndambiri (2017) conducted research on the determinants of women's engagement within

Mombasa County CDPs and it was evident that women take similar tasks, such as cleaning and serving in development initiatives. Ndambiri (2017) explored the determinants of women's engagement in Mombasa County CDPs. Women take similar tasks, such as cleaning and serving in development initiatives, according to the findings.

Oyegbami, Fabusoro, Awotunde, and Apantaku (2016) investigated rural women's level of participation in CDPs by looking at Iddo's local governance area within Oyo state in Nigeria. The findings revealed different participation of women levels within the project, but their participation was generally low. Razafindratsima and Dunham (2015) examined how to increase participation of women in community-based conservation. According to the report, men and women must participate equally to fulfill conservation and development goals. The authors note that cultural practices and gender roles make the participation of women challenging. For instance, while women are usually not formally excluded, cultural expectations often hinder them from speaking up in mixed-gender meetings. Moreover, women are under-represented in community meetings because they are often busy with household chores and childcare. Koros (2017) researched the determining factors for women participation in the agri-business sector within Sotik, Bomet County in Kenya. The findings established that education, funding, culture, technology, and government policies significantly impacted women's participation in agribusiness projects. Majedi, Andalib, and Mosharzadeh (2015) studied women's participation in urban development. The results showed that local social and cultural elements are important and must be considered when practicing them.

Overall, many studies on the participation of women in CDPs have failed to fully identify how these forces interact and how this interaction affects women participation in CDPs. Research still needs to be done on how socio-economic factors that impact participation of women in CDPs since these factors keep changing.

Although various studies have investigated features prompting the participation of women in CDPs in marginalized areas, knowledge gaps still exist gaps in terms of context, concept, and methodology. The table below provides a summary of some of the knowledge gaps resulting from such studies and how this study aimed to fill them.

Table 2.1: Knowledge Gaps and Recommendations

Author	Main point	Conclusions	Knowledge Gaps	Filling the Gaps
Razafindratsima and Dunham (2015)	Enhancing women's involvement in community-based conservation.	The study observed that the long-term success of both conservation and development goals is enhanced when both gender are involved equally.	The study created a conceptual gap by looking at enhancing the contribution of women in community-based conservation.	The emphasis was on women's participation in community water development project in marginalized regions.
Koros (2017)	Factors influencing women's participation in agricultural growth in Kenya Sotik Sub-County, Bomet County.	The study established that culture, education, funding, technology, and government policies significantly affected involvement of women in agribusiness initiative projects.	The study was undertaken in Sotik Subcounty, Bomet creating a contextual gap.	The study focused on Kenya's marginalized regions using a case of Laikipia North Sub-County
Nwaogwugwu, Obiaocha and Oghenekevwe (2018)	Socioeconomic factors influencing participation of women in CDPs in Uvwie Local Government Area (LCA), Delta State, Nigeria	The findings indicated that educational, occupation, and income levels significantly relate to the involvement of women in the activities of CDPs.	It was done in the Uvwie LCA of Delta State, Nigeria, hence creating a contextual gap.	The study was on factors influencing women's engagement in CDPs in Kenya's marginalized regions: A case of Laikipia North Sub-County.
Agboeze, Nwachukwu, Ugwueze and Agboeze (2020)	The association between wellness of widows and their	Findings unveiled poor health status among widows in Nsukka	The study looked at the wellness of widows as a correlate of their involvement in	The study looked at factors influencing women's

	engagement in CDPs in Nsukka, Enugu State, Nigeria	relative to non-widows in the same area.	CWDPs, hence creating a conceptual gap.	involvement in CDPs in Kenya's marginalized regions.
Munyambu (2019)	Study of Pastoralists in Kajiado Central Constituency to establish determinants of women's participation in CDPs	From the findings, there was no recognition of women in Matapato either in community leadership or an elected political office, which limited their participation in CDPs	The research focused on pastoralists in the Kajiado Central Constituency, generating a conceptual gap.	The study looked at the participation of women from marginalized areas in CWDPs using a case of Laikipia North Sub-County.
Adediran (2015)	Community education programs affect rural women's involvement in Osun Self-help CDPs.	The study indicated that women were encouraged to mingle, seek government aid, seek community comfort, and improve the local economy.	The study examined how community education programs affect rural women's engagement in Self-help CDPs, indicating a conceptual gap.	The study looked at the influence of educational, economic, social, and infrastructural factors on women's participation CWDPs
Ndambiri (2017)	Contributing factors of women involvement in Mombasa County community development	According to the study, women adopt similar roles, such as cleaning and serving in CDPs.	The study was done in Mombasa County hence creating a contextual gap.	The study was conducted in Laikipia North Sub-County.
Kisiangani (2016)	The elements that influence women's engagement in project implementation, utilizing the gender mainstreaming	According to the study, despite the existence of gender equality laws and policies, their gender mainstreaming	The study employed the case of a gender mainstreaming effort in particular Kenyan government ministries in Nairobi County,	The study aimed to establish the factors influencing women's participation in CWDPs in Kenya's

	project as a case study in selected government ministries in Nairobi County, Kenya.	functionality remained low.	hence producing a contextual gap.	marginalized regions using a case study of Laikipia North Sub-County.
Laboso (2015)	The elements that influence women's engagement in CDPs in Kericho County's Bureti sub-county.	Factors impacting the participation of women in CDPs in marginalized areas of Kenya: case study of the Laikipia North Sub-County.	It was done in Bureti Sub-County; Kericho County hence creating a contextual gap.	The study focused on Kenya's marginalized regions using a case of Laikipia North Sub-County.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter comprises the methodology that the researcher employed to collect data that answers the research question. The chapter is arranged in sections covering the research design, target population, sampling techniques, and sample size. In addition, it contains the data collection instrument and the method of analysis that the researcher used. The chapter ends with the ethical considerations that apply in the study.

3.2 Research Design

A thorough plan that the researcher follows during data collecting and analysis to produce reasonable and understandable findings (Schoonenboom & Johnson, 2017). The researcher utilized a descriptive survey research strategy to achieve the study's primary aims. The objective of a descriptive survey research design is to provide an accurate picture of the situation (Solheim, Plathe & Eide, 2017). It also enables for the testing and collection of additional data, making it suitable for acquiring data on the study's decisive goals and concerns.

3.3 Target Population

Defined as the elements with similar visible properties that are of study interest (Meerwijk & Sevelius, 2017) and include the broad population of interest to the researcher, from whom the sample study respondents were recruited (Tang, Hallouch, Chernyak, Kamaya & Sirlin, 2018). The chosen population in the current study comprised all the women in Laikipia North Sub-county, either as wives or heads. The County's 2020 statistical report on households indicates that there were 7,752 households. The study selected one woman per household, making up 7,752 women who were targeted for the study. Equally, this study relied on 30 community-based water projects in Laikipia North Sub-county, and 470 project members. Therefore, the total target population was 8,252 as distributed below.

Table 3.1: Target Population

Category	Population
Households (Women only)	7,752
Project Management Committees	30
Project Members	470
Total	8,252

From Table 3.1, there are 7,752 households, 30 project management committee members, and 470 project managers giving a total of 8,252 which was the target population for this study.

3.4 Sample and Sampling Techniques

The sample size of a study is a tiny subset of the overall population of interest to the researcher. It is chosen for use in the study and as a representative sample of the entire population (Martnez-Mesa et al., 2016). Sampling techniques are the procedures used to choose a study sample.

3.4.1 Sample Size

This study used Kothari's (2004) sample size formula.

$$n = \frac{Z^2 \cdot N \cdot \sigma^2}{(N - 1)e^2 + Z^2 \cdot \sigma^2}$$

Where; n = Sample size,

N = The estimated population given as 8552 people.

e = Acceptable error (0.05)

σ = The standard deviation of the population, given as 0.5 when unknown.

Z = Standard deviation stated as 1.96 at a confidence level of 95 percent

$$n = \frac{1.96^2 * 8252 * 0.5^2}{(8252-1)0.05^2 + 1.96^2 * 0.5^2}$$

$$\frac{7925.2208}{21.5879}$$

n=367 respondents

Respondents from Laikipia North Sub-County families were obtained using random sampling, whereas project participants and management committee members were recruited through a population census.

3.5 Data Collection Instrument

For this study, questionnaires served as the primary data collection instrument. The questionnaire consisted of closed-ended questions using a 5-point Likert scale to obtain typical replies. For data collection, the researcher visited the respondent's place of employment and requested that they complete the questionnaire before collecting it for analysis. The researcher additionally employed two research assistants to ensure a higher response rate and the collection of reliable data. The questionnaire as a tool also aids in preventing debates that deter respondents from providing their honest ideas.

3.6 Data Collection Procedures

The study collected data using self-administered questionnaires. The respondents were given the questionnaires. The researcher obtained permission from the University of Nairobi and the NACOSTI. The researcher and research assistants distributed questionnaires to respondents and awaited their completion before retrieving them and initiating the study analysis.

3.7 Pilot Testing

The researcher conducted a pilot test to check for any weaknesses in the instrument and make adjustments before the final, actual data was collected (Villwock, Sobin, Koester & Harris, 2016).

