ChildFund Kenya

BASELINE EVALUATION OF THE REGREENING AFRICA PROJECT

Mitigating the Impact of Climate Change and Improving Resilience and Adaptability of Women and Children in Nairobi, Makueni, and Kajiado Counties

2024

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Executive Summary

The purpose of the study was to undertake a baseline evaluation for the Regreening Africa Project that aims to mitigate the impact of climate change and improving resilience and adaptability of women and children in Nairobi, Makueni and Kajiado Counties. It aimed at establishing a starting point or reference against which future progress or changes of the project, would be measured. The study was guided by the following specific objectives: (i) to assess the current status of youth and women-led Climate Smart Green enterprises for environmental conservation, employment creation and income generation in the target areas; (ii) to evaluate the extent to which women have adopted climate-smart agriculture for increased access and production of nutritious food in the target counties; (iii) to determine the level of knowledge and skills among primary school children and teachers regarding environmental conservation practices, climate change adaptation and resilience in the target counties; (iv) to assess the current status of production of tree seedlings , tree nursery infrastructure, agroforestry practices and tracking mechanisms within the target counties.

The evaluation utilised was cross-sectional and descriptive study design. The evaluation apprwas mixed methods that adopted descriptive study design. The study population 1518 respondents where a sample size of 307 was drawn based on Cochran's formula. Primary participants were identified using systematic random sampling technique. Key Informant Interviews and Focused Group Discussions were conducted to triangulate opinions and views of primary participants. Questionnaires scripted on KOBO Toolkit were used to collect both quantitative and qualitative data. Data analysis using SPSS and MS Excel where frequencies, percentages, mean and standard deviations were generated. Data was presented using figures, charts, graphs and tables.

The study received a response rate of **70.4%** which is adequate to draw statistically sound analysis and conclusions. The results showed that all groups were female dominated with all participants above the age of 40 years being women. Generally, there was minimal gender disparity among youth and children categories implying adequate gender representation. Majority of the participants in the study were not married. Most of the participants (52.3%) had attained secondary level education. All (4) interviewed teachers had post-secondary training. A large segment (25.2%) of the participants indicated that they were either self-employed or casual laborers. Unemployed participants comprised of a relatively significant proportion (14.4%) of the study participants. At 54.9%, the participants in employment earned a monthly income of less than Ksh. 10,000.

The findings based on survey objectives are as follows;

On the current status of youth and women-led Climate Smart Green enterprises for environmental conservation, employment creation, and income generation, the findings reveal that only 11.6% of women and youth are participating in climate-smart agriculture (CSA). This minority group indicated that they are engaged in subsistence poultry and agroforestry primarily integrating avocados, mangoes, oranges, and lemons. Although, 27.9% of total participants rated their understanding of CSA as good only 19.8% of were formally trained on CSA. On income, the results revealed that 76.2% of those who have adopted CSA earn between 0 and Ksh.10, 000 ($77).
The findings on the extent to which women have adopted and are practicing climate-smart agriculture for increased nutritious food production and access reveal that only 12.5% adopt CSA for nutrition, with 9% stating they were formally trained on effective nutrition practices. Access to nutritious foods is limited, with only 14.6% generally accessing nutritious foods, 22.2% of those accessing daily. The results show that 52.3% of the participating households had children under five years old, where 20% provided them with at least one nutritious food item on a weekly basis. On support received, 26.8% of recipient households rated it effective while the rest felt the assistance was not effective.

Results on the level of knowledge and skills among primary school children and teachers regarding environmental conservation practices, climate change adaptation, and resilience reveal that 58.1% of children have been taught environmental conservation largely as part of the curriculum. Teachers rated primary school knowledge on environmental conservation as moderate. Equally, teachers and headteachers also rated their schools as being moderately capable of participating in conservation initiatives. On training capacity, teachers expressed moderate confidence in training pupils and peers, mostly noting that they have not received any additional training beyond what they learned in the course curriculum. For primary school children, 76.2% participate in conservation activities, predominantly tree planting. However, participation frequency is low, with 82.5% getting involved rarely.

On the status of tree seedlings production, tree nursery infrastructure, agroforestry practices, and tracking mechanisms the results show that on average, 169 trees per person are planted annually, with avocados, mangoes, oranges, Jacaranda, papayas, senna siamea, and acacia being the most commonly planted species. Access to tree nurseries is limited, with only 40.5% of youth, women, and 8.1% of primary children having access. A proportion of 35.6% indicate that they did agroforestry in their land noting that commercial agroforestry and fruit tree nurseries are primarily undertaken by men as a secondary venture rather than a sustainable economic activity. The results also show that only 18.9% are actively tracking or mapping tree planting activities, mostly using manual methods such as paper maps.

Recommendations

Based on the findings as well as suggestions from participants, improving women, youth and children climate change resilience and adaptability, the following recommendations are proposed for consideration by the project;

1. **Capacity building:** This is an essential component of enhancing community resilience and promoting sustainable practices in the face of climate change. It includes imparting practical knowledge and skills to beneficiaries (i.e. women, youth and children) on environmental conservation and climate-smart agriculture. It aims at helping them understand the importance of preserving natural resources, protecting environment and adopting sustainable farming techniques. It should also entail training beneficiaries about the nutritional benefits of climate-smart agriculture, which serves as an adaptation measure. From this, beneficiaries will be able to participate in activities to diversify their diets and enhance food security, and ultimately empower them to prepare for and respond to the impacts of climate change.
2. **Support access to resources and infrastructur**e: To accelerate efforts of beneficiaries' adaptation to climate change, it's imperative to integrate various support with inputs and key resources in climate smart agriculture that include; provision of quality seeds, support to access organic agriculture inputs, support to establish tree nurseries and water systems through borehole drilling and various water harvesting infrastructures.
3. **Promote advocacy and collaboration:** This involves educating the public about the causes and consequences of climate change, as well as advocating for policy changes and sustainable practices to mitigate its effects. By engaging in advocacy efforts, target beneficiaries and their communities will have the capacity to amplify their voices and raise awareness about the urgent need for action. This, compounded by collaboration and partnerships with stakeholders to leverage resources, expertise, and influence will support implementation of meaningful solutions and drive positive environmental and climate outcomes.
4. **Income Generation through Climate Smart Green Enterprises :** For climate adaptation, income generating activities can be done through fostering sustainable agricultural practices and empower local communities. This involves the implementation of agroforestry systems, which integrate the cultivation of fruit-based trees alongside traditional crops. For example, farmers can incorporate fruit trees like mangoes, citrus fruits, or avocados into their agricultural landscapes. Not only do these trees provide nutritious fruits for consumption and sale, but they also contribute to soil health and

biodiversity conservation. By propagating and selling tree seedlings, beneficiaries can diversify their income streams while simultaneously contributing to reforestation and ecosystem restoration.

5. **Innovation and Adaptive Practices:** Implementing innovative techniques such as vertical and horizontal gardens, greenhouses, and shade netting will support the realization of optimal climate change resilience outcomes in the target areas. Thus, embracing innovative approach will effectively help beneficiaries and their households mitigate exposure to environmental risk and adapt to changing environmental conditions.

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List of Abbreviations/Abbreviations

ASALs	Arid and Semi-Arid Lands
CBOs	Community Based Organizations
CSA	Climate Smart Green enterprises
CSNA	Climate Smart Nutritional Agriculture
CSNSL	Climate Smart Nutrition Sensitive Livelihood
EDCP	Emali Dedicated Children Programme
FEWS NET	Famine Early Warning Systems Network
FGD	Focus Group Discussions
GPS	Geographical Positioning System
ICRAF	International Centre for Research in Agroforestry
KEFRI	Kenya Forest Research Institute
KII's	Key Informants Interviews
KSEP	Kenya Semi-Arid Enabling Program
LEAP	Leadership, Effectiveness, Accountability, and Professionalism
M&E	Monitoring and Evaluation
MoA	Ministry of Agriculture
NARITP	National Agricultural and Rural Inclusive Growth Project
NEMA	National Environmental Management Authority
RAs	Research Assistants
SPSS	Statistical Package for Social Sciences

Chapter One

Introduction

1.0 Background of the Project

Over the last two decades, climate and ecological change have exacerbated resource-based conflicts and communal violence mainly in arid and semi-arid lands (ASALs) in Kenya. Pastoral and peripheral agricultural areas of eastern and northern Kenya received little rainfall during the March to May 2022 long rains season, marking the fourth consecutive below-average season. In September 2021 the Government of Kenya declared the drought affecting most parts of the country a national disaster.

Widespread livestock death, low livestock productivity, very low cropping levels and sharp declines in purchasing power have created large food consumption gaps and high levels of acute malnutrition among millions of households in eastern and northern Kenya. According to Famine Early Warning Systems Network (FEWS NET Kenya Price Bulletin, 2024 May Report) four to five million people need humanitarian food assistance. Long-term challenges exacerbating the situation include environmental degradation, poor agricultural credit access, poor access to quality agricultural inputs and seed varieties, and emerging crop and livestock diseases. These are compounded by global forces such as the War in Ukraine, which has driven up fuel and food prices, and the aftershocks of COVID-19 pandemic, which caused widespread job loss. Political and economic marginalization, communal conflicts, cross border conflicts and increasing resource competition are emerging. Water and pasture are becoming increasingly scarce and less reliable; therefore, contributing to local inter-clan conflicts.

Youth, women and their children in these arid and semi-arid regions bear the brunt of these challenges. They make up the largest proportion of people whose livelihoods are dependent on rapidly degrading land and livestock. Access to and quality of education is a great challenge, and unemployment among youth (15-24 years) is high. This exacerbates the climate change vulnerability of these groups through souring their food security, health and social economic statuses.

To help address these challenges and enhance climate change resilience of these most vulnerable groups, ChildFund is implementing a program funded by Dow Impact Fund under

the Regreening Kenya Initiative. The program aims at mitigating the impact of Climate Change and improving resilience and adaptability of women and children in Nairobi, Makueni and Kajiado Counties. The project aims at achieving the following Objectives;

- **Objective 1: Mitigate the effects of climate change** by enhancing reforestation and environmental conservation through establishment of Moringa and fruit tree nurseries in the three counties of Makueni, Kajiado and Nairobi.
- **Objective 2: Promote Employment for Youth and Women** by engaging them in tree nurseries as business enterprises. Program activities will also promote youth leadership and advocacy in environmental conservation.
- **Objective 3: Promote long-term environmental responsibility** through the establishment of environmental clubs like *Aflatoun* in schools and training of young children to be champions in advocating for green environments.

The project targets that at the end of one year:

- 600 (450 out of school and 150 in school) youth and 300 women will be engaged in climate-smart green enterprises, promoting reforestation, and resulting in increased incomes.
- 130,000 trees (grafted avocadoes, mangoes, oranges, macadamia, moringa among others) will be planted.
- 600 youth will also be able to earn more than $307,692 from the sale of the fruit tree and agroforestry tree seedlings.
- 300 participating households will have better access to food and indicators of long-term resiliency.
- 300 youth will be actively engaged in environmental conservation and promotion of environmental responsibility beyond direct participants.
- 600 children will have access to nutritious and fortified moringa food for improved nutrition status.
- 6 Schools (1 secondary and 1primary) in each of the three counties with 600 children will have increased capacity to promote climate change adaptation and environment management strategies.
- Learnings from the pilot will be evaluated and disseminated and contribute to efforts to scale strategies across Africa.

1.1 Purpose of the Baseline Study

The baseline study aimed at establishing a starting point or reference against which future progress or changes, of the Regreening Kenya project, will be measured.

1.2 Objectives and Scope of the Assignment

The main purpose was to undertake a baseline evaluation for the project aimed at mitigating the impact of Climate Change and improving resilience and adaptability of women and children. It was carried out in the project areas i.e. Nairobi, Makueni and Kajiado Counties. The project is being implemented in partnership with Dow, Emali Dedicated Children's Agency, and Matonyok Organization. The survey focused on establishing initial information against the project indicators at community level which will be used as a threshold for this project to assess outcomes and impact.

The project indicators as stipulated in the project M&E framework, formed the basis for data collection for this baseline study. Data obtained from the baseline survey was also utilized to revise the indicators in the current project. The survey was guided by the following objectives:

i. Assess the status of youth and women-led Climate Smart Green enterprises for environmental conservation, employment creation, and income generation in Nairobi, Makueni, and Kajiado Counties.
ii. Evaluate the extent to which women have adopted and are practicing climate-smart agriculture for increased nutritious food production and access in the project areas.
iii. Determine the level of knowledge and skills among primary school children and teachers regarding environmental conservation practices, climate change adaptation, and resilience in the target regions.
iv. To assess the status of tree seedling production, tree nursery infrastructure, agroforestry practices, and tracking mechanisms within the target areas.

Chapter Two

Methodology

2.0 Introduction

This chapter details the roadmap that was followed while undertaking this baseline survey. It includes elaborating the survey design, sample size sampling procedures, data collection, data management, quality assurance, ethical and child safeguarding protocols followed and the data analysis methods adopted.

2.1 Survey Design

The survey was a cross-sectional study since it entailed collecting data from participants at one point in time. It adopted a descriptive study design that enabled the researcher to comprehensively describe the survey phenomenon. This was generally centered on respondents'' participation. It adopted a mixed-methods research approach where both quantitative and qualitative data were collected. The choice of this research strategy was informed by the unique nature of the questions that need to be posed. The survey's nature required collection of both numerical and non-numerical data. For example, economic, financial and some demographic questions required numerical data e.g., age, earnings etc. while explanatory question that largely adopts the nature of '*hows*' and '*whys*' required rich in-depth information which could only be collected using qualitative methods.

Other important factors that were considered include the implicit objectives of the baseline and stakeholders' needs. Adopting the two techniques aimed at giving the survey both breadth and depth necessary to strengthen conclusion and recommendations. **Triangulation** was done to ensure completeness and comprehensiveness of the information obtained.

2.1.1 Baseline Survey Matrix

Table 1. in the next page presents the survey matrix providing details on objectives, questions, data sources(people),and tools used.

Table 1: The Survey Matrix

Objectives	Questions	Data Sources	Tools
Assess the current status of youth and women-led Climate	What is the level of youth and women awareness and Understanding of Climate Smart Green Enterprises?	Primary data collected	Youth and women questionnaire

Objectives	Questions	Data Sources	Tools
Smart Green enterprises for environmental conservation, employment creation, and income generationin Nairobi, Makueni, andKajiado Counties.	To what extent are youth and women currently participating in Climate Smart Green Enterprises for environmental conservation, employment creation, and income generation? Do women and youth have adequate skills and capacity to run Climate Smart Green Enterprises?	from women and youth survey	Youth and women FGD Interview guide Key Informants interview
Evaluate the extent to which women have adopted and are practicing climate-smart agriculture for increased nutritious food production and access in the project areas.	What is the status of women adoption of climate-smart agriculture to support access to nutritious food? What is the degree of availability and affordability of nutritious food for women and their households? What percentage of households in the project areas report consuming a diverse range of nutritious foods on a daily/weekly basis? Where does the household source the nutritious food from (own farm/market)? What are the main challenges hindering women's access to climate-smart agriculture for production of nutritious food?	Primary data collected from women survey	Women questionnaire Women FGD Interview guide Key Informants interviews
Determine the level of knowledge and skills among primary school children and teachers regarding environmental conservation practices, climate change adaptation, and resilience in the target regions.	What is the level of skills and knowledge on environmental conservation practices by primary school children and teachers? What is the level of knowledge, skills and application of climate change adaptation among primary school children and teachers? What extent have the children actively participated in environmental education programs, or extracurricular activities focused on climate change adaptation?	Primary data collected from teachers and children survey	Teachers and children questionnaire Teachers and children FGD Interviews Key Informants interview
To assess the current status of tree seedling production, tree nursery infrastructure, agroforestry practices, and tracking mechanisms within the target areas. .	How prevalent are agroforestry practices within the target areas? What factors influence adoption and implementation agroforestry practices? What is the overall landscape of tree seedling production and tree nursery infrastructure within the target areas? What is the current level of tree growing in schools?	Primary data collected from all categories of participants in the survey	Teachers' questionnaire Children questionnaire Women/youth questionnaire FGD Interviews Key Informants interview

The answers to the above questions were obtained after data collection and analysis and the findings are as presented in Chapter Three of this report.

