

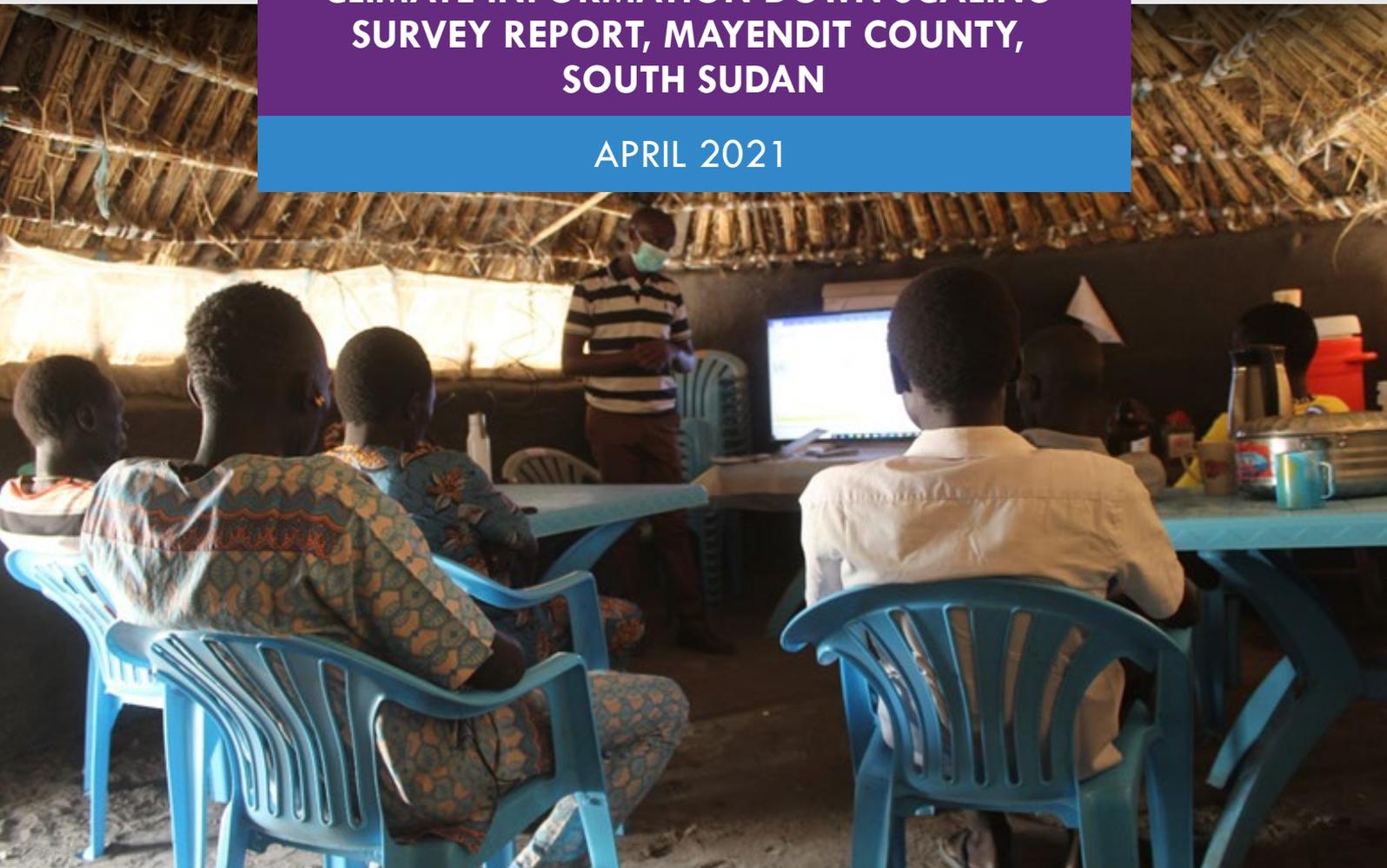


COALITION FOR HUMANITY

Improving Community Resilience

CLIMATE INFORMATION DOWN SCALING SURVEY REPORT, MAYENDIT COUNTY, SOUTH SUDAN

APRIL 2021



Funded by UKAID, through FAO Dry Season Response



WORLD
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ORGANIZATION



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Organization of the
United Nations



ADAPTATION FUND

ABOUT THIS REPORT

Coalition for Humanity is National NGO (NNGO) with its headquarters in Juba. Coalition for Humanity's mission is to save lives, alleviate suffering, built resilience of the vulnerable people, through programmes in Peace Building and Conflict Transformation, Protection/GBV, WASH, Food Security and Livelihoods, Health and Nutrition through strategies like community capacity building, Social Behavior Change Communication, market linkages, advocacy and governance to enhance contextualized innovative solutions for service delivery in Emergency Response and Sustainable development in South Sudan.