The study chose 15 similar respondents from Kirisia in Samburu County for pilot testing. The study included structured questionnaires designed to obtain specific information. Structured questionnaires were favored due to their great ability to reach remote respondents, hence decreasing the researchers' influence on the respondents. In addition, the respondents were allowed sufficient time to deliver informed comments while tackling the tasks. In addition, the usage of questionnaires was suitable for ensuring anonymity. The researcher and assistants administered the structured questions to respondents in person or via e-mail. Kirisia was chosen because of its resemblance to Laikipia North. The technique was meant to ensure the instrument's content is clear, increase its validity and reliability, and give the researcher a real field experience in the research administration processes. The pilot testing outcome enabled the researcher to identify issues and inconsistencies with the instrument and correct them before the instrument was ready for the final data collection.

3.7.1 Validity Test of the Research Instrument

Defined as the extent to which the instrument assesses the intended content (Schiefele & Schaffner, 2016). It encourages the reliability and accuracy of data, and this study applied the content validity testing. Almanasreh, Moles, and Chen (2019) define content validity as to how a tool can efficiently measure various aspects of the particular construct in question. To verify content validity, the researcher enlisted the aid of the study supervisor to assist in evaluating the questionnaire's topics and determining if they measure what they are intended to measure.

3.7.2 Reliability Test of the Research Instrument

A research tool is considered reliable if the test results are consistent every time they are applied to the same elements (Plonsky & Derrick, 2016). It is a measurement that aims to produce accurate results from the variables being measured. Pilot testing was used to enhance reliability in this study, and it was done through internal consistency techniques of Cronbach's Alpha. Internal uniformity Reliability is the degree to which multiple surveys or test items designed to measure the same general construct provide equal results. Cronbach Alpha levels ranging from 0 to 1 are considered optimal. A Cronbach Alpha coefficient of 0.7 is deemed acceptable for gathering trustworthy data (Taber, 2018).

3.8 Analysis of Data

After gathering all of the data, the researcher verified its accuracy and consistency before entering it into SPSS for further analysis. Through descriptive analysis, frequencies, means, and standard deviation were calculated. The outcomes of the analysis were then presented in tables and figures, and the discussions were written in prose, as described in the fourth chapter below.

The association between dependent and independent variables was established using descriptive and inferential statistics. Pearson Moment of Correlation shows how dependent and independent variables are related. Multiple linear regression found the relationship between dependent and independent components and the dependent variable's predictability by the independent factors.

The Multiple Regression Model was formatted as shown below;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where Y= the participation of women in CDPs

β_0 = Constant

β_1 , β_2 , and β_3 are Coefficients

ε = error term

X_1 = Social Factors

X_2 = Economic Factors

X_3 = Infrastructural Factors

X_4 = Educational Factors

3.9 Ethical Considerations

Research ethics are critical guidelines for conducting responsible research. Ethics, according to Resnick (2015), are perspectives, methods, and procedures for deciding how to act and analyze complex problems. Trust, respect, accountability, and fairness are just a few of the values that ethics can help to promote. The researcher acquired explicit approval from the University of Nairobi to conduct this investigation. The researcher also obtained approval for the study from the

NACOSTI. Also sought was the consent of the project management bodies. Due to the voluntary nature of this study, Consent was also asked from survey respondents, who were informed of the study's purpose. The information will be kept private and used solely for academic purposes, protecting respondent confidentiality and dignity. The researcher neither utilized nor published the respondents' names, and the unencrypted, computer-encoded raw data was deleted.

3.10 Variable Operationalization

Table 3.2: Operationalization of Variables

Objectives	Variables	Pointers	Rating Scale	Data Analysis
Educational factors	Independent	<ul style="list-style-type: none"> • Training • Awareness • Information • Accessibility 	Interval Scale	Descriptive statistics Content Analysis Inferential Statistics
Economic factors	Independent	<ul style="list-style-type: none"> • Level of Income • Community Initiatives • Poverty Levels 	Interval Scale	Descriptive statistics Content Analysis Inferential Statistics
Infrastructural factors	Independent	<ul style="list-style-type: none"> • Communication Networks • Road Networks • Transportation Systems 	Interval Scale	Descriptive statistics Content Analysis Inferential Statistics
Social factors	Independent	<ul style="list-style-type: none"> • Community Setup • Community Status • Community Welfare 	Interval Scale	Descriptive statistics Content Analysis Inferential Statistics

Participation of women in CDPs	Dependent	<ul style="list-style-type: none"> • Decision Making • Implementation • Planning 	Interval Scale	Descriptive statistics Content Analysis Inferential Statistics
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CHAPTER FOUR

ANALYSIS, INTERPRETATION, AND PRESENTATION OF DATA

4.1 Introduction

This chapter covers the study's conclusions as determined by the analysis of primary data. The chapter begins by discussing the questionnaire return rate, the demographic characteristics of respondents, and the analysis and interpretation of the findings from the field data on perceived factors influencing women's participation in CWDP in Kenya's disadvantaged areas. To make it easier for the intended audience to disseminate and comprehend the findings, they were presented in tables and accompanied by any necessary explanations.

4.2 Questionnaire Return Rate

A total of 367 surveys were issued. 327 (89.1 percent) of the 367 respondents targeted replied to the poll. Two research assistants contributed to the 89.1 percent reaction rate. According to Bell (2005), a 60 percent reaction rate is sufficient for data analysis to take place. As per Mugenda & Mugenda (2003), a response rate of fifty percent is satisfactory, sixty percent is good, and seventy percent or more is excellent. The study's return rate was sufficient for analysis.

4.3 Reliability Test

The reliability of all items' opinions was calculated for each of the questionnaire's five sub-scales, as shown in Table 4.1.

Table 4.1: Reliability Statistics

Scale	N of Items	Cronbach's Alpha	Conclusion
Educational Factors	10	.884	Reliable
Economic Factors	11	.838	Reliable
Infrastructural Factors	10	.938	Reliable
Social Factors	13	.956	Reliable
Participation of women	5	.966	Reliable

Findings in Table 4.1 show that the questionnaire items were very appropriate for data collection and thus they measured the constructs that they were supposed to measure.

4.4 Demographic characteristics of the respondents

It was critical to identify the demographic statistics of the respondents in order to achieve the desired responses in the study.

4.4.1 Distribution of the respondents by gender

The study focused primarily on women in Laikipia North Sub-County. However, it was necessary to gather comments from men who work closely with women, particularly in CDPs. Respondents was anticipated to provide knowledgeable responses.

Table 4.2: Gender Distribution

	Frequency	%	% Cumulative
Male	10	3.1	3.1
Female	317	96.9	100.0
Total	327	100.0	

According to Table 4.2, 96.9 percent of respondents were female, while only 3.1 percent were male. The gender disparity among respondents was attributed to the fact that this study was primarily focused on women.

4.4.2 Distribution of the respondents by the level of education

Education level influences an individual's capacity to acquire employment, choose a profession, and make important life decisions. In most circumstances, education increases a person's critical reasoning and problem-solving skills. Education level is the primary factor influencing employee participation in corporate operations. Table 4.3 displays the educational levels of respondents.

Table 4.3: Level of education

	Frequency	Percent	Cumulative Percent
Certificate	150	45.9	45.9
Diploma	100	30.6	76.5
Degree	71	21.7	98.2
Masters	6	1.8	100.0
Total	327	100.0	

Thus according Table 4.3, 45.9% of participants had certificates, 30.6% had diplomas, 21.7% had bachelor's degrees, and 1.8% had master's degrees. This suggests that all participants had a minimum of a high school education and that they were able to provide knowledgeable input. The majority of respondents held a certificate, placing them in a stronger position to engage in CDPs with defined objectives.

4.4.3 Distribution of the respondents by years participated in CDPs

The researcher wanted to know how long the respondents had been involved in CDPs. The results are shown in Table 4.4.

Table 4.4: Years participated in CDPs

	Frequency	Percent	Cumulative Percent
Less than 1 year	70	21.4	21.4
2-3 years	125	38.2	59.6
3-5 years	92	28.1	87.8
Over 5 years	40	12.2	100.0
Total	327	100.0	

According to Table 4.4, the majority of respondents (38.2 percent) have participated in CDPs for a period of 2-3 years, another 28.1 percent have participated in CDPs for a period of 3-5 years,

another 21.4 percent have participated in CDPs for a period less than a year, and only 12.2 percent of the respondents indicated that they have been participating in CDPs for more than 5 years

4.4.4 Distribution of the respondents by position held in the CDPs

The researcher wanted to know what positions the respondents held in CDPs in Laikipia North Sub-County. Table 4.5 summarizes and presents the responses to this question.

Table 4.5: Position held in the CDPs

	Frequency	Percent	Cumulative Percent
Project Manager	4	1.2	1.2
Assistant Manager	9	2.8	4.0
Project Inspection Officer	12	3.7	7.6
Project Member	132	40.4	48.0
Community Members	170	52.0	100.0
Total	327	100.0	

From Table 4.5, it was clear that the majority 52.0% of the participants were community members, and another 40.4% of the respondents were project members. The 3.7% of the respondents were Project Inspection officers, 2.8% were assistant managers while 1.2% of the respondents were project managers.