2.2 Data Collection Methods

2.2.1 Target population

To ensure representativeness, the survey participants were categorized into two i.e. primary and secondary target groups. The primary population included; Project beneficiaries i.e. youth, women, teachers and children in the project areas.

Based on the catchment, a total of 1518 respondents were targeted for intervention classified as follows;

Table 2: Target population

Category	Frequency	Percentage
Women	300	19.8%
Children	600	39.5%
Out of school youth	450	29.6%
In school youth	150	9.9%
Secondary school teacher*	9	0.6%
Primary school teachers*	9	0.6%
Total	**1518**	**100%**

**Included a headteacher and two matrons in each of the 6 schools (1 primary and 1 secondary) per county*

2.2.2 Sample size

In this baseline, Cochran's sample size formula was used to calculate the sample size. This formula is common in social surveys since it factors population, confidence level and margin of error thus assuring adequate sample size is drawn from both finite and infinite/unknown populations. The target population from which a sample was drawn include all persons who could match as beneficiary profile from the project catchment area and in this case total to 1518.

Sample computation based on a 95% confidence level and 5% margin of error and the target beneficiary population 1518 yield a sample size of 307 participants based on Cochran's

formula. To ensure representativeness, this sample was computed and distributed proportionately per category of beneficiaries. The distribution was done as follows:

Table 3: Sample distribution

Category	Frequency	Sample size	Percentage
Women	300	61	19.8%
Children	600	121	39.5%
Out of school youth	450	91	29.6%
In school youth	150	30	9.9%
Secondary school teacher	9	2	0.6%
Primary school teachers	9	2	0.6%
Total	**1518**	**307**	**100.0%**

2.3 Sampling and Sampling Design

From the list of participants, the survey followed systematic random sampling technique. Systematic random sampling is a probability sampling technique used to select a sample from an ordered population. In systematic random sampling, every n^{th} element in the population is selected to be part of the sample. It provides a methodical and systematic approach to sampling that ensures randomness while maintaining efficiency. In this survey the n^{th} beneficiary included in the sample was drawn following these steps;

- A random participant to start in the list will be picked, then,
- Based on a space established after dividing the number of target beneficiaries and sample required for the category e.g. women category this was 300/40~8, thus 8 beneficiaries were skipped and 9^{th} selected for interview.

2.3.1 Key Informants Selection

Data from the primary target group was compounded by views and opinion of secondary participants in participants in this study, 19 Participants of the Key Informant Interviews (KIIs) was selected based on their position and understanding of the subject matter. These were mostly knowledgeable partners, stakeholders and local opinion leaders in the project areas. They were distributed as follows;

- ChildFund Project Staff

- NMP staff for the target counties
- School headteachers
- 1 Emali Dedicated Children Agency
- 1 Matonyok Organization
- 3 (Sub)County agriculture/environment officers, 1 in each county
- 3 (Sub)County nutritionist officers, 1 in each county
- 3 (Sub)County Forest extension officers, 1 in each county
- 3 National government officials environment ministry and or NEMA in the target counties, 1 in each county
- 3 Opinion leaders or mobilizers, 1 in each county
- At least one official from local offices in the target counties (if available) from; International Centre for Research in Agroforestry (ICRAF), Vi-Agroforestry, LEAP Africa, Kenya Forest Research Institute (KEFRI), carbon trading organizations.

2.3.2 Focused Group Discussions (FGDs)

FGDs participants were drawn from among the beneficiaries factoring gender, age, persons with disability. 3 FGDs per category were carried out in each county and were detailed as follows:

1. Six Children FGD 1 per school
2. Three Youth FGD
3. Three Women FGD

Each FGD had at least 8 and at most 12 participants distributed based on gender and age and geographical distribution. Table 4 details participants' distribution;

Table 4: Distribution of FGD participants

Location	Number of participants		
	Children FGD	Youth FGD	Women FGD
Nairobi	11	12	12
Kajiado	10	9	11
Makueni	12	12	8

They were conducted through note taking and recording to comprehensively capture the discussions. Photos were captured to record status, progress and challenges.

2.4 Data Collection Methods

2.4.1. Training of Data Collectors

Experienced data collectors were recruited and trained on the overview of the project, child safeguarding, research ethics, research focus, methodology, instruments and survey administration process. This was a one-day training done virtually where research assistants were invited using an online link. The training entailed giving an overview of the research objectives, rationale, and significance, ensuring that data collectors understand the purpose and context of the study. Next, the RAs were taken through research methodology, including the study design, sampling strategy, data collection techniques, ethical considerations and child safeguarding policy. This was meant to ensure consistency/uniform understanding of the sampling, categorization of study participants and interviewing process by the research assistants. The research assistants were also trained on the survey administration process, including techniques for approaching respondents, obtaining informed consent, maintaining confidentiality, and recording data accurately.

2.4.2. Piloting data collection tools

Piloting of the research tools was done to check on their admissibility, reliability and validity making necessary adjustment/improvement before commencing the main survey. According to Blumberg et al (2021) a pilot group size may range from 5 to 100 subjects depending on the testing technique. This involved selecting a number equivalent to 10% of the sample i.e 15 participants from an area in Nairobi with similar characteristics as either Mukuru or Kasarani. This included women, youth and children of which respective questionnaires were administered.

The pilot helped evaluate flow of questions, understanding by the participants, time taken and testing functionality of the kobo data collection platform. Reliability was measured using Cronbach's alpha where coefficients of 0.7 and higher was dimmed to suffice for the study. The consultant ensured highest standards of research protocol and ethics and child safeguarding measures were followed to the latter during data collection.

2.5 Data Analysis

Data analysis was done using both quantitative and qualitative methods.

2.5.1. Quantitative analysis

was done using descriptive statistics, including measures of central tendency (mean, median, mode) and measures of dispersion (standard deviation, range) to summarize and describe the data's characteristics. The analysis entailed the use of data collected to help in reporting current status, success potential and challenges. Analyzed data was combined and presented in form of figures, graphs, charts, and tables in line with the objective of the baseline.

2.5.2. Qualitative data analysis

This was done according to patterns and emerging themes responding to different research questions posed. This analysis involved the systematic examination and interpretation of non-numerical data collected through open-ended interviews. It mainly focused on understanding the meanings, themes, and contexts inherent in the data. Data was categorized, arranged, and synthesized to provide meaning and interpretation. The process began with coding, where researchers identified and labelled themes, concepts, or patterns within the data. Thematic analysis entailed identifying recurring themes or patterns within the qualitative data and interpreting their significance. Most significant stories of change were analyzed and used to explain variations in quantitative analysis.

2.6 Data Management

Once data collection was complete, the raw dataset was downloaded/exported to relevant platforms i.e. Nvivo for qualitative data, Ms Excel and SPSS for quantitative data, where advanced functions were used to clean and analyze the data. Cleaning involved checking and addressing outliers, redundant and inconsistent entries.

2.6.1 Quality Assurance

All collected data was handled in a manner that guaranteed that it achieved the highest level of integrity and quality. This was done through ensuring all research ethics and protocols were stringently followed to the latter. For consistency and reliability of data, mobile based data collection application was used (i.e. KOBO Tool Kit for quantitative data) that had

modular workflows with complex branching logics and non-linear navigation that guaranteed high degree of consistency. It also had a timer and GPS system to ensure data was received in real time from the field and the consultant would monitor team movements. Beside the app, the consultant:

- Conducted spot check during the field work to see how data collection was progressing and resolving challenges as they emerged.
- Did random call backs and verifications on daily basis.
- Reviewed all the tools after each day to ensure data was correctly captured.
- Required all KIIs and FGD discussions to be recorded for review.

2.7 Ethical Consideration

The study strictly observed and safeguarded dignity and respect for people involved.

The following were stringently observed during field data collection;

1. **Women, youth and children participation in the survey was an ultimate consideration.**
2. **Respect to people was central throughout the survey.**

   Informed consent from all research participants was sought. In cases where children were involved in the survey, the consultant ensured that consent was obtained and given by parents/guardians.

   Minimized the **risk of harm** including psychological stress and discomfort to participants. This was achieved through ensuring that interviewing beneficiaries was done in a manner that made them comfortable while responding to questions.

   Protect and guarantee participants' **anonymity** and **confidentiality**; this was implemented as a practice throughout the survey, from data collection to report writing where no information that could identify a participant appeared anywhere, including in the main report.
3. **Refrain from** using **deceptive practices**; Field work was conducted in a manner that did not involve the use dishonest or misleading information to participants including promising of direct benefits in order to get data.
4. Giving participants the **right to withdraw** from the study at any point. The introductory part of the survey contained all the information on the rights of the participants

including withdrawal from the study or free not to answer a question that made them uncomfortable.

Chapter Three

Findings

3.0 Introduction

This chapter comprises of analysis, presentation and discussions of the study results based on the research objectives. It begins by a presentation of the general information that include response rate and respondents social economic and demographic background. The next section presents the study's key findings in line with the survey objectives. It includes baseline scores and discussions relating to the survey variables drawn from project indicators.

3.1 Response Rate

A total of 307 questionnaires were sent out across different target categories. The survey was administered to participants based on stipulated guidelines. Table 4 summarizes the response rate.

Table 5: Response rate

Category	Sample size	Frequency	Response Rate
Women	61	43	70.5%
Children	121	105	86.8%
Out of school youth	91	47	51.6%
In school youth	30	17	56.7%
Secondary school teacher	2	2	100.0%
Primary school teachers	2	2	100.0%
Total	**307**	**216**	**70.4%**

As shown in table 4, a total of 216 questionnaires were satisfactorily completed and returned while 91 of the questionnaires were either not returned or unsatisfactorily completed. This translates to a 70.4% response rate. Generally, children category had the highest (86.8 %) response rate while women and youth category had a response of 58.8% with the women's section having a higher response rate of 70.5%. According to Fincham (2008) and Nulty (2008), a social survey that attains a response of 50% is regarded as

adequate. This echoed Richardson (2005) who analyzed 141 articles from different journal article and observed an overall average response rate of 50.6%. This implies that the 70.4% response rate attained in this study can be categorized as high and therefore adequate to draw statistically sound results and generalizable conclusions.

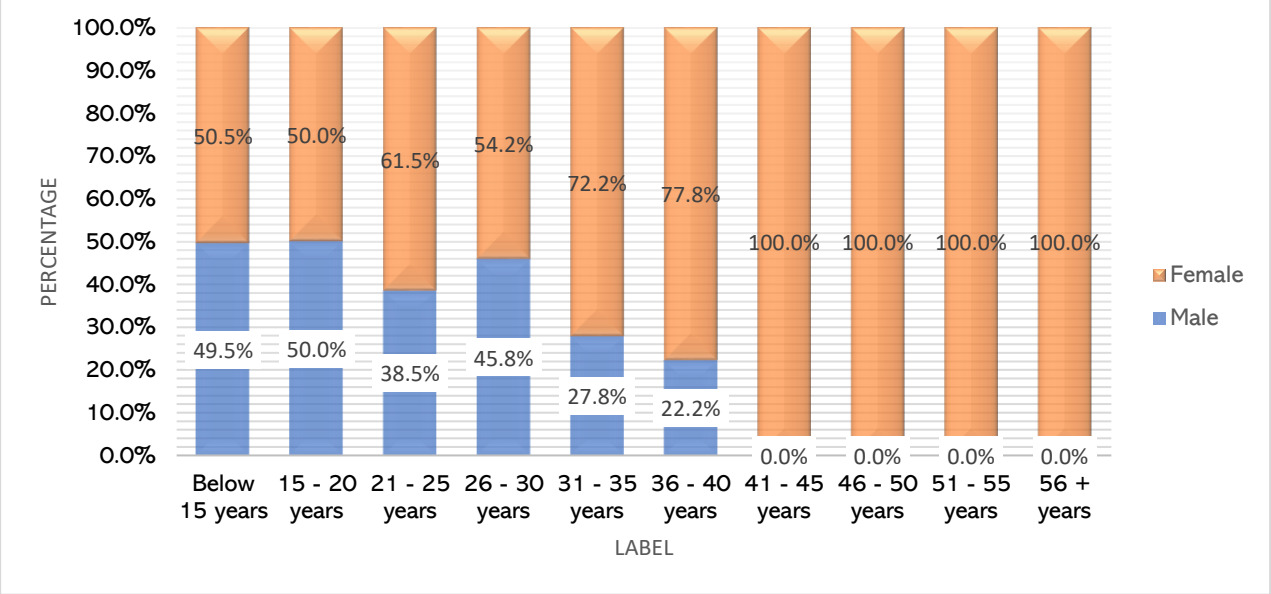
3.2 Participants Demographics

This section includes the participants demographic and social economic characteristics including; gender, age, marital status, education and monthly income.

3.2.1 Participants distribution by gender and age

Participants were asked to indicate their gender and age. The results were presented in figure 1.

Figure 1: Participants' gender distribution

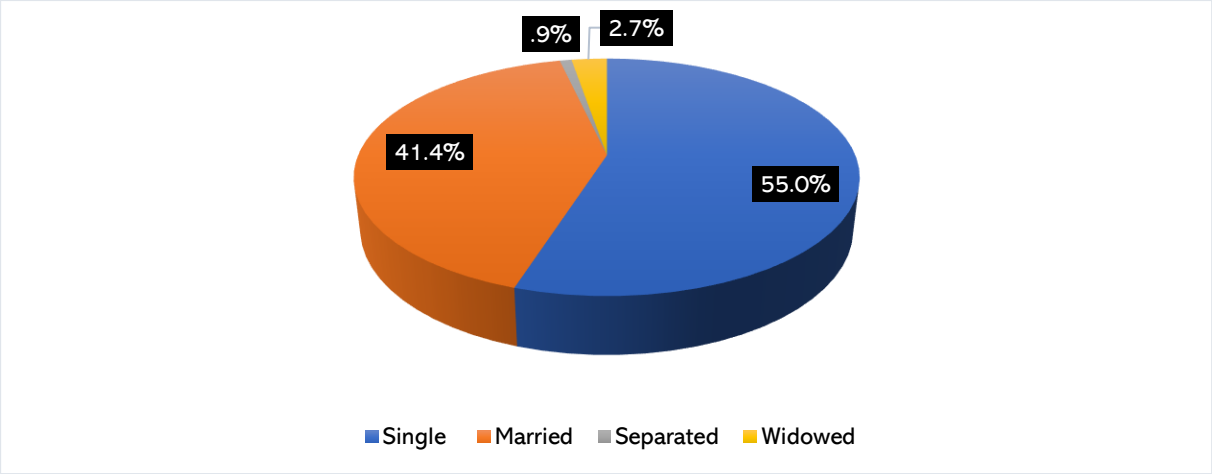


The results show that females dominated all groups, with all participants above the age of 40 years being women. Apart from 31-40 age categories that revealed gender disparity, majority of participants in younger categories had minimal disparity implying adequate gender representation. It's worth noting that the study included children under the age of 15, with the youngest participant being 7 years old and the average age of participants in this category being 11 years.