Coalition for Humanity was engaged by the Food and Agriculture Organization of the United Nations (FAO) in January 2021 as an implementing partner in Unity State Mayendit County. The overall goal was to reduce chronic food insecurity and increase households' access to food. Under the FAO's Partnership for Recovery and Resilience initiative during dry season response and Climate information Downscaling Coalition for Humanity was mandated to provide services directly to the identified beneficiaries of Mayendit County in Unity State, South Sudan. Through the Emergency Livelihood and Response Program (ELRP), the agreement. This project was funded by USAID 60% and UKAID 40% through FAO.

This report is part of the Climate Information Downscaling piloted by Coalition for Humanity funded by UKAID through FAO. Coalition for Humanity was tasked with passing climate information through radio sessions to 1000 farmers. The project was implemented between January 2021 and April 2021. Beyond the climate information, the survey collected information on other indicators. This report can be used as a baseline survey for other food security and livelihoods projects in Mayendit County.

The report is organized in different sections: The background contains information on sampling, demographics, and sources of livelihoods. Chapter two contains information on community and households' assets as well as availability of land for agriculture. Chapter three contains information on availability of services like schools, water, healthcare, government offices and their accessibility. Chapter four has information on household's income levels, expenditure, amounts realized from crop and vegetable production and access to loans. Chapter five comprises information on household nutrition status, types of foods consumed, and sources of food, either production, aid, purchasing or borrowing. Chapter six provides information on community way of socialization and participation in community meetings and trainings. Chapter seven contains information on community's adaptation of new technologies and farming practices. Chapter eight provides information of community levels of access to climate information and appropriate channels that can be used to pass information. Chapter nine provided information on community awareness of climate change and their attitude towards it. Finally, chapter ten provides a summary of findings with clear conclusions while chapter eleven provides recommendations useful in future programming for food security and livelihood in South Sudan.

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EXECUTIVE SUMMARY

The Climate information downscaling was conducted in Mayendit County. A total of 100 Households were randomly sampled from 8 Payams i.e., Rubkuay, Tutnyang, Thaker, Jaguar, Mirnyal, Dablual, Luom and Leah. More than 53% of the community members lost their assets during the floods that engulfed the entire county starting July, 2020. The findings indicated that 30.4% of the community depend on Agro-pastoralism as their main source of livelihoods, 23.5% fishing, 15.4 % of depended on pastoralism as their source of livelihoods, 10.8% Urban/Petty trade, 9.2% depended on Riverine, another 10.8% mentioned other forms of livelihood. Crop production was the main source of income for 20% of households, fishing for 19%, Livestock rearing and sales for 14%, poultry keeping 13%, informal remittance from friends and relatives 4%, formal remittance by government/NGO 10%. Only 2% mentioned formal employment, Business/petty trade 6%, casual employment 2%, cross border trading 3%, Bee keeping 7%, other source of income 2% and pension which was the least source of income was at 1%. More than 80% of the community members lacked access to, financial services, public means of transport while 73% had no access to agricultural extension services, 22% have no access to markets, 53% can access markets withing 45 minutes' walk, while 14% can access within 1 hour walking.

Majority of households did not have farm assets, few farm assets that were found at household level can be linked to previous Food Security and Livelihoods distributions by Coalition for Humanity funded by FAO and SSHF. Items like rakes were available to 56% of households, with 10% having enough, 84% had few axes, 52% had few hoes, 10% had enough hoes, 38% had few pangas. Cell phones were recorded at 58% availability but the network coverage in the area not reliable. Radios at 28%, cars 8%, Motorcycles at 6%, Bicycles 22% and solar panels at 8% availability. None of the households had TV sets, Generators and computers/Laptops.