4.5 Participation of women

Using a scale of (1-5, where: 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree) respondents were asked to rate the extent to which they supported various constructs relating to the involvement of women in CDPs as shown in Table 4.6.

Table 4.6: Descriptive statistics for the participation of Women

	SD	D	N	A	SA	MEAN	SD
More women have gotten involved in CDPs in the last five years	4.9%	0.9%	1.5%	33.3%	59.3%	4.41	0.96
More women have taken up roles in project implementation in the county	3.7%	1.8%	2.8%	52.0%	39.8%	4.22	0.88
More women have taken up roles in project design in the county	2.8%	2.8%	4.0%	52.0%	38.5%	4.21	0.86
More women have taken up roles in project monitoring in the county	3.1%	3.4%	5.2%	52.3%	36.1%	4.15	0.9
More women have taken up roles in project planning in the county	4.3%	5.5%	6.4%	17.7%	66.1%	4.36	1.1

N=327

KEY: SD=Strongly Disagree, D=Disagree, N=Neutral, A=Agree, SA=Strongly Agree

Table 4.6 demonstrates that the majority of respondents supported the notion that women participate in CDPs. For instance, a mean score of 4.4128 shows that a greater proportion of respondents believed that more women had participated in CDPs during the past five years. This is also reflected by the mean score of 4.2232, which indicates that the majority of respondents believed that more women have assumed responsibilities in the county's project implementation. In a similar vein, most respondents (mean 4.2080) agreed that more women hold project design positions in the county. Furthermore, the majority of respondents agreed that more women have taken on roles in project monitoring in the county, as evidenced by a mean of 4.1498, and the majority of respondents (4.3578) agreed that more women hold project planning positions in the county.

4.6 The relevance of educational characteristics on women's engagement in CDPs

The researcher wanted to determine the effect of educational characteristics on women's participation in CDPs. To achieve this a scale of (1-5, where: 1= strongly disagree, 2= disagree, 3= neutral, 4= agree and 5= strongly agree) was used and respondents were asked to judge the

extent to which they endorsed various concepts connected to educational factors and how it affects women's participation in CDPs. The outcomes are presented in Table 4.7.

Table 4.7: Descriptive statistics for Educational Factors

Statements	SD	D	N	A	SA	MEAN	SD
The level of formal education attained by women in this area influences their taking roles in development projects within the community	8.0%	6.4%	7.6%	13.8%	64.2%	4.2	1.29
The ability of women to read and interpret project plans affects their involvement in community projects	3.7%	9.2%	3.1%	22.9%	61.2%	4.29	1.12
The ability of women to understand how projects work influence their participation levels	3.7%	9.2%	3.1%	22.9%	61.2%	4.29	1.12
The ability of women to understand how projects influence the actions they take to ensure successful community project implementation	1.8%	4.3%	4.9%	24.5%	64.5%	4.46	0.91
Educated women have more tendencies towards active engagement in community projects	9.2%	4.6%	4.0%	18.3%	63.9%	4.23	1.28
Short courses training undertaken by women in the county improves their participation in CDPs	1.5%	3.1%	8.3%	24.5%	62.7%	4.44	0.88
A continuous learning approach among women has improved interest in community work	4.9%	3.4%	2.4%	28.1%	61.2%	4.37	1.04

The skills acquired by women in formal education play a critical role in their execution of tasks in CDPs	2.4%	3.7%	0.6%	33.6%	59.6%	4.44	0.88
Majority of the women taking part in CDPs have studied beyond form four	0.3%	1.5%	0.3%	18.3%	79.5%	4.75	0.57
The education level for women has no impact on their involvement in CDPs in this county.	21.4%	60.9%	5.2%	7.0%	5.5%	2.14	1.01

N=327

KEY: SD=Strongly Disagree, D=Disagree, N=Neutral, A=Agree, SA=Strongly Agree

According to Table 4.7, the majority of participants agreed that educational variables influence the involvement of women in CDPs. For instance, an average score of 4.1988 shows that a greater proportion of target population believed that the amount of formal education acquired by women in their region influenced their participation in CDPs. In addition, an average score of 4.2875 indicates most of participants agreed that women's capacity to comprehend and interpret project plans impacts their participation in CDPs. In addition, most of respondents felt that educated women are more likely to partake actively in CDPs, as indicated by the average score of 4.2423. This is further in tandem with the fact that the majority of respondents disagree with the assertion that women education level has no relevance on their participation in CDPs in their county. These findings are congruent with those of Hassan, Ong'ayo, and Osore (2019), who determined that educated women actively participate in project design, the initial decision-making process, and the implementation and monitoring of CDPs. The involvement of women in community initiatives in Mombasa County was also reliant on their level of education, which influenced their comprehension of how the project operates as argued by Ndambiri (2017). In addition, according to Mutongu (2018), the majority of women have a low level of education, which creates an inequity in society because educated individuals tend to dominate all the activities. The discrepancy limits women participation in CDPs by confining them to their reproductive role, which is not always viewed as a tangible economic contribution.

4.6.1 Correlation for educational factors

The Pearson Moment Correlation Coefficient was utilized to tabulate these results. This correlation was calculated using education scores and women's participation. Table 4.8 shows the analysis.

Table 4.8: Correlation between educational factors and the participation of women

		Educational Factors
Participation of women	Pearson Correlation	.709**
	Sig. (2-tailed)	.000
	N	327

As indicated in Table 4.8, there was a strong positive connection ($r=.709$ $n=327$ $p.01$) between the significance of educational features and the participation of women. Nwaogwugwu, Obiaocha, and Oghenekevwe (2018) discovered that women's engagement in CDPs is heavily inclined by their level of education, occupation, and income. The researchers also suggested that governments and NGOs coordinate adult education and skill-enrichment programs to improve their educational attainment and employability in order to boost them in employment opportunities, income, and attitude toward economic development activities in their communities.

4.6.2 Regression Analysis for educational factors

To establish the contribution of educational aspects and the involvement of women, the study used a coefficient of determination (R^2) using regression analysis as depicted in Table 4.9.

Table 4.9: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.709 ^a	.503	.502	.63238

a. Predictors: (Constant), Educational Factors

From Table 4.9 the R-value is at .709 which shows that there exists a strong association of educational aspect on the involvement of women in CDPs in Laikipia North Sub-County. R^2 shows .503 on the variation of the involvement of women caused by educational levels.

The ANOVA was also computed to ascertain the significance of educational aspects in predicting the actual involvement of women in CDPs. The results were summarized as shown in Table 4.10

Table 4.10: ANOVA of educational factors and the participation of women.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	131.653	1	131.653	329.210	.000 ^b
	Residual	129.969	325	.400		
	Total	261.622	326			

a. Dependent Variable: Participation of women

b. Predictors: (Constant), Educational Factors

Table 4.10 shows that educational factors influence the participation of women in CDPs in Laikipia North Sub-County and are thus a significant predictor ($F(1, 326) = 329.210, P.05$).

4.7 Economic factors and their influence on the participation of women in CDPs

A five-point scale was used to collect the opinions of the respondents. As indicators of economic factors, eleven concepts were presented to participants. They answered to the questions using a Likert scale with 5 indicating a high degree of economic factor effect on women's involvement and 1 suggesting a low level of economic factor influence on women's contribution. This data was evaluated further based on the percentage frequencies, mean and standard deviation scores of the respondents and summarized in Table 4.11.

Table 4.11: Descriptive statistics for Economic Factors

	SD	D	N	A	SA	MEAN	SD
The level of women involved in income-generating activities influences their participation in CDPs	6.4%	3.1%	4.0%	22.3%	64.2%	4.35	1.12
Women with regular sources of income stand a higher chance of participating in CDPs	4.6%	12.5%	6.7%	21.1%	55.0%	4.09	1.24
Women engaging in businesses stand a high chance of participating in CDPs	5.8%	9.2%	5.5%	27.5%	52.0%	4.11	1.21
The ability of women to provide basic needs for their families influences their participation in CDPs	24.5%	42.8%	16.8%	7.0%	8.9%	2.33	1.18
Women's access to quality and decent paid work influences their participation in CDPs	30.6%	55.0%	11.9%	1.5%	0.9%	1.87	0.74
Women's access to property and other collateral assets in this sub-county influences their participation in CDPs	3.1%	2.4%	3.1%	48.6%	42.8%	4.26	0.88
The ability of women to provide leadership influences their participation in CDPs	3.7%	3.1%	4.9%	27.5%	60.9%	4.39	0.98
Lack of income among women influences their participation in CDPs	4.0%	6.1%	4.6%	26.3%	59.0%	4.3	1.07
High poverty among women influences their participation in CDPs	4.6%	2.8%	15.3%	37.6%	39.8%	4.05	1.04
Women's participation in CDPs is affected by their restricted access to credit facilities.	5.2%	3.1%	4.6%	30.3%	56.9%	4.31	1.06
Lack of stable incomes among women influences their participation in CDPs	5.8%	1.8%	3.7%	29.4%	59.3%	4.35	1.05

N=327

KEY: SD=Strongly Disagree, D=Disagree, N=Neutral, A=Agree, SA=Strongly Agree

The majority of respondents, as shown in Table 4.11, agree that economic reasons influence the participation of women in CDPs. For instance, an average score of 4.3486 shows that a greater portion of participants agreed with the research question that women involvement in business

activities affects their participation in CDPs. Moreover, an average score of 4.3058 indicates that the majority of respondents felt that women limited access to financial facilities affects their involvement in CDPs.