3.2.3 Marital Status

The participants were asked to indicate their marital status. The results were as presented in figure 2.

Figure 2: Participants' marital Status

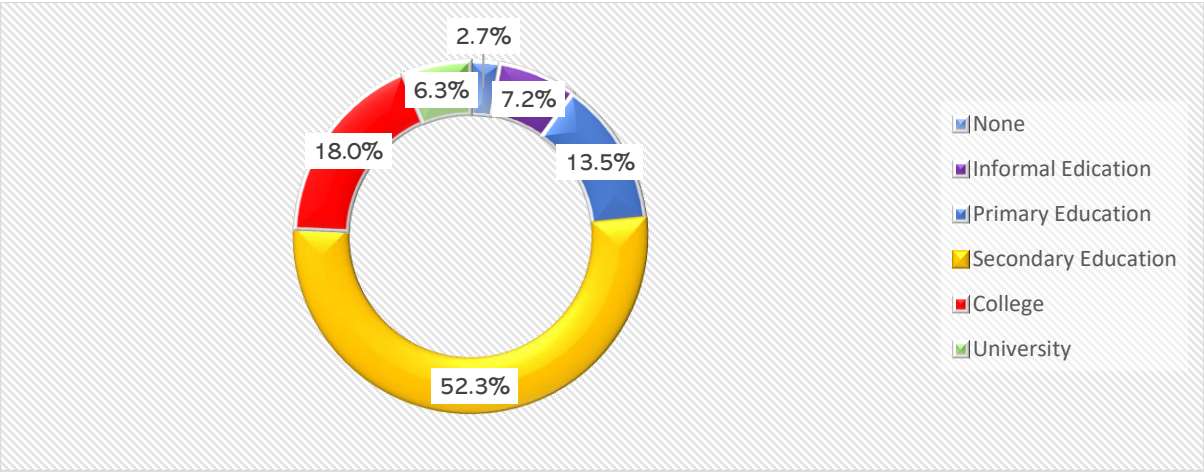


The findings (figure 2) revealed that majority (55%) of the participants in the study were single followed by 41.4% who indicated that they were married. Only 0.9% stated that they were separated while 2.7% stated that they were widowed.

3.2.4 Education Level

The distribution of education level for the youth and women participants is as shown in figure 3.

Figure 3: Participants education level



The results (figure 3) revealed that majority (52.3%) of the participants had attained secondary level education followed by 18% who pointed out that they had attained college

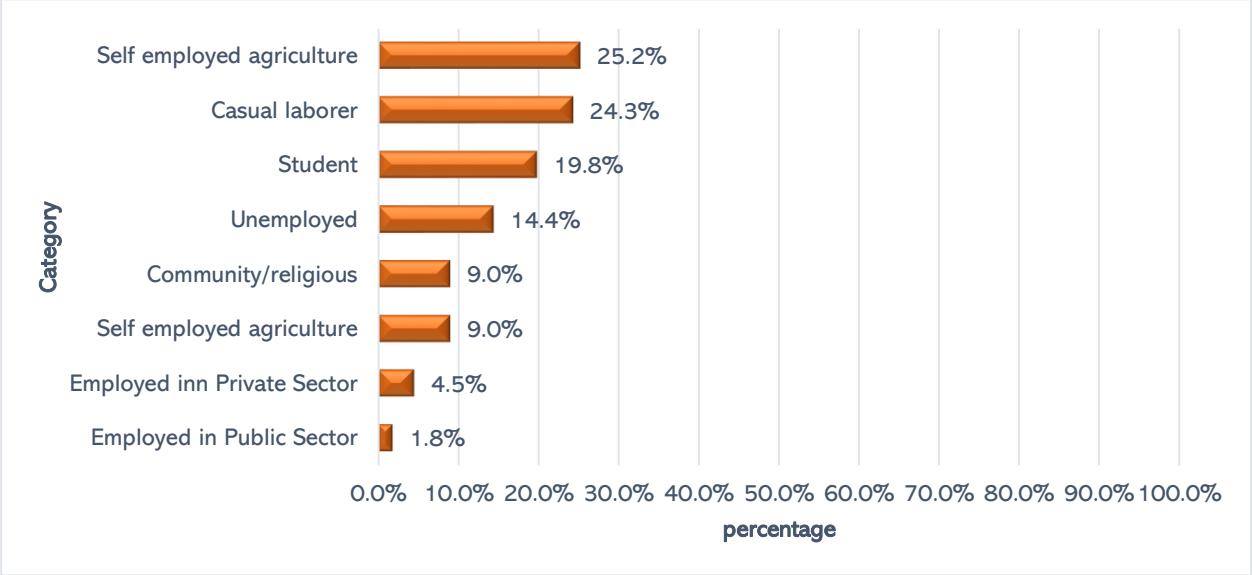
education. Only 2.7% and 7.2% had indicated that they had none or informal education respectively. This implies that most participants understood the survey subject matter and responded to questions without needing translation pointing out to high level of consistency.

Notably, all the children interviewed were in primary school while in-school youth were in secondary school. For the category of children participants, child-friendly questions were included in the questionnaire to enhance validity and consistency. All (4) interviewed teachers had post-secondary training.

3.2.5 Source of Income

Participants in the women and youth category were asked to indicate their sources of income and the results presented in figure 4.

Figure 4: Participants sources of income



A quarter (25.2%) of the participants indicated that they were engaged in self-employment through agriculture followed by 24.3% who were in casual labor. Participants noted during the FGDs that they were engaged in diverse economic activities including; poultry farming, small businesses, and transportation services. Livelihood activities within the survey areas were primarily centered on small-scale farming, livestock rearing, and informal employment. The participants reported low level of engagement in Climate Smart Agricultural activities citing numerous challenges such as inadequate training and resources among others detailed

in this report. They noted that these hindrances impeded their ability to adopt climate-smart practices and engage in green enterprises.

The results (figure 4) also show that participants employed in the public sector comprise the least proportion (1.8%) followed by participants indicating that they were employed in the private sector comprising of 4.5% of the participants. Notably, this proportion had a relatively gainful and stable incomes among the participants. On the other hand, the unemployed participants comprised of a relatively significant proportion (14.4%) of the study participants.

3.2.6 Monthly Income

The study aimed to assess the income levels of potential project beneficiaries. Thus participants (youth and women) were asked to indicate their income level and the results presented in table 6.

Table 6: Income distribution

Category	Frequency	Percentage
Less than 5,000	36	32.4%
5000 - 9999	25	22.5%
10,000 - 24,999	13	11.7%
25,000 - 49,999	5	4.5%
Not employed	29	26.1%
Don't know/Not Sure	1	0.9%
Choose not to answer	2	1.8%
Total	**111**	**100.0**

The findings reveal that nearly one third (32.4%) of participants in the study earned monthly income of less than ksh. 5,000 followed by 22.5% who had a monthly income of between ksh. 5,000 and ksh. 9,999. Participants who reported to earn ksh. 25,000 and above comprised a proportion of 4.5%.

3.3 Key Findings and baseline scores

This section presents the analysis on scores of the key baseline indicators. It includes; the status of youth and women-led Climate Smart Green enterprises for environmental conservation, employment creation; the status of adoption of climate-smart agriculture practices among youth and women in the target project areas; their knowledge and

awareness of climate change adaptation and community environmental conservation initiatives. The analysis further includes exploration of climate-smart nutrition-sensitive livelihoods, household nutrition status, environmental conservation participation, tree planting and agroforestry activities, skills and capacity building programs on climate change adaptation and finally, the status of primary school children, teachers' level of knowledge and skills regarding environmental conservation practices, climate change adaptation and resilience as well as overall school capacity to promote climate change adaptation.

3.4 Youth and Women Adoption of Climate Smart Agriculture

This section presents results on respondents' participation in agriculture particularly climate-smart agriculture and barriers hindering its adoption.

3.4.1 Participation in Climate Smart Agriculture (CSA)

A general question on whether participants engaged in agriculture was posed to the respondents where 75.7% indicated that they were actively involved in it. Next, participants were asked whether they or their households were involved in livelihood activities relating to climate smart agriculture. The results were as shown in figure 5.

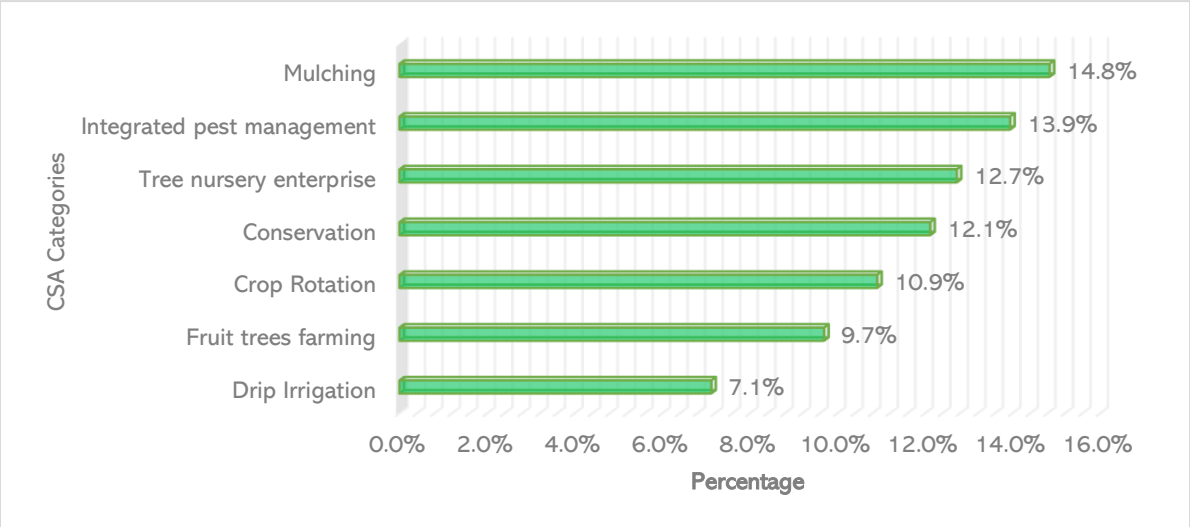


Figure 5: Participation in CSA

The results show that on average, 11.6% of the participants were practicing one activity or another relating to climate smart agriculture. As shown (figure 5) most participants (14.8%) mentioned mulching as a CSA practice they are involved in followed by integrated pest

management (13.9%) and tree nurseries enterprise (12.7%). Drip irrigation (7.1%) and fruit tree farming (9.7%) were the least mentioned CSA activities.

These findings were further affirmed by FGD's where a participants exhibited varying levels of understanding and awareness of climate-smart initiatives, with only a few recognizing the benefits of practices like tree planting and kitchen gardening in promoting environmental sustainability and food security. One participant noted;

"*We can say climate change is the change of weather patterns which causes change in life. Also, climate-smart enterprises are jobs that are created out of changes in weather and help to restore the changes in weather while give people income and finances. Here some of these are cleaning the river, removing garbage from the river and also planting bamboo trees to remove toxins from river water*". Another noted that; *" it involves change of weather and things we can do to restore the environment like tree planting, kitchen garden, It is important because you won't have to go to the market everything is at home where you can harvest vegetables and other garden foods (…) Little water is required , it reduces distance and enhance nutrition."*

Many community members expressed limited familiarity with existing climate-smart agricultural techniques and green entrepreneurship opportunities pointing towards low level of adoption.

Those involved in CSA activities were asked the number of years they have been in the practice. The results shows that a large proportion (49%) participants had been in CSA for periods between 1-3 years with an aggregate mean of 2 years.

3.4.2 Barriers hindering adoption of climate smart agricultural practices

From the analysis, the following were identified as the main challenges that participants face or anticipate that (may) hinder adequate adopting of climate-smart agriculture practices.

First, the participants pointed out resource constraints which included: i. financial constraints that affect startup cash flow. They explained that lack of proper access to credit and responsive government support hamper participation in CSA activities. ii. They noted that there is a shortage of resources such as tools, quality seeds, and farming space, which further

complicates farming efforts. For instance, one participant noted that *"Sometimes there is lack of water, expensive agro-chemicals, pest leading to destruction and inadequate rainfall hamper our efforts. Some like chicken will need a number of vaccines which are expensive to get (we need shades to protect seedlings but we can't afford*". Another expounded, "*Nurseries have become hard to manage due to inadequate resources (…) On waste management, it is challenging because we do not have PPEs and materials to protect ourselves whilst cleaning the rivers and community*".

Second, participants indicated that they had knowledge and skills in CSA: Many respondents mentioned lack of knowledge about climate-smart agriculture practices, modern agricultural technologies, and organic pest/disease management practices among others. A participant reported, "*we would like to take part in urban farming; however, we do not have adequate training on urban farming hence we try and fail especially in small poultry and rabbit keeping".* However, some had received training as explained by one respondent that, "

Thirdly, water scarcity or shortage emerged as a significant issue, impacting both agricultural and household activities. Some mention inadequate capacity to recycle or conserve water.

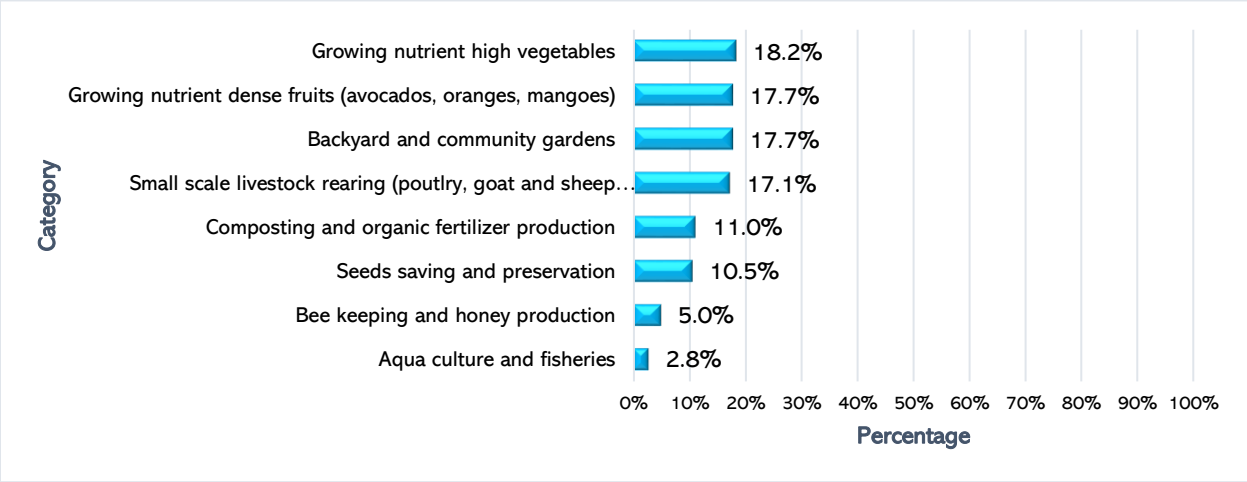
Fourth, in Kajiado and Makueni damage of crops by wild animals or livestock poses a threat to CSA participation. One respondent noted, "*The community also tends to be unsupportive to this youths project and even sabotages their projects by stealing their products and destruction of tree seedlings planted"*. Other Challenges mentioned include theft of crops, lack of access to quality seeds, and the use of counterfeit or substandard farming inputs.

