VICTORIA FRIENDLY MONTESSORI EVALUATION REPORT

2023

ACKNOWLEDGEMENT

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1 INTRODUCTION

Victoria Friendly Montessori (VFM) is a locally based organization that operates within the Rusinga Island community, specifically focusing on Kamasengere West sub-location of Rusinga West in Suba North sub-county, Homa Bay County in the Nyanza region of Kenya. The VFM initiative was established in 2014 to address the pressing need for early childhood development (ECD) education among the fishing communities on the island. The project uses the Montessori system to empower children. It has 7 initiatives aimed at achieving transformational development: Education; Water and Sanitation services; Health; Economic empowerment; HIV and AIDs response; Child protection and social services; and Social welfare empowerment.

1.1 Main goal

To develop capacities of grassroots community along the Lake Victoria basin to mitigate against effects of poverty through sustainable community-led interventions.

1.2 Vision

The organization envisions a society in which all children will be able to live a dignified existence with equal and just access to future opportunities in life. This directs focus to children as agents of change and development within the Rusinga Island. This will ensure that children are the entry point into the households among the beneficiaries both directly and indirectly in order to ensure transformational development within the Island.

1.3 Mission

To improve the situation of orphaned and vulnerable children by providing education, feeding and health care, and address the factors leading to their situation. The project addresses the root causes of poverty and vulnerability by tackling the social determinants in the key areas in order to ensure wellbeing of children.

OUR FOCUS AREAS

Education

Water and sanitation

Health

HIV/AIDS response

Child protection and social services

Social welfare empowerment

Economic empowerment

2 PROJECT OBJECTIVES

1. To gather accurate and reliable data to evaluate the impact of VFM projects on the communities in Kamasengere West, specifically in terms of access to education, water and sanitation, housing, food security, energy, environment, and social welfare.

2. To identify the various strategies and mechanisms employed by households in Kamasengere West to cope with limited access to education, water and sanitation, housing, food security, energy, environment, social welfare, and community groups.

3. To develop practical and effective recommendations for scaling up the existing VFM projects in the Kamasengere West communities, with the aim of improving overall community well-being and development.

3 LOCATIONAL CONTEXT

Victoria Friendly Montessori (VFM) is situated on Rusinga Island, specifically covering the Kamasengere West sub-location of Rusinga West in Suba North sub-county, which is located in Homa Bay County within the Nyanza region of Kenya. The sub-county spans an area of 634 square kilometers and has a population of 122,383 individuals. According to the 2019 Kenya Population and Housing Census: Volume II, page 220, Kamasengere West sub-location has a population of 5,469 people, with 2,717 being male and 2,752 being female. It has a total of 1,433 households and covers a land area of 4.9 square kilometers (490 hectares).

Table 3-1: Demographics of Kamasengere West according to the 2019 Kenya Population and Housing Census

Sub-locations	Total population	Male	Female	No. of Households	Area coverage	Population density per sq. km
Kamasengere West	5,469	2,717	2,752	1,433	4.9 sq. km (490 ha).	1116.12

Figure 3 1: Map of Homabay county
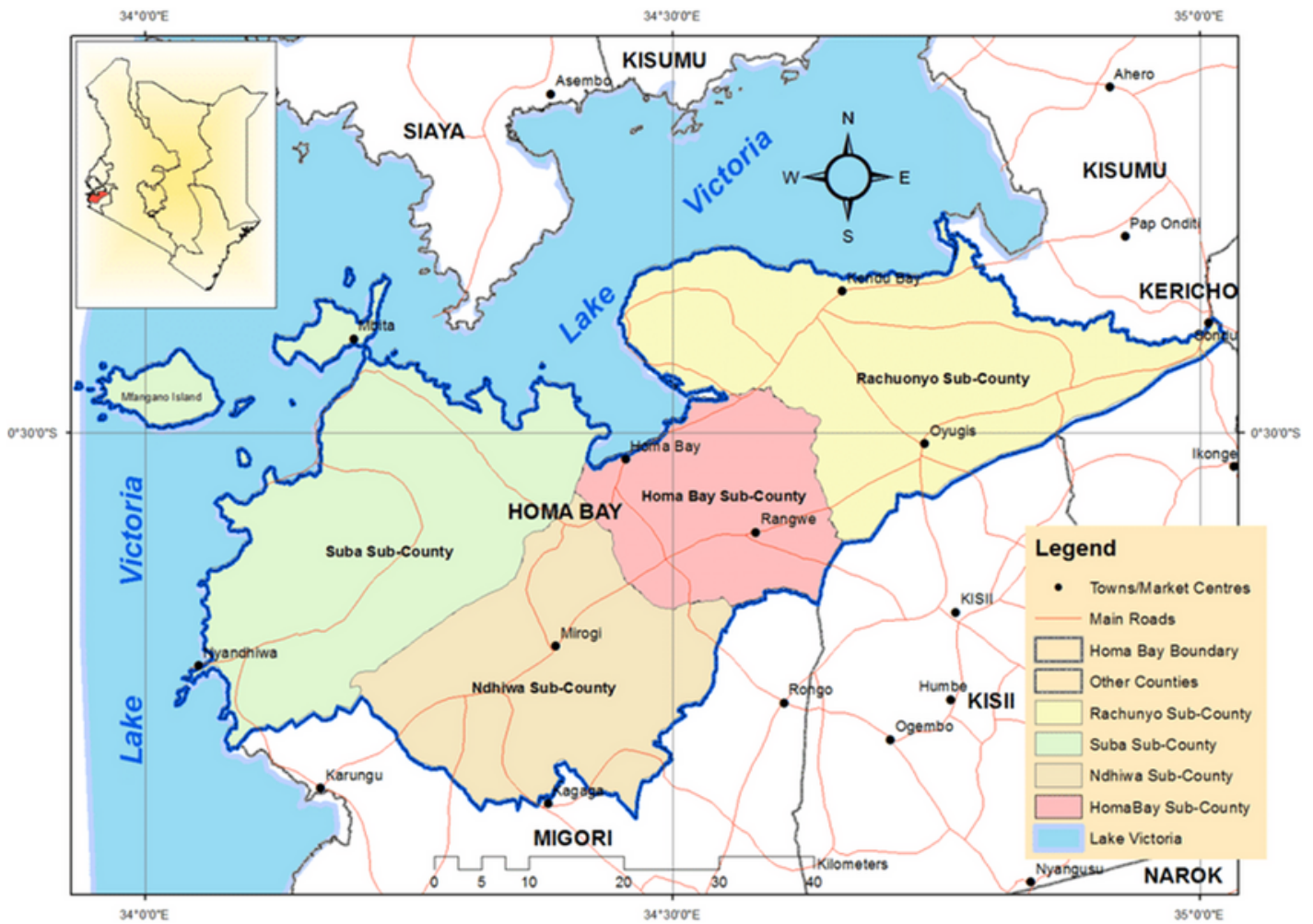
4 METHODOLOGY

The household survey research adopted a community participatory method approach in the collection of data. The research employed the following steps:

Preparation of data collection tools

Training of data collection team

Data collection

Data analysis
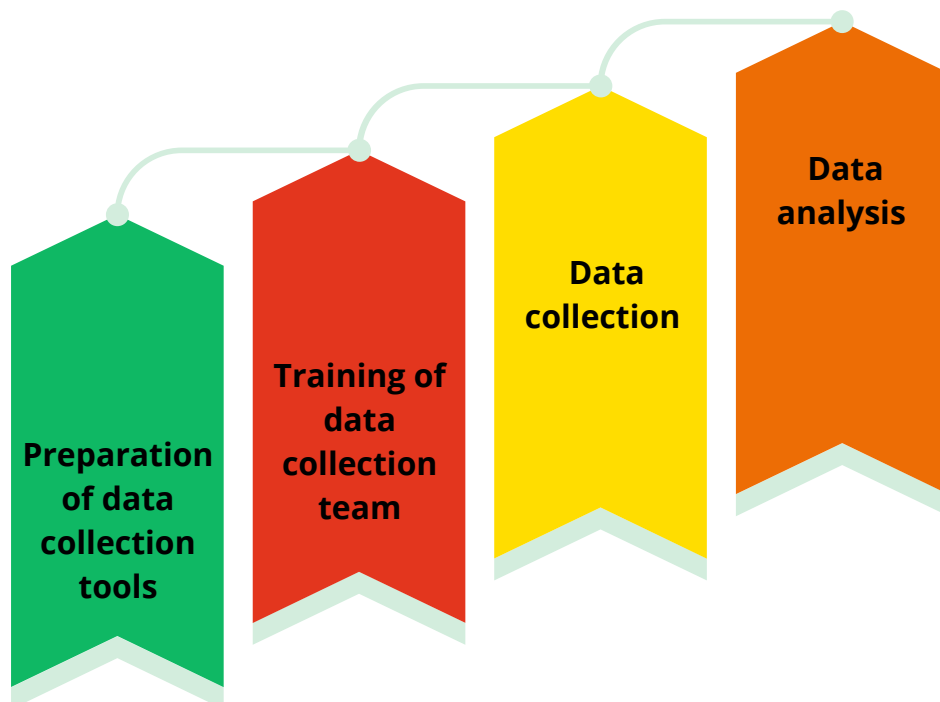
4.1 Preparation of data collection tools

These tools include the household survey questionnaire and the focus group discussion questionnaire. These tools sought to provide relevant information regarding the set research objectives. These tools enabled the collection of data on demographics, education, health, child protection services, financial services and environment and natural resources. The ODK Collect tool, a mobile online platform was used to collect the data.

4.2 Training of data collection team

The research involved the mobilization of community members to assist in data collection within their settlements. The team was adequately trained on the various tools used for data collection, which emphasized the significance of the process. To ensure accuracy and clarity of the data collected, community members were assigned specific duties to collect data within their respective settlements.

4.3 Data collection

The actual data collection started on 13th– 19th April 2023 where 569 households in Kamasengere West sub-location in Rusinga West in Suba North sub-county were profiled in 9 villages.

4.4 Data analysis

Data analysis was conducted using Microsoft Excel and SPSS. Out of the analyzed data, a report was generated to summarize the research findings.

RESEARCH FINDINGS PER SECTOR

5 DEMOGRAPHICS

5.1 Gender of the respondents

A total of 569 households were sampled from 9 villages in both Kamasengere West sub-location in Rusinga West location. Based on the analysis, **75.9% of the respondents were female, while 24.1% were male.** The gender composition of the interviewed respondents per village are indicated in the table below.

Table 5-1: Gender composition of respondents

Sub-location	Village	Male	Female	Total
Kamasengere West	Luanda	42	112	154
	Nyangera	27	64	91
	Ufira	34	77	111
	Gumba	8	31	39
	Sianda	4	19	23
	Sianga A	2	15	17
	Sianga B	1	22	23
	Sianga C	4	21	25
	Waende	15	71	86
Total		137	432	569

5.2 Age group

The **largest age group is individuals aged 36-49 years**, accounting for 41% of the total responses, followed by those aged 18-35 years, comprising 32% of responses. The 50-65 age group represents 21% of responses, while those aged 66 years and above account for 6% of responses.

Figure 5-1: Age group of respondents

- 18-35 years
- 36-49 years
- 50-65 years
- 66 years and above
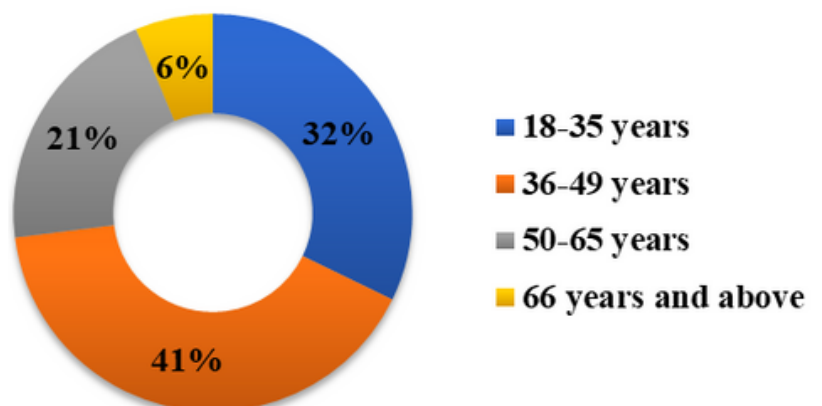
When considering gender, the **majority of female respondents fall into the 36-49 age range (30.8%),** and (25.8%) aged 18-35 years. For male respondents, the majority falls into the 36-49 age range, with (10%) in this group, followed by those aged 18-35, representing 6.3% of the male responses.

Figure 5-2: Gender and age group of respondents

	18-35 years	36-49 years	50-65 years	66 years and above
■ Females	26%	31%	15.10%	4.20%
■ Males	-6.30%	-10.00%	-5.60%	-2.10%

These percentages provide insight into the demographics of the settlement, showing that the **majority of respondents fall within the middle-aged bracket**, with a higher percentage of females interviewed compared to males.

5.3 Marital status

The majority of the respondents, representing **71% of the total responses, are married. Widowed respondents** make up the **second largest group at 26.4%,** while single, divorced, and separated respondents account for only a small percentage of the total responses at 1.6%, 0.6%, and 0.4%, respectively. These percentages suggest that the majority of the individuals in the settlement are married and likely to have families, while a significant proportion of respondents have experienced the loss of their spouse through death or separation. This information is relevant for understanding the social dynamics within the settlement and may have implications for the provision of social services and support for different groups within the community.