In addition, the majority of respondents (average = 4.3456) agreed that a lack of stable income influences their participation in CDPs. This is corroborated by the fact that, with a mean score of 4.2559, the majority of participants in this sub-county concur that women's access to property and other collateral assets affects their involvement in CDPs. Notably, the majority of respondents, with an average score of 2.3303 and 1.8716 as a standard deviation, disagreed that their ability to provide basic needs for their families influences their participation in CDPs and that women's access to quality and decently paid work influences their participation in CDPs.

Muhia (2020) reached the same conclusions in his research, namely that in order for women's voices to continue growing and being heard, It is necessary to sensitize them in income-generating activities that would empower and support them, and to provide them with an equitable opportunity to participate in CDPs in pastoralist community regions. He also suggested that training and empowering women through workshops and apprenticeships is required for them to participate in economic activities and that they should be trained and empowered through workshops and apprenticeships that will increase their skills, capacities, and competencies. Furthermore, Lugendo (2019) concluded that financially stable women are more involved in CDPs and contribute their strength and financial support to the CDPs' success.

4.7.1 Correlation for economic factors

To calculate the scores for economic factors as an independent variable and the involvement of women as a dependent variable, the Pearson Moment Correlation Coefficient was used. There was a moderately positive relationship between economic factors and their participation in CDPs. This relationship is depicted in Table 4.12.

Table 4.12: Correlation between economic factors and the participation of women

		Economic Factors
Participation of women	Pearson Correlation	.514**
	Sig. (2-tailed)	.000
	N	327

As demonstrated in Table 4.12, there was a moderately favorable relationship ($r=.514$ $n=327$ $p.01$) between the influence of economic conditions and the participation of women. Munyambu (2019) found that the educational level, socioeconomic status, cultural and traditional characteristics, and structural aspects of the CDPs all have a significant impact in determining women's engagement in projects and the extent of their participation. In their research on the socioeconomic factors that influence women's participation in CDPS in the Uvwie region of Delta State, Nigeria, Nwaogwugwu, Obiaocha, and Oghenekevwe (2018) found that educational level, occupation, and income level all have a significant relationship with women's participation in CDPs.

4.7.2 Regression Analysis for economic factors

To establish the level of influence of economic factors and the participation of women the study used a coefficient of determination (R^2) using regression analysis as presented in Table 4.13.

Table 4.13: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.514 ^a	.264	.262	.76956

a. Predictors: (Constant), Economic Factors

From Table 4.13 the R value is at .514 which shows that there exists a moderate influence of economic factors on the participation of women in CDPs in Laikipia North Sub-County. R^2 shows .264 on the variation of the participation of women caused by economic factors.

An analysis of variance (ANOVA) was also done to ascertain whether economic factors were a significant predictor of the participation of women in CDPs. The findings are summarized as shown in Table 4.14.

Table 4.14: ANOVA of economic factors and the participation of women

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	69.148	1	69.148	116.760	.000 ^b
	Residual	192.474	325	.592		
	Total	261.622	326			

a. Dependent Variable: Participation of women

b. Predictors: (Constant), Economic Factors

Table 4.14 shows that economic factors influence the participation of women in CDPs in Laikipia North Sub-County and are thus a significant predictor ($F(1, 326) = 116.76, P.05$).

4.8 Infrastructure issues and their impact on the participation of women in CDPs

This study aimed to determine whether infrastructure effects women involvement in CDPs. The respondent views were gathered using a five-point rating scale. The respondents were given with ten indicators of infrastructure factors. They answered to the propositions on a Likert scale ranging from (5) strongly agree to (1) strongly disagree, with 5 representing a high level of influence of infrastructural variables on women participation and 1 indicating a low level of influence. Table 4.15 provides a summary of the data analysis.

Table 4.15: Descriptive statistics for Infrastructural Factors

	SD	D	N	A	SA	MEAN	SD
Availability of learning schools for their children influence their participation	4.6%	1.8%	5.8%	30.9%	56.9%	4.34	1
The distance to the nearest school affects the involvement of women in CDPs	2.4%	5.8%	5.2%	41.3%	45.3%	4.21	0.96
The quality of the road network in the area is a element in the involvement of women	34.6%	55.0%	2.1%	5.2%	3.1%	1.87	0.91
The distance to the nearest health facility influences the role of women	42.5%	47.7%	1.5%	5.8%	2.4%	1.78	0.92
The quality of healthcare offered in the nearest health center influences the involvement of women in CDPs	53.2%	42.2%	0.0%	4.6%	0.0%	1.56	0.72
The convenience of various means of transport available in this area impacts on the engagement of the women	5.8%	0.6%	0.0%	35.5%	58.1%	4.39	0.99
The availability of water resources for their families influences the involvement of women in the CDPs	5.2%	1.5%	4.6%	33.6%	55.0%	4.32	1.01
The distance to the nearest water source influences the role of women in CDPs in this county	3.1%	2.1%	5.5%	40.4%	48.9%	4.3	0.9
The equipping of learning centers in the county influences the participation of women in CDPs in this county	38.5%	42.8%	6.4%	10.7%	1.5%	1.94	1.01
The hospitality of the local community influences the participation of women in CDPs in this county	59.3%	39.8%	0.9%	0.0%	0.0%	1.42	0.51

N=327

KEY: SD=Strongly Disagree, D=Disagree, N=Neutral, A=Agree, SA=Strongly Agree

Table 4.15 demonstrates that the majority of respondents agreed that infrastructure factors impact women's participation in CDPs. For instance, average score of 4.33364 shows that a greater proportion of participants believed that the availability of learning schools for their children affects their engagement. This is also demonstrated by an average score of 4.3945, signifying that the

majority of participants believed that the accessibility of various modes of transportation in their area has an effect on women's engagement.

In addition, as evidenced by a mean score of 4.2997, the majority of respondents believed that the distance to the nearest water source affected women's participation in CDPs in their county. It is important to note, however, that a significant proportion of respondents disagreed that the friendliness of the local community influences women's participation in CDPs in this county and that the quality of healthcare offered at the nearest health center influences women's participation in CDPs, with mean scores of 1.4159 and 1.5596, respectively. According to (NGEC, 2015) the minority and marginalized communities had low education levels, poor infrastructure, persistent conflicts, lack of social amenities, and high unemployment rates and insecurity, and women are the most affected due to lack of social amenities and basic items. Mbogori (2014) asserts that poor infrastructure results in women spending a lot of time handling domestic chores that there is little time left to engage in remunerative activities. This includes collecting water, traveling to markets, grinding mills, and health centers.

4.8.1 Correlation for infrastructural factors

Using the Pearson Moment Correlation Coefficient, the scores for infrastructural characteristics as an independent variable and the participation of women as a dependent variable were calculated. It was obvious that infrastructure considerations had a considerable negative correlation with women's engagement in CDPs. This is illustrated in Table 4.16.

Table 4.16: Correlation between infrastructural factors and the participation of women

		Infrastructural Factors
Participation of women	Pearson Correlation	-.809**
	Sig. (2-tailed)	.000
	N	327

Table 4.16 shows that there was a strong positive association ($r = -.809$ $n = 327$ $p < .01$) between the influence of infrastructure factors and the participation of women. Birgen (2018) discovered a strong link between the participation of women and the performance of county infrastructure

projects. However, women's participation is contingent on access to women's groups, meetings, and actual access to the ongoing project, highlighting the importance of quality infrastructural systems.

4.8.2 Regression Analysis for infrastructural factors

To establish the level of influence of infrastructural factors and the participation of women the study used a coefficient of determination (R^2) using regression analysis as shown in Table 4.17.

Table 4.17: Model Summary

Model	R	R²	Adjusted R²	Standard Error of the Estimate
1	.809 ^a	.655	.654	.52701

a. Predictors: (Constant), Infrastructural Factors

From Table 4.17 the R value is at .809 which shows that there exists a strong influence of infrastructural factors on the participation of women in CDPs in Laikipia North Sub-County. R^2 shows .655 on the variation of the participation of women caused by infrastructural factors.

An analysis of variance (ANOVA) was also done to ascertain whether infrastructural factors were a significant predictor of the participation of women in CDPs. The results were summarized as shown in Table 4.18.

Table 4.18: ANOVA of infrastructural factors and the participation of women

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	171.356	1	171.356	616.955	.000 ^b
	Residual	90.267	325	.278		
	Total	261.622	326			

a. Dependent Variable: Participation of women

b. Predictors: (Constant), Infrastructural Factors

Table 4.18 shows that infrastructure factors influence the participation of women in CDPs in Laikipia North Sub-County and are thus a significant predictor ($F(1, 326) = 661.955, P.05$).

4.9 The impact of social factors on the participation of women in CDPs

The researcher sought to establish the influence of social factors on the participation of women in CDPs. To achieve this a Likert scale as discussed above was used and respondents were requested to rate how they supported various constructs relating to social factors and how it influences the participation of women in CDPs. The results were as shown in Table 4.19.