3.5 Households' adoption of Climate Smart Nutrition Sensitive Livelihood

3.5.1 Participation in climate-smart nutritional agriculture practices

It was established that only 41.4% indicated that they had participated in climate smart nutritional agriculture practices while majority (58.6%) were not participating in climate smart nutritional agricultural practices or couldn't classify their participation. More insights were drawn by asking the respondents to specify activities relating to climate smart nutritional agriculture practices they had engaged in. The results were presented in figure 6.

Figure 6: Participation in climate-smart nutritional agriculture practices



The results reveal that on average about 12.5% of the participants indicated that they were practicing at least one of the climate smart nutritional agricultural practices, either by themselves or in their household. According to results presented in figure 6, a large proportion (18.2%) of participants mentioned growing high nutrient vegetables followed by growing nutrient dense fruits and backyard and community garden both comprising of 17.7%. Aqua culture was least (2.8%) climate smart nutritional practice followed by bee keeping and honey production (5%).

3.5.3 Training on climate smart nutritional livelihood activities

Participants were asked whether they had received any training or any of climate smart nutritional livelihood activities. The results were presented in table 7.

Table 7: Training on climate smart nutritional livelihood activities

Response	Frequency	Percentage
Yes	15	13.5%
No	93	83.8%
Not sure/Don't know	2	1.8%
Choose not to answer	1	0.9%
Total	**111**	**100.0**

The results show that a large majority (83.8%) had not received any training in any of the areas relating to climate smart nutritional agriculture.

However, for those who had received training a follow up question was asked about the content of the training they had received. Most mentioned that they had received training on urban farming and agribusiness that entailed emphasis on innovative techniques like beekeeping, planting vegetables in pyramids or sacks, and utilizing limited space effectively. Moreover, they talked of learning sustainability through practical guidance on various aspects such as preparing gardens, manuring, and establishing pyramids for vegetable planting.

3.5.4 Interventions to enhance engagement in Climate Smart Agricultural Nutritional (CSNA) practices

The key interventions and support suggested by the participants that could promote their participation in climate smart nutritional agricultural practices include;

Besides financial assistance, availability of inputs such as quality seeds, water supply during dry seasons, drip irrigation systems, kitchen garden materials, storage facilities, subsidized inputs and farm tools among others would accelerate their participation in CSNA.

In Makueni, women participants expounded,

"*Near our drier we need to have nursery since the one in Mwanyani is very far. It is a nursery with shade and we have about 900 moringa seedlings located in one of the member's home which is quite limiting. We need a common area built so that we can work from there. That was we can plan to meet and agree to work on the nursery (in common area) which we believe will accelerate our progress, we believe in the mantra that 'umoja ni nguvu'"*

Participants also mentioned inadequate knowledge and skill specific to engaging in CSNA including understanding the linkage with nutrition, required agricultural techniques, and a variety of crops or animals under this classification among others. They noted, "*We want more trainings to understand the opportunities in this practice (…) Training and sensitizing of the public on the importance of green entrepreneurship. This can be achieved by organizing educating days to sensitize the community, establish a feeding program for children where they also receive training on the climate smart agricultural practices".* In Nairobi, one participant commented on importance of sensitization stating that, "*Some are aware and some are not aware, the level of awareness is different among different members*

of the community. For example, in this area we had to put a sign post of the things we do in riverside as there are some members of the community that have been passing along this area and are not aware of the issues or activities that we do around here, they actually fear us".

In addition, participants pointed out water availability and management as a crucial area of support expressing the need for assistance during dry seasons and water harvesting infrastructure such as storage facilities. One of the participants noted, "*Address water issue since most kitchen gardens fail because of this. Water harvesting tank to be place near kitchen garden."*

Respondents also raised a need to get support towards access to CSNA product market to sell surplus and earn some income. One explained that, "*Help us with route to market, Also, get more carts (mkokotenis") to enhance our transport services as it is another venture that, not only link our products to markets, but also gives us income to and help maintain and conserve the environment, unlike the motorized carriers"*

Participants indicated that kitchen gardens are not very popular in urban areas, especially for apartment dwellers, due to restrictions from building caretakers and landlords or lack of interest. Respondents also pointed out the need to have collaborative efforts and partnerships between the community and organizations, donors, NGOs, and government agencies to facilitate the entire process i.e. training, sensitization, and resource provision. This is based on the view that the Ministry of Agriculture encourages the use of urban farming technologies (hydroponics, greenhouses and vertical gardens) and readily accessible materials (plastic containers, sacks) for kitchen gardens.

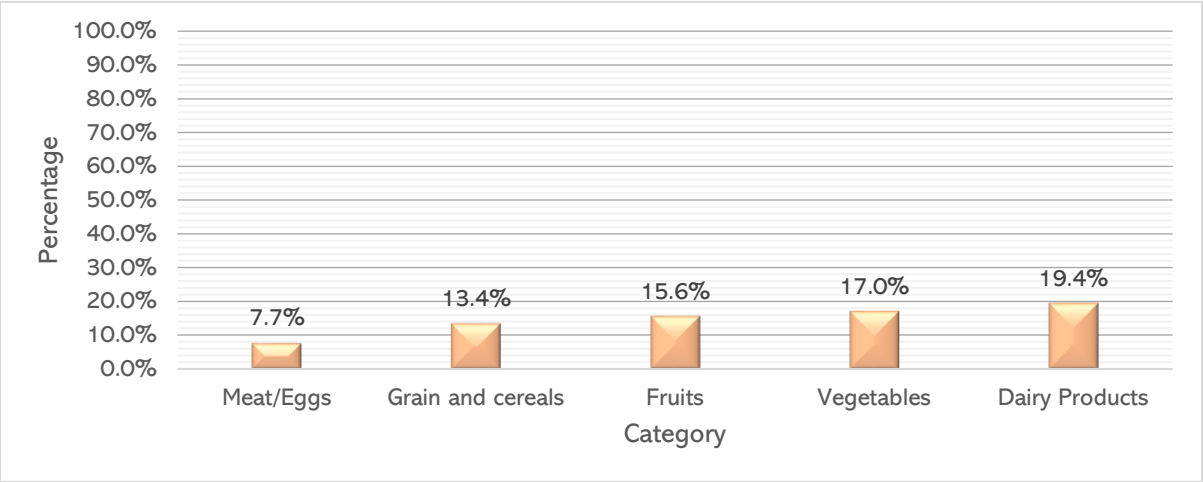
3.6 Households Nutrition Status

This was measured by assessing the composition of the meals participants households consumed 24 hours before the date of survey. This section presents the results

3.6.1 Household Nutrition Composition

Participants were asked to indicate whether, in their household, they had eaten selected food items that are termed as nutritious, within the last 24 hours before the interview. The results were as shown in figure 7.

Figure 7: Household nutrition composition



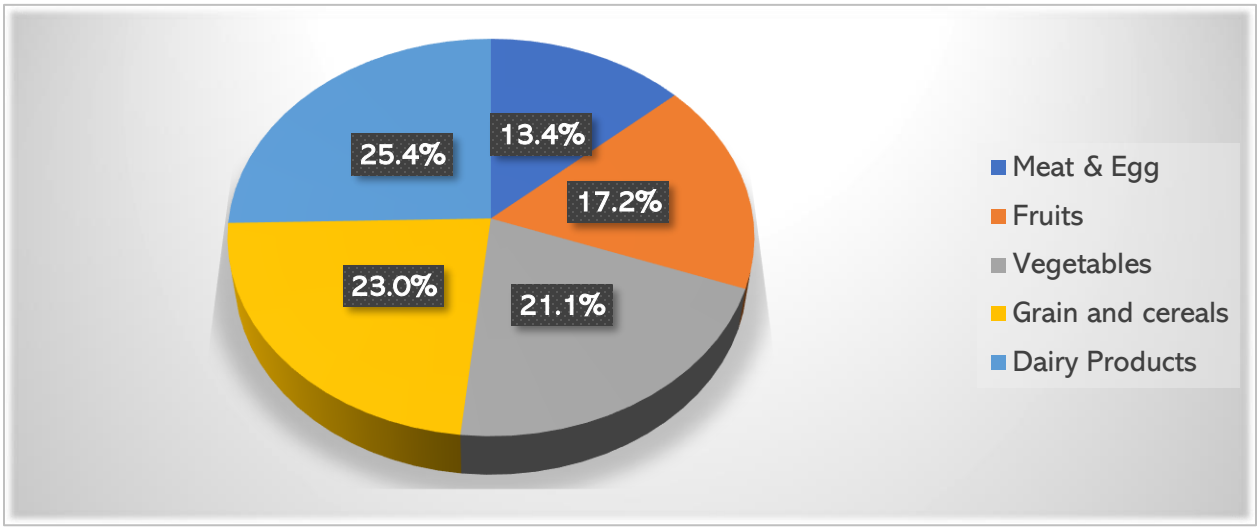
The analysis revealed that on average about 14.6% of participant had mentioned taking any of the food item listed. From figure 7, Dairy products were the most mentioned (19.4%) food item that the households had taken followed by vegetables (17%) while animal products were the least consumed (7.7%) followed by grains and cereals (13.4%).

3.6.2 Meals Nutrition Composition for under 5 years old children

Participants were asked to indicate whether there were children under the age of five years in their household. Majority (52.3%) of respondents affirmed while 47.7% stated that they had no child under the 5 years old in their house.

Those who stated that they had under 5-year-old children were asked to indicate whether their household provided the children assorted nutrition packs the previous 24 hours. The analysis was presented in figure 8.

Figure 8: Household nutrition composition for under 5 years old children



On average, about 20% participants mentioned giving their households and providing under 5-year-old children with any of the listed nutritious foods. Figure 8 detail response per item and reveal that dairy products were the most mentioned (25.4%) followed by grains and cereals (23%) while animal products were least mentioned (13.4%)

3.6.3 Frequency of consumption of high nutritious food

High nutritious foods such as vegetables, fruits and moringa are targeted as interventional high nutritional foods in the project. To assess their status, participants were asked to indicate how frequently they or their household consume these foods. The results were presented in table 8.

Table 8: Household frequency of consumption of high nutritious food

Category	Frequency	Percent
Daily	48	22.2%
Weekly	56	25.9%
Bi - weekly	9	4.2%
Rarely	25	11.6%
Never	78	36.1%
Total	**216**	**100.0%**

The results (table 7) shows that a large section (36.1%) of the participants indicated that they never take high nutritious foods.22.2% indicated that they took nutritious foods daily with the rest indicating that they took them at least weekly, bi-weekly or rarely.

3.6.4 Ratings on the current access to nutritious foods

On a scale of 1-5 (where 1=Very poor, 5= Very good) participants were asked to rate their current capacity to access to nutritious foods for their household. The results were as presented in table 8.

Table 9: Ratings on the current access to nutritious foods

Category	Frequency	Percent
Very poor	54	25.0%
Poor	18	8.3%
Moderate	102	47.2%
Good	41	19.0%
Very Good	1	0.5%
Total	216	**100.0%**

The results revealed that although a large proportion (47.2%) indicated that their house hold had moderate capacity to access nutritious foods, a plausible proportion aggregating 33.3% indicated that they their households had poor capacity to access to nutritious foods.

3.6.5 Support to improve nutrition

The study sought to evaluate the available support in the project target areas. Respondents were asked whether they or anyone in their household received any other support related to improving household nutrition. The results revealed that a large proportion (88.3%) had not received any support either as individuals or as household. Those who stated that they or their household has received any support to improve nutrition were asked to say more about the support.

Most explained that they had received food relief in the form of maize, rice, beans, milk, meat, eggs, fruits, and other essential food items. They noted that this support aimed at enhancing balanced diet for improved health outcomes, particularly for mothers, newborns and school going children.

A portion of participants also indicated that they received support through participating in a health sensitization where they were taken through good feeding habits for mothers and newborns. According to one participant *"(…) this support involves raising awareness about the importance of proper nutrition and dietary practices for maternal and child health."*

Most of this support came from community organizations such as Emali Dedicated Children's Agency and the *Mazingira* Institute assistance dedicated to specific causes or community welfare. Other sources of support came from well off relatives, friends while other stated government through relevant ministries such as health and special programmes.

3.6.6 Effectiveness of the support to improve household nutritional quality

Those who received support to improve their household nutritional status were asked whether the support received was effective. The analysis revealed that 72.2% indicated the support received was not effective at all in improving their household nutritional status. They cited inconsistency of the support, inadequacy to meet nutritional needs from variety of sources to all household members and that they stopped enjoying the benefits immediately after the support was stopped.

However, participants who felt that the support was effective in one way or the other cited that such support came at the time of dire need (during drought or time of economic hardship), and they really needed some food having stayed for a while without proper and adequate meals. Others noted that the knowledge they acquired was still useful in their daily endeavors to ensure they and their household access nutritious food.

3.6.7 Awareness of impacts of climate change on child nutrition and protection

The survey aimed to assess the level of participants in the youth and women category awareness of the impacts of climate change on child nutrition and protection. The results were presented in table 10.

Table 10: Awareness of the potential impacts of climate change on child nutrition and protection

Category	Frequency	Percentage
Yes	48	43.2%
No	55	49.5%
Not sure/Don't know	5	4.5%
Choose not to say	3	2.7%
Total	**111**	**100.0%**

The results show that about half (49.5%) of the participants did not know the impacts of climate change on child nutrition and protection.

Participants (43.2%) who indicated that they knew impacts of climate change on child nutrition and protection were asked to explain. Most participants highlighted a range of negative impacts of climate change on health and nutrition, including diseases, malnutrition, and reduced immunity. They also noted the potential benefits that included push to adopting climate-smart practices that would promote healthy diets and community well-being.

3.6.8 Support needed to improve nutritional quality

From the analysis, households expressed a need for various forms of support, including financial assistance, resources provision, education and training, access to water. They also pointed out provision of infrastructure support that include; facilitation with fences, greenhouses and water tanks, to improve nutritional quality and food security.

3.7. Environmental Conservation and Participation

The study aimed at evaluating respondents' participation in efforts aimed at preserving and protecting natural resources and ecosystems. The results were presented in this section.

3.7.1 Membership of environmental group

The results revealed that slightly more than half (51.4%) of the participants were a member of at least one environmental group. As indicated by the respondents, the missions of their groups revolved around the interconnected themes of environmental conservation, economic empowerment (particularly for women and youth), community development, and advocacy for sustainable practices. Others had a component of recognition of innovative approaches to address climate and environmental challenges.

