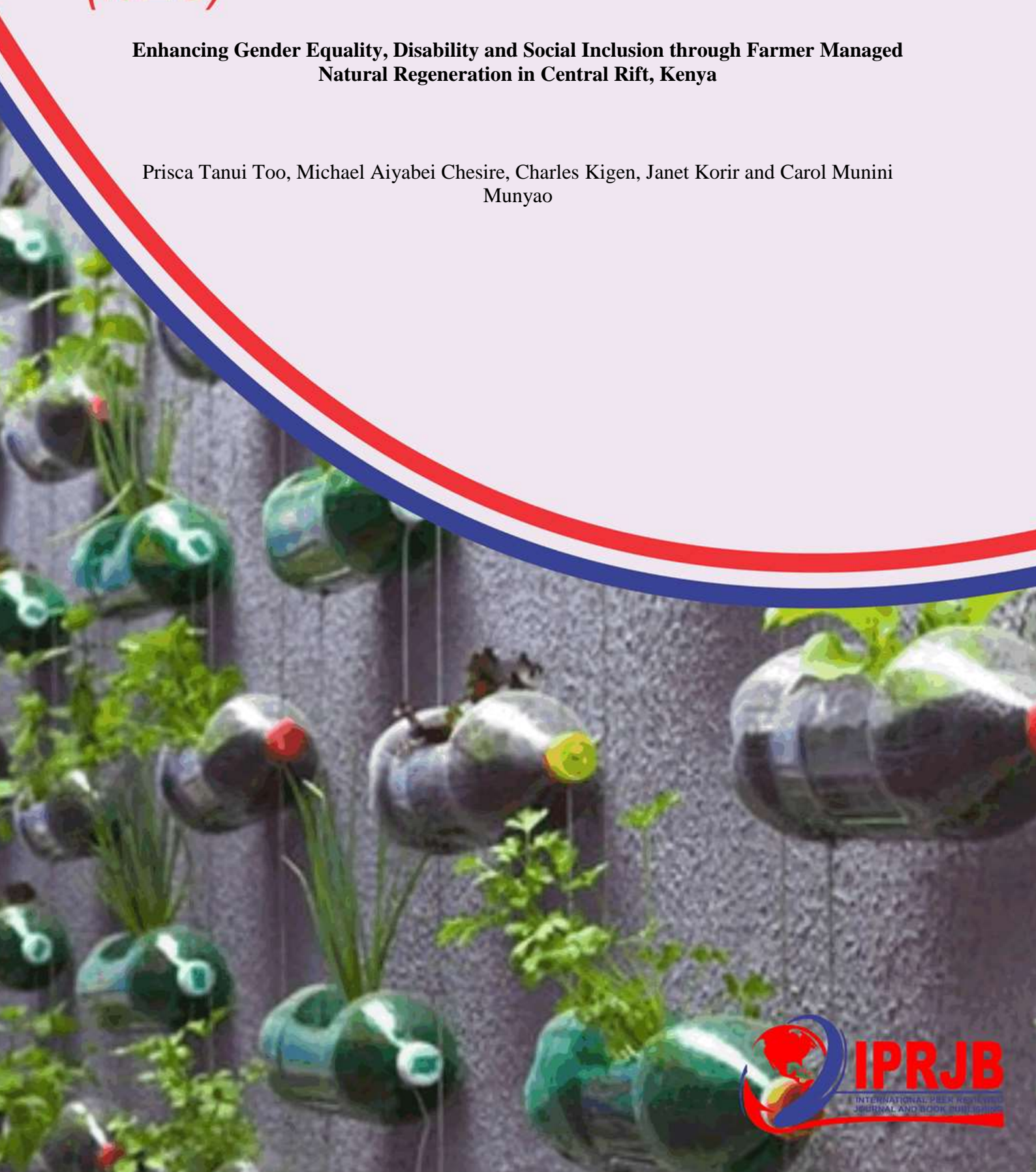


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**Enhancing Gender Equality, Disability and Social Inclusion through Farmer Managed  
Natural Regeneration in Central Rift, Kenya**

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Munyao



## Enhancing Gender Equality, Disability and Social Inclusion through Farmer Managed Natural Regeneration in Central Rift, Kenya

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### Abstract

**Purpose:** This paper examines how World Vision’s project “Central Rift Farmer-Managed Natural Regeneration Scale-up project (CRIFSUP)” carried out between 2017 and 2021 used Gender Equality, Disability and Social Inclusion (GEDSI) approach and transformation power relations among farmers.

**Methodology:** The Study areas were Ndabibi in Nakuru County, Marigat in Baringo County, and Ng’oswet in Elgeyo Marakwet. Methodology adopted was mixed method approach and data collected using collective brainstorming sessions with communities, key informant interviews, Household questionnaire, focused group discussions for adults and children, and observation. Purposive sampling was employed to identify farmers to participate in focus group discussions and key informants. Apart from examining the field reports on this project, this study reviewed secondary related literature. Enhancement of gender, disability and social inclusion is traced by examining the changes that transpired between the time the baseline report was conducted, CRIFSUP GESI Report and the end of term report. The focus is on decision making, time use, roles, responsibilities and economic empowerment.

**Findings:** The findings showed that the time spent on collecting firewood was reduced to 30 minutes. Energy saving measures such as jikos and biogas were introduced by CRIFSUP. Savings for transformation groups enabled women and people with disabilities to access resources that enabled them to diversify their roles and engage in income generating activities such as bee keeping. However, mainstreaming gender, disability and social inclusion considerations has been partially successful, for instance land ownership and access is still heavily weighted towards men and this affects women access and use of trees. This influences the time women spend to look for firewood.

**Unique Contribution to Theory, Practice and Policy:** The theory of change and agency and employed to how the implementation of FMNR created a conducive environment for the transformation of gender, disability and social inclusion.