Table 4.19: Descriptive statistics for Social Factors

	SD	D	N	A	SA	MEAN	SD
Female roles of cooking for their families influence their participation in CDPs	47.4%	48.9%	1.5%	0.3%	1.8%	1.6	0.71
Community expectations on the role of women in society influences their participation in CDPs	0.0%	2.1%	0.6%	39.8%	57.5%	4.53	0.63
The perception of the marital status of women in the county influences their participation in CDPs	4.3%	1.2%	1.8%	33.9%	58.7%	4.42	0.93
Traditional culture on the place of women in society influences their participation in CDPs	3.7%	3.1%	1.8%	24.2%	67.3%	4.48	0.96
Gendered ideology on women influence their involvement in CDPs	4.0%	3.1%	1.2%	26.0%	65.7%	4.46	0.97
Gender suppression among the local communities influence the contribution of women in CDPs	0.6%	1.8%	4.0%	27.5%	66.1%	4.57	0.71
The marital status of women influences their participation in CDPs	3.4%	1.5%	2.8%	25.7%	66.7%	4.51	0.9
Cultural practices of these area limit the involvement of women in CDPs	4.0%	2.4%	3.4%	23.9%	66.4%	4.46	0.97
Religious beliefs of the community in this county limit the contribution of women in CDPs	4.9%	5.5%	4.3%	18.3%	67.0%	4.37	1.11
Separation of roles between genders limited the involvement of women in CDPs	3.1%	1.5%	0.3%	27.5%	67.6%	4.55	0.85

Early marriages among women affect their involvement in CDPs	1.5%	2.1%	2.8%	26.3%	67.3%	4.56	0.78
Child-rearing responsibilities limit the participation of women in CDPs	1.2%	2.8%	0.9%	28.4%	66.7%	4.57	0.76
Limited movement among women influence their participation in CDPs	3.1%	1.2%	1.8%	35.8%	58.1%	4.45	0.85

N=327

KEY: SD=Strongly Disagree, D=Disagree, N=Neutral, A=Agree, SA=Strongly Agree

Table 4.19 demonstrates that the majority of respondents agreed with the assertion that women's participation in CDPs is influenced by societal factors. For instance, an average rating of 4.4465 showed that a bigger portion of participants believed that women limited mobility affects their participation in CDPs. This is supported by an average rating of 4.5657, which indicates that the most of respondents believe that childrearing responsibilities limit women involvement in CDPs. In addition, an average score of 4.5566 suggests that the majority of respondents agree that early marriages among women have an impact on their participation in CDPs. Moreover, the majority of respondents considered that the separation of gender roles impeded women's participation in CDPs, as indicated by the mean rating of 4.5505. It is crucial to note, however, that the majority of respondents did not believe that female roles in cooking for their families influenced their participation in CDPs, as indicated by a rating mean of 1.6024. Ajayi, Abiodun, and Oluwatusin (2019) came to similar conclusions, stating that it is challenging and difficult for women to fight for their rights and space in the community due to the traditions and cultural practices among pastoralist communities that silence the women's voice and diminish or undermine their strength and efforts. In their research on improving women's involvement in CDPs in Madagascar, Razafindratsima and Dunham (2015) highlighted that cultural practices and gender norms made it difficult for women to participate. While women are typically not formally prohibited from mixed-gender meetings, societal norms sometimes prevent them from participating. In addition, women are underrepresented at community meetings because they are frequently occupied with domestic chores.

4.9.1 Correlation for social factors

Pearson Moment Correlation Coefficient was used to calculate the scores for social factors as an independent variable and the participation of women as a dependent variable. There was clearly a strong positive relationship between social conditions and women engagement in CDPs as depicted in Table 4.20.

Table 4.20: Correlation between social factors and the participation of women

		Social Factors
Participation of women	Pearson Correlation	.950**
	Sig. (2-tailed)	.000
	N	327

The results showed that there was a strong positive association ($r=.950$ $n=327$ $p<.01$) between the influence of social factors and the involvement of women as shown in Table 4.20. Razafindratsima and Dunham (2015) concluded that family status determines the extent and mode of involvement in community-based conservation, and women who have good occupations are likely to get involved in community projects. Moreover, the authors concluded that women with high incomes tend to be more active in participatory group projects than those who lack stable incomes. Majedi, Andalib, and Mosharzadeh (2015) in their study on effective factors of women's contribution to urban development projects concluded that women are often treated as unequal stakeholders thus affecting their effective contribution to urban development projects. Furthermore, Lugendo (2019) noted that women over the years have been fighting for their rights and space in the community. Ajayi, Abiodun, and Oluwatusin (2019) note that this fight is still far from over, especially in marginalized communities because of traditions and cultural practices that bar the voice and dim or undermine the strength and efforts of the women.

4.9.2 Regression Analysis for infrastructural factors

To determine the extent to which societal factors impact women engagement, the study used a coefficient of determination (R^2) using regression analysis as shown in Table 4.21.

Table 4.21: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.950 ^a	.903	.903	.27964

a. Predictors: (Constant), Social Factors

From Table 4.21 the R value is at .950 which shows that there exists a strong impact of social factors on the involvement of women in CDPs in Laikipia North Sub-County. R² shows .903 on the variation of the participation of women caused by social factors.

ANOVA analysis was also computed to ascertain whether social aspects were a determinant predictor of the participation of women in CDPs. The results were summarized as shown in Table 4.22

Table 4.22: ANOVA of social factors and the participation of women

. Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	236.207	1	236.207	3020.510	.000 ^b
	Residual	25.415	325	.078		
	Total	261.622	326			

a. Dependent Variable: Participation of women

b. Predictors: (Constant), Social Factors

From Table 4.22 where [F (1, 326) = 3020.510, P<.05] it is evident that social features affect the contribution of women in CDPs in Laikipia North Sub-County and thus a significant predictor.

4.10 The regression model

This study employed a multivariate regression model to determine the significance of the independent variables with regard to the dependent variable which was the involvement of women in CDPs in Laikipia North Sub-County. This is helpful in determining the statistical implication

of the predictor variables used in this study. The study investigated how well the predictor variables predict the participation of women in CDPs. The regression model used was as follows;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where:

Y = Participation of women in CDPs

β_0 = Y intercept

$\beta_1, \beta_2, \beta_3, \beta_4$ = the slope of the regression line for each independent variable

X_1 = Educational factors

X_2 = Economic factors

X_3 = Infrastructural factors

X_4 = Social factors

ε = Error term.

Table 4.23 shows the model summary of the regression model

Table 4.23: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.975 ^a	.951	.950	.19934

a. Predictors: (Constant), Social Factors, Economic Factors, Educational Factors, Infrastructural Factors

Table 4.23 shows that the R-value, which measures predictor and dependent variable correlation, was .975. Social, economic, infrastructure, and educational aspects affect women's CDP participation in Laikipia North Sub-County. In our sample data, the coefficient of determination (R^2) was .951, indicating that independent factors explained 95.1% of the variance in women's CDP involvement. Since R^2 is always between 0 and 100%, with 0 indicating that the model explains none of the response data variability around its mean and 100% suggesting that it explains all of it, 95.1% indicates that the model fits the data well. ANOVA was used to examine if independent variables predicted women's CDP involvement. Table 4.24 provides results.

Table 4.24: Analysis of variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	248.827	4	62.207	1565.497	.000 ^b
	Residual	12.795	322	.040		
	Total	261.622	326			

a. Dependent Variable: Participation of women

b. Predictors: (Constant), Social Factors, Economic Factors, Educational Factors, Infrastructural Factors

From Table 4.24 the ANOVA findings [$F(4, 322) = 1565.497, P < .05$] where the significance value of 0.00 depicts that there exists a significant impact of the predictor variables (Social Factors, Economic Factors, Educational Factors, Infrastructural Factors) on the response variable (Participation of women in CDPs).

Multiple regression was also computed to ascertain the impact of predictor variables on the response variable, these results were summarized and presented as depicted in Table 4.25.