On specific missions of the groups that participants were involved in and were engaged in environmental conservation aimed at promoting environmental conservation efforts through tree planting, nursery establishment, and "going green" initiatives while others were involved in conserving natural resources, such as rivers and catchment areas, for long-term sustainability. Others aimed at creating a clean and healthy environment for the community, raising awareness and advocating for environmental sustainability movements at policy and program levels, recognition of artists and creative individuals contributing to the climate and sustainability as well as creating economic sustainability for community members through

initiatives like savings and loan programs, agriculture, poultry farming, and other livelihood projects.

From the FGDs common livelihood activities that youth and women participated in included tree planting, garbage collection, waste management, urban farming, and casual labor. One participant explained that, "*Majority of the women are casual laborers, do laundry business and own kiosk for selling vegetables and household items"* One from the youth category added, *"mainly the youths and women engage in the youth group activities like tree nursery establishment, planting of vegetables for sale, cleaning of rivers, garbage collection and car wash activities."*

The general nature of the missions of these environmental group have limited or divided support drawing away from supporting climate smart agriculture. For instance, Key Informants in Nairobi indicated that there is a high level of involvement of women and youth in, environmental conservation initiatives, and solid waste management practices in Nairobi. They added that, Community-based organizations (CBOs) have been formed by youth and women to engage in activities such as plastic recycling, tree planting, and advocacy for policy implementation.

Some of the Initiatives and Programs mentioned by KIIs in Nairobi

- *Collection of plastics by women and youth for recycling and making beads or decorative pieces.*
- *CBOs like Small Axe CBO involved in tree planting, nurseries, and creating recreational areas along rivers.*
- *Partnerships between the county government and CBOs for awareness creation, conversations, and educational programs on climate change and solid waste management.*
- *Initiatives by Child Fund, empowering youth in solid waste management practices and environmental conservation.*
- *Upcoming initiatives from FAO, World Vision, and the Ministry of Agriculture promoting environmental conservation and climate-smart agriculture, including the use of hydroponics.*

The participants expounded that the county government partners with CBOs comprising youth and young mothers for awareness creation, sustainable solid waste management, and tree planting activities. However, there was limited mentioning of climate smart agriculture

that, not only contribute to enhancing environmental conservation, but also, contribute to resolving nutrition and food insecurity.

3.7.2 Children Participation in environmental management initiatives

The results show that over three quarters (76.2%) of the children who participated in the study indicated that they had participated in environmental management initiatives. They largely participated in tree planting events. According to teachers, tree planting was the major environmental conservation initiatives the schools were involved in. However, the frequency of participation was low as a large majority (82.5%) of the children stated that they rarely participated.

3.7.3 Challenges participating in environmental management initiative

The participants faced various barriers /challenges while participating in environmental management and conservation practices. These include:

i. Lack of water supply: Participants highlighted inadequate or lack of water while in other cases difficulties accessing water points, which hindered their ability to care for planted trees and nursery beds.
ii. Attacks from animals, pest and disease infestation: Participants mentioned challenges relating to pests, diseases that affect plants while in other instances destruction of young trees by animals such as birds, insects, squirrels, and livestock.
iii. In schools where the trees are not protected, they are stepped on by pupils while playing and some even uproot them.
iv. Lack of resources and support: Participants cited insufficient tree seedlings, lack of planting equipment and inadequate space for nursery beds as barriers to effective participation in environmental management activities.
v. Knowledge gaps and awareness: Some participants mentioned lack of awareness about environmental conservation practices among parents, teachers, and the community. Additionally, insufficient knowledge about tree planting techniques and environmental practices was noted.
vi. Environmental factors: Challenges such as drought, inadequate rainfall, and soil conditions unsuitable for tree growth were identified as barriers to successful tree planting and environmental management.

3.7.4 Knowledge of climate change adaptation

The results of participant's ratings on their understanding of climate change adaptation were presented in table 11.

Table 11: Ratings on participants Knowledge of climate change adaptation

Category	Frequency	Percentage
Poor	20	18.0%
Moderate	60	54.1%
Good	25	22.5%
Very Good	6	5.4%
Total	**111**	**100.0%**

The findings reveal that majority (54.1%) of the participants had moderate understanding while plausible proportion (18%) indicated that their understanding of climate change adaptation was poor. Teachers rated their knowledge as falling between moderate and good.

3.7.5 Awareness of community environmental conservation/climate change mitigation initiative

Participants were asked to indicate whether they were aware of any initiatives or programs in their community related to environmental conservation or climate change mitigation. About two thirds (67.6%) indicated that they were not aware of any such initiative. However, majority of the teachers knew of an initiative in the community aimed at mitigating climate change. They pointed out being aware of initiatives to do river and drainage cleanups, tree planting and garbage and waste management. There were also mentions of specific initiatives, organizations, and other complementary activities such as bee-keeping, youth training, and community well-being.

This showed a disconnect between what works on the ground against what is known at policy level. For instance, one Key Informant in Makueni noted of wide footprint of climate change initiatives stating that,

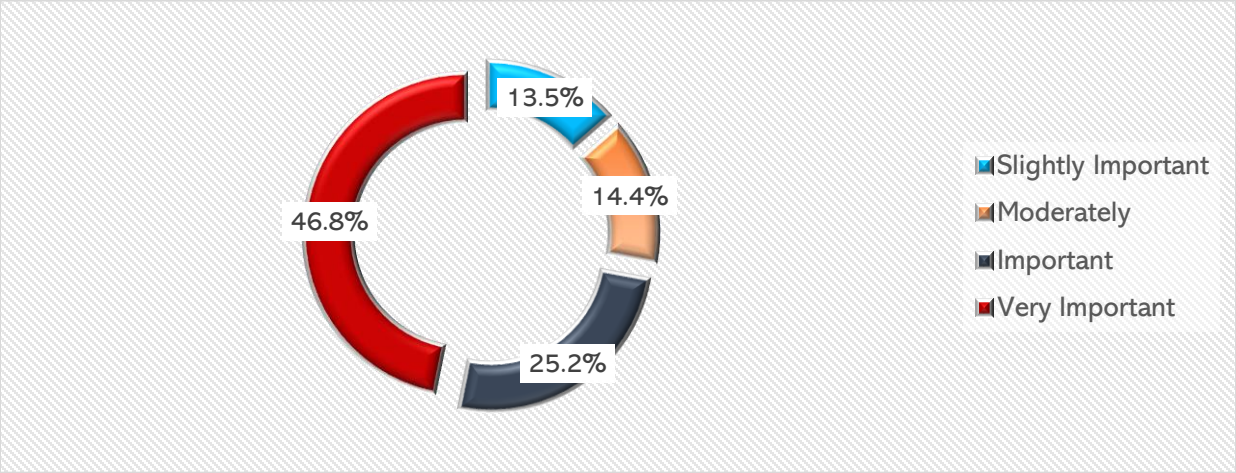
"*There a number of well-known county government initiatives such as KSEP (Kenya Semi-Arid Enabling Program) and NARITP (National Agricultural and Rural Inclusive Growth Project) advocate for climate-smart agriculture farming, providing training on crop selection, smart farming practices, drought-resistant crops, and poultry farming*"

They added that county government is dedicated to meeting its target for the national government's initiative to establish one million kitchen gardens, providing households with easy access to vegetables.

3.7.6 Importance of environmental conservation and climate change adaptation

Participants were asked to indicate the level of importance of environmental conservation and climate change adaptation in their community. The results were presented in figure 9.

Figure 9: importance of environmental conservation and climate change adaptation in their community



A large proportion (46.8%) of the participants felt environmental conservation and climate change adaptation were very important while one quarter (25.2%) felt it were important to their community with only 13.5% stating that it was slightly important.

3.8 Tree Planting and Agroforestry

This section presents findings relating to tree planting initiatives and agroforestry practices within the study areas.

3.8.1 Number of seedlings produced

Participants were asked to indicate an estimated number of tree seedlings they had produced in the past year. While most could not account, those who did mentioned numbers between 0 and 1769 with a mean of 169 seedlings. On the common trees they planted, avocados, mangoes, oranges, Jacaranda, papayas, *senna siamea* and acacia were most mentioned.

3.8.2 Access to tree nursery facility

Results on the extent participants had access to a tree nursery facility were presented in table 12.

Table 12: Participants' access to tree nursery facility

Category	Frequency	Percentage
Yes	45	40.5%
No	63	56.8%
Not sure/Don't know	3	2.7%
Total	**111**	**100.0%**

Majority (56.8%) of the participants in the youth and women category had no access to a tree nursery facility. Similarly, about a large segment (91.9%) of the children and three out of four teachers interviewed indicated that they didn't have access to a tree nursery facility. Participants who indicated that they had access to a tree nursery facility mentioned having greenhouses, shade nets, open fields, irrigation systems and open-air nurseries. Irrigation system was mentioned in Kenyewe Poka and Emali, while the rest were common in all areas.

3.8.3 Participation in agroforestry practices

On whether participants practiced agroforestry in their household, 64.4% of the participants indicated that they did not while 35.6% indicated that they did agroforestry in their land. They indicated that they did agroforestry integrating avocadoes, mangoes, oranges, lemon among others. One Key Informant in Kajiado noted that,

"*Commercial agroforestry and fruit tree nurseries are primarily undertaken by men as a secondary venture rather than a sustainable economic activity*".

However, in Nairobi, one Key Informant noted that there is a moderate level of awareness that exists regarding commercial agroforestry and fruit tree nurseries, with CBOs engaged in seed grafting and planting nurseries for sale. He added that,

"Fruit trees are typically planted in schools, churches, and hospitals for consumption (…) awareness and skills for income generation through commercial agroforestry and fruit tree nurseries are relatively low".

3.8.4 Mapping or tracking of tree planting activities

The results of whether participants mapped or tracked tree planting activities in their area indicated that a large majority (81.1%) were not tracking while 18.9% were tracking. For those who did tracking photo-taking by phones, are the most commonly used method for mapping and tracking across all sub-counties, followed by GPS and paper maps in some cases

3.9 Skills and Capacity Building on Climate Change Adaptation

This section presents results on skills and capacity building for climate change adaptation in the study areas.

3.9.1 Education or training on effective climate smart agriculture

Participants were asked to indicate whether they had received any education or training on effective climate smart agriculture. Table 13 presents the results.

Table 13: Participants' training on effective climate smart agriculture

Category	Frequency	Percentage
Yes	22	19.8%
No	87	78.4%
Not sure/Don't know	1	0.9%
Choose not to say	1	0.9%
Total	**111**	**100.0%**

The results showed that a large majority (78.4%) of participants in youth and women category had not received training on effective climate smart agriculture while only 19.8% indicated that they had been trained.

3.9.2 Environmental conservation knowledge and skills among primary school children

On whether participants in the children category had received any form of education or training on climate change adaptation and environmental management practices, 58.1% indicated that they had received while 41.9% indicated that they hadn't. Similarly, 3 of the four teachers interviewed pointed out that they hadn't received any formal training or education on environmental conservation practices and climate change adaptation.

Adult participants who had received any form of training stated that they covered agroforestry, climate-smart agriculture such as kitchen gardening, conservation practices, and techniques for sustainable agriculture. The trainings were primarily provided by organizations focusing on adaptive methods of agriculture, agroforestry, climate change adaptation, and climate-smart agricultural practices

For the children who had been trained on environmental management practices indicated that they learned about the importance of environmental conservation, tree planting, and nursery bed management. They emphasized caring for the environment by avoiding pollution, maintaining clean rivers, and conserving natural resources. They also highlighted learning of the significance of tree planting in preventing soil erosion, attracting rain, and beautifying the surroundings. Most indicated that they had received this training in school with only 3.3% having received it from a community event.

On whether from the knowledge they had teachers were confident in their ability to teach/advocate for environmental conservation and climate change adaptation, 3 out of 4 stated that they were, to a moderate extent while one stated they were confident to a large extent. They also unanimously rated the primary school children understanding of environmental conservation and climate change adaptation as moderate. One participant of the KII noted,

"*While efforts have been made to sensitize primary school children, there is still a significant gap of creating more awareness. Teachers, especially those attending environmental workshops, are generally familiar with the practices. Personally, I have observed efforts to involve teachers in environmental conservation and I hope to see this being integrated as part of wider schools' philosophy"*

Regarding schools' capacity to promote climate change adaptation all the teachers who participated in the study rated their school as having moderate capacity. They largely expounded that, currently, there is a lack of children and teacher-friendly resources for promoting environmental conservation in schools.

However, the participants generally agreed that their schools had made some strides towards environmental management having participated in a number of tree planting activities. One of the headteachers interviewed as a key informant expressed optimism about the potential impact of involving primary school children and teachers in environmental activities. He noted that his school, which is one of the targeted for intervention has an environmental club, and parents are supportive of their children's involvement in these activities. Another KII participant extended this view noting that both primary school children and teachers are eager to participate in environmental conservation activities. She added, "*Strategies such as using games, music, and sports can accelerate and sustain their involvement*.

3.9.3 Support to promote climate change adaptation in schools

Participants highlighted the following as the key areas they needed support to enhance their schools' capacity to participate in environmental conservation and climate change adaptation initiatives;

1. **Access to quality seeds:** Participants emphasized the importance of accessing high-quality seeds for agricultural activities.
2. **Access to a tree nursery:** Some respondents highlighted the significance of having access to a tree nursery for propagating tree seedlings.
3. **Capacity building and provision of resources:** This came out from all participants noting that having capacity building initiatives, including training sessions on environmental conservation for teachers and students would in leaps and bound accelerate their participation.
4. **Water supply and climate change adaptation:** Several respondents mentioned the importance of sufficient water supply, drilling boreholes, and planting adaptive tree seedlings to address climate change impacts.
5. **Financial aid and educational resources:** Respondents mentioned the necessity of financial aid and resources such as books with children's photos to support environmental education efforts.
6. **Kitchen gardens and training:** Participants suggested the establishment of kitchen gardens, planting trees, and conducting training sessions for both learners and teachers on environmental conservation and climate change.

7. **Innovative approaches:** Lastly, a respondent mentioned the implementation of innovative techniques such as vertical and horizontal gardens, greenhouses, and shade netting.

3.10 Household education or training on effective nutrition practices

The study sought to understand the status of capacity building of nutrition practices. Participants were asked to indicate whether they had received any education or training on effective nutrition practices. The results were presented in table 14.