**Keywords:** *Gender, Decision-making, Time Use, Responsibilities, Economic Empowerment*

## INTRODUCTION

Gender equality and social inclusion in land restoration is a major objective of many international organizations evident by commitments of organizations such as, UN Decade on Ecosystem Restoration (2021 – 2030), Bonn Challenge, and African Forest and Landscape Restoration Initiative (Kendal et al. 2021). Policies have been passed by international organizations, governments and practitioners putting in place guidelines that provide a road map in integrating gender, disability and social inclusion in land restoration intervention (Gann et al. 2019, Kandel et al. 2021). World Vision developed Gender Equality, Disability and Social Inclusion (GEDSI) approach aimed at assisting in its projects, to overcoming the challenges that restrict women and the vulnerable people in society in participating in, and benefiting from, Farmer Managed Natural Regeneration (FMNR) for climate restoration. Sustainable land restoration will only be attained if all the farmers, irrespective of their social differences, participate in restoration measures. This study examines how World Vision's Central Rift Farmer-Managed Natural Regeneration Scale-up project (CRIFSUP) in Kenya, contributed to enhanced gender and social equality.

FMNR technique was first championed by Tony Rinaudo in the 1980s (Kendal et al. 2021). The approach is now implemented in at least 24 countries worldwide (Thomas, D. and Austin, A., 2022). It is widely promoted in Africa as a cost-effective way of restoring degraded land that overcomes the challenge of low survival rates associated with tree planting in arid and semi-arid areas (Chomba, et al. 2020). It is a proven sustainable land management technique that restores degraded wasteland and improves depleted farmland (Ojuok and Ndayizigiye, 2021). This restoration technique is used to combat poverty and hunger amongst poor subsistence farmers by increasing food and timber production, and resilience to climate extremes (World Vision, Australia, 2015). It involves the systematic regrowth and management of trees and shrubs from felled tree stumps, sprouting root systems or seeds. The regrown trees and shrubs help restore soil structure and fertility, inhibit erosion and soil moisture evaporation, rehabilitate springs and the water table, and increase biodiversity. Some tree species also impart nutrients such as nitrogen into the soil (World Vision, 2019). FMNR can double crop yields, provide building timber and firewood, fodder and shade for livestock, wild foods for nutrition and medication, and increased incomes and living standards for farming families and their communities (CRIFSUP GESI REPORT, 2021, World Vision, 2022).

The technique became the foundation to the CRIFSUP development interventions. This was attained through assisting smallholder farmers' groups to overcome barriers of access to formal financial institutions and strengthening their credibility and negotiation power; profitable value chains through private sector partnership and alternative livelihood options for the most vulnerable and poor farmers, especially women (CRIFSUP GESI Report, 2021).

De Siqueiral et al (2021) points out that restoration projects often quantify biological diversity as a measure of success, but generally, overlook human diversity, including gender issues, which have not been sufficiently considered in restoration implementation, and monitoring. De Siqueiral further justifies the need to consider gender equality in ecological restoration and offer guidance on adopting gender-responsive approaches. They further indicate that equality should be considered both a driver and a measure of success because it plays a central role to leverage the contributions of restoration. As a human activity, ecological restoration techniques, such as FMNR, reflects all the habits of human behaviour and is largely impacted

by culture, values, social norms, and all psychological and organizational factors driving our relationship with nature.

Kendal et al., 2021 examined how historical, socio-ecological, and political processes, condition and prospects for social equity in FMNR interventions. This study asserts that pre-existing hierarchies in authority, control, and access over land and trees for FMNR projects, as well as how these hierarchies are spatially differentiated, based on the local farming system and agroecological change, conditioned the social equity of FMNR outcomes. It further points out the need for recognition of the varying aspirations of different stakeholders and the need to overcome contextual inequity and achieve equitable distributive outcomes in FMNR projects.

World vision defines Gender Equality as the state or condition that affords women and girls, men and boys, equal enjoyment of human rights, socially valued goods, opportunities, and resources. It includes expanding freedoms and voice, improving power dynamics and relations, transforming gender roles and enhancing overall quality of life so that males and females achieve their full potential. On the other hand, Gender Equality, Disability and Social Inclusion (GEDSI) is defined as a multi-faceted process of transformation that: Promotes equal and inclusive access, decision-making, participation, and well-being of the most vulnerable; Transforms systems, social norms, and relations to enable the most vulnerable to participate in and benefit equally from development interventions; Builds individual and collective agency, resilience, and action; and promotes the empowerment and well-being of vulnerable children, their families and communities (World Vision, 2021)

### **Gender Equality, Disability and Social Inclusion (GEDSI) Approach**

GEDSI approach seeks to address inequality and exclusion of the vulnerable by improving their terms of participation in society and enhancing opportunities, access to resources, voices and respect for human rights. It is a multifaceted process of transformation that provides a common pathway required to achieve gender equality and social inclusion, and promote and guide the systematic integration of gender equality and social inclusion in development programmes. This approach seeks to identify and address barriers preventing people with disability from participating in and benefiting from development (DFAT, 2015). It also examines overlapping and inter-related vulnerabilities, which may be simultaneously based on gender, disability, marital status, age among other forms of marginalisation (World Vision, 2023)

World Vision GEDSI approach in relation to natural disasters, is based upon the premise that natural disasters do not affect people equally. It asserts that there are inequalities in exposure and sensitivity to risk as well as inequalities in access to resources, capabilities, and opportunities that systematically disadvantage certain groups of people, rendering them more vulnerable to the impact of natural disasters. GEDSI approach is expected to yield transformative outcome such as an increase in participation opportunities, empowerment, agency and efficacy (Macura, B. et al, 2023). Ojuok and Ndayizigiye, 2021 pointed out that the implementation of FMNR has not been as successful as intended due to slow women uptake and participation in the approach. However, measuring transformative social change is complex, non-linear, context specific and slow, but this should not prevent studies on the impact of GEDSI approach because it improves understanding of the extent and direction of change (Macura, B. et al, 2023).