Table 4.25: Coefficients of regression equations

Model		Unstandardized		Standardized		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	1.380	.144		9.575	.000
	Educational Factors	-.130	.043	-.083	-3.041	.003
	Economic Factors	.581	.067	.252	8.627	.000
	Infrastructural Factors	-.536	.033	-.458	-16.146	.000
	Social Factors	.657	.046	.536	14.153	.000

a. Dependent Variable: Participation of women

Multiple regression was used in determination of the the association between the involvement of women in CDPs and the other variables which were Social aspects, Economic issues, Educational levels, and Infrastructural aspects. From Table 4.25, the Multiple Linear Regression Equation Model that was fit for this study is shown below.

$$Y = 1.380 - 0.083X_1 + 0.522X_2 - 0.458X_3 + 0.536X_4 + 0.144$$

When all other factors are maintained constant, the coefficients of the linear regression equation show the degree to which the independent variables fluctuate in response to women's participation in CDPs. $\beta_0 = 1.380$ demonstrates that even if social, economic, educational, and infrastructural factors were all ranked at zero, the participation of women in CDPs would still be higher than it is now at 1.380. This is clearly indicating that the participation of women in CDPs is highly dependent on the independent variables, the constant is statistically significant and was encompassed in the model equation. $\beta_1 = -0.083$ shows that a decrease in a unit of educational factors results in a 0.083 decrease in the participation of women in CDPs. From the model, this predictor is statistically significant and was used in fitting the model. $\beta_2 = 0.522$ demonstrates that a one unit rise in economic factors results in a 0.522 increase in women involvement in CDPs. From this model, this variable was statistically significant hence it was fitted into the model. $\beta_3 = -0.458$ shows that a decrease in a unit of infrastructural factors results in a 0.458 decrease in the participation of women in CDPs. From the model, this predictor was statistically significant hence it was used in model fitting. $\beta_4 = 0.536$ shows that an increase in a unit of social factors results in a 0.536 increase in the involvement of women in CDPs. This predictor is also statistically significant and was used in fitting the model. From Table 4.25, it is evident that Social Factors, Economic Factors, Educational Factors, and Infrastructural Factors are determinants of the participation of women in CDPs. All of the predictor variables were statistically significant on women contribution in CDPs in Laikipia North Sub-County.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary of the overall study's findings based on the objectives and research questions stated in the first chapter. The study's findings were based on data analysis, as presented in chapter four. The chapter also presents the researcher's conclusions and recommendations based on the data analysis findings reported in chapter four.

5.2 Summary of Findings

Laikipia North Sub-County was used as an example to research the perceived factors that influence CWDPs in Kenya impoverished areas. Using the case of Laikipia North Sub-County, this study seek to identify the elements that inspire the active engagement of womankind in CDPs in Kenya's underprivileged communities based on their educational, economic, infrastructural, and the impact of social factors on their role in CDPs. Three theories underpinned this study: the Theory of Constraints, the Community Development Theory, and the Stakeholder Theory.

Standardized questionnaires were administered to gather main data for the descriptive investigation. The researcher administered standardized questionnaires with the assistance of two study assistants. The structured questionnaire was selected since it motivates responders and permits the clarification of any issues. Each of the closed-ended items on the study instrument required a single response on a Likert scale ranging from one to five. There were 367 questionnaires in the sample, of which 327 were returned for analysis and 40 were not.

A Cronbach's Alpha reliability test was conducted on both the independent and dependent variables. Each variable was considered reliable as they Cronbach's Alpha coefficient was larger than 0.7, which is a recognized measure of variable reliability. Using the Pearson Moment Correlation, each of the four independent variables (educational factors, economic factors, infrastructural factors, and social factors) was attributed with the dependent variable (Participation of women in CDPs), and the results demonstrated a substantial correlation.

5.2.1 Educational factors and the participation of women in CDPs

The assessment of the impact of educational aspects on the involvement of women in CWDP in Laikipia North Sub-County showed a positive link. Regression analysis also demonstrated that educational characteristics impact women's participation in CDPs and are a major predictor of women's CDP participation.

5.2.2 Economic considerations and the proportion of women participating in CDPs

The assessment of economic consideration on the engagement of women in CWDP in Laikipia North Sub-County were found to be positively connected. The regression analysis found a substantial link between economic factors and women's CDP involvement. Analyses of multiple regressions found that economic considerations were important predictors and had an impact on the participation of women in CDPs in Laikipia North Sub-County.

5.2.3 Infrastructural factors and the participation of women in CDPs

The assessment of infrastructural issues and its impact on women active role in CWDP in Laikipia North Sub-County revealed a negative relationship. The infrastructural factor regression analysis revealed that infrastructural variables are a predictor of women's participation in CDPs. In addition, the multiple regression analysis revealed that infrastructure considerations had a considerable impact on women's partaking in CDPs.

5.2.4 Social variables and women's participation in CPDs.

The assessment of the effects of social features on the involvement of women in CWDP in Laikipia North Sub-Count recorded the highest Pearson Moment correlation coefficient of .950. The results implied that there was a strong positive correlation with the participation of women with the social aspects of their communities. The regression analysis for social factors indicated that social factors are a strong predictor of the participation of women in CDPs in Laikipia North Sub-County.

5.3 Conclusions

5.3.1 Educational factors

This investigation revealed a significant correlation between educational variables and the participation of women in CDPs. It was also discovered that educational characteristics had a statistically significant impact on women's engagement in CDPs. Thus, an increase in educational factors would cause an increase in the involvement of women in CDPs and a decrease in educational factors would hinder the involvement of women. Similar to this finding, Ndambiri (2017) established that the participation of women was dependent on their understanding of the project and how it works. Moreover, Hassan, Ong'ayo, and Osore (2019) concluded that educated women take part in project formulation, initial decision-making process, and in the implementation and monitoring of the CDPs. According to Kisiangani (2016), educational factors empower women towards project development by equipping them with the necessary skills required to effect change in their communities. Finally, Laboso (2015) concluded that the community education system is essential in uplifting the disadvantaged community members' capacity to engage in collective development activities. Therefore, high-quality education for community members catalyzes the participation of women in CDPs.

5.3.2 Economic factors

The general opinion of respondents indicated that economic aspects affect the participation of women in CDPs in Laikipia North sub-county. From the eleven opinion statements on economic factors, most of the participants agreed that the level of involvement of women in income-generating activities influences their contribution in CDPs. The Pearson Moment coefficient for economic aspects demonstrated that there was a strong positive correlation. The Coefficient of Determination rated economic factors highly as a factor that influence the contribution of women. The multiple regression analysis also showed that economic factors were statistically significant predictors for the participation of women in community development.

5.3.3 Infrastructural factors

There was a considerable positive association between infrastructure elements and the engagement of women in CDPs. The majority of respondents believed that the availability of water resources for their families affects women's involvement in the initiatives. It was determined that

infrastructure elements have a statistically significant impact on women's engagement in CDPs, and that increasing these characteristics will have a major impact on women's participation, and vice versa. It can be stated that the service provider requires appropriate infrastructure to efficiently supply services.

5.3.4 Social factors

Social factors recorded the highest correlation results of the participation of women in CDPs. That means that it has a strong impact on the involvement of women in CDPs. From the results discussed, it can be concluded that gender disparities, according to respondents, are affecting women's participation in CDPs in Laikipia North sub-county.

5.4 Recommendations

Based on the research, the study offers the following policies, programs, and future research regarding the factors that influence women contribution in CDPs. Because the community under study is disenfranchised and does not provide equal opportunity for women to participate in CDPs, all stakeholders should address the issue. The indications that women are marginalized must be addressed effectively and those involved in propagation of such vice must suffer severe penalties. The study conclusion that women are regarded in CDPs, treated equitably in the community, and occupy prominent positions within the community should be discussed and other communities should be encouraged to emulate.

Most respondents say the political class does not really respect women's community development, that women and men aren't treated equally in politics, and that political discrepancies prevent women from participating. Education, economic, infrastructure, and societal variables do not really encourage women's CDP participation, says the report. The authorities should educate the public on the importance of recognizing women and giving them equal opportunities to serve. The government must enact laws that encourage all organizations to address gender-related issues seriously and educate residents about gender equality, especially in CDPs.

5.5 Areas for Further Research

This research was carried out in the Laikipia North Sub-County; similar research could be conducted in other underprivileged regions of the nation. The subject of women involvement in CDPs has received inadequate research consideration, particularly in the similar study area; so, additional research is required to investigate the topic and build better governance regulations. In addition, it is necessary to contrast CDPs in which women participate with those in which they do not. This will demonstrate whether or not these two groups differ in terms of project management. The involvement of women during project implementation is another area where research is restricted; consequently, further research is required in this area. Lastly, additional study on the advantages of female participation in CDPs is required.

REFERENCES

- Adediran, V. O. (2015). *The Impact of Community Education Programmes on Rural Women Participation in Self Help Development Projects in Osun State, Nigeria* (Doctoral dissertation).
- Ajayi, G. T., Abiodun, A., & Oluwatusin, F. M. (2019). *Women Participation in Community and Social Development Project (CSDP) in Ondo State, Nigeria* (Doctoral dissertation)
- Rout, S. (2018). Gendered participation in community forest governance in India. *Contemporary Social Science*, 13(1), 72-84.
- Birgen, R. K. (2018). *Influence of Women Participation on the Performance of County Infrastructural Projects: A Case of Moiben Sub County, Uasin Gishu County; Kenya* (Doctoral dissertation, University of Nairobi).
- Muhia, M. E. (2020). *Influence of Socio-economic Factors on Sustainability of Women Empowerment Groups in Pastoralist Communities in Kenya: A Case of Tiaty Sub-county, Baringo County* (Doctoral dissertation, University of Nairobi).
- Ng'asike, J. T. (2019). Indigenous knowledge practices for sustainable lifelong education in pastoralist communities of Kenya. *International review of education*, 65(1), 19-46
- Hassan, F. A., Ong'ayo, H. A., & Osore, M. K. (2019). Assessing the Influence of Demographic Factors on Community Participation in a Demand Driven Development Project: The Case of Hazina Ya Maendeleo Ya Pwani Approach in Coastal Kenya. *Open Journal of Social Sciences*, 7(01), 209.
- Nhem, S., & Lee, Y. J. (2019). Women's participation and the gender perspective in sustainable forestry in Cambodia: local perceptions and the context of forestry research. *Forest Science and Technology*, 15(3), 93-110.
- Lugendo, V. N. (2019). *Factors influencing the level of women participation in community development projects: A case of Kahama town council* (Doctoral dissertation, Mzumbe University).