5.4 Household breadwinners and the type of households

Based on the analysis, **60.6% of the respondents are household bread-winners** which shows that there is a significant number of individuals who have the decision-making power within the household in terms of food, finances and household activities.

The majority of households are **regular households where the male head lives with his wife and children, comprising 65.8%** of the total responses. **Female-headed 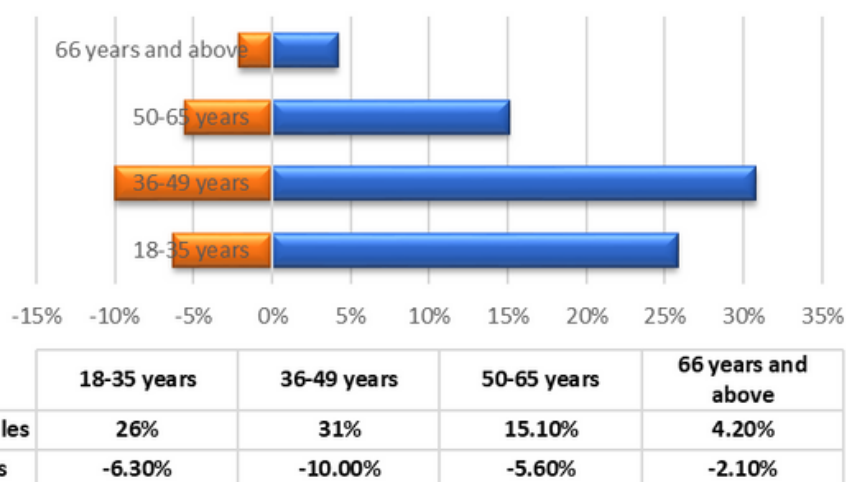households where the woman is single, separated, divorced or widowed** account for **24.8%** of responses, while **female-headed households where the husband lives elsewhere and does not regularly sleep in the house** make up **5.4%** of responses. The remaining responses are distributed amongst the other categories with smaller percentages, with **male-headed households where the wife lives elsewhere and does not regularly sleep in the house accounting for 1.4%** of responses, and **male-headed households where the male is single, separated, divorced, or widowed accounting for 2.6%** of responses.

Figure 5-3: Type of households

4%

30.2%
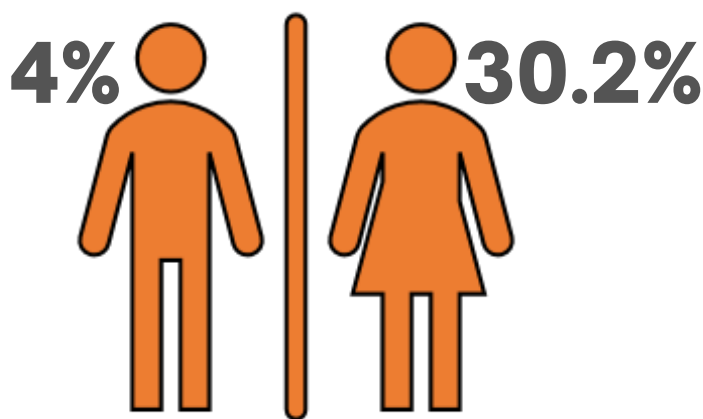
Overall, the data suggests that there is a significant proportion of **female-headed households (30.2%)** and a relatively small proportion of **male-headed households (4%) in the settlement,** with most households being regular households where the male head lives with his wife and children.

5.5 Time length the residents have lived in the settlement

Of all the respondents, **the highest percentage of residents (21.4%) have lived in the settlement for 6-10 years**, followed by 16% of residents who have lived there for 11-15 years and 14.1% of residents who have lived there for 1-5 years. Furthermore, 11.6% of residents have lived in the settlement for 26-30 years, while only 1.9% of residents have lived there for Above 50 years as shown in the bar graph below.

Figure 5-4: Duration lived in the settlement
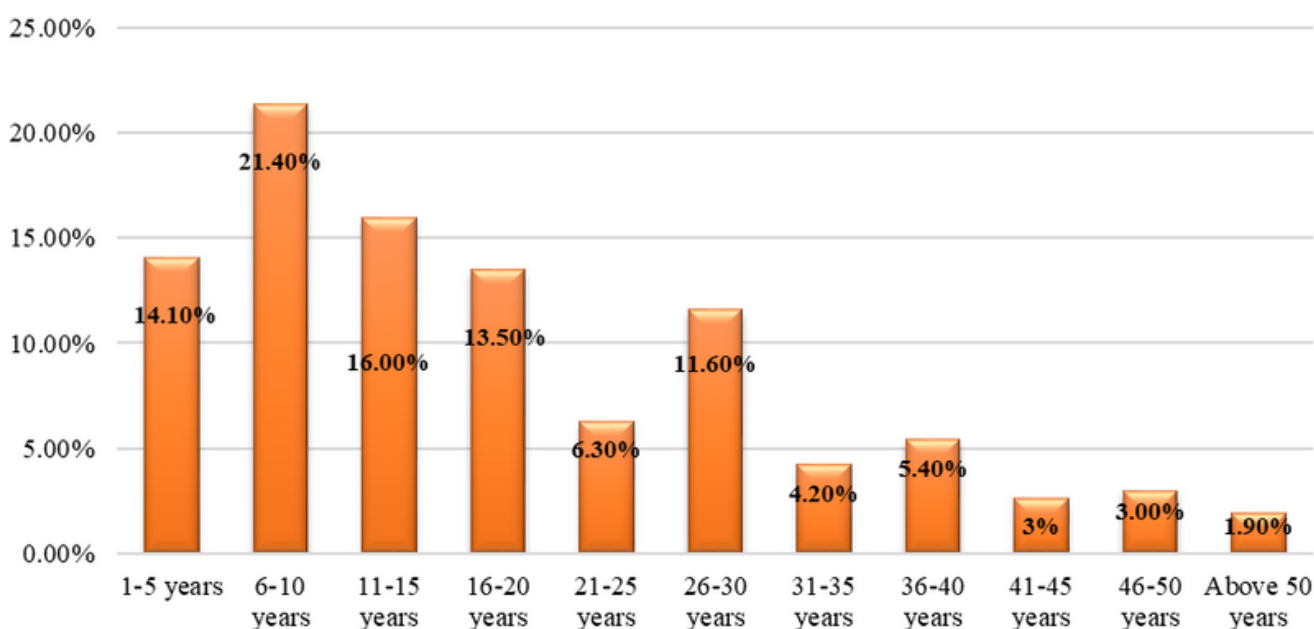
Overall, the data shows that the settlement has a relatively stable population, with **a significant proportion of residents having lived there for more than a decade.**

5.6 Household size

The majority of the respondents reported **a household size of 1-5 people living in their households,** representing **78.4%** of the total responses. The next largest group of respondents reported household sizes of 6-10 people, accounting for 20.6% of the total responses. Only a small percentage of respondents reported having households with 11-15 people, representing only 1% of the total responses. These percentages suggest that **the majority of households in the settlement are relatively small, with few households having more than 10 people.**

5.6.1 Age distribution

Based on the data analysis, **48.2% of the people living within the households were males while 51.8% were females.** 16.2% of the respondents had children aged between 0-5 years, 30.6% had children aged between 6-12 years, 26.1% had children aged between 13-17 years, 16.6% had household members aged between 18-35 years, 4.2% had members aged between 36-49 years, 2.3% had members aged between 50-65 years, and only 1% had members aged 66 years and above. The chart below shows the age distribution according to gender.

Figure 5-5: Age distribution of households per gender
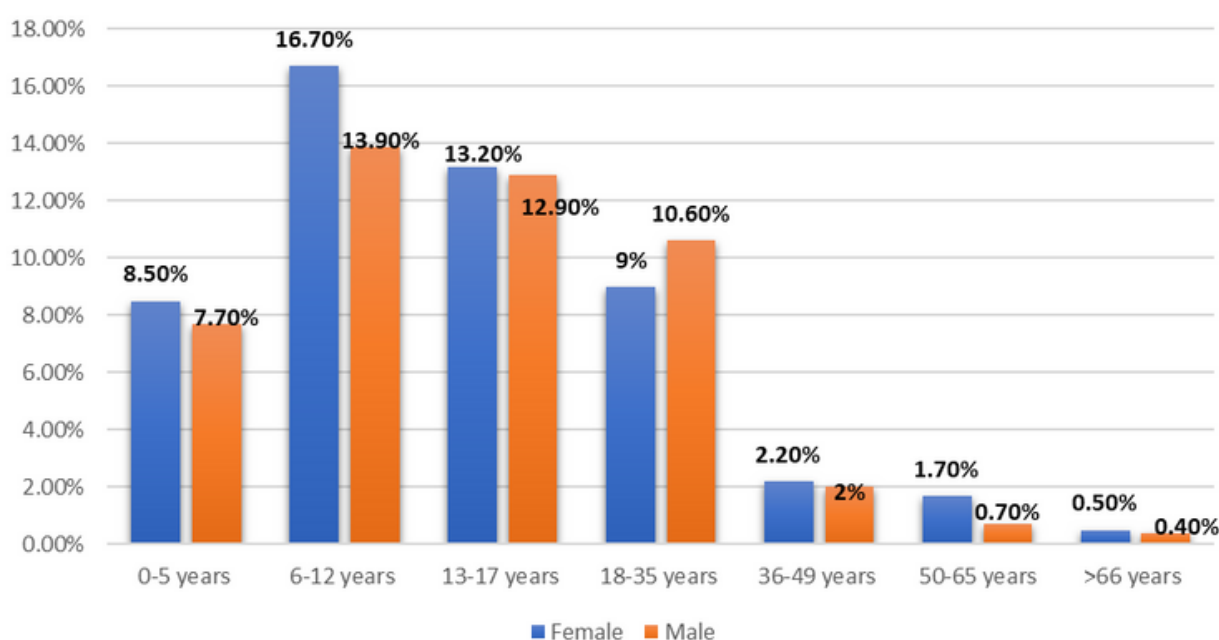
5.6.2 Household occupation

According to the data analysis, the households had a diverse range of occupations. The majority of the population, **approximately 33.3% were practicing fishing.** The next largest occupation group was **casual laborers, which comprised around 29.6%** of the population. The other occupations are listed as follows;

10.5% Farming   **20.4%** Business   **6.2%** Formal employment

5.6.3 Highest level of education

According to the data collected on the highest level of education among the household members, the largest percentage, **41.9%, had reached at the primary school only** and 28.1% had completed up to secondary education level. 10% had reached pre-primary school while 6.7% had completed tertiary education, certificate or diploma. A smaller percentage, 4.8%, had pursued university education level. Only 2% of the household members had never attended school in their life while 6.5% were children under 3 years of age and had not yet started school. These findings demonstrate that a majority of the population had completed at least a primary level of education, with a significant percentage advancing to secondary and tertiary levels.

Figure 5-6: Highest level of education attained by household members
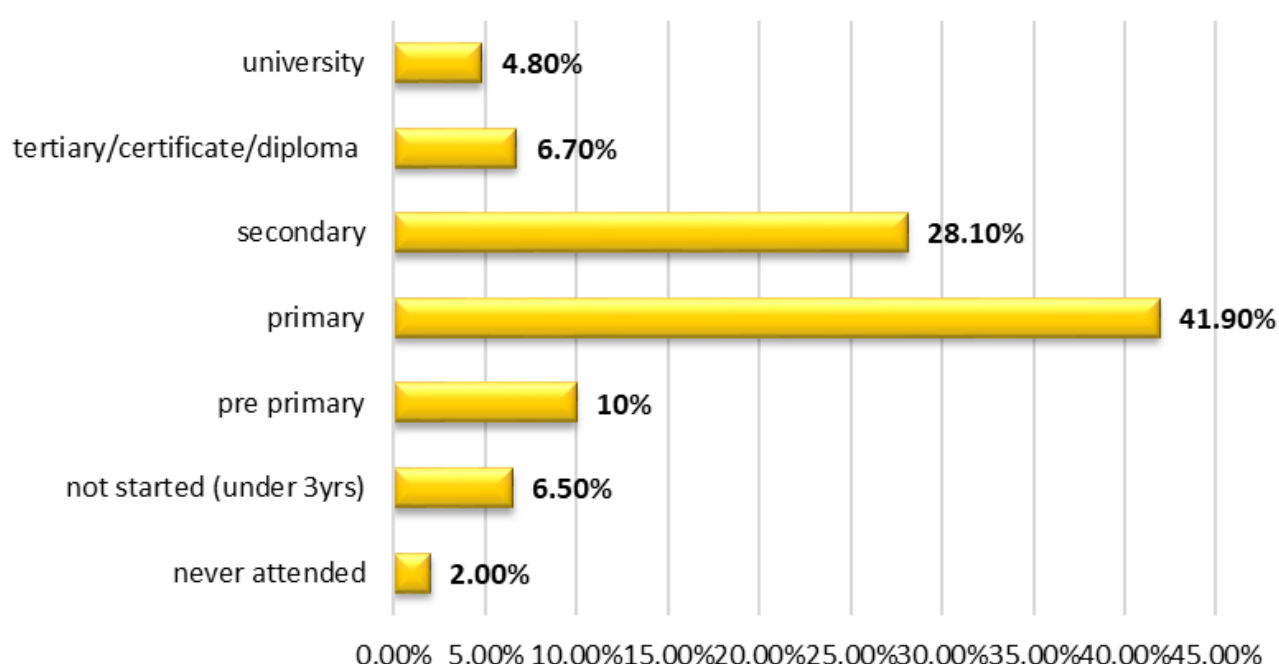
6 EDUCATION

In the education sector, the household survey aimed to gather information on several aspects related to access to education in the area i.e. the enrollment rates of boys and girls, as well as the proportion of children who have dropped out of school. The survey also sought to determine the access to education facilities for children in Early Childhood Development (ECD), primary and secondary education levels. In addition, it sought to identify the current schools feeding programs in the area and the categories of children that benefit from such programs. This was beneficial to provide insights of the food security status of children in Rusinga Island. The data analyzed will provide insights on identifying areas that need improvement to ensure that all children have access to quality education.