Table 14: Participants' training on effective nutrition practices

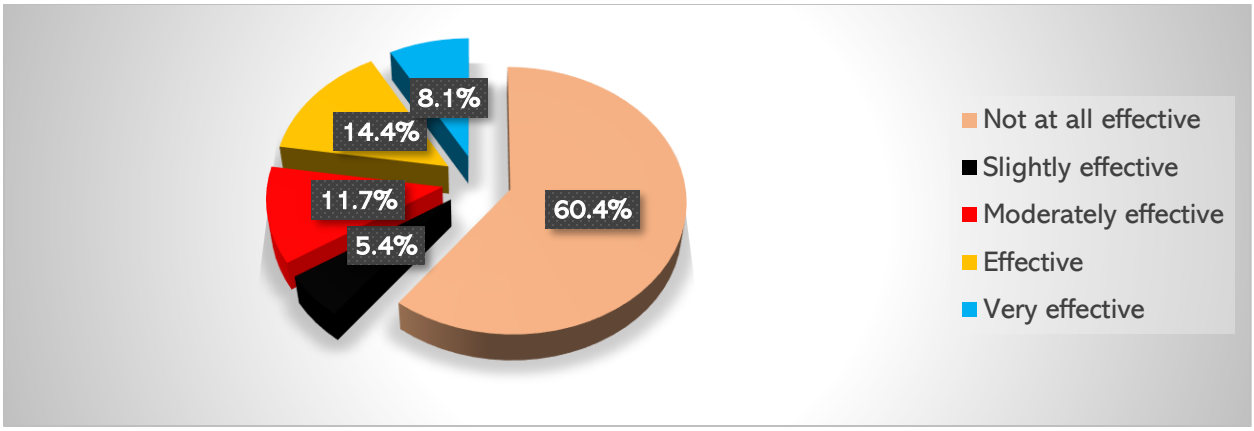
Category	Frequency	Percentage
Yes	10	9.0%
No	99	89.2%
Not sure/Don't know	2	1.8%
Total	**111**	**100.0%**

A large majority (89.2%) of the participants indicated that they had not received any training on effective nutrition practices while 9% indicated they had been trained on the subject. Those trained stated that they covered a range of topics cutting across; food, nutrition and balanced diet to people of different ages, blending juices and making porridge for children and human health nutrition. ChildFund was the predominant provider of training with other contributors such as VSO, community health workers, and Nati SACCO in certain being mentioned.

3.10.1 Effectiveness of training in improving household nutritional quality

Although the trained proportion was small, participants were asked to rate effectiveness of the training received. The results were as presented in figure 10.

Figure 10: Effectiveness of training in improving household nutritional quality



The results showed that majority (60.4%) of those who had been trained termed the training as being not at all effective. Reasons for this rating primarily revolved around lack of further training opportunities, insufficient knowledge and skills imparted during training, and resource constraints hindering the implementation of learned practices. They expressed a need for more education on topics such as nutritional value and agricultural techniques. Participants also noted lack of practical skills and post training support to implement what they learned were barriers to effectiveness.

Those who rated the training as effective gave reasons revolving around knowledge acquisition, practical application, and improved well-being. They expounded that acquisition of knowledge, particularly related to nutritional farming practices, understanding agriculture in the context of climate change, proper agricultural activities, and the importance of balanced nutrition empowered them to implement better agricultural techniques and make informed decisions about their farming activities. Some participants reported that yields from their crops and trees increased, indicating the successful application of what they learnt. Additionally, the training provided hands-on experience in activities such as planting nursery bed seedlings, allowing participants to develop practical skills. Lastly, some respondents mentioned improved health among family members, likely due to better nutrition and agricultural practices introduced from lessons they learnt. They indicated that the training provided strategies for resilience during food shortages adding that it instilled hope and ideas for best agricultural practices, contributing to the growth of healthy families.

3.11 Participants Further Expectations

Participants were asked to express their views regarding the outcomes or benefits they hoped to see from the implementation of the project on improving climate resilience and adaptability of youth, women and children in their community. The following were mentioned;

i. Improve the status of the environment to stop or reverse impacts of climate change.
ii. Improve accessibility to adequate and nutritious food throughout the year
iii. Increase opportunities for income-generating activities especially to youth and women in order to improve living standards of individuals, households and community in general.
iv. Priority Areas for Impact: Priority sectors where climate-smart practices could have a significant impact include expansion of tree planting, urban farming, waste management, and conservation agriculture, addressing both environmental and economic needs.

3.12 Way forwards from Child Fund team

A summary of planned initiatives to respond to the project requirements were obtained from interviews with project staff who highlighted the focus as follows;

Table 15: Reported project action areas

Concern area	Planned action
Alignment with Community Priorities and Policy Direction:	The planned activities align with community needs and priorities, such as addressing environmental degradation in degraded lands and diversifying livelihoods to enhance resilience during droughts. Additionally, there's a focus on food transformation systems, alignment with broader policy directions related to food security and agricultural sustainability.
Engagement of Youth and Women:	The team foresee engaging youth and women in climate-smart green enterprises and reforestation to promote both environmental conservation and income generation. This dual objective aim at addressing environmental concerns while also empowering marginalized groups economically.

Concern area	Planned action
Establishment of Fruit Tree Nurseries	Initial steps include creating environmental clubs, stakeholder engagement, and training village-based advisors. These preparations indicate a comprehensive approach to laying the groundwork for sustainable income-generating enterprises.
Capacity Enhancement for Schools and Children	Strategies involve training teachers and forming environmental clubs, along with ensuring access to reliable water for kitchen gardening. There's also a focus on sensitizing children to climate change and environmental issues, aiming to cultivate a generation of environmentally conscious individuals.
Sustainability Measures	Measures to ensure sustainability beyond the project duration include capacity building among children and enhancing community involvement to foster ownership of project initiatives.
Community Engagement and Participation:	Strategies involve collaborating with local youth and women groups, ensuring proper entry processes that include community input, and leveraging children as conduits for knowledge transfer to households.
Monitoring and Tracking Progress:	Plans include establishing indicators to track outcomes and outputs, emphasizing the importance of measuring progress toward project goals from the outset.
Anticipated Challenges and Mitigations	Foreseen challenges include uncontrolled grazing, school calendar constraints affecting garden maintenance, and potential disruptions due to teacher transfers. Mitigation strategies involve implementing protective measures for gardens and developing contingency plans that align with school calendars and factor for staff changes.

Chapter Four

Conclusion and Recommendations

4.0 Introduction

This chapter, in line with the study objectives, presents the summary of the research findings, draws conclusion, and proposes recommendation.

4.1 Summary of Findings

The study received adequate response from both women/youth and children's categories. The results showed that females dominated all groups with all participants above the age of 40 years being women. Generally, there was minimal gender disparity among youth and children categories implying adequate gender representation. Majority of the participants in the study were not married. Majority (52.3%) of the participants had attained secondary level education. All (4) interviewed teachers had post-secondary training. A large segment (25.2%) of the participants indicated that they were either in self-employed or casual labor. Unemployed participants comprised of a relatively significant proportion (14.4%) of the study participants. 54.9% of the participants in employment earned monthly income of less than ksh. 10,000.

The following table (14) summarizes the findings of this study based on project indicators:

Table 16: Findings summary based on project indicators

Outcome Indicators	Baseline Status/score
% of women adopting and practicing climate smart agriculture for increased nutritious food production and access.	• 11.6% for women and youth participation • 19.8% of youth women formally trained in CSA • 27.9% rated their understanding of CSA as good • 40.5% of youth/women and 8.1% of children have access to tree nurseries.

Outcome Indicators	Baseline Status/score
% of women adopting and practicing climate smart agriculture for increased nutritious food production and access. **% of youth adopting and practicing climate smart agriculture for increased nutritious food production and access.**	• 12.5% level of adoption of CSA for nutrition • 9% trained on effective nutrition practices • 51.4% of youth/women participated in environmental groups activities • 76.2% of children participated in environmental conservation activities mostly tree planting. • Low frequency of participation, 82.5% participated rarely.
% of targeted children and households with improved nutrition because of the project	• 14.6% generally access nutritious foods • 22.2% of those (14.6%) access daily • 19.5% rated their capacity to access nutritious food as good • On support received, only 26.8% of those who received rated it as somewhat effective • 52.3% had under 5-year-old child • 20% of participants households provided the under 5-year-old children with at least one nutritious food item largely on a weekly basis.
% of children with improved knowledge and skills on climate change adaptation and are positively applying the skills for improved climate change adaptation **% of primary school children and teachers with skills and knowledge on environmental conservation practices**	• 58.1% of children had been taught environmental conservation as part of curriculum; 3.3% had received it from a community event • Teachers rated primary school knowledge on environmental conservation as moderate • Schools rated themselves as moderately capable • Teachers rated their confidence to train pupils and peers as moderate. • They had not received any training outside the curriculum they went through

4.2 Conclusion

The survey findings reveal valuable insights into the status of communities' climate change adaptation and resilience. The following conclusion can be drawn from the results;

First, while there is some participation in climate-smart green enterprises, particularly among women and youth, the overall engagement levels remain relatively low. This suggests a need for more targeted efforts to encourage participation and involvement in environmental activities.

Secondly, training and education emerge as critical factors in enhancing understanding and capacity-building. The results expose a knowledge gap on the level of formal training on climate-smart agriculture (CSA). This points out to the need for improvement in knowledge dissemination and awareness-raising efforts.

Third, the survey highlights substantial tree planting efforts, indicating a positive step towards environmental conservation. However, there's a need to accelerate access to resources such as tree nurseries and strengthening tracking and monitoring mechanisms to ensure the effectiveness climate change adaption initiatives. The survey findings also unearthed economic opportunities, particularly through the sale of fruit tree and agroforestry seedlings, present promising avenues for income generation among youth and women.

Fourth, it emerged that food security and nutrition remain areas of concern, with low adoption rates of CSA for nutrition and limited training on effective nutrition practices. Improving access to nutritious foods and providing adequate support are essential for addressing these challenges. Additionally, while there's notable participation in environmental conservation activities, efforts to increase engagement frequency are necessary to maximize impact.

Fifth, education and capacity building, particularly within schools, play a crucial role in promoting environmental awareness and actions. Based on the findings on the status of school children and teachers, even though environmental conservation is included in the

curriculum, there's a need for enhanced teacher training and school capacity to effectively deliver action based environmental and climate change adaptation training.

Lastly, the survey findings highlight the importance of targeted interventions, collaboration among stakeholders, and sustained efforts to address climate change and promote sustainable development. With interventions aimed at addressing concerns emerging from the study, the target communities have the potential to work towards building a more resilient and environmentally-consciousness for posterity.

4.3 Recommendation

Based on the findings as well as suggestions from participants, improving women, youth and children climate change resilience and adaptability, the following recommendations are proposed for consideration by the project;

1. **Capacity building:** This is an essential component of enhancing community resilience and promoting sustainable practices in the face of climate change. It includes imparting practical knowledge and skills to beneficiaries (i.e. women, youth and children) on environmental conservation and climate-smart agriculture. It aims at helping them understand the importance of preserving natural resources, protecting environment and adopting sustainable farming techniques. It should also entail training beneficiaries about the nutritional benefits of climate-smart agriculture serving as an adaptation measure. From this, beneficiaries will be able to participate in activities to diversify their diets and enhance food security, and ultimately empower them to prepare for and respond to the impacts of climate change.

2. **Support access to resources and infrastructure:** To accelerate efforts of beneficiaries' adaptation to climate change, it's imperative to integrate various support with inputs and key resources in climate smart agriculture that include; provision of quality seeds, support to access organic agriculture inputs, support to establish tree nurseries and water systems through borehole drilling and various water harvesting infrastructures.

3. **Promote advocacy and collaboration:** This involves educating the public about the causes and consequences of climate change, as well as advocating for policy changes

and sustainable practices to mitigate its effects. By engaging in advocacy efforts, target beneficiaries and their communities will have the capacity to amplify their voices and raise awareness about the urgent need for action. This, compounded by collaboration and partnerships with stakeholders to leverage resources, expertise, and influence will support implementation of meaningful solutions and drive positive environmental and climate outcomes.

4. **Income Generation through Climate Smart Entrepreneurship:** For climate adaptation, income generating activities can be done through fostering sustainable agricultural practices and empowering local communities. This involves the implementation of agroforestry systems, which integrate the cultivation of fruit-based trees alongside traditional crops. For example, farmers can incorporate fruit trees like mangoes, citrus fruits, or avocados into their agricultural landscapes. Not only do these trees provide nutritious fruits for consumption and sale, but they also contribute to soil health and biodiversity conservation. Propagating and selling tree seedlings, beneficiaries can diversify their income streams while simultaneously contributing to reforestation and ecosystem restoration.

5. **Innovation and Adaptive Practices:** Implementing innovative techniques such as vertical and horizontal gardens, greenhouses, and shade netting will support the realization of optimal climate change resilience outcomes in the target areas. Thus, embracing innovative approach will effectively help beneficiaries and their households mitigate exposure to environmental risk and adapt to changing environmental conditions.

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List of Reviewed Documents

Title	INSTITUTION	LOCATION
1. Victor	EDCA	Emali
2. Penina	Agri. Officer	Nairobi
3. Rebbecca	Agri. Officer	Emali
4. Jescaand Phyllis	Nutrition officer	Nairobi
5. Anonymous (Headteacher)	Kasarani	Nairobi
6. Anonymous	Childfund	Emali/Kajiado
7. Mashuuru	Nutrition officer	Kajiado
8. Fidel	Forest/environment offficers	Nairobi
9. Silvia	Forest/environment offficers	Kajiado
10. Victoria	NEMA	Nairobi
11. Ochieng	NEMA	Makueni
12. Mark	NEMA	Kajiado
13. Ruth	KEFRI	Makueni/Kajiado
14. Benard	ICRAF	Nairobi
15. Everlyn	Childfund/NMP Ground coordinator	Mukuru(Embakasi)

ANNEXES

Annex I: Youth and Women Questionnaire

1. Introduction

Good day! My name is ……. from Insight Research Training and Consultants Limited, a company that has being contracted by ChildFund to undertake a Baseline Survey on Regreening Africa Project. ChildFund is an organization that aspire enhancing children's capacity to improve their lives and increase their opportunity to become young adults, parents and leaders. We are carrying out the baseline survey for the Regreening Africa Project aiming at mitigating the impact of climate change and improving resilience and adaptability of women and children in Nairobi, Makueni and Kajiado counties. The purpose of the study is to establish initial information against the project indicators at community level which will be used as a threshold for this project to assess outcomes and impact. I would like to talk to you about your views, and experience on the same.

Consent

You have been selected using a random process and your participation is voluntary. The views and opinion you will share in this interview will be treated with confidentially and strictly used for the purposes of improving ChildFund's work on the Regreening Kenya Initiative. No part of the report shall bear information that identifies you. Your contribution and cooperation will be highly appreciated. The interview will take approximately 20 minutes.