## Research Objectives

CRIFSUP project was committed to promote social and gender equality and empowerment of youth, children and people living with disabilities in the Central Rift region of Kenya. This paper endeavors to: -

1. Examine the vulnerabilities that existed in the study before the implementation of FMNR.
2. Evaluate whether the use of GEDSI approach in the implementation of FMNR transformed decision making.
3. Assess how the adoption of GEDSI approach by CRIFSUP project impacted on the roles carried out by men, women, youth, children and people living with disabilities.
4. Assess the impact of CRIFSUP project on time use among men, women, children and people living with disabilities
5. Analyze whether the implementation FMNR using GEDSI diversified economic activities carried out by the vulnerable groups.

## Theoretical Approach

This paper adopts the theory of change, agency and intersectionality approaches to provide guidance on how Farmer Managed Natural Regeneration technique contributed to the well-being of the most vulnerable through transformative change. Theory of Change is an organization's hypothesis of the changes that will occur as it is utilizing its strategies and activities to achieve its mission (Dhillon and Vaca, 2018). It is a purposeful model of how an initiative, in this case a programme, contributes through a chain of social change (Serrat, 2013). It argues that priorities and strategic objectives at programme level should be gender and disability sensitive so as to create an enabling environment to contribute to gender equality. This theory assists programmes to decide on priorities and strategic choices, it gives opportunity of tracking outcomes, reflects upon evolving processes which is an asset for integration of well-grounded gender strategies.

Agency theory is defined by McNay (2000) as a generative process that is able to institute new and unanticipated modes of behaviour such as transformations within gender relations. This theory is also interested in the durability of forms of gender constructions and manifestation over time. It is at the heart of empowerment, it refers to the capacity of women and the vulnerable in society to take action and pursue goals, make choices and act upon them. It outlines the capacity of individuals or groups to feel, reflect intend and act within a particular social relations and historical context in which they live. Within the family or through participation in informal or formal networks. Agency can take many forms such as bargaining, negotiation, manipulation, subversion and resistance.

Agency theory considers development participants as active agents of change, rather than mere victims of exclusion or inactive beneficiaries of development (World Vision, 2021). This theory elucidates the way in which men and women support and challenge the existing system of gender relations. In this paper, agency theory enables us to describes systems of control, coercion, and the way the vulnerable people in Central Rift Kenya bargain or negotiate for privileges and resources.

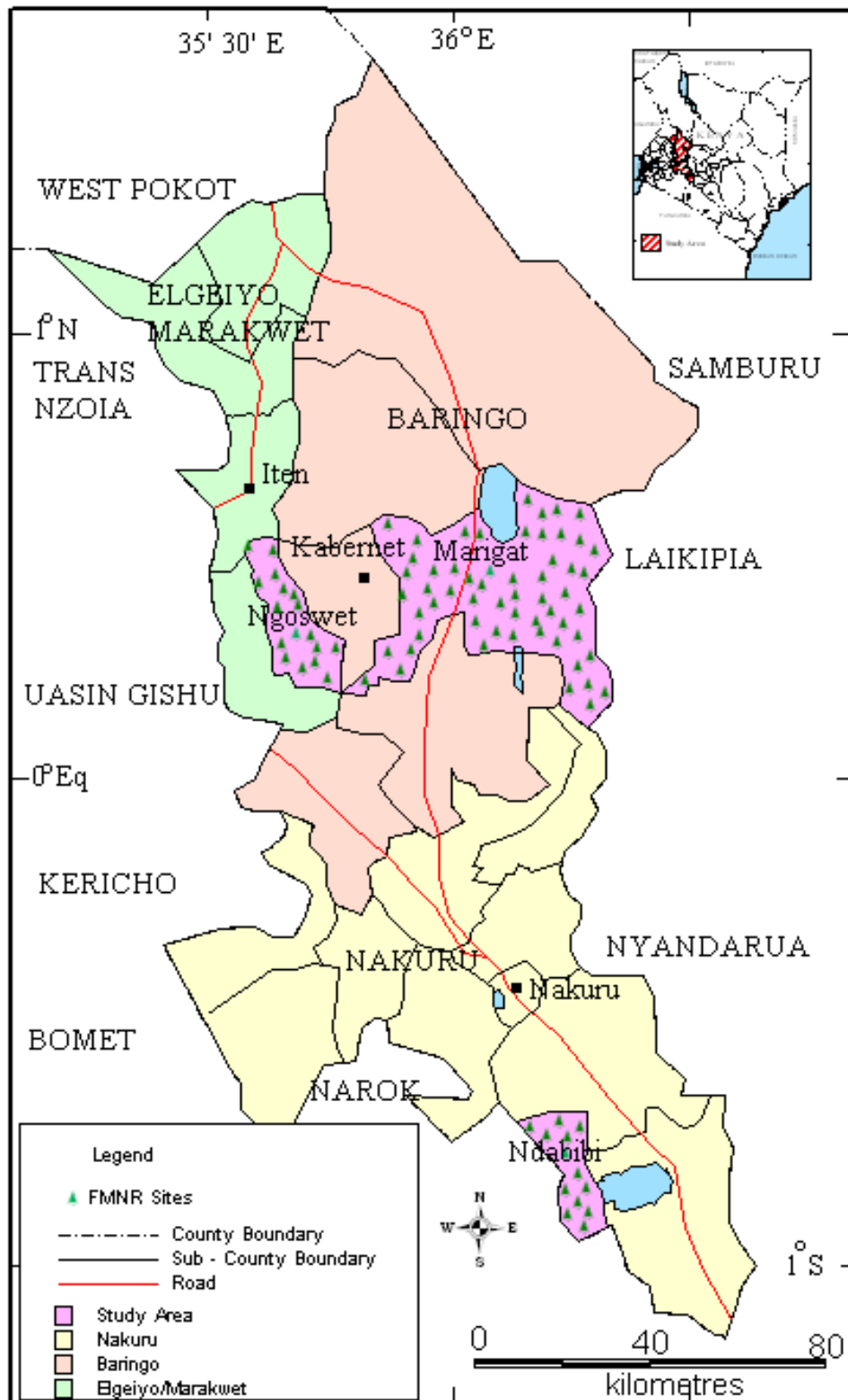
Agency theory is used to characterize the actions of the vulnerable in the society. It carries with it distinct tones of resistance by the subjugated and contain within it the idea that agents should have the ability to effect changes on the society. To transform to some degree the dominant