6.1 Access and education coverage

Early Childhood development schools

According to the survey, **65.1% of households reported that their children attend Early Childhood Development (ECD) schools.** Among those who attend ECD, 8.3% reported missing at least one month of school in the past year due to either the lack of school fees or sickness, and some parents reported that their female children refuse to attend school. In addition, **34.9% of households reported that their children are currently not attending ECD schools due to the lack of school fees, with sickness being another reason for female children not attending. Among the children who are not attending ECD, the majority are females.** These findings suggest that financial constraints and illness are significant barriers to ECD school attendance.

Table 6-1: Proportion of ECD children attending and not attending school

Attending school (65.1%) 289 Students		Not attending school (34.9%) 155 students	
Male	Female	Male	Female
30.4% (135 students)	34.7% (154 students)	14.9% (66 students)	20% (89 students)

Primary schools

According to the data analysed, **85.4% of households with children from primary school age, reported that their children attend primary schools.** Among those who attend, 8.9% reported missing at least one month of school in the past year due to either the lack of school fees or sickness. In addition, **14.6% of households reported that their children are currently not attending primary schools due to the lack of school fees, or sickness.** Among **the children who are not attending primary school, the majority are females.**

Table 6-2: Proportion of Primary school children attending and not attending school

Attending school (85.4%) (858 students)		Not attending school (14.6%) (147 students)	
Male	Female	Male	Female
39.4% (396 students)	46% (462 students)	6.7% (67 students)	7.9% (80 students)

Secondary schools

Based on the data analysis, **74.6% of households reported that their children attend secondary schools.** Among those who attend, 21.2% reported missing at least one month of school in the past year due to either the lack of school fees or sickness. Also, females were reported to have missed school due to the educational facilities located in a far or insecure area. I**n addition, 25.4% of households reported that their children are currently not attending secondary schools due to the lack of school fees, or sickness.** Furthermore, some of the **male children were reportedly not attending secondary school because they had to take care of their siblings.**

Table 6-3: Proportion of Secondary school children attending and not attending school

Attending school (74.6%) (403 students)		Not attending school (25.4%) (137 students)	
Male	Female	Male	Female
36.7% (198 students)	37.9% (205 students)	12.4% (67 students)	13% (70 students)

6.2 Rate of school dropouts

Based on the survey conducted, **6.9% of respondents reported that there are school-going children in their household who have dropped out of school.** Among these school dropouts, the majority dropped out of primary school (43.6%), followed by secondary school (35.9%), university (15.4%), and tertiary education (5.1%).

Figure 6-1: Rate of school dropouts

6.90%

94.30%

■ Yes
■ No
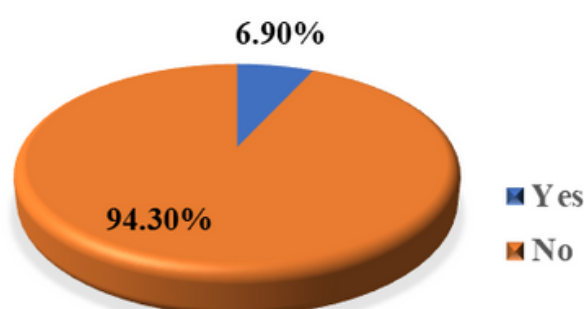
6.2.1 Reasons for dropping out of school

Lack of school fees was the most commonly cited reason for dropping out of school, accounting for 61.5% of responses. Other reasons included **poor academic performance** (12.8%), **early marriages** (5.1%), **teenage pregnancy** (10.3%), **peer pressure** (7.7%), and **care burdens** (2.6%). These findings suggest that **financial constraints are a major barrier to educational attainment, particularly among those in primary and secondary school.**

6.3 School feeding programs

According to the analysis, **91.5% of respondents reported that there are school feeding programs in the schools** their children are attending. Among those who answered yes, the **98.2% stated that the program benefits the entire school.** However, for the small percentage who answered no, **the majority (86.5%) reported that the program only benefits specific categories of children, with children above 5 years of age being the most common (65.4%).**

Figure 6 2: Children benefiting from school feeding programs
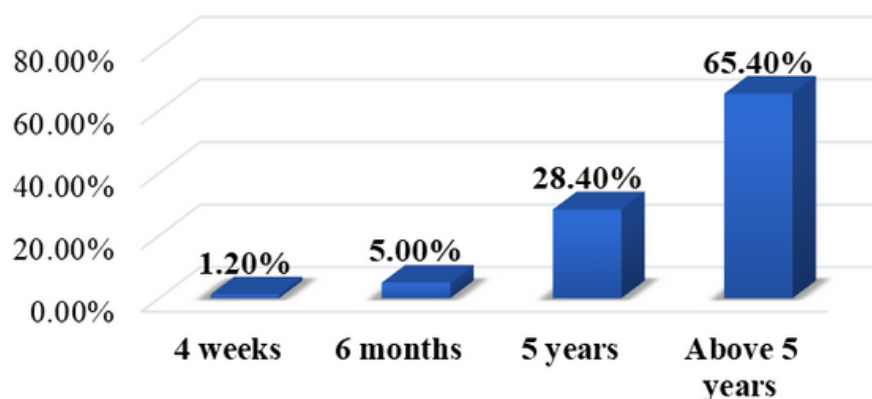
6.3.1 Number of meals provided per day in schools

The **majority (52.6%) of respondents reported that their children receive one meal per day,** while only a small percentage of 10% receiving three or more meals per day. According to the data analysis, an assumption is that those who receive three meals or more are in boarding schools.

Figure 6 3: Number of meals provided in a day
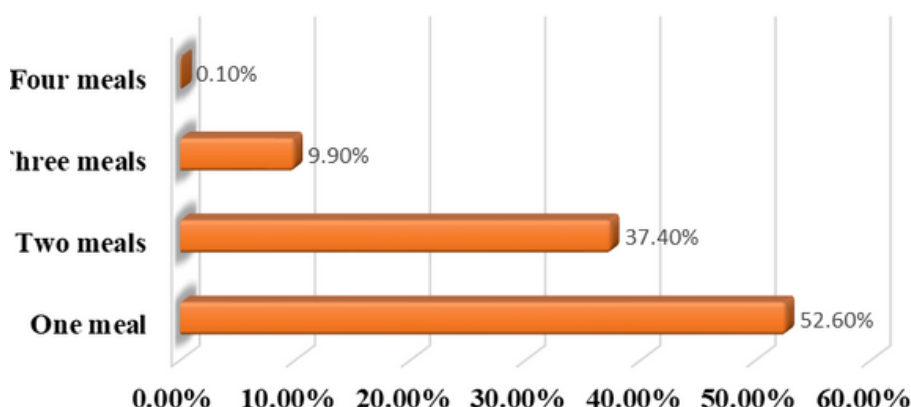
The data suggests that **school feeding programs are prevalent in the communities surveyed,** and they appear to benefit a large portion of the student population.

6.3 Changes witnessed in the education sector by households in the last seven years

Summary of changes

Improvement in the education system in terms of:

1. teacher-to-student ratio
2. teaching methods
3. skills development
4. increased schools
5. increased food security
6. increase in trainings
7. early enrolment in schools
8. provision of bursaries
9. identification of vulnerable children
10. provision of sanitary towels

The majority of households **(58.4%) reported witnessing an improvement in the education system,** including the teacher-to-student ratio, teaching methods, and skills development. They also deemed the education system to be of high quality. Additionally, they observed a rise in the number of schools in their area, which they believe has reduced overcrowding and allowed teachers to concentrate on a smaller group of students and offer better teaching. In addition, the respondents reported that VFM's school feeding program has increased the food security of vulnerable children and improved their concentration and attendance at school. The provision of meals has also created excitement among students and increased their likelihood of attending classes.

Some **parents in the community have benefited from VFM's trainings on the importance of education (15.1%)**, with some reporting that their children have started school as early as three years old. This has promoted the early enrolment of school going children in schools and therefore develops their skills at an early stage.

Additionally, **12.6% of the school going children have benefited from the VFM project as VFM has provided bursaries to the children.** Through this, the residents witnessed a decrease in school dropouts and early pregnancies. Moreover, they have been able to identify the most vulnerable children and have been able to pay their school fees in order to increase their school attendance. Additionally, VFM has supported girls' education by providing sanitary towels, which has reduced period shame and increased attendance.

Some households **(4.1%) reported lacking the funds to continue educating their children,** while a small percentage **(1.5%) reported that CBC is costing them a lot of money in as much as it is contributing to the skills development** of their children. Additionally, a few respondents **(8.3%) reported not having received any support from VFM.** The word cloud below visually represents the themes emerging from the changes witnessed in the last seven years.

Figure 6 4: Emerging themes from the education sector

7 FOOD SECURITY

In this sector, the research sought to investigate the food security situation in households. This involved assessing the availability and accessibility of food, identifying the main sources of food, determining the number of meals taken per day, and examining the affordability of food sources. Additionally, the research identified the various strategies employed by households to cope with food shortages or lack of sufficient food.

7.1 Access to sufficient food

Sufficient food refers to the availability of food in a quantity and quality that is able to satisfy the dietary needs of individuals. According to the data analysis, **24.6% of respondents reported having access to sufficient food for their households.** However, 75.4% reported not having access to sufficient food for their households **due to the presence of harsh weather in the area.** Other responses cited are shown in the table below. These findings highlight the challenges faced by households in accessing sufficient food, particularly for those with low income.

Table 7-1: Factors affecting access to sufficient food

Factors affecting access to sufficient food	Percentage
Inadequate income	52.2%
High cost of food	19.8%
High cost of living	16.8%
Unemployment	7.7%
Inadequate land for cultivation	0.5%
Low farm produce	0.7%
Low fish catch	1.2%
High household size	0.2%
Health conditions	0.9%

7.2 Main sources of food

In terms of where respondents obtain most of their food from, **the majority (66.4%) reported purchasing food,** while 19.2% obtained food through farm cultivation. Other sources of food are listed down below;

Figure 7-2: Sources of food

Food aid (3.8%)   **borrowing from relatives/friends (5%)**   **livestock keeping (1.2%)**   **fishing (2.5%)**   **gifts from relatives and friends (1.9%)**

7.3 Food consumption per day

According to the data analyzed, the **majority of households (66.8%) consumed two meals the previous day,** while 12.8% had one meal and 20% had three meals. Approximately 0.4% reported not having consumed any meal the previous day.

On a typical day, t**he majority of households (72.6%) consume two meals, while only 5.1% have one meal and 22.1% have three meals** as shown in the figure below. Only a small percentage, 0.2% have four meals in a day.

Figure 7-3: Meal consumption in a day
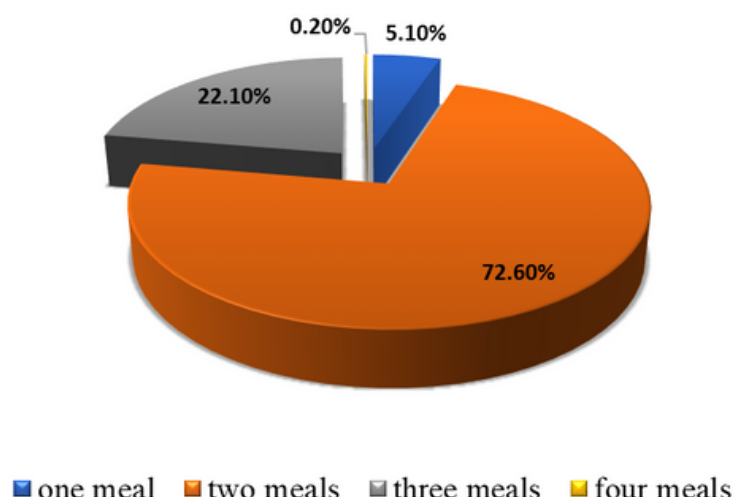
In regards to consuming sufficient food, **29.5% of the households reported having gone for two days without consuming sufficient food (i.e. two meals a day) in the past week**. In addition, other respondents mentioned that they had gone for more than three days without consuming sufficient food as shown in the bar graph below.