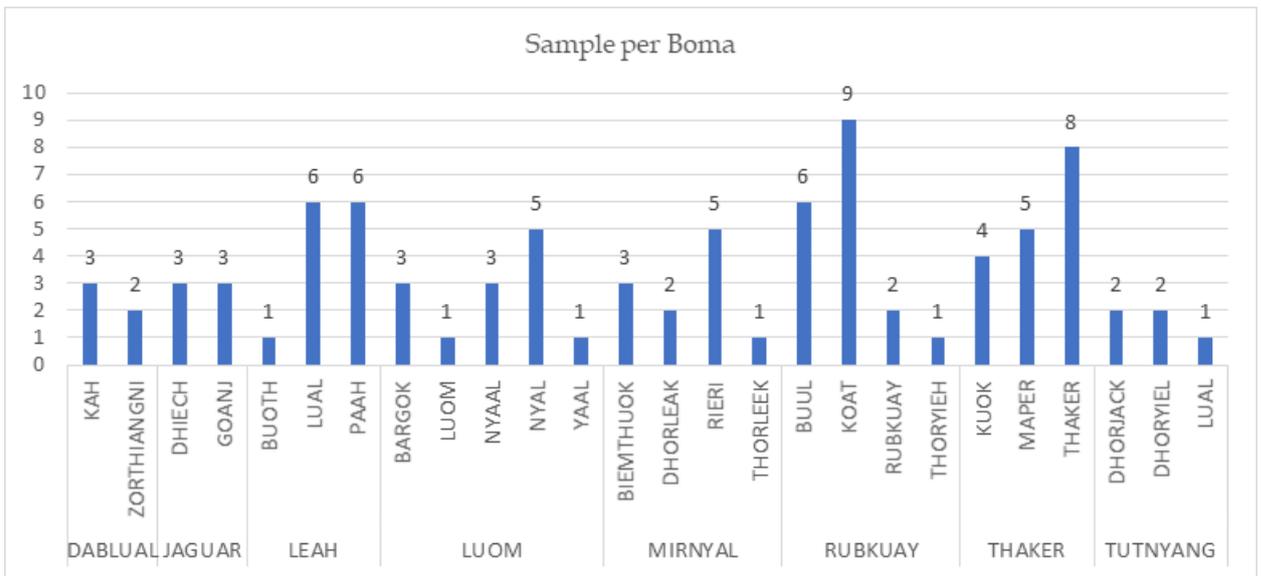
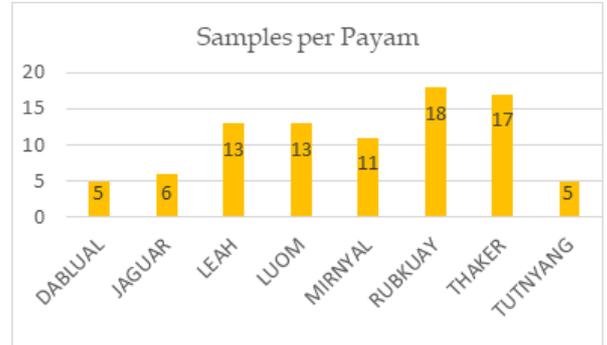
Findings indicated that 90% of the community members had received scientific weather information. Majority of the Community members, 66% mentioned to have received weather and climate information through the radio. This can be attributed to climate information downscaling project implemented by coalition for humanity which provided pre-recorded radio sessions. Despite having access to information, 57% of the community members experienced challenges accessing weather information. Out of those who experienced challenges, 39% said that the information came too late when the impacts had already been experienced. According to 29%, the information was not relevant to their needs while 19% said there was no one to really explain the information to them. About 6% said the information was not practical and 3% felt the forecast needed interpretation into the local language.

Households value information on rainfall, 28% felt that weather information on total rainfall quantity in the season would help them properly plan their daily activities, 20% wanted information on the onset of rains, 15% wanted information on planting period within a season and 18% wanted information on rainfall distribution within a season (wet/dry spell). According to 65% of the community members, NGOs were best positioned to relay all information about weather and climate. However, 18% felt meteorological services departments would do it better. 3% said the government extension service and 9% preferred the information coming through the Local Leaders.

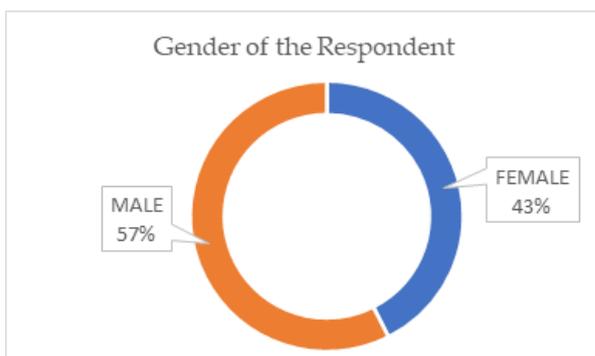
1.0 BACKGROUND INFORMATION

1.1 Sampling Information

A total of 100 Households were randomly sampled from 8 Payams i.e., Rubkuay, Tutnyang, Thaker, Jaguar, Mirnyal, Dablual, Luom and Leah. Out of this sample, 88 questionnaires were valid and were used during data analysis. Samples were picked across the various Bomas in the 8 Payams.