- Mashapa, C., Zisadza-Gandiwa, P., Libombo, E., Mhuriro-Mashapa, P., Muboko, N., & Gandiwa, E. (2020). An assessment of women participation in community-based natural resource conservation in Southeast Zimbabwe. *Open Journal of Ecology*, *10*(04), 189.
- Mutongu, Z. B. (2018). Women's participation in community-based organizations' development as a strategy for poverty reduction in Kenya. *Priscilla Papers*, *26*(1), 11
- Halakhe, R. R. (2020). *Influence of Women Participation On Sustainability of the Community Conservation Project Implemented by Jaldesa Community Conservancy in Marsabit County, Kenya* (Doctoral dissertation, University of Nairobi).
- Akello, S., Turyahabwe, N., Sseguya, H., Okullo, P., & Agea, J. G. (2017). Local community participation in restoration of watersheds in Uganda. *American Journal of Environmental Protection*, *5*(2), 25-32.
- Zikhali, W. (2017). Participation of Women in Developmental Issues in Nkayi District, Zimbabwe. *Research on Humanities and Social Sciences*, *7*(10), 28-35.
- Bikuba, J. R., & Kayunze, K. A. (2019). Enhancing community participation to improve sustainability of irrigation projects in Geita District, Tanzania. *Journal of Agricultural Extension and Rural Development*, *11*(10), 169-175.
- Mutumukuru-Maravanyika, T., Mills, D. J., Asare, C., & Asiedu, G. A. (2017). Enhancing women's participation in decision-making in artisanal fisheries in the Anlo Beach fishing community, Ghana. *Water resources and rural development*, *10*, 58-75
- Agboeze, M. U., Nwachukwu, R. U., Ugwueze, M. O., & Agboeze, M. N. (2020). Health Status of Widows as a Correlate of Their Participation in Community Development Projects in Nsukka, Enugu State, Nigeria. *Global Journal of Health Science*, *12*(7).
- Almanasreh, E., Moles, R., & Chen, T. F. (2019). Evaluation of methods used for estimating content validity. *Research in Social and Administrative Pharmacy*, *15*(2), 214-221.
- Alzuabi, A. Z. (2016). Sociopolitical participation of Kuwaiti women in the development process: Current state and challenges ahead. *Journal of social service research*, *42*(5), 689-702.

- Brenya, E., Mensah, A. E., & Nyarko, C. J. N. (2018). Women Participation in Local Governance: A Case Study of the Kumasi Metropolitan Assembly. *IJASSH*.
- Caroline, C. K. (2017). *Determinants of women participation in agribusiness development projects in Sotik Sub-county, Bomet county, Kenya* (Doctoral dissertation, University of Nairobi).
- Chigbu, U. E. (2015). Repositioning culture for development: women and development in a Nigerian rural community. *Community, Work & Family*, 18(3), 334-350.
- Collins, C. G. (2017). Integrating and valuing rural womanhood in community development projects: Case study lessons from Nepal. *Journal of Rural and Community Development*, 12(1).
- Daniel, A. (2015). Factors Influencing Low Level of Women Participation in Literacy Programme in Maiha Local Government Area of Adamawa State. *Journal of Education and Practice*, 6(15), 183-188.
- Freeman, R. E. (1994). The politics of stakeholder theory: Some future directions. *Business ethics quarterly*, 409-421.
- Green, H. E. (2014). Use of theoretical and conceptual frameworks in qualitative research. *Nurse researcher*, 21(6).
- Gundogar, E., Sari, M., & Kokcam, A. H. (2016). Dynamic bottleneck elimination in mattress manufacturing line using the theory of constraints. *SpringerPlus*, 5(1), 1276.
- Holden, L., & Biddle, J. (2017). The introduction of human capital theory into education policy in the United States. *History of Political Economy*, 49(4), 537-574.
- Howe-Walsh, L., & Turnbull, S. (2016). Barriers to women leaders in academia: tales from science and technology. *Studies in Higher Education*, 41(3), 415-428.

- Hsu, B. X., & Chen, Y. M. (2019). Industrial policy, social capital, human capital, and firm-level competitive advantage. *International Entrepreneurship and Management Journal*, 15(3), 883-903.
- Jaquette, J. S. (2017). Women/gender and development: the growing gap between theory and practice. *Studies in Comparative International Development*, 52(2), 242-260.
- Johnson, N. L., Kovarik, C., Meinzen-Dick, R., Njuki, J., & Quisumbing, A. (2016). Gender, assets, and agricultural development: Lessons from eight projects. *World Development*, 83, 295-311.
- Jones, T. M., & Wicks, A. C. (1999). Convergent stakeholder theory. *Academy of management review*, 24(2), 206-221.
- Karamunya, J., & Cheben, P. (2016). Socio-Cultural Factors Influencing Community Participation in Community Projects Among the Residents Inpokot South Sub-County, Kenya. *American Based Research Journal*, 5(11).
- Kisiangani, G. O. (2016). *Factors Influencing Women Participation in Project Implementation: The Case of Gender Mainstreaming Project in Selected Government Ministries in Nairobi County, Kenya* (Doctoral dissertation, University of Nairobi).
- Kothari, C. R., & Garg, G. (2014). *Research methodology methods and techniques (3rd ed.)*. New Delhi: New Age International (P) Ltd.
- Kunjuraman, V., & Hussin, R. (2016). Women Participation in Ecotourism Development: Are They Empowered? *World Applied Sciences Journal*, 34(12), 1652-1658.
- Laboso, E. (2015). *Factors influencing women participation in community-based development projects: a case study of Bureti sub-county, Kericho county* (Doctoral dissertation, University of Nairobi).
- Lelelit, L. S., Macharia, D., & Mburugu, K. N. (2017). Influence of social-cultural factors on women participation in wildlife conservation projects: A case of Northern Rangeland Trust

- Samburu County. *International Academic Journal of Information Sciences and Project Management*, 2(1), 520-540.
- Martínez-Mesa, J., González-Chica, D. A., Duquia, R. P., Bonamigo, R. R., & Bastos, J. L. (2016). Sampling: how to select participants in my research study? *Anais brasileiros de dermatologia*, 91(3), 326-330.
- McClanahan, A. J. (2017). Becoming Non-Economic: Human Capital Theory and Wendy Brown's Undoing the Demos. *Theory & Event*, 20(2), 510-519.
- Mendes, P. (2008). Teaching community development to social work students: A critical reflection. *Community Development Journal*, 44(2), 248-262.
- Miles, S. (2017). Stakeholder theory classification: A theoretical and empirical evaluation of definitions. *Journal of Business Ethics*, 142(3), 437-459.
- Munyambu, M. R. (2019). *Determinants of Women's Participation in Community Development Projects: A Study of Pastoralists in Kajiado Central Constituency* (Doctoral dissertation, University of Nairobi).
- Ndambiri, A. M. (2017). *Determinants of women participation in community development projects. A case of Mombasa county, Kenya* (Doctoral dissertation, University of Nairobi).
- Ndambiri, A. M. (2017). *Determinants of women participation in community development projects. A case of Mombasa county, Kenya* (Doctoral dissertation, University of Nairobi).
- National Gender and Equality Commission. (2015). *Unmasking Ethnic Minorities and Marginalized Communities in Kenya*. Nairobi: National Gender and Equality Commission Headquarters.
- Okereke-Ejiogu, E. N., Asiabaka, C. C., Ani, A. O., & Umunakwe, P. C. (2015). Assessment of Households' Participation in Community and Social Development Projects (CSDP): A Case Study of Imo State, Nigeria. *Advances in Research*, 1-9.

- Okoroba, I. A., Okodudu, S., & Joab-Peterside, S. (2019). Gender Participation in Community Development Governance in the Niger Delta: A Case of the SPDC GMoU. *Journal of Advances in Social Science and Humanities*, 5(5), 732-754.
- Oyegbami, A., Fabusoro, E., Awotunde, J. M., & Apantaku, S. O. (2016). Extent of Rural Women's Participation in Community Development Projects in Iddo Local Government Area of Oyo State, Nigeria. *Journal of Education, Society and Behavioural Science*, 1-10.
- Panizzolo, R. (2016). Theory of constraints (TOC) production and manufacturing performance. *International Journal of Industrial Engineering and Management*, 7(1), 15-23.
- Plonsky, L., & Derrick, D. J. (2016). A meta-analysis of reliability coefficients in second language research. *The Modern Language Journal*, 100(2), 538-553.
- Puche, J., Ponte, B., Costas, J., Pino, R., & De la Fuente, D. (2016). Systemic approach to supply chain management through the viable system model and the theory of constraints. *Production planning & control*, 27(5), 421-430.
- Razafindratsima, O. H., & Dunham, A. E. (2015). Increasing women's participation in community-based conservation: Key to success? *Madagascar Conservation & Development*, 10(2), 45-47.
- Rideout, V. (2016). Measuring time spent with media: The Common Sense census of media use by US 8-to 18-year-olds. *Journal of Children and Media*, 10(1), 138-144.
- Sam, J. M., & Todd, S. K. (2020). Women as hand pump technicians: empowering women and enhancing participation in rural water supply projects. *Development in Practice*, 1-12.
- Saprii, L., Richards, E., Kokho, P., & Theobald, S. (2015). Community health workers in rural India: Analysing the opportunities and challenges Accredited Social Health Activists (ASHAs) face in realising their multiple roles. *Human resources for health*, 13(1), 95.
- Schiefele, U., & Schaffner, E. (2016). Factorial and construct validity of a new instrument for the assessment of reading motivation. *Reading Research Quarterly*, 51(2), 221-237.