structures in which they are embedded. The approach calls for greater attention to the vulnerable in development and emphasizes the need to challenge existing gender roles and relations. Agency theory does not regard power within gender relations as repressive, and the vulnerable as inevitable victims of supremacy helpless and hapless at the hands of evil intentioned, omnipotent men. Rather it brings out how the vulnerable in society set up, maintain and alter systems of relations. Generally, agency theory is pertinent in achieving sustainable development goals and World Vision objectives.

The third theory utilized in this paper is intersectionality which tackles the overlapping vulnerabilities such as gender, class, age, disability, marital status, religion and education level. This approach argues that a person has multiple intersectional identities, which may provide a degree of privileges, but for others, it may result in more discrimination. Intersectionality brings out the convergence or interwovenness of systems of vulnerabilities (Carastathis, 2014). Thus, the need to take care of the disaggregated nature of women and people with disabilities in their response to FMNR technique. The next section describes the research study area.

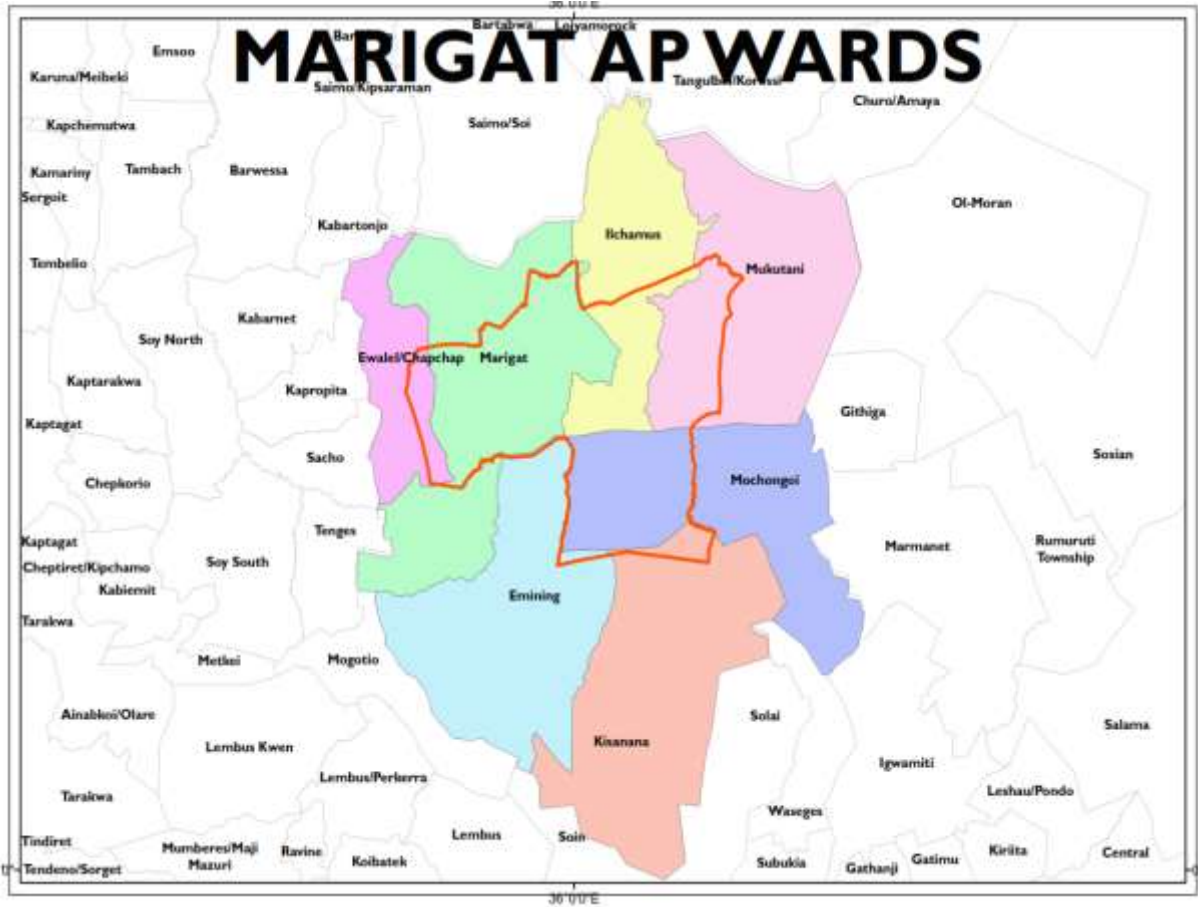
### **Study Area**

Research was carried out in Elgeyo-Marakwet, Nakuru and Baringo Counties that form part of the Central Rift region of Kenya. The study was done in seven World Vision Area Development Programs (ADPs) namely Mogotio, Marigat in Baringo County; Kiambogoko, Ndabibi in Nakuru County; and Soin, Tunyo, and Ngoswet in Elgeyo-Marakwet County. The position of the study area is indicated in the maps below.