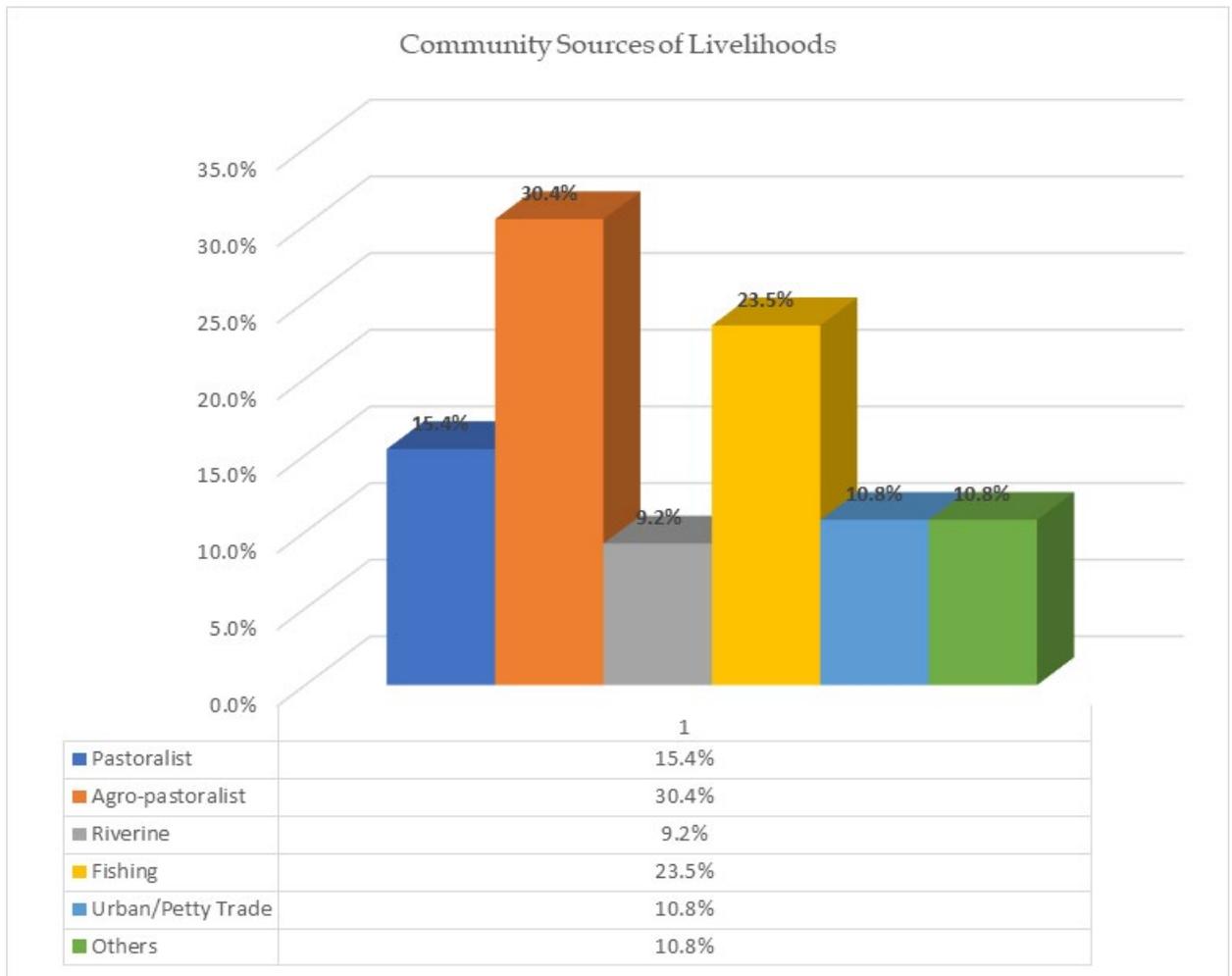
1.2 Demographic Information



Out of the respondents interviewed, 57% were male while 43% were female. The survey however targeted 50% male and 50% female respondents per Boma in every Payam. This variation was realized due to the few invalid questionnaires which were found.