- Schoonenboom, J., & Johnson, R. B. (2017). How to construct a mixed methods research design. *KZfSS Kölner Zeitschrift für Soziologie und Sozialpsychologie*, 69(2), 107-131.
- Shaw, M., Armstrong, A., & Craig, G. (2016). Re-visiting the Community Development Projects of the 1970s in the UK. *Concept*, 7(2), 16-16.
- Solheim, E., Plathe, H. S., & Eide, H. (2017). Nursing students' evaluation of a new feedback and reflection tool for use in high-fidelity simulation—Formative assessment of clinical skills. A descriptive quantitative research design. *Nurse education in practice*, 27, 114-120.
- Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in Science Education*, 48(6), 1273-1296.
- Villwock, J. A., Sobin, L. B., Koester, L. A., & Harris, T. M. (2016). Impostor syndrome and burnout among American medical students: a pilot study. *International journal of medical education*, 7, 364.

APPENDICES

APPENDIX I: INTRODUCTION LETTER

Dear Respondent

I am a student doing a master's degree in project planning and management at the University of Nairobi. I am conducting research on:

PERCEIVED FACTORS INFLUENCING THE PARTICIPATION OF WOMEN IN COMMUNITY WATER DEVELOPMENT PROJECTS IN MARGINALIZED AREAS OF KENYA: A CASE OF LAIKIPIA NORTH SUB-COUNTY.

You have been selected to participate in this study because your input is significant and will help us reach our study goals. Your information will remain confidential now and during the writing of the report and the findings shall be used only for academic purposes.

I will be very grateful for your time and cooperation.

Yours sincerely,

Irene Wairimu.

APPENDIX II: QUESTIONNAIRE

SECTION A: GENERAL INFORMATION

1. Kindly select your gender

Male () Female ()

2. Please indicate your highest level of education by ticking the provided box.

Certificate () Diploma () Degree () Female () Other.....

3. Please indicate the number of years you have participated in CDPs

Zero () Less than 1 year () 2-3 years () 3-5 years () Over 5 years ()

4. What position do you hold in the development of the project?

Project Manager () Assistant Manager () Project Inspection Officer ()

Other (Please Specify) () _____

SECTION B: EDUCATIONAL FACTORS AND THE PARTICIPATION OF WOMEN

1. Below are several statements on educational factors and the participation of women. Kindly use the five-point Likert scale to rate the extent of your agreement where 5= strongly agree, 4=agree, 3=neutral, 2=disagree, and 1=strongly disagree.

Statement	1	2	3	4	5
i. The level of formal education attained by women in this area influences their taking roles in development projects within the community					
ii. The ability of women to read and interpret project plans affects their participation in community projects					
iii. The ability of women to understand how projects work influence their participation levels					
iv. The ability of women to understand how projects influence the actions they take to ensure successful community project implementation					
v. Educated women have more tendencies towards active engagement in CDPs					
vi. Short courses training undertaken by women in the county improves their participation in CDPs					
vii. A continuous learning approach among women has improved interest in CDPs					

iii.	The skills acquired by women in formal education play a critical role in their execution of tasks in CDPs					
ix.	The majority of the women taking part in CDPs have studied beyond form four					
x.	Women's education level has no influence on their participation in CDPs in this county.					

SECTION C: ECONOMIC FACTORS AND THE PARTICIPATION OF WOMEN

2. Use the five-point scale to rate the agreement on these statements on economic factors, where 5 indicates strong agreement, 4 indicates agreement, 3 indicates neutrality, 2 indicates disagreement, and 1 indicates significant disagreement.

Statement	1	2	3	4	5
i. The level of women involved in income-generating activities influences their participation in CDPs					
ii. Women with regular sources of income stand a higher chance of participating in CDPs					
iii. Women engaging in businesses stand a high chance of participating in CDPs					
iv. The ability of women to provide basic needs for their families influences their participation in CDPs					
v. Women's access to quality and decent paid work influences their participation in CDPs					
vi. Women's access to the property and other collateral assets in this sub-county influences their participation in CDPs					
vii. The ability of women to provide leadership influences their participation in CDPs					
viii. Lack of income among women influences their participation in CDPs					
ix. High poverty among women influences their participation in CDPs					
x. Limited access to credit facilities hampers the participation of women in CDPs					
xi. Lack of stable incomes among women influences their participation in CDPs					

SECTION D: INFRASTRUCTURAL FACTORS AND THE PARTICIPATION OF WOMEN

3. Below are several statements on infrastructural factors and the participation of women.

Please use the five-point Likert scale to rate the extent of your agreement where 5 indicates strong agreement, 4 indicates agreement, 3 indicates neutrality, 2 indicates disagreement, and 1 indicates significant disagreement.

Statement	1	2	3	4	5
xii. The availability of learning schools for their children influences their participation					
xiii. The distance to the nearest school influences the participation of women in community projects					
xiv. The quality of the road network in the area is a factor in the participation of women					
xv. The distance to the nearest health facility influences women’s participation					
xvi. The quality of healthcare offered in the nearest health center influences the participation of women in community projects					
xvii. The convenience of various means of transport available in this area impacts the participation of the women					
xviii. The availability of water resources for their families influences the participation of women					
xix. The distance to the nearest water source influences the participation of women in CDPs in this county					
xx. The equipping of learning centers in the county influences the participation of women in CDPs in this county					
xxi. The hospitality of the local community influences the participation of women in CDPs in this county					

SECTION E: SOCIAL FACTORS AND THE PARTICIPATION OF WOMEN

4. Below are several statements on social factors and the participation of women.

Please use the five-point Likert scale to rate the extent of your agreement where 5 indicates strong agreement, 4 indicates agreement, 3 indicates neutrality, 2 indicates disagreement, and 1 indicates significant disagreement.

Statement	1	2	3	4	5
i. Female roles of cooking for their families influence their participation in CDPs					
ii. Community expectations on the role of women in society influence their participation in CDPs					
iii. The perception of the marital status of women in the county influences their participation in CDPs					
iv. Traditional culture on the place of women in society influences their participation in CDPs					
v. Gendered ideology on women influences their participation in CDPs					
vi. Gender suppression among the local communities influences the participation of women in CDPs					
vii. The marital status of women influences their participation in CDPs					
viii. Cultural practices of this area limit the participation of women in CDPs					
ix. Religious beliefs of the community in this county limit the participation of women in CDPs					
x. The separation of roles between genders limited the participation of women in CDPs					
xi. Early marriages among women affect their participation in CDPs					
xii. Child-rearing responsibilities limit the participation of women in CDPs					
xiii. Limited movement among women influences their participation in CDPs					

SECTION F: THE PARTICIPATION OF WOMEN

5. Below are several statements on the participation of women. Please use the five-point Likert scale where 5 indicates strong agreement, 4 indicates agreement, 3 indicates neutrality, 2 indicates disagreement, and 1 indicates significant disagreement.

Statement	1	2	3	4	5
i. More women have been participating in CDPs in the last five years					
ii. More women assumed roles in project implementation in the county					
iii. More women have assumed roles in project design in the county					
iv. More women have assumed roles in project monitoring in the county					
v. More women have assumed roles in project planning in the county					

THE END

THANKS

APPENDIX III: WORK PLAN

Task Description	Jan-May 2021	May-2021	June-September 2021	October-2021
Writing the proposal				
Designing Questionnaire				
Proposal Defense				
Collection of Data				
Analyzing Data				
Discussing the findings and writing the report				
Submitting the report				

APPENDIX IV: RESEARCH BUDGET

Research Activity	Cost (Ksh.)
Printing, scanning, photocopying and binding	6,500.
Travelling, meals and accommodation	25,000.
Internet bundles	3,000.
Telephone charges	3000.
Miscellaneous	4,000.
Data Analysis	22,000.
Total	63,500

APPENDIX V: LIST OF WATER PROJECTS IN LAIKIPIA NORTH SUB-COUNTY

1. Kurum Borehole
2. Solio Water Project
3. Lonyek Water Project
4. Mifugo hand-pump water
5. Lusukut borehole water project
6. Katonga Borehole Water Project
7. Baraka Dispensary Water Project
8. Doldol Dam Water Project
9. Luoniek Water Project
10. Kimanjo Water Project
11. Tangi Nyeusi Water Project-
12. Nosarai borehole- Mukogodo West
13. Mowarak Posta Borehole Water Project