Map 1: Study Area

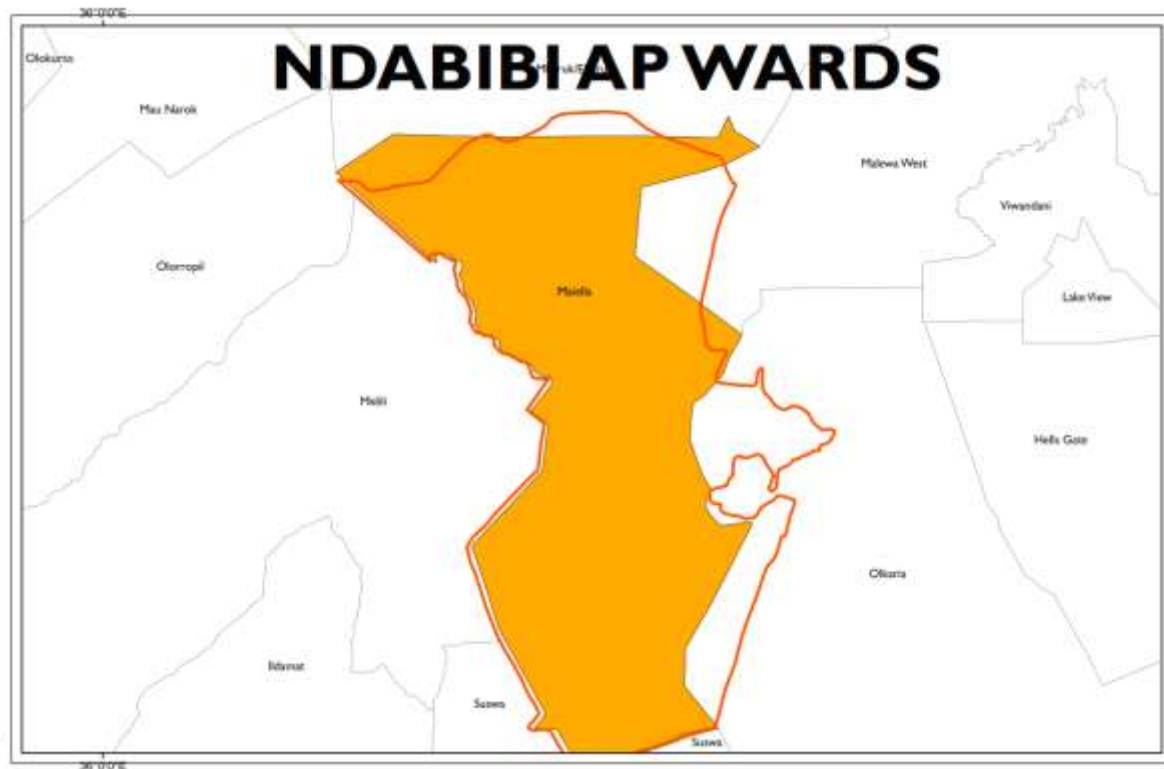
Source: Moi University, GIS Laboratory



Map 2: Marigat ADP

Source: CRIFSUP, 2017





*Map 3: Ndabibi ADP*

*Source: CRIFSUP, 2017.*



Gender was a cross cutting theme in CRIFSUP, this paper examines how the project enhanced gender equality, disability and social inclusion in Central Rift Kenya. In an attempt to achieve enhanced gender, disability and social inclusion, the project adopted strategies that raised awareness on gender roles in environmental management during training for lead farmers and schools. This included; Climate Smart Agriculture which involved the promotion of conservation agriculture, soil and water erosion control interventions, forestry and agroforestry models, or sustainable agriculture models, Empowered World View - Approach which sought to interrogate the beliefs, practices, systems and structures of communities in light of their contribution and/ or hindrances to development (for a better future) as God intended. It is aimed at transforming the mind, heart and the pocket (economic empowerment), Local Value Chain Development (LVCD - Sought to help people to generate more sustainable income that allows them to provide for the needs of their families and their children through improved access to the market, Citizen Voice and Action (CVA), which entails mobilising and equipping citizens not only to understand their rights and hold government to account for its commitments and to bring about institutional change, but also to understand their responsibilities in bringing about this change, Savings for Transformation (S4T): Building financial resilience by supporting community members to save together in a safe, convenient and flexible way. Savings groups are owned, managed and operated by the members, using a simple, transparent method whereby groups accumulate and convert small amounts of cash into savings and Sustainable and renewable energy options: Promotion of clean energy options in the community ensures controlled utilisation of energy sources e.g., charcoal use, firewood, biogas, use of solar instead of kerosene, among others.

### **Data Analysis**

CRIFSUP baseline, end term and GEDSI reports were analyzed. Basing on the objective of this paper, end term report was compared with the base line and GEDSI reports to be able to trace the social changes caused by CRIFSUP project and the agency of the vulnerable in the study area. Content analysis of related secondary data was also carried out. This provided corroborating evidence to support CRIFSUP reports. Data has been presented mainly in a descriptive form.

## **FINDINGS**

### **Introduction**

This paper examined how the implementation of FMNR in Central Rift enhanced gender equality, disability and social inclusion. It focused on the impact of FMNR technique on vulnerable group, decision making, roles and responsibilities, time use and diversification of economic activities. Patriarchy is deeply entrenched in the communities where CRIFSUP was implemented which could fuel resistance if it was perceived that the project was going against established cultural practices and undermining cherished values. CRISUP overcame this by targeting men and gatekeepers as champions of gender equality interventions. CRIFSUP programme also involved the vulnerable and this contributed to their empowerment. This was through ensuring that they participated in project meetings, which enabled them to provide feedback on how the programme has affected them or their workloads. CRIFSUP implementation of FMNR using GEDSI model enhanced the capacity of the vulnerable to cope and adapt on decision- making, time use, roles and diversification of economic activities.