Would you like to participate in the interview? 1. Yes, 2. No

2. Background Information

a) Date:	
b) Time:	
c) County	1. Nairobi (Mukuru, Kasarani) 2. Kajiado (Kenyewa-Poka ward) 3. Makueni (Emali-Mulala Ward)
d) Sub County	

3. Respondent Demographics

3a.) Gender	1. Male 2. Female 3. Other 4. Prefer not to say
3b.) What is your age group?	1. 15-20 years 2. 20 – 25 years 3. 26 – 30 years 4. 31 – 35 years 5. 36 – 40 years 6. 41 – 45 years 7. 46 – 50 years 8. 51 – 55 years 9. 56+ years

3c.) Marital status	1. Single 2. Married 3. Separated 4. Widowed 5. Widower
3d.) What is your highest level of education completed?	1. None 2. Informal education 3. Primary education 4. Secondary education 5. College 6. University
3e.) What are the main sources of income for you or your household?	1. Employed in the public sector 2. Employed in private sector 3. Self-employed agriculture 4. Self-employed business 5. Casual laborer 6. Retired 7. Unemployed 8. Student 9. Community/religious 10. Other specify
3f.) How much do you make (in Kenya Shillings) per month from this source?	1. Less than 5,000 2. 5,000 – 9,999 3. 10,000- 24,999 4. 25,000 - 49,999 5. 50,000 – 99,999 6. 100,000 and above 7. Not employed 8. Don't know/Not sure 9. Choose not to answer

4. Youth and Women Adoption of Climate Smart Agriculture

4a. Are you or your household currently practicing any agricultural practices?	1. Yes 2. No 3. Don't know/Not sure 4.Choose not to answer
4b.) Are you or your household currently involved in livelihood activities in any of the following practices related to climate-smart agriculture.	(*Tick all that applies*) 1. Conservation agriculture 2. Tree nursery enterprise 3. Fruit trees farming 4. Mulching 5. Drip irrigation 6. Crop rotation 7. Integrated pest management 8. Other specify……
4bi.) How long have you been practicing the above climate-smart agricultural techniques?	……years

4e.) What barriers or challenges do you face or anticipate that (may) hinder adequate adopting of climate-smart agriculture practices?	1…… 2…… 3…… 4…… 5……

5. Climate Smart Nutrition Sensitive Livelihood

5a.) Are you currently involved in any livelihood activities related to climate-smart nutrition practices?	1. Yes 2. No 3. Not sure/don't know 4.Choose not to answer
5b.) Which of the following are you currently involved in? (select all that apply)	1. Backyard and community gardens 2. Growing nutrient-dense fruits (such as avocado, mangoes and oranges) 3. Growing high nutrients vegetables 4. Composting and organic fertilizer production 5. Seed saving and preservation. 6. Small-scale livestock rearing (Poultry farming, goat or sheep rearing) 7. Beekeeping and honey production 8. Aquaculture and fisheries 9. Other specify…….
Other specify	
5c.) Have you received any training or any of these (climate smart nutritional) livelihood activities?	1. Yes 2. No 3 . Not sure/don't know 4.Choose not to answer
5ci.) If yes, what was the training about?	1…… 2…… 3…… 4…… 5……
5d.) What support or resources would help improve you engagement in the above climate smart nutritional practices?	1…… 2…… 3…… 4…… 5……

6. Households Nutrition Status'

6a.) In the last 24 hours, did your household eat any of the following foods?	1. Fruits 2. Vegetables 3. Meat/Egg 4. Dairy products 5. Grains and cereals 6. Moringa
6b.) Is there a child under the age of 5 years in your household?	1. Yes 2. No. If yes go to 7bi.), if No, go to 7c.
6bi.) In the last 24 hours, did your household provide any of the following nutrition packs to children under five?	1. Fruits 2. Vegetables 3. Meat/Egg

	4. Dairy products 5. Grains and cereals 6. Moringa
6bii) How frequently do you or your household consume moringa or other nutrient-rich foods?	1. Daily 2. Weekly 3. Bi-weekly 4. Rarely 5. Never

7a.) On a scale of 1-5 (where 1=Very poor, 5= Very good) How would you rate the current access to nutritious foods for your household?	1. Very poor 2. Poor 3. Moderate 4. Good 5. Very good
7b.) Have you or anyone in your household received any other support related to improving household nutrition?	1. Yes 2. No 3. Sure/don't know **4.** Choose not to answer
7bi) If yes, what type of support was it?	1…… 2…… 3…… 4……
7bii) Who Offered the support?	
7biii.) How effective was the support in improving your household nutritional quality?	1. Not at all effective 2. Moderately effective 3. Very effective……
Please explain	
7e.) Are you aware of the potential impacts of climate change on child nutrition and protection?	1. Yes 2. No 3. Not sure/don't know 4.Choose not to answer
7ei.) If yes please explain	
7f.) What support would your household need to improve your household nutritional quality?	1…… 2…… 3…… 4…… 5……

8. Environmental Conservation and Participation

8a.) Are you a member of any environmental related group?	1. Yes 2. No 3. Not sure/don't know 4. Choose not to answer
8ai.) If yes, what is the group name and mission?	Group name…….
8aii. What is the mission of the group?	
8b.) Overall, how would you rate your understanding of climate change adaptation?	1. Very poor 2. Poor 3. Moderate 4. Good 5. Very good

8c.) Are you aware of any initiatives or programs in your community related to environmental conservation or climate change mitigation?	1. Yes 2. No 3. Not sure/don't know 4.Choose not to answer
If yes please explain……..	
8d.) How important do you think environmental conservation and climate change adaptation are for your community?	1. Not Important 2. Slightly important 3. Moderately important 4. Important 5. Very important

9 Tree Planting and Agroforestry

9a.) Approximately how many tree seedlings have you produced in the past year?	
9b.) Which tree species are commonly produced in your area?	
9c.) Do you have access to a tree nursery facility?	1. Yes 2. No 3. Not sure/don't know 4.Choose not to answer
9ci.) If yes, please describe the infrastructure available (e.g., greenhouse, shade netting, irrigation).	
9d.) Do you currently practice agroforestry on your land?	1. Yes 2. No 3. Not sure/don't know 4.Choose not to answer
9di) If yes, which types of trees are integrated into your agricultural activities?	
9e.) Do you currently map or track tree planting activities in your area?	1. Yes 2. No 3. Not sure/don't know 4.Choose not to answer
If yes, what methods or tools are used for mapping and tracking? (e.g., GPS, paper maps, digital platforms)	

10 Skills and Capacity Building on Climate Change Adaptation

10a.) Have you received any education or training on effective climate smart agriculture?	1. Yes 2. No 3. Not sure/don't know 4.Choose not to answer
10b.) Have you received any education or training on effective nutrition practices?	1. Yes 2. No 3. Not sure/don't know 4.Choose not to answer
10bi) If yes, what specific topics or skills were covered?	1…… ……. 2…… …….

	3…… …… 4…… ……
10bii.) Who Offered the training?	……
10c.) If yes, what specific topics or skills were covered?	1…… …… 2…… …… 3…… …… 4…… ……
10ci) Who offered the training?	……
10cii.) How effective was it in improving your household nutritional quality?	1. Not at all effective 2. Slightly effective 3. Moderately effective 4. Effective 5. Very effective Please explain……

11 Expectations and Feedback

11a. What outcomes or benefits do you hope to see from the implementation of the project on improving climate resilience and adaptability of youth, women and children through promoting commercial agro-forestry in your community?

……
……

11b. Do you have any suggestions or feedback on how the improving climate resilience project can better meet the needs of the community and other women and youth?

……
……

Annex II: Children Questionnaire

MITIGATING THE IMPACT OF CLIMATE CHANGE AND IMPROVING RESILIENCE AND ADAPTABILITY OF WOMEN AND CHILDREN IN NAIROBI, MAKUENI AND KAJIADO COUNTIES

1. **Introduction**

Good day! My name is ……. from Insight Research Training and Consultants Limited, a company that has being contracted by ChildFund to undertake a Baseline Survey on Regreening Africa Project. ChildFund is an organization that aspire enhancing children's capacity to improve their lives and increase their opportunity to become young adults, parents and leaders. We are carrying out the baseline survey for the Regreening Africa Project aiming at mitigating the impact of climate change and improving resilience and adaptability of women and children in Nairobi, Makueni and Kajiado counties. The purpose of the study is to establish initial information against the project indicators at community level which will be used as a threshold for this project to assess outcomes and impact. I would like to talk to you about your views, and experience on the same.

Consent

You have been selected using a random process and your participation is voluntary. The views and opinion you will share in this interview will be treated with confidentially and strictly used for the purposes of improving ChildFund's work on the Regreening Kenya Initiative. No part of the report shall bear information that identifies you. Your contribution and cooperation will be highly appreciated. The interview will take approximately 20 minutes.

Would you like to participate in the interview? 1. Yes, 2. No

2. **Background Information**

Date:	
Time:	
County	Nairobi Kajiado Makueni
Sub County	Embakasi Kasarani Kenyewa-Poka Emali-Mulala
Name of school	…….

3. **Respondent Demographics**

3a.) Gender	1. Male 2. Female 3. Other 4. Prefer not to say
3b.) Please tell me what is your age?	
3c.) Which grade are you (input class number)?	

4. **Children knowledge and skills on Climate Change Adaptation**

4a.) Have you received any form of education or training on climate change adaptation and environmental management practices?	Yes No
4ai.) If yes, where did you get the training from.	In school Church/mosque

	Community activity Other specify……
4aii.) please indicate what you learnt about from environmental management practices training?	
4b.) Have you participated in environmental management initiatives such as tree planting, environmental day, etc	Yes No
4bi.) If yes, how often do you participate in these kinds of initiatives?	1. Rarely 2. Often 3. Very often
4c.) What barriers or challenges do you face in participating in environmental management practices, and if so, what are they?	
4d.) Do you have access to a tree nursery facility?	1. Yes 2. No 3. Not sure/don't know 4. Choose not to answer
4e.) Do you currently practice agroforestry on your household land?	1. Yes 2. No 3. Not sure/don't know 4. Choose not to answer
4f.) Which of the following are you or your household currently involved in? (select all that apply)	1. Backyard and community gardens 2. Growing nutrient-dense fruits (such as avocado, mangoes and oranges) 3. Growing high nutrients vegetables 4. Composting and organic fertilizer production 5. Seed saving and preservation. 6. Small-scale livestock rearing (Poultry farming, goat or sheep rearing) 7. Beekeeping and honey production 8. Aquaculture and fisheries 9. Other specify…….

5. Children Nutritious Status

5a.) In the last 24 hours, did your household eat any of the following foods?	1. Fruits 2. Vegetables 3. Meat/Egg 4. Dairy products 5. Grains and cereals 6. Moringa
5b.) How frequently do you or your household consume more than one of these nutrient-rich foods?	1. Daily 2. Weekly 3. Bi-weekly 4. Rarely
5c.) On a scale of 1-5 (where 1=Very poor, 5= Very good) How would you rate the current access to nutritious foods for your household?	1. Very poor 2. Poor 3. Moderate

	4. Good 5. Very good
5d.) Have you or anyone in your household received any other support related to improving household nutrition?	1. Yes 2. No 3. sure/don't know 4. 4.Choose not to answer
5di.) If yes, what type of support was it?	1…… 2…… 3…… 4……
5dii) Who Offered the support?	
5diii.) How effective was the support in improving your household nutritional quality?	1. Not at all effective 2. Slightly effective 3. Moderately effective 4. Effective 5. Very effective
5div.) Please explain	

Annex III: Teachers Questionnaire

MITIGATING THE IMPACT OF CLIMATE CHANGE AND IMPROVING RESILIENCE AND ADAPTABILITY OF WOMEN AND CHILDREN IN NAIROBI, MAKUENI AND KAJIADO COUNTIES

1. Introduction

Good day! My name is ……. from Insight Research Training and Consultants Limited, a company that has being contracted by ChildFund to undertake a Baseline Survey on Regreening Africa Project. ChildFund is an organization that aspire enhancing children's capacity to improve their lives and increase their opportunity to become young adults, parents and leaders. We are carrying out the baseline survey for the Regreening Africa Project aiming at mitigating the impact of climate change and improving resilience and adaptability of women and children in Nairobi, Makueni and Kajiado counties. The purpose of the study is to establish initial information against the project indicators at

community level which will be used as a threshold for this project to assess outcomes and impact. I would like to talk to you about your views, and experience on the same.

Consent

You have been selected using a random process and your participation is voluntary. The views and opinion you will share in this interview will be treated with confidentially and strictly used for the purposes of improving ChildFund's work on the Regreening Kenya Initiative. No part of the report shall bear information that identifies you. Your contribution and cooperation will be highly appreciated. The interview will take approximately 20 minutes.

Would you like to participate in the interview? 1. Yes, 2. No

2. Background Information

a.	Date:	
b.	Time:	
c.	County	1. Nairobi 2. Kajiado 3. Makueni
d.	Sub County	1. Embakasi 2. Kasarani 3. Kenyewa-Poka 4. Emali-Mulala
e.	Name of school	…….
f.	Position	1. Headteacher 2. Matron 3. Other specify….

3. Respondent Demographics

3a.) Gender	1. Male 2. Female 3. Other 4. Prefer not to say
3b.) What is your age group?	a) 18 – 25 years b) 26 – 30 years c) 31 – 35 years d) 36 – 40 years e) 41 – 45 years f) 46 – 50 years g) 51 – 55 years h) 56+ years
3c.) Marital status	1. Single 2. Married 3. Separated 4. Widow
3d.) What is your highest level of education?	1. None 2. Informal education 3. Primary education 4. Secondary education

	5. College 6. University
3di.) If college of university what course did you specialize in?	
3f.) How much do you make (in Kenya Shillings) per month from this source?	a) Less than 5,000 b) 5,000 – 9,999 c) 10,000- 24,999 d) 25,000 - 49,999 e) 50,000 – 99,999 f) 100,000 and above g) Not employed h) Declined

1. **Teachers Skills and Knowledge on Environmental Conservation practices and climate change adaptation and resilience**

1a.) To what extent are environmental conservation practices and climate change adaptation taught or incorporated into the school curriculum?	1. Very small extent 2. Small extent 3. Moderate extent 4. Large extent 5. Very large extent
1b.) Have you received any formal training or education on environmental conservation practices and climate change adaptation?	1. Yes 2. No
1bi.) If yes in 1b, please specify the areas you received training on:	
1c.) To what extent do you feel confident do in your ability to teach or promote environmental conservation and climate change adaptation practices to others, including your students or peers?	1. Very small extent 2. Small extent 3. Moderate extent 4. Large extent 5. Very large extent
1d.) Can you provide examples of any environmental conservation projects or initiatives you have been involved in at your school or within your community?	
1e.) How would you rate the level of awareness and understanding of environmental conservation and climate change adaptation among your primary school children.	1. Very low 2. Low 3. Moderate 4. High 5. Very high

2. Teachers Environmental Conservation and Participation

2a.) Are you a member of any environmental related group in the community?	1. Yes 2. No 3 . Not sure/don't know 4.Choose not to answer
2ai.) If yes, what is the group name and mission?	Group name…….
2aii. What is the mission of the group?	

2b.) Overall, how would you rate your understanding of climate change adaptation?	1. Very poor 2. Poor 3. Moderate 4. Good 5. Very good
2d.) Are you aware of any initiatives or programs in your community related to environmental conservation or climate change mitigation?	1. Yes 2. No 3 . Not sure/don't know 4.Choose not to answer
If yes please explain……..	

3. Tree Planting and Agroforestry Participation

3a.) Approximately how many tree seedlings have you produced in this school in the past one year?	
3b.) Which tree species are commonly produced in your area?	
3c.) Do you have access to a tree nursery facility?	1. Yes 2. No 3. Not sure/don't know 4. Choose not to answer
3ci.) If yes, please describe the infrastructure available (e.g., greenhouse, shade netting, irrigation).	
3d.) Do you currently practice agroforestry in this school?	1. Yes 2. No 3. Not sure/don't know 4. Choose not to answer
3di) If yes, which types of trees are integrated into your agricultural activities?	
3e.) Do you currently map or track tree planting activities in this school?	1. Yes 2. No 3. Not sure/don't know 4. Choose not to answer
3ei.) If yes, what methods or tools are used for mapping and tracking? (e.g., GPS, paper maps, digital platforms)	

3. School Capacity to promote Climate Change Adaptation (Teachers and headteachers)

4a. To what extent would you rate the current level of capacity or readiness of your school to promote climate change adaptation and environmental management strategies?	1. Very low capacity/readiness 2. Low capacity/readiness 3. Moderate capacity/readiness 4. High capacity/readiness 5. Very high capacity/readiness
4b. Have there been any past initiatives or projects aimed at promoting climate change adaptation and environmental management at your school?	1. Yes 2. No 3. Not sure/don't know 4. Choose not to answer
4bi. If yes, please explain the nature of a recent initiative.	