Figure 7 4: Number of days gone without sufficient food

	None	One day	Two days	Three days	Four days	Five days	Six days	Seven days
Series1	30.90%	14.90%	29.50%	12.80%	5.80%	4.60%	1.10%	0.40%

Number of days
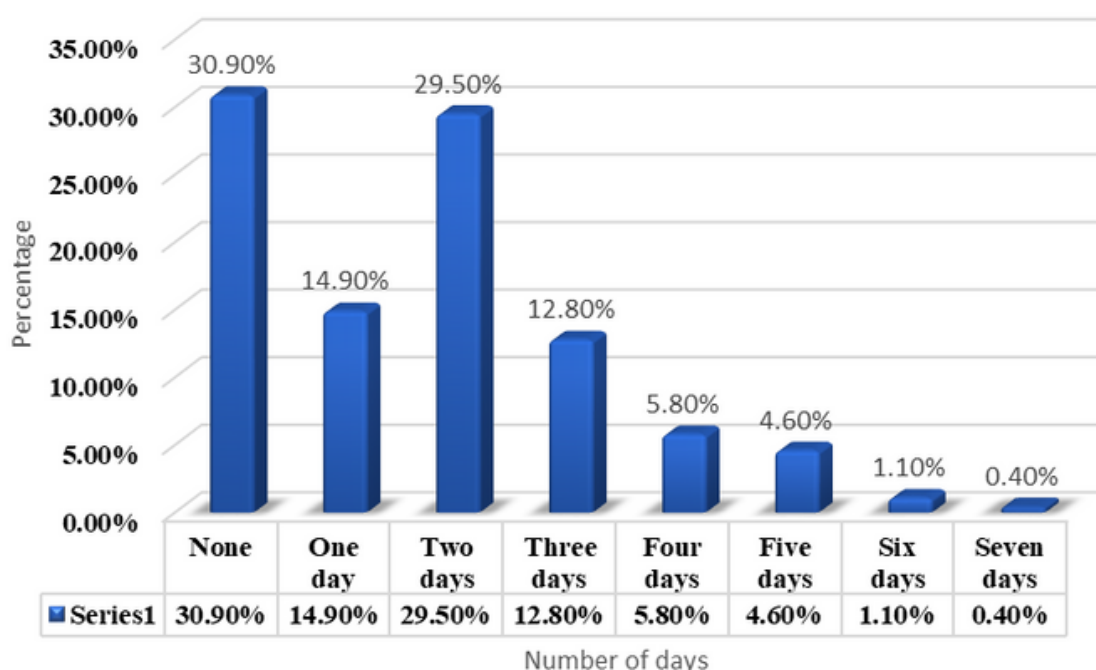
Based on the data findings, a conclusion can be made that around **54.2% of households go for more than two days without having sufficient food during the past week**. This implies that **more than half of the households are experiencing food insecurity**. Therefore, there is a need to identify interventions to address food insecurity and ensure access to adequate and nutritious food for all households.

7.4 Affordability of food products given the household's economic situation

Figure 7 5: Affordability of food products

According to the analysis, 40.9% found food products unaffordable while 6.9% found them affordable.

Affordability of food

Highly affordable (6.9%)

Somewhat affordable (52.2%)

Unaffordable (40.9%)
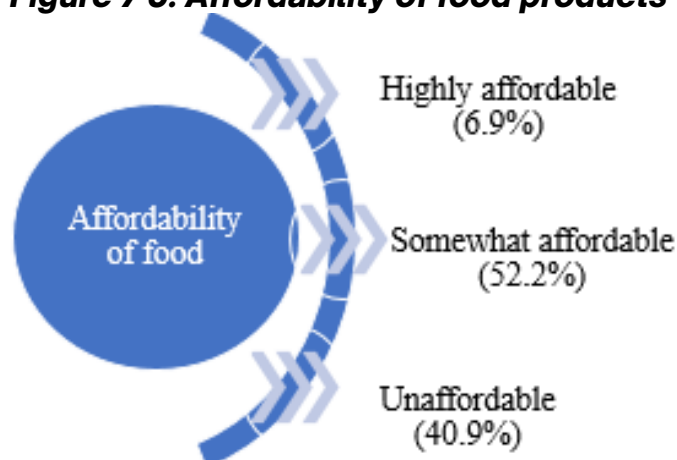
7.5 Coping strategies of households when they lack access to sufficient food

The analysis indicates that when households experience insufficient food, the majority of them **(26.9%) rely on less preferred or cheaper food.** The table below illustrates other coping mechanisms used by households when they experience insufficient food.

Table 7-2: Household coping strategies when they experience insufficient food

Coping strategies	Percentages
Rely on less preferred or cheaper food	29%
Borrowing food from friends or relatives	15.1%
Purchased food on credit from shops or traders	26.3%
Skipping entire days without eating	10.1%
Households limited meal portion sizes	7.8%
Households reduced the number of meals eaten per day	6.7%
Restricted consumption by adults to ensure that children eat	2.7%
Selling livestock	1.2%
Selling other productive assets	0.4%
Contracted debts from banks or service providers	0.1%
Rely more on remittances	0.1%
Consume seed stock	0.3%
Gather unusual wild food or harvest immature crops	0.2%

7.6 Changes witnessed in the food security sector by households in the last seven years

Summary of changes

Improvement in food security in terms of:
1. increased food production
2. nutritional education
3. provision of food donations
4. kitchen gardening
5. modern farming practices
6. provision of water tanks
7. Provision of seedlings and grains

According to the households surveyed, there has been an **improvement in food security (25.1%)** due to an increase in the availability of food as a result of increased food production. Nutritional education on balanced and nutritious diets, including carbohydrates, proteins, and vitamins, was received by some respondents from VFM. A few households reported engaging in banana plantation, which provides both income and a nutritious food source. The households reported that VFM supported vulnerable populations by providing food donations to reduce hunger in the community.

A majority of respondents reported **practicing kitchen gardening (57.6%) and growing their own vegetables and fruits,** which has contributed to their household food security, and some were given fruit tree seedlings by VFM. VFM also provided fencing materials and taught households how to store yields during the harvesting season.

The education provided by VFM has enabled households to employ **modern farming practices and sustainable techniques** such as the use of ganny bags, drought-resistant crops like bananas and moringa, and crop diversification practices. VFM provided households with grains and water tanks to ensure sufficient water for irrigation.

However, due to the high cost of living, many households reported a **high cost of food products (11.1%),** which has reduced their ability to purchase healthy and sustainable food products, resulting in reduced food production.

Some households **(4.9%) reported no change at all,** while some **(1.3%) reported receiving no support from VFM** in the last seven years. The word cloud below visually represents the themes emerging from the changes witnessed in the last seven years.

Figure 7-6: Emerging themes from the food security sector

8 HOUSEHOLD MEMBERS WITH SPECIAL NEEDS

8.1 Types of disabilities

The data reveals that **8.8% of the respondents reported having family members with special needs or disability.** Of the 8.8% households with family members with special needs or disability, 47.5% reported physical disability as the main type, while 18% reported hearing disability, and 18% reported mental disability. The other types of disabilities are shown in the graph below.

Figure 8-1: Type of disabilities
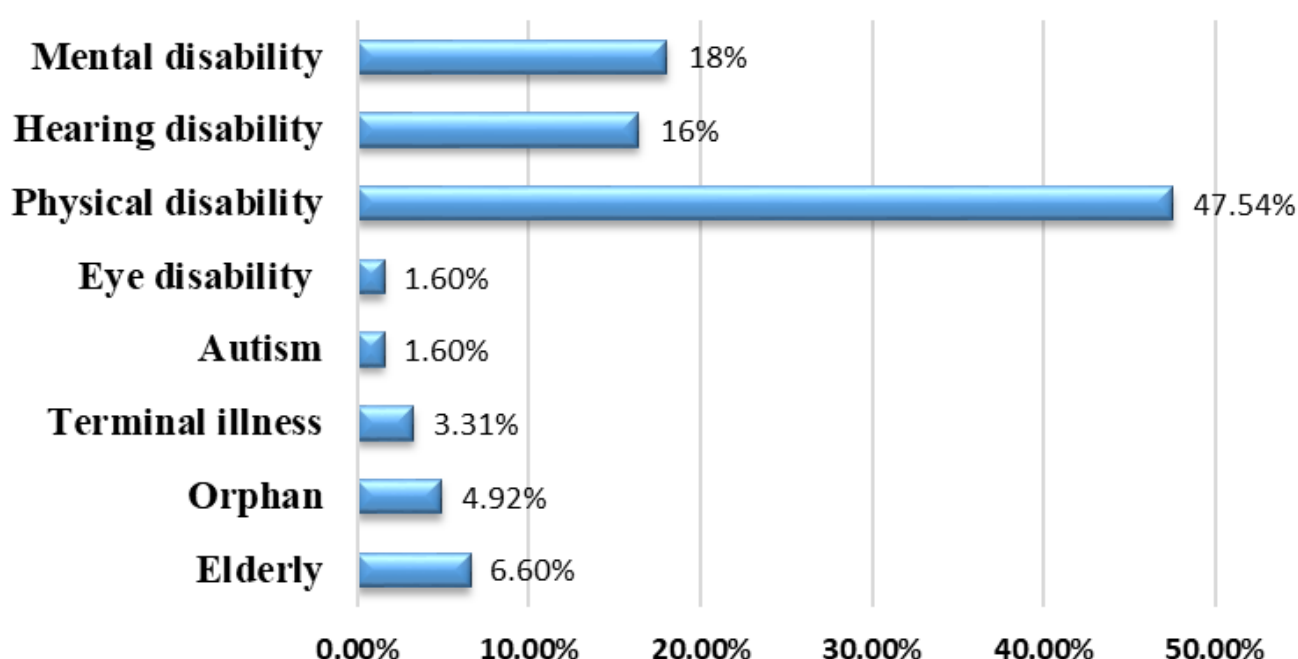
The data suggests that a **small but significant proportion of households in the survey have family members with special needs or disability,** and that physical disability is the most commonly reported type.

9 HEALTH

The health sector aimed to investigate the percentage of children who had experienced malaria, amoeba, cholera, and pneumonia. It also aimed to determine the proportion of children who had received DPT, Polio, and Measles vaccinations, and to assess the number of children who slept under a Long-Lasting Insecticide Treated Net (ITN). Moreover, the study sought to investigate the prevalence of HIV in the area.

9.1 Long Lasting Insecticide Treated Nets (LLINs)

According to the data, **the majority of households (85.2%) have children under the age of 18 who sleep under Long Lasting Insecticide Treated Nets (LLINs),** while only 14.8% households reported that their children do not sleep under LLINs.

Table 9 1: Long Lasting Insecticide Treated nets

Children (those aged below 18 years) who sleep under (LLINs)	Children (those aged below 18 years) who do not sleep under (LLINs)
91.8%	8.2%

9.2 KEPI Immunization routine

In terms of routine KEPI immunization against DPT, Polio, and Measles vaccines, the majority of households reported that approximately **83.1% had completed the routine immunization**. In addition, (16.9%) were reported to still be in the process of completing the KEPI immunization against DPT, Polio and Measles vaccines.

9.3 Prevalence of diseases (Malaria, Amoebiasis, Pneumonia, Cholera)

According to the data, in the last month, **a large percentage of households (31.8%) reported that a child under the age of 18 suffered from malaria,** while **9.9% households reported amoebiasis** and **9.1% households reported pneumonia**. Only a small percentage of households **(1.3%) reported that a child suffered from cholera** in the last month. However, the majority of households (47.9%) reported that none of the children in their households suffered from any of the mentioned diseases in the last month.

9.4 HIV Prevalence

9.4.1 Status of HIV/AIDS

Based on the data analysis, **24.6% of respondents reported being HIV positive,** while 68.9% reported being HIV negative. Additionally, 6.5% of respondents did not know their HIV status. Furthermore, 18.5% of respondents reported having a household member living with HIV, while 70.8% did not. However, 10.7% of the respondents did not know the HIV status of the people in their households.

9.4.2 Rate of HIV/AIDS

When asked about the rate of HIV infections in their community, **23.2% of respondents believed it to be high,** while 67.3% believed it to be moderate and 9.5% believed it to be low.

9.4.3 Prevalent causes of HIV/AIDS

Respondents cited **multiple sexual partners (47.5%) and unprotected sexual intercourse (32.3%) as the main reasons for the high/moderate rate of HIV infections**. Other reasons are listed in the table below.

Table 9-2: Reasons for an increase in the rate of HIV/AIDS

Reasons for high HIV prevalence	Percentage
Blood transfusions	5.3%
Lack of access to healthcare	1.6%
Mother to child transmission	4.7%
Multiple sexual partners	47.5%
STI	2.3%
Sharing needles	1.1%
Stigma and discrimination	5.2%
Unprotected sexual intercourse	32.3%

9.4.4 Categories most affected by the virus

Figure 9-1: Categories of people affected by HIV/AIDS

When asked who is most affected by the virus, **50% of respondents believed it to be youth**, 41% believed it to be adults, and 5% believed it to be the elderly.

Legend:
- Children (1-17 years)
- Elderly (65 years and above)
- Adults (36-64 years)
- Youth (18-35 years)

4%   5%   41%   50%
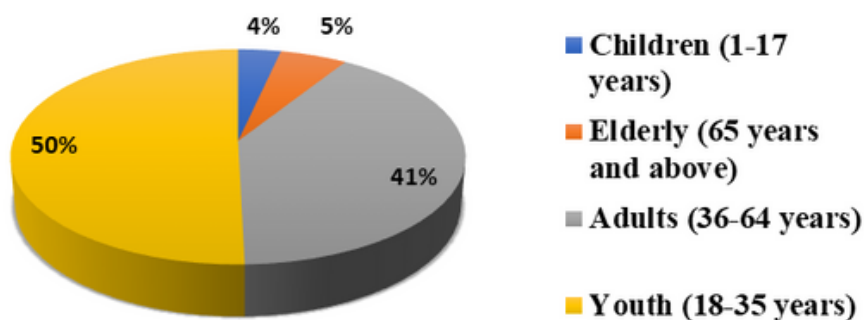
9.4.5 HIV prevention programs

Additionally, **72.6% of respondents reported the presence of HIV prevention program**s or initiatives in their area, with 88.6% of those respondents believing that these programs have been able to reduce the rate of HIV infections among the people.