### **Challenges in the Study Area that CRIFSUP was Implemented**

This study sought to identify the challenges the community faced before the implementation of CRIFSUP. The three counties of Baringo, Elgeyo Marakwet and Nakuru, like other parts of Kenya are greatly affected by climate change (Marigi, S.N. 2017). This in turn causes poverty, conflict over resources, cattle rustling, drought, floods, famine, inadequate water resources and poor infrastructure.

Harmful cultural practices such as female genital mutilation, child marriage, child abuse, teenage pregnancy and gender-based violence are prevalent in this region, reinforced gender inequality and the subordination of women and children. Pandemics such as Covid 19 and HIV/AIDS also impacted negatively on the community that CRIFSUP project was undertaken.

The above risks and harmful practices by the community are reinforced by climate change that impacts on men, women, boys and girls differently. This is in line with research which indicate that vulnerabilities related to climate change and its impacts on communities are gendered (Rao et al. 2019, Angula, et al. 2021). The study participants identified the vulnerable in the study area to include women who are single parents, the elderly, widows and widowers, people living with disability and children.

### **Impact of FMNR on Decision Making**

The study sought to understand how GEDSI Approach transformed decision making among men, women youth and people with disabilities in the study area. Of interest was men's respective role in public and household decision-making and the practical barriers to women's participation in climate change discussions, planning and decision-making within the CRIFSUP Project.

The study established that woman, people with disabilities and youth at the beginning of the project could not participate adequately in government driven public development meeting on planning and budgeting. The FGD participants noted that prior to CRIFSUP project in Central Rift, persons with disability were rarely acknowledged, they were shunned by the community in all the implementation sites. In Nakuru for instance, an FGD participant noted "People think a disabled person is bewitched and they treat as outcasts". Most of the meetings were attended by men because the priority areas of discussion only focus on projects such as road construction, maintenance and construction of factories roles considered masculine among these societies besides, women were left at home to tend to household chores. Among the Kalenjin, a community dominant in all the implementation sites, single women/mothers are usually not elected to, leadership positions. Consequently, denying them equal opportunities while men have control over major decisions in the community. Consequently, there was also low participation by women and people with disabilities in community meetings as they are usually attended by men. Unmarried single mothers were worse off because of cultural barriers.

Oral sources identified some of the barriers to participation in public decision-making forums to include; domestic chores leading to lack of time, cultural barriers such as lack of ownership of land and low literacy levels that hindered women participation in development initiatives at community level. Long distance to where meetings were held especially public meetings organized by the chief and ward representatives closed out people with disabilities. High levels of poverty among vulnerable women, men, youth and people with disabilities also made this group not able to attend meetings, leading to their exclusion from decision making forums.

Poor infrastructure and long distances to the public barazas also closed out people with disabilities from participating in decision making forums.

In a bid to enhance women and people with disabilities positions in decision making, Citizen Voice and Action (CVA) was successfully employed by CRIFSUP project. Citizen Voice and Action groups successfully leveraged environmental by-laws and policies in support of FMNR. Policies supporting the implementation of FMNR in the three counties were non-existent during the baseline survey. However, in the evaluation report of 2021, the number of policies promoting FMNR had increased to 7. By-laws created, and/or modified and operationalized to promote natural regeneration the three counties also increased from 8 in 2018 to 18 by 2021. CVA accepted women and people with disabilities as members and leaders, with 97% of survey respondents reported equal opportunity to participate in this community structure. This gave women and people with disabilities an opportunity to participate in decision making. Although the policies and by-laws in the three counties, were not directly focusing on gender equality, disability and social inclusion, any policy supporting its implementation and expansion plays a major role in enhancing gender equality and social inclusion.

Findings indicated that Savings for Transformation groups, empowering association established by CRIFSUP also enhanced decision making by women and people living with disabilities in Central Rift. Women were priority participants in Savings Groups and Empowered World View training (World Vision, 2021). These groups proved strong and sustainable. Members were able to make a broader range of financial decisions to diversify their income sources and try new things. The emphasis on women and people with disabilities as members was in line with the project's mainstreaming approach to gender and could be linked to perceived outcomes of equality in FMNR. Savings for transformation groups were vibrant and these are the platforms used by women, men, youth and people with disabilities to share their issues and organize their development agenda and participation in decision making. Participation in many of the community forums by these groups were always voluntary and no one is excluded based on their ethnicity, religion, marital status and gender despite existing cultural and social norms that tend to promote exclusion. In the end term report a notable 48.4 per cent of the persons with disability interviewed held leadership positions in a project or savings for transformation community group. Discussions with key informants noted that the relatively high proportion of persons with disabilities in leadership was partly because the project targeted them for leadership at community level.

Project management committees formed by CRIFSUP, ensured adequate gender representation and inclusion of people with disabilities. In such forums and committees' women, people with disabilities and other vulnerable groups were given enough chances to air their views during public participation. Children (boys and girls) used agricultural clubs, and environmental clubs to voice their concerns on issues affecting them.

As far as distribution of decision-making power between men and women in the household is concerned, the study established that at the beginning of CRIFSUP project there was inequity in decision making. The role of men was dominant at household level in all the implementation sites with a tendency to exclude women and youth in decision-making. By the end of the project decision at household level involved both men and women. They tend to make decisions together over enterprises, income-generation activities, or resources important for their wellbeing and livelihood.

From the foregoing it is apparent that the establishment of Citizen Voice Action and Savings for Transformation groups, and project management committees apart from empowering the vulnerable economically, provided equal opportunities for women and men to be engaged and be represented in different decision-making spaces, breaking the barrier that only men can speak on behalf of the community. This was supported by various respondents who reported that these groups, increased voice for women, people with disabilities and other vulnerable groups in the study area. It was highlighted by the majority of respondents (94.5%) that women's decision making in income and household management had increased in the last four years; while 97.3% respondents observed women were taking part in community/neighbourhood meetings.