4c. What resources or support do you think would be most beneficial in enhancing your school's capacity to promote climate change adaptation and environmental management?	1…… 2…… 3…… 4……
4d. Are there any existing partnerships or collaborations with local organizations, government agencies, or community groups that could support efforts to promote climate change adaptation and environmental management at your school?	1. Yes 2. No 3. Not sure/don't know 4. Choose not to answer
4di. If yes, please explain the major one	

END

Thank You for your contribution

Annex IV: Key Informants Interview Guides

MITIGATING THE IMPACT OF CLIMATE CHANGE AND IMPROVING RESILIENCE AND ADAPTABILITY OF WOMEN AND CHILDREN IN NAIROBI, MAKUENI AND KAJIADO COUNTIES

1 INTRODUCTION

Good day! My name is ……. from Insight Research Training and Consultants Limited, a company that has being contracted by ChildFund to undertake a Baseline Survey on Regreening Africa Project. ChildFund is an organization that aspire enhancing children's capacity to improve their lives and increase their opportunity to become young adults, parents and leaders. We are carrying out the baseline survey for the Regreening Africa Project aiming at mitigating the impact of climate change and improving resilience and adaptability of women and children in Nairobi, Makueni and Kajiado counties. The purpose of the study is to establish initial information against the project indicators at community level which will be used as a threshold for this project to assess outcomes and impact. I would like to talk to you about your views, and experience on the same.

2. CONSENT

You have been selected based on your position in the society, knowledge, and experience on matters relating to climate change adaptation. The views and opinion you will share in this interview will be treated confidentially and strictly used for the purposes of improving

ChildFund's work on the Regreening Kenya Initiative. No part of the report shall bear information that identifies you. Your contribution and cooperation will be highly appreciated. The interview will take approximately 20 minutes.

Would you like to participate in the interview? 1. Yes 2.No

3. BACKGROUND INFORMATION

a. Date of Interview:	
b. Time of Interview:	
c. Category of Informant	
d. County	1. Nairobi (Mukuru, Kasarani) 2. Kajiado (Kenyewa-Poka ward) 3. Makueni (Emali-Mulala Ward)
e. Sub County	Embakasi Kasarani Poka Kenyewa Emali Mulala

GUIDING QUESTIONS 1- Government Officials, Community leaders and Project partners

1. What is the current level of involvement of women and youth in climate-smart agriculture and green enterprises in this county or area?
2. What are the existing challenges faced by women and youth in adopting climate-smart practices for environmental conservation and income generation?
3. Are there any existing initiatives or programs supporting women and youth in climate-smart agriculture and green enterprises? if so what are the initiative and level of effectiveness
4. What is the current level of awareness and skills among youth and women regarding commercial agroforestry, fruit tree nurseries, and nutritious food production in this area?
5. How accessible are kitchen gardens and nutritious food options for households, especially those with children? What are the main barriers to implementing kitchen gardens and ensuring access to nutritious foods for children and households?
6. What are the opportunities for children's participation in key environmental days and government celebrations in your community?
7. How are local government departments currently supporting environmental conservation initiatives in schools and communities?
8. What suggestion would you propose to initiative on mitigating the impact of climate change and improving resilience and adaptability of women and children in this area?

GUIDING QUESTIONS 2: Head teachers

1. How familiar are primary school children and teachers with environmental conservation practices and climate change adaptation?
2. What resources and support are currently available for schools to promote environmental conservation and climate change adaptation?
3. How do you envision the involvement of primary school children and teachers in environmental conservation and climate change activities contributing to community-level impact?
4. What is the current level of community engagement in tree planting and environmental conservation efforts?
5. What are the perceived benefits of establishing environment/Aflatoun clubs in primary schools, and what challenges might arise in their implementation?
6. How do you assess the readiness of primary school children and teachers to actively participate in environmental conservation and climate change activities? What strategies can be employed to ensure sustained participation of children and teachers in environmental conservation efforts?
7. What are the existing gaps in understanding the link between climate change and child protection in your community?
8. What suggestion would you propose to initiative on mitigating the impact of climate change and improving resilience and adaptability of women and children in this area?

GUIDING QUESTIONS- ChildFund Staff

1. How do you foresee engaging youth and women in climate-smart green enterprises and promoting reforestation as part of the project objectives?
2. What initial steps or preparations have been made to establish and sustain fruit tree nurseries as sustainable income-generating enterprises for youth and women in the target areas?
3. What strategies are being considered to enhance the capacity of schools and children to positively influence climate change adaptation and environmental management prior to project implementation?
4. What potential challenges or barriers and mitigations do you anticipate encountering in the initial stages of project implementation, particularly related to promoting environmental conservation and climate change adaptation practices among youth, women, and children?
5. How do you plan to establish a system for tracking progress and monitoring the achievement of project outcomes and outputs before project activities commence?
6. What preliminary measures are being taken to ensure the sustainability and long-term impact of the project beyond the project duration?

7. How do you intend to engage with local communities and beneficiaries to solicit their input and ensure their active participation in project planning and design?
8. How do you plan to align the project output, outcome and impacts with community priority and general policy direction? i.e. how well do the planned activities align with the needs and priorities of the target communities and beneficiaries?

Annex V: Focus Group Discussions Guide

MITIGATING THE IMPACT OF CLIMATE CHANGE AND IMPROVING RESILIENCE AND ADAPTABILITY OF WOMEN AND CHILDREN IN NAIROBI, MAKUENI AND KAJIADO COUNTIES

INTRODUCTION

Good day! My name is ……. from Insight Research Training and Consultants Limited, a company that has being contracted by ChildFund to undertake a Baseline Survey on Regreening Africa Project. ChildFund is an organization that aspire enhancing children's capacity to improve their lives and increase their opportunity to become young adults, parents and leaders. We are carrying out the baseline survey for the Regreening Africa Project aiming at mitigating the impact of climate change and improving resilience and adaptability of women and children in Nairobi, Makueni and Kajiado counties. The purpose of the study is to establish initial information against the project indicators at community level which will be used as a threshold for this project to assess outcomes and impact. I would like to talk to you about your views, and experience on the same.

CONSENT

You have been selected based on your position in the society, knowledge, and experience on matters relating to climate change adaptation. The views and opinion you will share in this interview will be treated confidentially and strictly used for the purposes of improving ChildFund's work on the Regreening Kenya Initiative. No part of the report shall bear information that identifies you. Your contribution and cooperation will be highly appreciated. The interview will take approximately 30 minutes. Would you like to participate in the interview? 1. Yes 2.No

BACKGROUND INFORMATION

a) Date of Interview:	
b) Time of Interview:	
c) Type of FGD	1. Youth 2. Women 3. Mixed community 4. Children
d) County	1. Nairobi (Mukuru, Kasarani) 2. Kajiado (Kenyewa-Poka ward) 3. Makueni (Emali-Mulala Ward)
e) Sub County	1. Embakasi 2. Kasarani 3. Poka Kenyewa 4. Emali Mulala

GUIDING QUESTIONS- Women and Youth

1. Can you share your understanding of climate-smart green enterprises and their potential benefits for the community?
2. How familiar are community members with existing climate-smart agricultural practices and green entrepreneurship opportunities?
3. What are the common livelihood activities practiced by community members, particularly women and youth?
4. Have community members encountered any challenges in adopting or practicing climate-smart agricultural techniques or engaging in green enterprises? If so, what are they?
5. In your opinion, what opportunities exist for enhancing community involvement in climate-smart practices and green enterprises?
6. What resources or support do community members need to effectively engage in climate-smart agriculture and green entrepreneurship?
7. How aware are community members of the importance of environmental conservation and climate change adaptation?
8. What methods or channels do you think would be most effective for raising awareness and educating community members about climate-smart practices and green entrepreneurship?
9. What are the priority areas or sectors within the community where climate-smart practices and green enterprises could have the most significant impact?
10. Are there any specific types of green enterprises or climate-smart practices that community members are particularly interested in or would like to learn more about?
11. How can community members be actively involved in planning, implementing, and monitoring climate-smart initiatives and green enterprise projects?
12. What strategies can be employed to ensure the meaningful participation of women, youth, and other marginalized groups in these activities?
13. Are there existing community organizations, local businesses, or government agencies that could collaborate to support climate-smart initiatives and green entrepreneurship?
14. How can partnerships be strengthened to enhance the sustainability and impact of these projects within the community?
15. What are your suggestions to improve a project aiming at mitigating the impact of climate change and improving resilience and adaptability of women and children in this area

GUIDING QUESTIONS 2- Children FGD

1. Engagement with Climate Change Education: Have any of you received education or training on climate change adaptation and environmental management practices? If so, where did you receive this training, and what did you learn from it?
2. Participation in Environmental Initiatives: How many of you have participated in environmental management initiatives such as tree planting or environmental days? Can you share your experiences with us?

3. Barriers to Participation: For those who haven't participated in environmental initiatives, what are some challenges or barriers you face in participating? What could be done to overcome these challenges?
4. Access to Tree Nursery Facilities: Do any of you have access to a tree nursery facility? If yes, how do you use this facility, and what impact does it have on your community?
5. Involvement **in Agroforestry and Household Activities:** Which of the listed activities (backyard gardens, growing fruits/vegetables, composting, etc.) are you or your household currently involved in? Can you tell us more about your involvement?
6. **Household Support for Nutrition Improvement:** Have you or anyone in your household received support related to improving household nutrition? If yes, what type of support was it, and how effective was it in improving your household's nutritional quality?

Annex VI: Monitoring and Evaluation Matrix

Goal: Regreening Kenya to mitigate the impact of Climate Change and improve resilience and adaptability of women, youth and children in the counties of Nairobi, Makueni and Kajiado.							
Outcome	**Indicator**	**Baseline**	**Target**	**Source of data**	**Method of gathering data**	**Frequency of data collection**	**Responsible person/Data gatherer**
Outcome 1: Enhanced youth and women-led Climate Smart Green enterprises for environmental conservation, employment creation and increased incomes.	% of women earning from climate smart green enterprises	11.1%		Field survey	Women beneficiaries Questionnaire	Twice – beginning and end of project	External consultant
	% of women who have been trained on Climate Smart nutrition agriculture	13.5%.		Field survey	Women beneficiaries Questionnaire	Twice – beginning and end of project	External consultant
	% of youth earning from climate smart green enterprises	8.3%		Field survey	Youth beneficiaries Questionnaire	Twice – beginning and end of project	External consultant
	% of children under 5 years with access to nutritious food	14.6%.		Field survey	Children beneficiaries Questionnaire	Twice – beginning and end of project	External consultant
Outcome 2: Improved capacity of teachers and children to positively influence climate change adaptation and environment management in schools	% of children with improved knowledge and skills on climate change adaptation	58.1%		Field survey	Children beneficiaries' questionnaire	Twice – beginning and end of project	External consultant
	% of children practicing climate change adaptation activities	76.2%		Field survey	Children beneficiaries' questionnaire	Twice – beginning and end of project	External consultant
	% of teachers with skills and knowledge on environmental conservation practices	54.1%		Field survey	Teachers beneficiaries' questionnaire	Twice – beginning and end of project	External consultant
Output							
1.1. Youth trained on commercial Agro-Forestry and Fruit Tree Nurseries	# youth trained on commercial agroforestry and fruit tree nurseries	0	600		Attendance List Activity Reports	After activity	Project Officer
1.2. Commercial agro-forestry tree Nurseries for the youth established	# commercial agroforestry tree nurseries established	0	6		Activity reports Monitoring reports	After activity	Project Officer
1.3. Climate resilient trees planted	# climate resilient trees planted	0	130000				

1.4. Kitchen gardens established to increase uptake of nutritious food.	# of kitchen gardens established	0	20		Activity reports Monitoring reports	After activity	Project Officer
1.5.Women and youth trained in Climate Resilient Sustainable Agricultural Technologies.	# of women trained on resilient sustainable agricultural technologies.	0	300		Attendance List Activity Reports	After activity	Project Officer
	# of youth trained on resilient sustainable agricultural technologies.	0	450		Attendance List Activity Reports	After activity	Project Officer
1.6.Children have access to nutritious and fortified moringa food for improved nutrition status.	# of children who have access to nutritious foods for improved nutrition status.	0	600		Attendance List Activity Reports	After activity	Project Officer
1.7.Women trained on effective nutrition practices for children under 5.	# of women sensitized on effective nutrition practices for children.	0	300		Attendance List Activity Reports	After activity	Project Officer
2.1.Aflatoun clubs established in primary schools to inculcate environmental conservation discipline and entrepreneurship	# of Aflatoun clubs in primary schools	0	12		Activity Reports School Club records	After activity	Project Officer
	# of children sensitized and participating in the clubs	0	600		Attendance List Activity Reports	After activity	Project Officer
2.2.Agroforestry and fruit tree nurseries established and linked to the solarized water systems.	# of agroforestry clubs and fruit trees nurseries established	0	6		Activity Reports School Club records Distribution Lists	After activity	Project Officer
	# of children participating in the agroforestry clubs in the schools	0	600		Activity Reports School Club records	After activity	Project Officer
2.3.Tree planting sessions held in schools	# of tree planting sessions conducted	0	1		Attendance List Activity Reports	After activity	Project Officer
	# of children, participating in the tree planting sessions	0	175		Attendance List Activity Reports	After activity	Project Officer
	# of teachers participating in the tree planting sessions	0	5		Attendance List Activity Reports	After activity	Project Officer
	# of trees planted	0	3000		Attendance List Activity Reports	After activity	Project Officer
2.4. Collaboration with County and Sub-County Government's relevant departments supported	# of government officers attending meetings on environmental conservation practices	0	45		Minutes of the meeting Activity Report Attendance List	After activity	Project Officer

2.5. Environmental days and government celebrations conducted	# of Environmental Conservation and Climate resilience information sharing events	0	1		Attendance List Activity Reports	After activity	Project Officer
	Number of children who participated in such events	0	20		Attendance List Activity Reports	After activity	Project Officer
2.6. Media engagement of children in media (social media, radio and TV) to disseminate environment conservation messages.	# of children participating in social media and local radio and TV stations on environmental conservation activities.	0	20		Attendance List Activity Reports	After activity	Project Officer
2.7. Integrated Farming Techniques and Environmental conservation trainings conducted	# of teachers trained on integrated farming techniques and environmental conservation practices.	0	5		Attendance List Activity Reports	After activity	Project Officer
	# of children trained on integrated farming techniques and environmental conservation practices.	0	175		Attendance List Activity Reports	After activity	Project Officer
2.8.Interschool debates on environmental conservation conducted	# of inter-school debates conducted	0	2		Attendance List Activity Reports	After activity	Project Officer
	# of children reached with awareness during debates	0	50		Attendance List Activity Reports	After activity	Project Officer
2.9.Action research on the link between climate change and child protection conducted	# of action research developed	0	1		Reports	After activity	Project Officer