According to the report, the prevention programs implemented in the community have successfully reduced the rate of HIV among t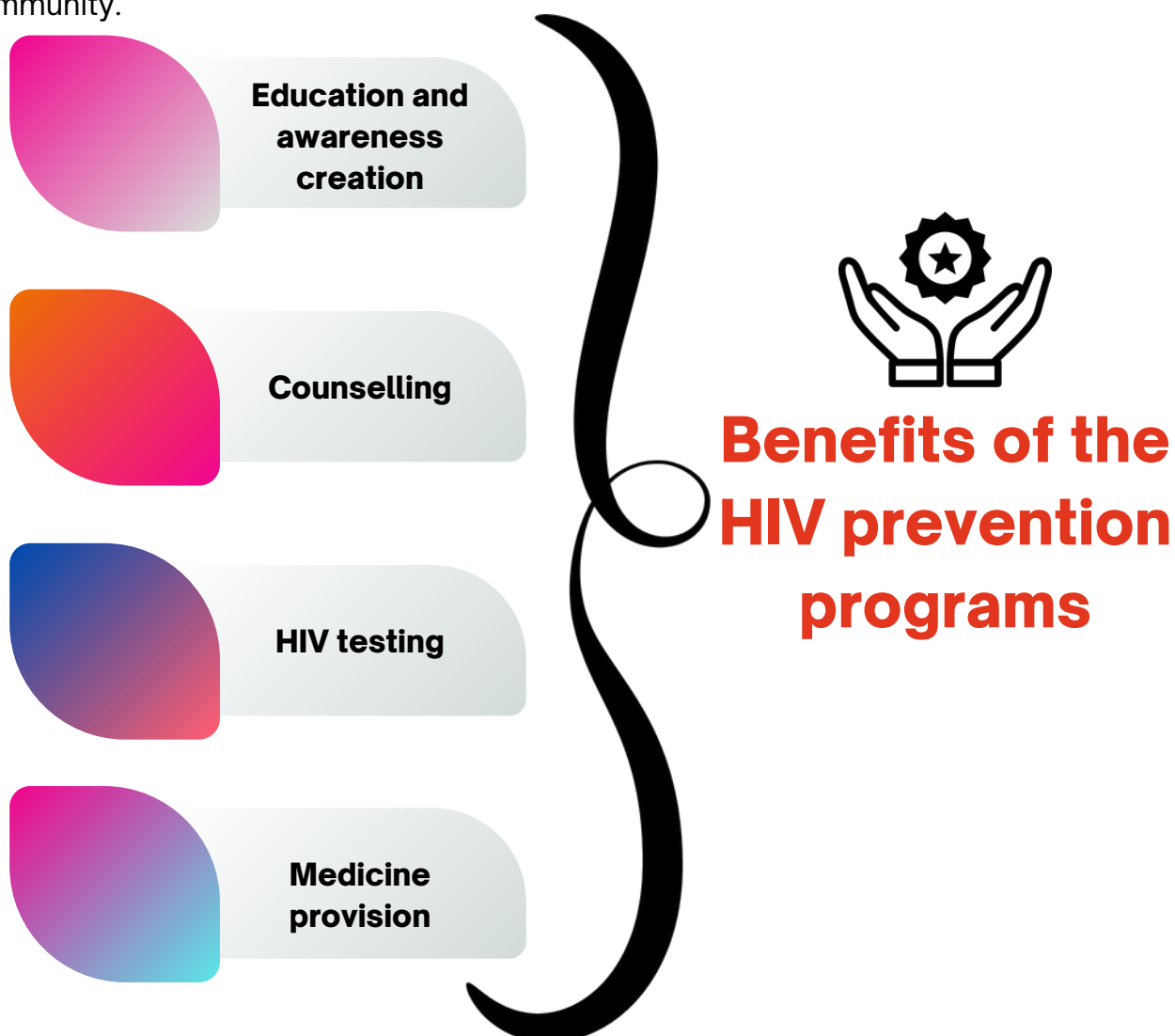he people. The reduction rate is attributed to various interventions, including **education and awareness creation, which accounts for 85.7% of the success of these programs.** These interventions include promoting abstinence, condom use, and reducing the number of sexual partners. In addition, the programs have provided pre-exposure prophylaxis (PrEP) to individuals at high risk of HIV and post-exposure prophylaxis (PEP) for people who may have been exposed to the virus. A change of attitude and behavior has also been encouraged. In addition, **counselling has contributed 10.5%,** while **HIV testing accounts for 1.1%. Medicine provision of ARVs to HIV-positive individuals has also contributed to the prevention, accounting for 2.7%** of the success. Overall, the prevention programs have had a significant impact on reducing the spread of HIV in the community.

Education and awareness creation

Counselling

HIV testing

Medicine provision

Benefits of the HIV prevention programs

9.5 Changes witnessed in the health sector by households in the last seven years

Summary of changes

Improvement in the health sector in terms of:

1. accessibility of health facilities
2. improved service delivery
3. availability of medicines
4. presence of community health volunteers
5. awareness creation
6. increase in hospital visits and NHIF
7. provision of treated mosquito nets
8. health outreaches and door to door activities to offer free medical services.
9. increase in immunization
10. reduction in infant deaths
11. medical treatment to school-going children
12. provision of sanitary towels

A significant number of respondents **(47.8%) reported that healthcare facilities have improved their quality** for the last seven years. They have become more accessible to them, as they have been increased and located in close proximity to their communities. They further mentioned that these facilities have improved their service delivery, offering substantive health services to all including cancer screening, and family planning.

In addition, they also mentioned that **drugs are currently available in most health centers therefore providing a convenience to them.** Respondents also recognized the availability of community health volunteers who help to link them to medical services and track their health status.

Additionally, VFM played a crucial role in **creating awareness (43.4%) among the community members, with respondents reporting that they have been educated on their health status, disease prevention, and on how to live a healthy life.** Moreover, through VFM, households have witnessed an increase in hospital visits and **NHIF registration,** as well as the reduction of malaria cases through the provision of treated mosquito nets.

Furthermore, **VFM has been conducting numerous outreaches and door-to-door activities to offer free medical services,** resulting in an increase in immunization and reduction in infant deaths. In addition, VFM provides health talks and medical treatment to school-going children while they are at school, reducing early pregnancies and providing sanitary towels to girls during menstrual cycles.

However, the **high cost of living** was cited by some households (2.8%) as a barrier to accessing medical services. Additionally, (2.3%) of the households reported not being supported by VFM while (3.7%) reported no change witnessed in the health sector. The word cloud below visually represents the themes emerging from the changes witnessed in the last seven years.

Figure 9-2: Emerging themes from the health sector

# 10 CHILD PROTECTION/ SOCIAL SERVICES/ COUNSELLING

10.1 Household analysis

In the analysis, **3.5% of the households (20 households) reported that their children had suffered abuse**, while the majority of households (96.5%) reported no cases of abuse. Among the children who suffered abuse, the most common types were verbal-emotional (30%), physical (30%), and sexual (25%). Neglect, and spiritual abuse were less commonly reported as shown in the pie chart below.

Figure 10 1: Types of abuse experienced
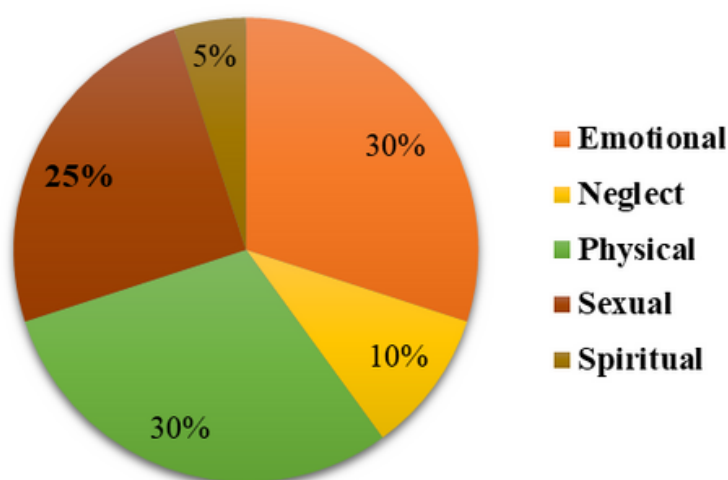
10.1.1 Causes of abuse

Figure 10 2: Frequency of the abuse has taken place
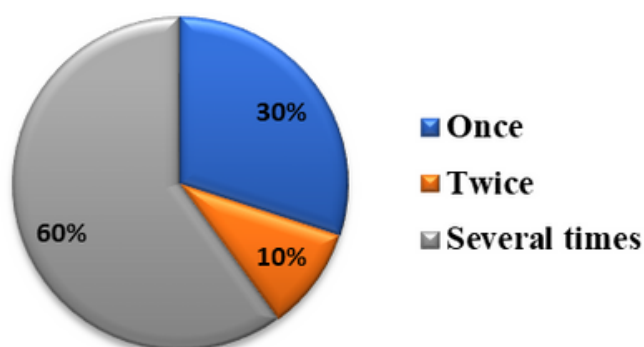
Neglect was identified as the leading cause of abuse (35%), followed by peer pressure (20%), and poor economic status (15%). Other responses include: care burdens (10%), school dropouts (10%), drug abuse (10%). Most of the abused children experienced abuse several times (60%), while 30% were abused once.

Only **35% of the reported cases were taken to the authorities,** with an equal number being reported to the police and village elders. Once reported, the action taken varied, with some receiving counselling and culprits being arrested, while others reported no action being taken or the case still being underway.

Table 10 1: Number of abuse cases reported

Cases reported		
Abuse type	**Percentage**	**Authority**
Sexual	57.1%	Police
Emotional	14.3%	Village elders
Physical	14.3%	Village elders
Neglect	14.3%	Village elders

The effects of abuse on the children included **stigmatization (40%), school dropout (30%), pregnancy (10%), and trauma (20%).** Only 10% of the abused children received therapy, while the majority (70%) received counselling as post-abuse support services. However, 20% stated that they did not receive any support post-abuse.

10.2 Community analysis

In the community, **92 households (or 16.2%) reported that a child had suffered from some form of abuse.** Out of the households that reported abuse, 65% reported sexual abuse, 14% reported neglect, 11% reported physical abuse, 9% reported emotional abuse, and 1% reported cultural abuse.

Figure 10 3: Types of abuse the community has experienced
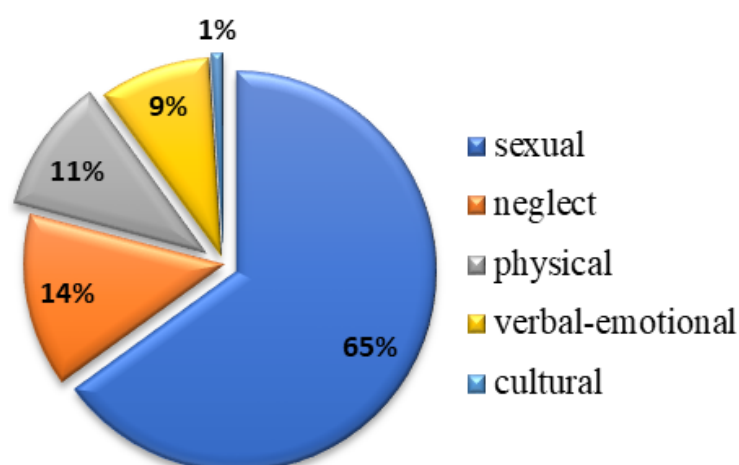
Figure 10 4: Frequency of the abuse
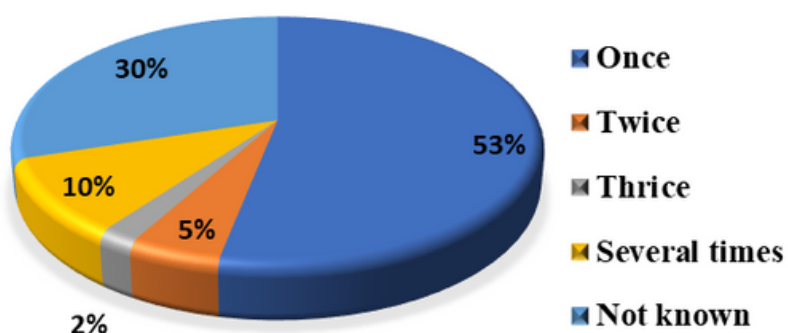
Regarding how many times the child had been abused, 53% of respondents reported once, 30% reported not knowing, 10% reported several times, and 5% reported twice.

Only 77.2% of cases were reported, with 54.9% of cases reported to the chief, 28.2% to the police, and 16.9% to village elders. In terms of the actions taken, respondents reported counselling (1.4%), culprits being arrested (36.6%), court proceedings (15.5%), hospital treatment for the victim (5.6%), and administration follow-up (9.9%). However, 5.6% of the households reported that no action had been taken while 25.4% were unaware of the actions taken to respond to the abuses.