### **Impact of FMNR on Gender Roles**

Women and men perform different roles, and have different stakes in environmental conservation (Gunwal and Mago, 2019). These interests have been socially constructed following the attribution of gender roles that determine the extent to which each gender depends on and protects nature (Lotsmart, 2008). Women and girls tend to have responsibility for sourcing, collecting and transporting natural resources for domestic purposes. In most developing countries, men mainly use natural resources for commercial purposes (agriculture, fishing, timber) (Mhacha, E.P. 2014). In crop production, men prioritize (market-orientated) cash crops for export, whereas women agriculturalists tend to focus more on food crops for the household and community. In these countries, national food security often rests upon women's production of food crops (Visser, J. and Wangu, J. 2021 and Igutia, R., and Sumelius, J., 2022).

The study has established that there were clear division of labour between men and women; boys and girls within the communities where CRIFSUP project is being implemented. The analysis of structure reveals a clear gendered division of labour and exploitation of women and child labour. It shows not only who is working where, but also the diversity of activities, and the gender domination within each household and community. The gender division of labour and the constitution of the family as an economic entity often contributes to gender inequalities.

This study established that communities in the study area are patriarchal and men are seen as the head of the family, while women are the caregivers. The study established that chores carried out by women are arduous. They are expected to be involved in fetching water from long distances, fire wood, cooking for families, taking care of children, the sick and the elderly and general domestic chores in addition to working in the farm and other productive agricultural activities. The study established that women play a critical role in agricultural and pastoral livelihoods, often bearing significant responsibility for managing critical productive resources such as land, water, livestock, biodiversity, fodder, fuel, and food. Food security often rests upon women's production of food crops.

In a bid to change norms and perceptions CRIFSUP involved women in activities outside the household. Women were appointed as lead farmers, the project ensured that women travelled together when visiting other farmers, and encouraged female-to-female farming networks and mentorship. Women respondents attested that they had experienced equal opportunities with men in their engagement with FMNR, with 64.3% of women indicating that their confidence and skills had been built through the project.

This was clearly articulated in community brainstorming sessions, when it was indicated that women were involved in FMNR. Respondents attested that their participation in community development activities and other productive tasks has helped to improve their recognition of their role as agents of change. The long-term involvement of women in FMNR related group activities is helping change perceptions and norms gradually. During such meetings women, people with disabilities and other vulnerable groups get to speak and contribute to development agenda within their community.

Parents in the study area were not effective in caring for and protecting their children. The CRIFSUP Baseline Report outlined challenges facing children to included inadequate food, school drop-outs and early marriages. Female youths added that dropping-out of school was due to parental negligence of their children and lack of basic needs. In addition, it was indicated that poor parental care contributed to high rates of early pregnancies among children. Project records estimated approximately 34,750 children benefited from the FMNR, including directly through school environment clubs and lessons, and indirectly through household production, increased income and food security. The project took place in areas with relatively high school attendance. FGDs confirmed that increased income was making it easier for families to afford school fees. Children FGDs pointed out that both boys and girls have enjoyed opportunities and rights. While not directly attributable to project activities, this culture of equality is a promising sign of more equal engagement in economic, environmental and social spheres as adults. (CRIFSUP End Term Evaluation Report, 2021).

The study revealed that school children engaged in FMNR through environmental clubs surpassed project targets, with 2,523 club members (target 2,170) in 160 schools (target 126). The evaluation noted significant time was still expected of children to help with family chores. For girls, this was often firewood collection and for boys herding livestock to grazing pasture. Children in focus groups noted they would do these chores after school rather than during school hours; however, further reduction of time and expectation of children in both activities could support other child wellbeing outcomes such as quality learning, child protection, family time and play. While not directly attributable to project activities, this culture of equality is a promising sign of more equal engagement in economic, environmental and social spheres as adults.

### **Impact of CRIFSUP Project on Time Use**

The fourth research objective endeavoured to assess the impact of CRIFSUP project on time use among men, women, children and people living with disabilities. How women and men spend time is one of the most important and least understood characteristics of people around the world (Rubiano-Matulevich, E. and Viollaz, M.,2019). Women's perceived roles and responsibilities within the home, including reproductive and unpaid domestic activities (such as cooking, cleaning, collecting water and firewood, and caring for dependents including children, people with disabilities and older persons) are time consuming, rarely valued and severely limit the amount of time women are able to engage in income- earning activities (Lovell, E., 2021). Men and women bear disproportionate work burden which leads to time poverty (FAO, 2015).

There is little appreciation and recognition of unpaid care and domestic work in Kenya. Unpaid care and domestic work are indispensable in contributing to the well-being of individuals, families and societies. Female workers spend more time in unpaid care and domestic work than their male counterparts (Tanui and Chelang'a, 2021). Time is one of the most critical assets for

women's empowerment due to its strong impact on their ability to engage in other development activities, such as access to training, paid employment and income generating activities compared to men. This study also sought to understand time use by men, women, boys, girls and people with disabilities in the communities where the CRIFSUP project was implemented. Women spend an average of 4.6 hours per day on unpaid domestic and care work, ranging from 5.0 hours in Nakuru to 4.2 hours in Baringo (CRIFSUP Baseline Report, 2018). In places where FMNR techniques had been introduced, improved agricultural methods (fencing, allowing trees to sprout, pasture for grazing and soil and water conservation) were employed, the time saved per day for an individual woman totaled 2.7 hours. Women in Baringo reported up to 3.1 hours saved per women per day while the lowest was 2.4 hours reported by women in Nakuru.

Information in table 1 indicates that most women and girls spend more time on reproductive tasks compared to men and boys. They also spend almost equal time in productive and community tasks. It was established that men are not expected to help their spouses with household chores because it is considered a taboo and the community would reprimand those who attempt. The study has established that compared to men, women fulfill double roles in the economy and bear a double time-burden. They engage in domestic chores and income generating activities.

**Table 1: Activities and Tasks Performed by Men and Women in the Community**

Activity/task	Who does most of the task?				How much time does it take to complete the task?			
	Women	Men	Boys	Girls	Women	Men	Boys	Girls
<b>Reproductive Tasks</b>								
Cleaning and washing	X	0	0	X	6 hours	0	0	2hours
Food preparation	X	0	0	X	3hours	0	0	1 hours
Care for the sick	X	0	0	0	2 hours	0	0	2 hours
Childcare	X	0	0	X	3hours	0	0	11hours
Collecting water and fuel	X	0	X	X	4hours	0	1hours	2 hours
Feeding the cattle	X	X	X	0	3hours	2hours	1hours	0
<b>Productive Tasks</b>								
Agricultural activities (specify)	X	X	X	X	4hours	6hours	2hours	2hours
Livestock rearing, fishing, bee keeping)	X	X	X	0	6hours	6hours	4hours	0
<b>Community Tasks</b>								
Cleaning the community	X	X	X	0	1 hours	6 hours	3 hours	0
Removing silt	X	X	0	0	4 hours	6hours	0	0

Source: CRIFSUP GESI Report, 2021



### **Impact of FMNR on Diversification of Economic Activities**

Rural families constantly negotiate their livelihoods by obtaining access to natural resources, labour, capital, knowledge, and markets. Successful negotiation leads to enhanced family well-being and sustainable use of natural resources. Unsuccessful negotiation threatens family survival, threatens sustainable use of natural resources, and reduces biodiversity. These negotiation processes are mediated by gender relations (Valdivia, C. and Gilles, J. 2001). Saving for Transformation groups played a major role in raising resources for women and people with disabilities in the study area. This is in line with the arguments of Huyer, who points out that, local women's groups, self-help groups, village savings and loans, and other groups based economic mutual support groups, that supported credit access and production support go a long way in empowering women economically (Huyer et. al, 2021). Savings for Transformation groups became empowering association for many. These groups proved strong and sustainable sources of income. Members were able to make a broader range of financial decisions to diversify their income sources and try new things. The emphasis on women as members was in line with the project's mainstreaming approach to gender and could be linked to perceived outcomes of equality in farming and FMNR. This action supported and strengthened the formation of more than 40 savings for Transformation groups in the Elgeyo Marakwet, Baringo and Nakuru counties each reporting annual return on investment of at least USD: 500. This enabled them to engage in different economic activities supported by CRIFSUP. For instance, indigenous honey harvesting practices with modern beehives and protective gear that enabled women could take part more easily. Women respondents attested that they had experienced equal opportunities with men in their engagement with FMNR, with 64.3% of women indicating that their confidence and skills had been built through the project. However, men are still in control over labour proceeds from women and children.

The use of trees for firewood for household energy needs and for the burning of charcoal was a major requirement in all the four counties. In the baseline report respondents observed that limited access to secure land tenure was a knock-on effect on women's ability to access natural resources, such as water and trees. Tree rights are often linked to land rights. Due to having limited formal land rights, women had to travel long distances to collect firewood, despite having local trees closer to their homes owned by male members of the household. Alternatively, they are forced to collect other types of fuel, such as dung and stalks for use as fuel at homestead level.

Reduced time and distance for collecting firewood was an important gender equality, disability and inclusion target for CRIFSUP. A survey of project participants taken in 2019-20 found time taken to collect firewood had reduced from an average of three hours to 30 minutes, because of the large number of trees in the study area due to FMNR and the ability of women to negotiate for the use of these trees.

However, need for firewood and burning of charcoal is a threat to the natural regeneration through naturing of trees by FMNR. Energy-saving interventions were commenced by CRIFSUP project and collaborated with government and energy-efficient service providers to train their farmers in energy-efficient technologies (energy improved cookstoves, biogas, and solar). Through project field days conducted, 43 households to purchase energy-saving cookstoves.

## **Conclusion**

From the foregoing it is apparent that the implementation of CRIFSUP project in Central Rift Kenya enhanced gender equality, disability and social inclusion in a number of areas. This includes an increase in women decision making power. The appointment of men and women as lead farmers, Citizen Voice Action and Saving for Transformation groups played a major role in breaking the barriers that prevented effective participation of vulnerable group in engaging in decision making in the study area. These groups are used by women, men, youth and people with disabilities to participation in decision making in the study area.

There were clear division of labour between men and women; boys and girls within Central Rift, which contributed to gender inequalities and exclusion of the vulnerable in development. Although women are still mainly engaged in domestic chores, their participation in community development activities and other productive tasks has been enhanced by this project. This in turn has improved their recognition of their role as agents of change. The long-term involvement of women in FMNR related group activities is helping change perceptions and norms gradually. It created awareness among them and led to change of norms and perceptions gradually and involvement of the vulnerable in diverse income generating activities.

Time being one of the most critical assets for women's empowerment, this study assessed how CRIFSUP project alleviated the time women and the vulnerable spent in house hold chores and other development activities. In places where FMNR techniques had been introduced, improved agricultural methods were employed, the time saved per day for an individual woman went up because of availability of firewood. In the same vein, this project in collaboration with other service providers was in the pipeline to further reduce the hours spend by women and other vulnerable groups in looking for firewood, through introduction of energy efficient technologies such as energy saving stoves, biogas and solar. This will greatly reduce the time spend on household chores and allowed women to engage in other income generating activities.

A major challenge in CRIFSUP reports was lack of detailed gender disaggregated data by age, different disabilities, marital status, education, employment and class. Such data, for instance, this would determine whether all women and people with disabilities had their decision-making power enhanced or there were discrepancies depending on education, age, marital status or ethnicity. This is because women and people with disabilities face different dominations, some of which intersect.

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