Table 10 2: Number of abuse cases reported

Cases reported		
Abuse type	Percentage	Authority
Sexual	78.9%	Police, Chief, village elders
Emotional	2.8%	Chief
Physical	9.9%	Village elders, chief, police
Neglect	7%	Village elders and Chief
Cultural	1.4%	Chief

From the data analysis, the abuse experienced by children had various effects on them. The highest reported effect was **stigmatization, with a percentage of 50%**. Additionally, **9% of the reported cases resulted in pregnancy**, while **9% of individuals experienced trauma** as a result of the abuse. Other reported effects were **school dropout (6%), physical injury (6%), and impact on self-esteem (5%).** In addition, 9% were unaware of the effects caused while 9% reported that no action was taken.

Additionally, 54.3% of respondents reported that their children had received counselling after the abuse, while 30.4% reported therapy. However, 9.8% of the respondents were unaware of any support given to the victims while 5.5% reported received no abuse post-abuse.

11 HOUSING

11.1 Wall construction material

The data shows that the majority of respondents' **exterior walls are made of mud, with 63.6%** of respondents using this material. Concrete bricks are the second most popular material, used by 28.8% of respondents. Iron sheets and cement are used by 4.4% and 3.2% of respondents, respectively.

11.2 Roofing construction material

In terms of roofing materials, the vast majority of respondents **(98.6%) use iron sheets**. A small percentage of respondents use other materials such as concrete bricks (1.2%), plastic (0.1%), and straw grass-papyrus-banana/fiber (0.1%).

11.3 Floor construction material

For flooring materials, **mud is the most popular material, used by 60.5%** of respondents. Concrete bricks are the second most popular flooring material, used by 28.6% of respondents, followed by cement used by 10.9% of respondents.

11.4 Changes witnessed in the housing sector by households in the last seven years

Summary of changes

Improvement in housing in terms of:

1. proper lighting and ventilation
2. reduced indoor air pollution
3. house renovation
4. increased construction of houses
5. practising of savings
6. improvement in cleanliness within their homes
7. high transition to iron-roofed houses
8. training on proper housing arrangement

The households have reported **positive changes in their housing situation (64.6%),** including having proper lighting and ventilation. This has also led to an improvement in their health status and reduced indoor air pollution.

Moreover, households have been **provided with building materials by VFM to construct or renovate their homes**. It is worth noting that they have also practiced savings through the Silc and VFM programs and have managed to access loans to construct or renovate their homes.

Furthermore, the households reported **a noticeable improvement in the cleanliness (11.4%)** of their homes. This change was brought about by the training they received through VFM and Silc on how to keep their houses neat and well-arranged. They were also taught to smear cow dung on their walls.

In addition, s**ome households have moved from thatched grass houses to iron-roofed houses**, which provide a safer shelter. Additionally, they have been trained on proper housing, including the appropriate areas to construct houses. VFM was particularly useful in educating people on the hazards of constructing houses along the lake shore of Lake Victoria.

However, some households reported that the **high cost of living has made building materials expensive (6.5%)**, thus hindering their housing construction projects. In addition, **some families still have leaky roofs (0.7%)**, which pose a threat to their safety.

It is worth noting that some of the **households have not experienced any changes in the past seven years (9.5%)**, while others **(5.6%) reported to have not received any support at all.** In addition, some households **(1.7%) were unaware of the changes that have occurred** in this sector. The word cloud below visually represents the themes emerging from the changes witnessed in the last seven years.

Figure 11-1: Emerging themes from the housing sector

12 LIVELIHOODS AND ASSETS

12.1 Sources of income

According to the respondents, the **main source of income for their households includes small-scale trade- wholesale and retail trade (37%), and** farming (33%). Other sources of income as shown in the graph below.

Figure 12 1: Household sources of income
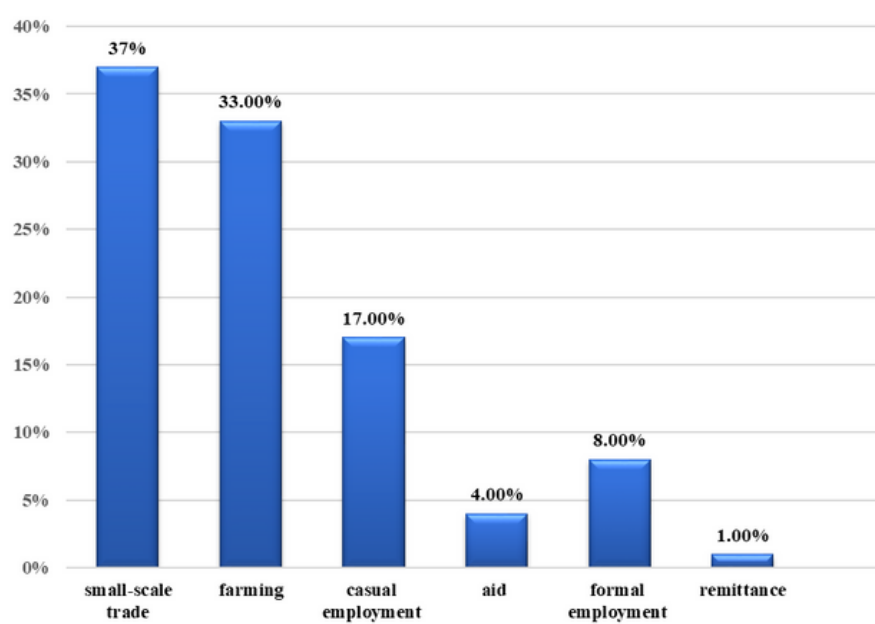
12.2 Household expenditure

Regarding expenditure, the majority of respondents reported **that food (64%) took most of their income in the past three months,** followed by school-related expenses (27.8%), medical care (5.4%), shelter (1.6%), water (buy or treat water) (0.7%), non-food items (e.g. kitchen, utensils, washing buckets beddings) (0.2%), and assets (agriculture inputs, etc.) (0.3%).

Additionally, a large percentage of respondents (87.3%) indicated that their household income was not able to meet their household needs throughout the year.

12.3 Trainings and support received

A majority of households **(62.3%) reported receiving support or training to boost their income in the previous three months.** Among those who received training, 32.2% received training and support on environmentally friendly agriculture (e.g., ganny bags technology). The table below depicts the additional trainings and assistance provided to households.

Table 12 1: Trainings and support received

Trainings and support received	Percentage
Land cultivation training	12.2%
Animal husbandry (keeping) training/ Distribution of livestock	1.6%
Tailoring training	3.9%
Mechanics course	0.8%
Carpentry training	0.8%
Business Training / Entrepreneurship/ Book keeping, finance management training	21.5%
Access to credit	1.8%
Environmentally friendly agriculture (e.g., ganny bags technology)/ Distribution of seeds for kitchen gardens	32.2%
Tree planting campaigns and environmental awareness	16.4%
Donkey and donkey cart	1.3%
Porter training	1.3%
Energy saving equipment (e.g., improved cook stones, briquettes)	1.3%

13 WATER & SANITATION

13.1 Main sources of water for cooking and drinking

Based on the survey conducted, **the majority of respondents (96.8%) use lake water as their main source of water for drinking and cooking.** Rainwater (0.9%), shallow wells (0.4%), water refill shops (0.5%), water tanks (1.2%), and solar panels (0.2%) were used by less than 3.2% of the respondents.

13.2 Water treatment

Regarding water treatment, most respondents **(94.6%) indicated that they treat water to make it safe for drinking,** while 5.4% do not treat their water.

13.3 Changes witnessed in the water sector by households in the last seven years

Summary of changes

Improvement in water in terms of:

1. access to clean and sufficient water
2. increased water connection and supply
3. ongoing water project
4. improved water hygiene
5. water treatment practices
6. education of using water sparingly
7. water conservation on kitchen gardens

In regards to the water sector, households have reported that they have **access to clean and sufficient water (30.3%) that is available throughout the day,** as there has been an increase in water connection to the communities. Their primary sources of water are Lake Victoria, rainfall, and wells, but they also obtain water from VFM-operated water kiosks.

Additionally, they mentioned experiencing **increased water supply, resulting in affordable water prices**. Furthermore, VFM has an **ongoing/upcoming water project** (22.7%) to improve the water supply and affordability of water. However, a few households mentioned that the some of the water sources were distant from their homes, and were therefore provided with donkeys to help transport water.

Households reported **improved water hygiene (37%),** thanks to their current practices such as treating and boiling water, leading to a decrease in water-borne diseases. They were also educated on water treatment mechanisms and encouraged to use water sparingly through the use of ganny bags to conserve water in their kitchen garden. Additionally, VFM provided water tanks to ease water storage.

Moreover, a few households **(4.4%) mentioned that they are witnessing the depletion of the lake water** due to domestic and agricultural usage. Furthermore, they also reported that some residents are overfishing at Lake Victoria and polluting the lake with their boat engines.

However, **some households did not notice any change in the water sector (3.7%),** while a few reported **no support from VFM (1.9%).** The word cloud below visually represents the themes emerging from the changes witnessed in the last seven years.
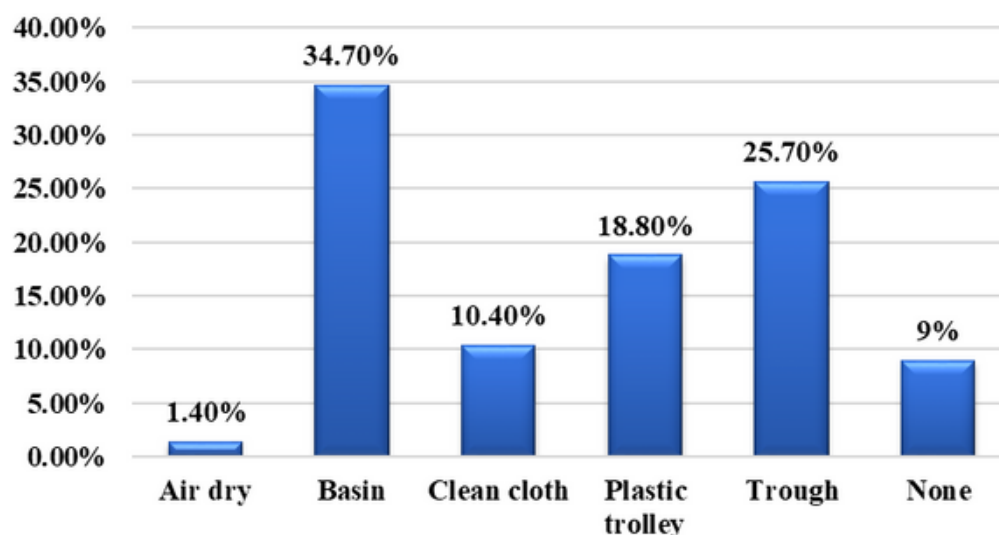
Figure 13-1: Emerging themes from the water sector

13.4 Dish drying

For dish drying, **most respondents (74.7%) use a dish rack.** The 25.3% who do not use a dish rack use alternative methods such as air drying, basins, or plastic trolleys.
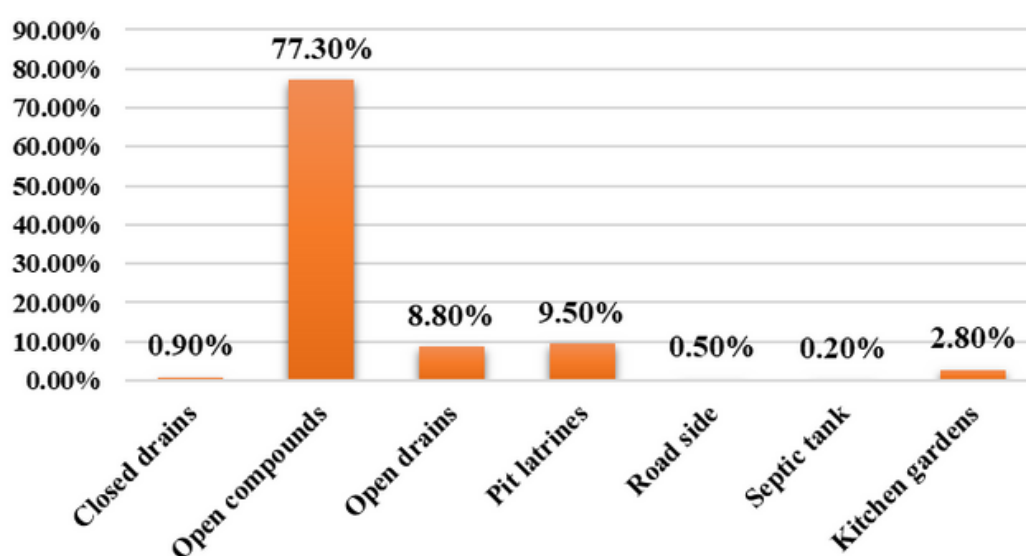
Figure 13 2: Alternative methods to dish drying

13.5 Liquid waste disposal

When it comes to liquid waste disposal, **the majority (77.3%) dispose of their waste in open compound fields,** while smaller percentages use closed drains, open drains, pit latrines, kitchen gardens, road sides, or septic tanks as shown in the chart below.

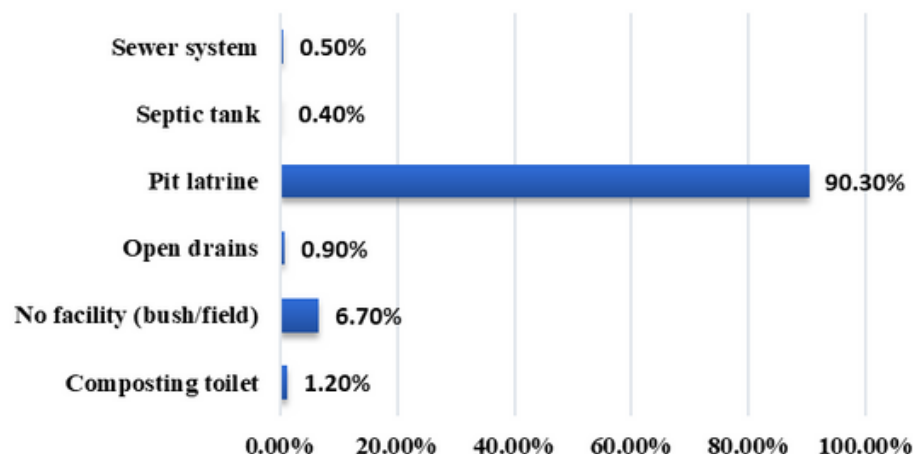**Figure 13 3: Liquid waste disposal**

13.6 Types of sanitation facilities

For sanitation facilities, **most households (90.3%) use pit latrines,** while some use composting toilets, no facilities, open drains, septic tanks, or sewer systems.

Figure 13 4: Types of sanitation facilities

Sanitation facility	Percentage
Sewer system	0.50%
Septic tank	0.40%
Pit latrine	90.30%
Open drains	0.90%
No facility (bush/field)	6.70%
Composting toilet	1.20%

Only a small percentage of respondents **(14.1%) reported having public toilets** in the area, costing an average of Ksh. 10.

Regarding handwashing facilities after visiting the toilet, m**ost households (66.3%) use leaky tins**, while others use foot pedal-operated sinks (4.7%), basins (12.7%), taps (5.3%), jugs (2.8%), or troughs (1.6%). However, 6.6% reported that they lacked hand washing facilities to use after visiting the toilet.

13.7 Solid waste management

Solid waste collection services were only available to a small percentage of respondents (0.7%) whereby the county government and the private sector supported in collecting their waste. The majority of households **(89.4%) dispose of their waste by burning it**. Other methods of waste disposal reported included burying (0.5%), composting (6.2%), disposing on nearby land (2.6%), recycling, and reusing (1.1%) and the use of dry pit (0.2%).

13.8 Animal waste disposal management

Regarding animal waste disposal, **most households (92.6%) compost it** to use as natural fertilizer, while others bury it, or smear it on the external walls of the house. The percentages are shown in the bar graph below.

Figure 13 5: Animal waste disposal
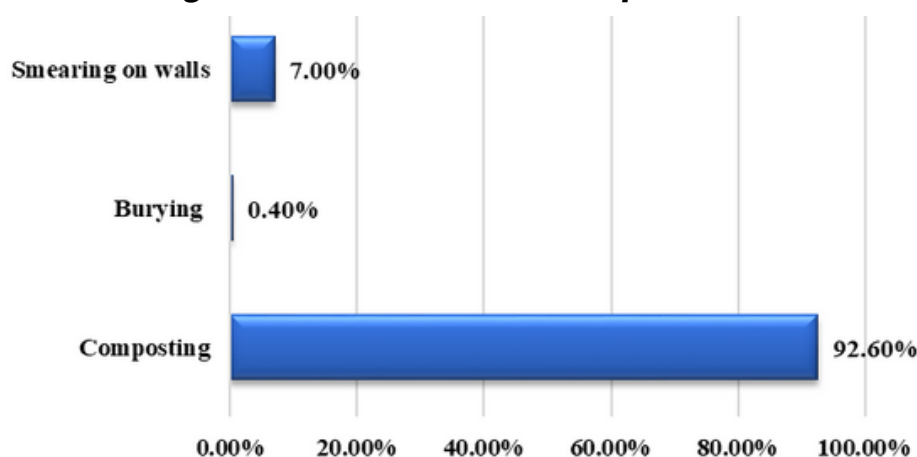
Animal waste disposal	Percentage
Smearing on walls	7.00%
Burying	0.40%
Composting	92.60%

13.9 Changes witnessed in sanitation sector by households in the last seven years

Summary of changes

Improvement in sanitation in terms of:
1. increase in toilet facilities
2. reduction in open defecation
3. tree planting to conserve the environment
4. awareness creation on maintaining a clean environment
5. practising of proper waste disposal mechanisms
6. increased use of dish racks
7. increased handwashing facilities
8. provision of trash cans
9. use of cloth lines to dry their clothes

Among the surveyed households, the **majority (40.5%) reported an increase in the availability of toilets,** including pit latrines and septic tanks. This has resulted in a reduction in open defecation and the use of flying toilets.

Additionally, **(30.4%) of respondents mentioned that VFM had educated them on the importance of maintaining a clean environment** to reduce the spread of diseases in the area. As a result, some households have started planting trees to help conserve the environment. Furthermore, the households stated that they have seen an overall improvement in the sanitation sector due to the training and educational talks provided by VFM.

In addition, **23.7% of the respondents highlighted that they have witnessed improved sanitation** within their communities. Some are now practicing proper waste disposal mechanisms, thanks to VFM's provision of trash cans.

Some of the respondents mentioned that they are now **using dish racks to dry their kitchen utensils,** while others highlighted that VFM had **provided awareness on best sanitation hygiene practices,** including the importance of having handwashing facilities near sanitation facilities. In addition, the respondents reported that they are now using cloth lines to dry their clothes due to VFM's education on the importance of this practice.

On the other hand, some respondents **(3.4%) reported that they have seen no change in the sanitation sector** despite VFM's efforts. Furthermore, a few households **(2%) still reported experiencing poor sanitation despite the program's interventions.** The word cloud below visually represents the themes emerging from the changes witnessed in the last seven years.
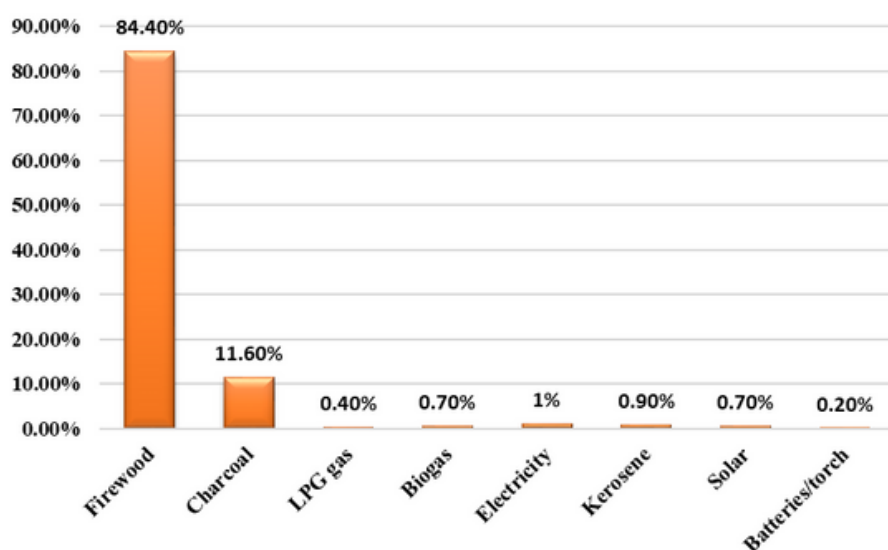
Figure 13-6: Emerging themes from the sanitation sector

14 ENERGY

14.1 Sources of energy

According to the respondents, the **most common cooking energy used is firewood (84.4%)**, followed by charcoal (11.6%). Other sources are shown in the bar graph below.

Figure 14 1: Sources of cooking energy

**Main reasons for using these cooking energies**

1. Affordability- 44.8%
2. Easily accessible- 30.9%
3. Commonly used- 3.5%
4. Cooks fast- 4.1%
5. Environmentally friendly- 8.1%
6. Efficiency/little is required- 7.9%
7. Renewable- 0.7%

For lighting energy, **electricity was the most common (36.9%)**, followed by solar (46.6%). Other sources are shown in the bar graph below.

Figure 14 2: Sources of lighting energy

Main reasons for using these lighting energies

1. Affordability- 42.7%
2. Environmentally friendliness- 19%
3. Commonly used- 10.7%
4. Easily accessible- 7.2%
5. Efficiency/little is required- 18.1%
6. Renewable- 2.3%
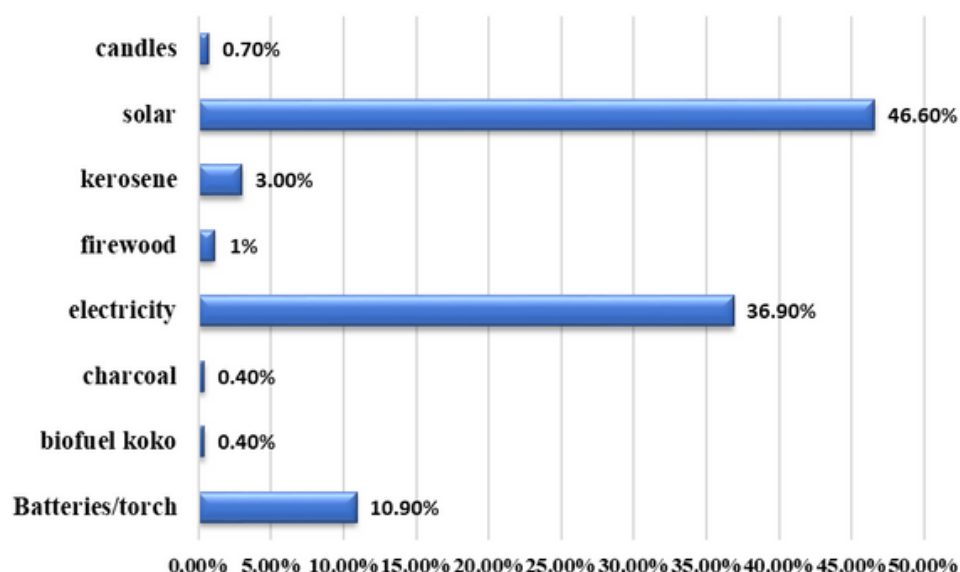
15 ENVIRONMENT

15.1 Environmental challenges

The respondents reported a range of environmental issues they currently encounter, as shown in the table below. The **most common challenges were climate change (drought, floods, high temperatures) (38.7%)** and **land degradation (20.2%).** It is worthy to note that 12.5% of respondents claimed not to have faced any environmental challenges.

Table 15 1: Environmental challenges experienced by households

Challenges	Percentage (%)
Climate change	38.7%
Deforestation	3.7%
Land degradation	20.2%
Pollution	13.9%
Over fishing	1.6%
Poor waste disposal	3.3%
Increase in snails	0.7%
Wildlife disturbance	5.4%
None	12.5%
Total	**100%**

15.2 Environmental sensitization

In addition, **64.9% stated that they were sensitized on environmental conservation** by non-governmental organizations (45.9%), community-based organizations (34.7%), civil society organizations (1%), county government (8.2%), national government (1.2%), self-help groups (4.5%), and Victoria Friendly Montessori (4.5%). Most of the respondents received training on awareness creation (50.9%) and waste management (26.6%). Other trainings received were pollution control and use of renewable energy sources as shown in the diagram below.

Figure 15 1: Training on environmental conservation
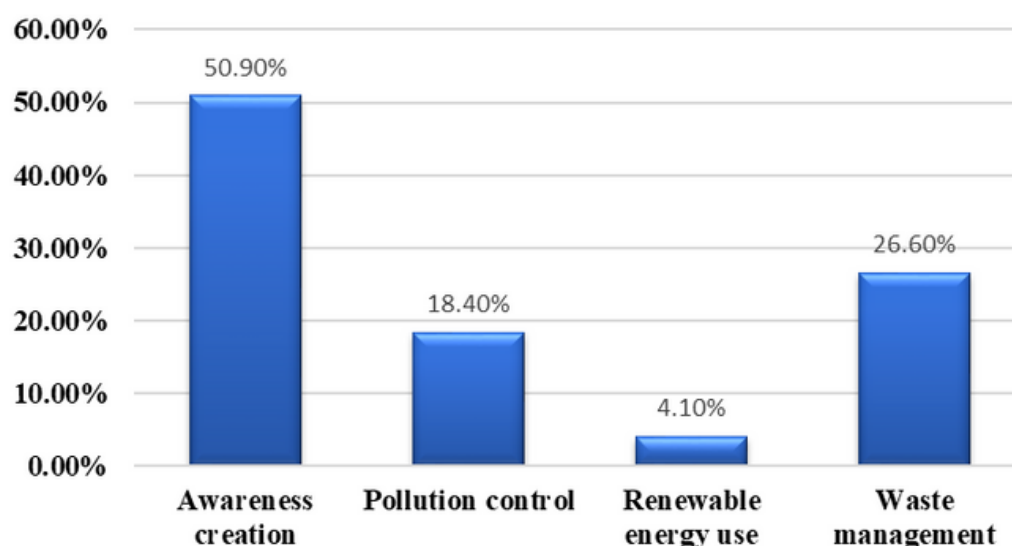
15.3 Climate resilient farming practices

Additionally, **59.2% of households practice urban farming and kitchen gardening.** In order to curb with climate change, the households have adopted climate resilient farming practices such as crop rotation (25.3%), resistant crop varieties (30.1%) and rainwater harvesting (23.2%). Other practices include: crop diversification (2.5%), irrigation management (2.1%), grazing (0.7%), and agroforestry (0.5%). It is worth noting that 15.6% of households did not employ any climate resilient farming practices.

**Figure 15 2: Climate resilient farming practices**
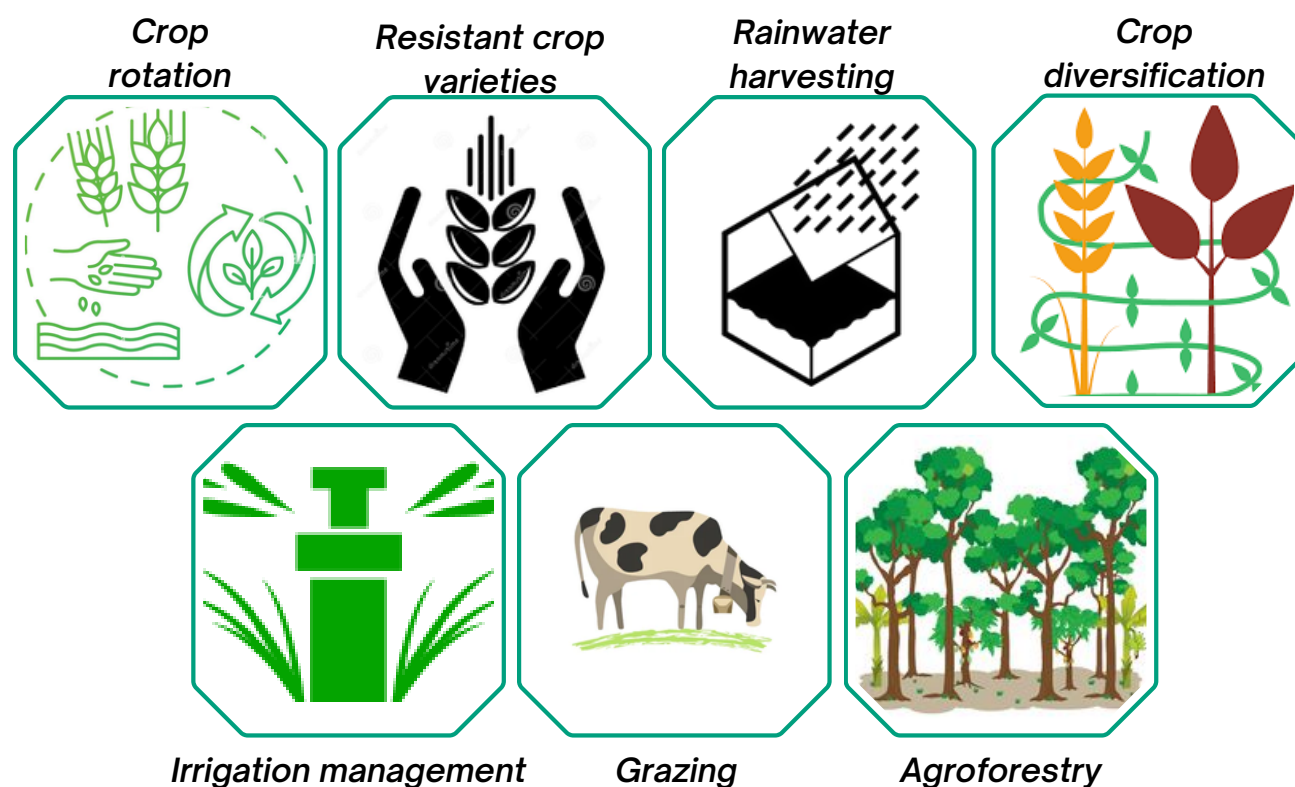
16 SOCIAL WELFARE AND ORGANIZED GROUPS

16.1 Community social groups

The research sought to determine the level of community social group membership and their engagement in income-generating activities. The analysis showed that **49.2% of the respondents belonged to a community social group.** Among those who belonged to a social group, the most popular were SILC (68.2%), followed by self-help groups (29.6%). Other groups mentioned as listed in the bar graph below.

Figure 16 1: Types of community social groups
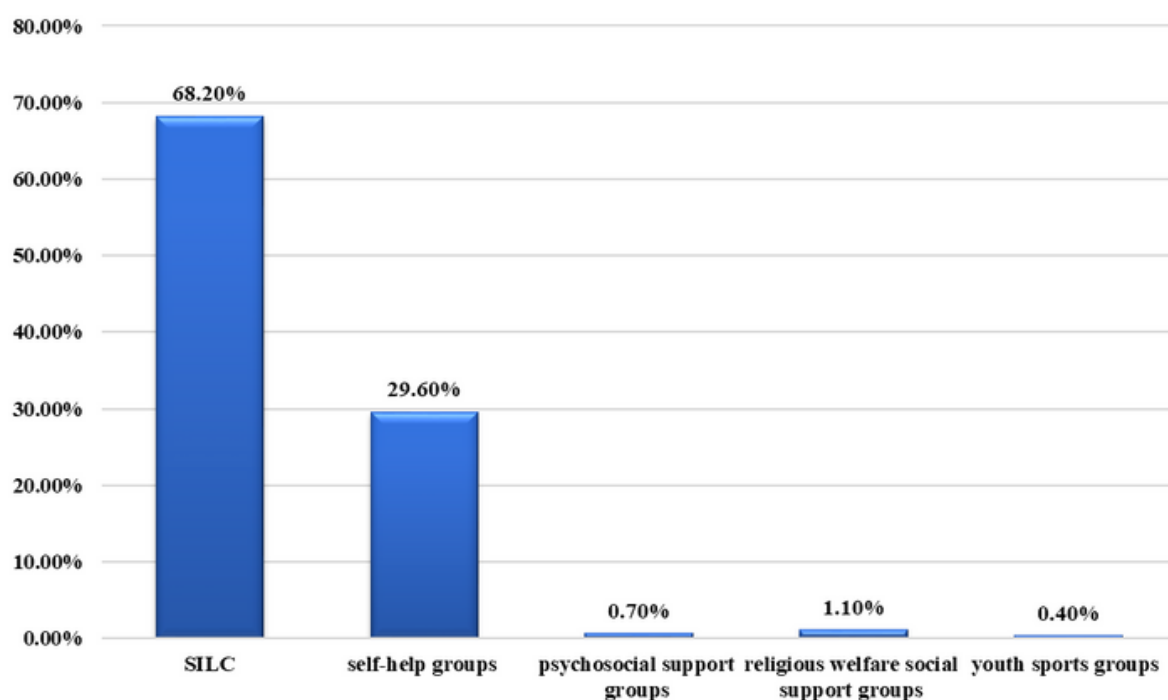
16.2 Income generating activities

Of those who belonged to a social group, **56.1% reported engagement in income-generating activities**. The most common income-generating activities mentioned were farming and fishing (43.3%). Other activities mentioned included business (22.1%), savings and loaning (15.8%), hiring of tents and chairs (11.5%), livestock keeping (3.2%), and catering services (3.2%). A small percentage (0.6%) reported selling plastic, while another small percentage (0.3%) reported no income-generating activities.

Figure 16 2: Farming

16.3 Access to a revolving fund

A revolving fund is a dedicated fund created with the intention of providing loans to members or being used or invested for a particular purpose with the condition that repayments or benefits or income from the fund may be used again for these purposes only. Among those who belonged to a community social group, **35.5% reported having access to a revolving fund.** Out of those who had access to a revolving fund, 94.1% reported benefiting from it. The most common benefits were loans (33.6%), business (14.2%), and school fees (31%), among others.

Figure 16 4: Benefits of the revolving fund
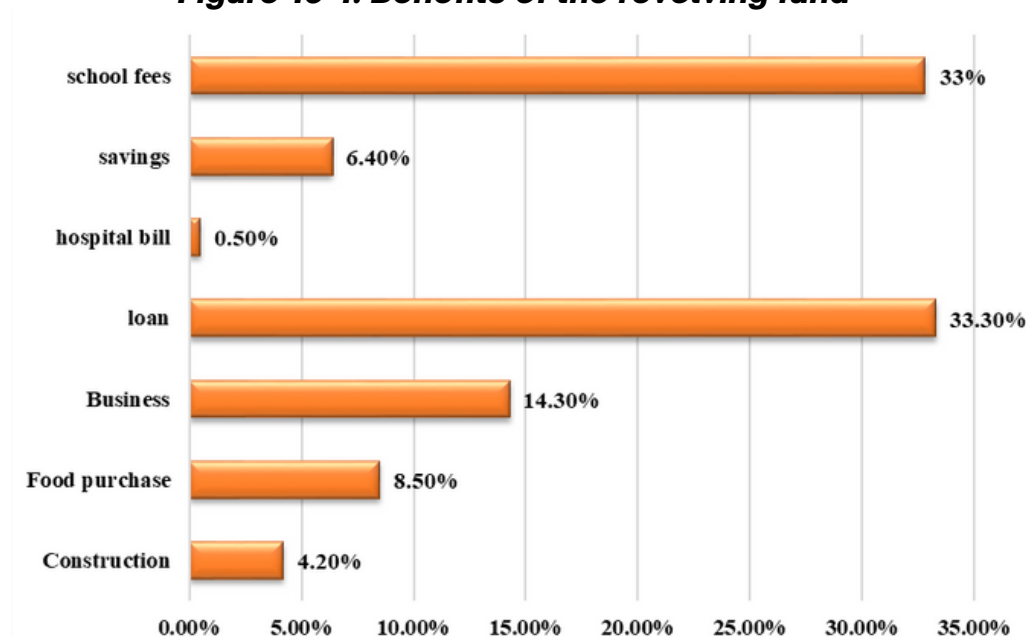
Among those who did not benefit from a revolving fund, the most common reasons were not applying (16.7%), not interested (16.7%) and being in a new group (41.7%). Other reasons were;

- Inadequate funds-8.3%
- Not qualified- 8.3%
- Waiting for one's turn to receive the fund- 8.3%

16.4 Access to start-up capital

In regards to start-up capital, **16.3% of respondents had access to the capital.** Of those who had access to start-up capital, 96.8% reported benefiting from it. The most common benefits were business-related benefits (starting a business or growing an existing business) (52.2%), payment of school fees (13.3%), and purchasing of kitchen gardens and farming inputs (7.7%), among others as listed in the table below.

Table 16 1: Benefits of the revolving fund

Benefits	Percentage
Business-related benefits (starting a business or growing an existing business)	52.2%
Kitchen garden and farming inputs	7.7%
Loans	12.2%
Savings	11.1%
School fees	13.3%
Fishing equipment	3.5%
Total	**100%**

Among those who did not benefit from start-up capital, the most common reasons were lack of interest (33.3%), not applying (33.3%) and inadequate finances (33.4%).

16.5 Affirmative action funds

According to the data analysis, **28.1% of respondents have benefited from an affirmative action fund.** For those who have benefited, the most common ways were through business (25.8%), followed by loans (25.8%), food purchases (29%), and school fees (9.7%). Other beneficiaries reported using the funds for construction, hospital bills, chair purchase, and savings as shown in the bar graph below.

Figure 16 5: Benefits of the affirmative action funds
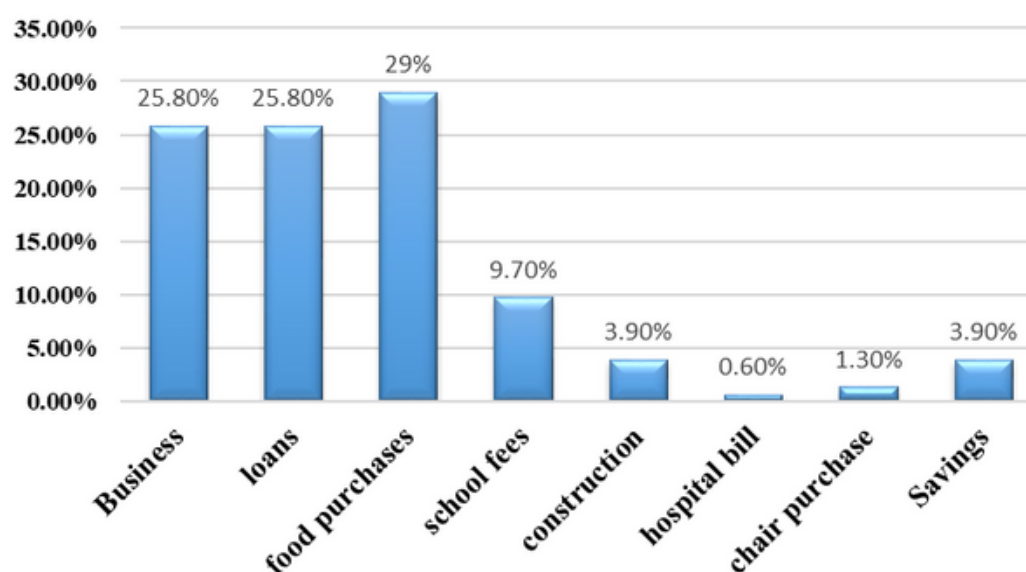
For those who have not benefited, the reasons include not being interested (32.5%), not having applied (21%), high interest rates (13.9%), and lack of information (13.4%). Other reasons given were as follows;

Table 16 2: Reasons from not benefitting from the affirmative action funds

Reasons for not benefiting from the affirmative action funds	Percentages
Not being interested	32.5%
Not having applied	21%
Inadequate income	4.6%
High interest rates	13.9%
Lack of information	13.4%
Not being qualified	11.2%
Lengthy procedures	2.0%
Funds were not accessible	1.4%