1.3 Sources of Livelihoods

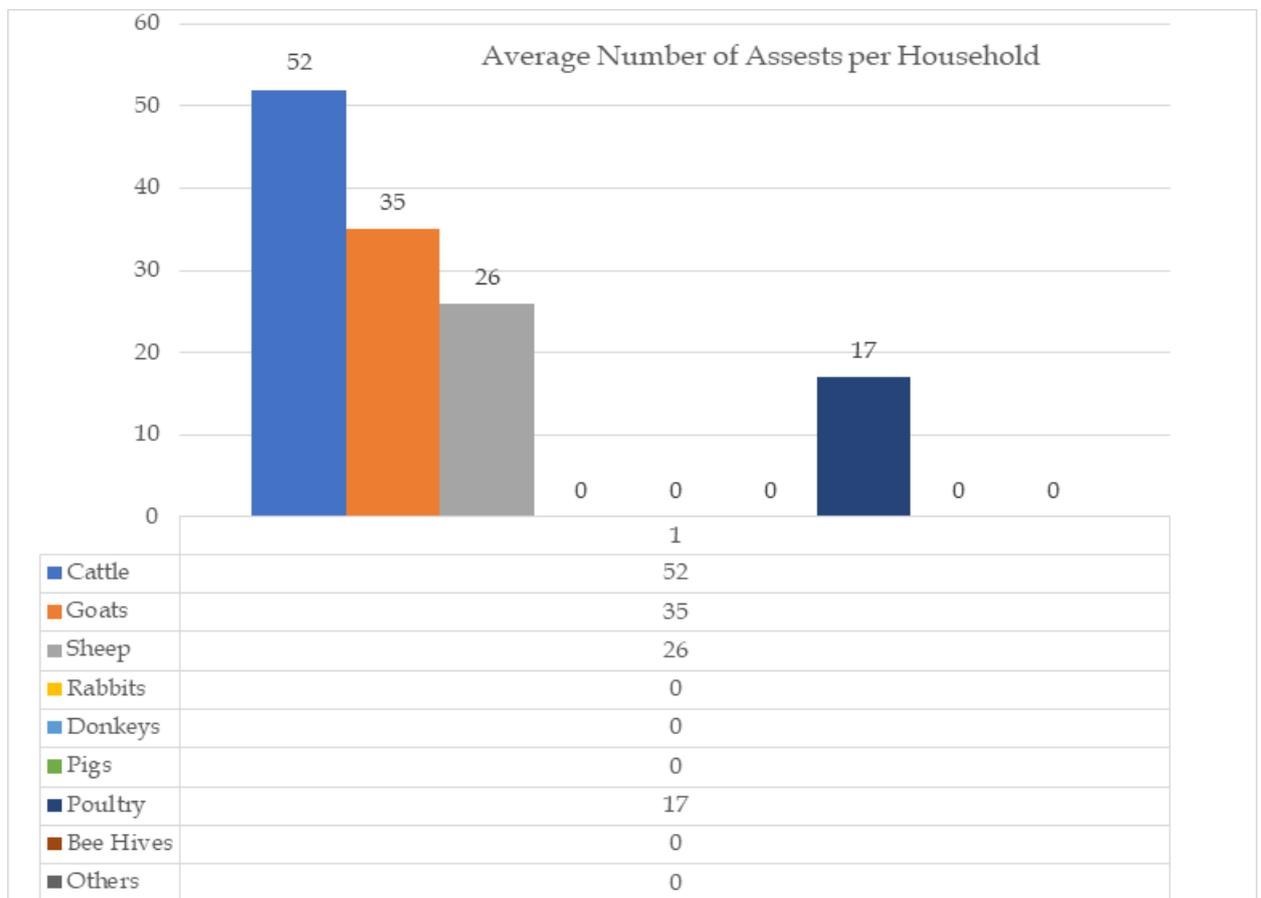
The findings indicated that 15.4 % of the community members depended on pastoralism as their source of livelihoods, 9.2% depended on Riverine, 23.5% fishing, 10.8% Urban/Petty trade, another 10.8% mentioned other forms of livelihood and 30.4%, majority of the community members said to be depending on Agro-pastoralism as their main source of livelihoods.



2.0 COMMUNITY ASSETS

2.1 Average Number of Assets per Household

From the findings, the community had a number of assets at household and/or homestead level. On average, a household would own 52 heads of cattle, 35 goats, 26 sheep and about 17 Birds/poultry. It was however found that none of the community members owned Rabbits, Donkeys, Pigs and Bee hives for Honey Harvesting. It was discovered that most honey was harvested directly from the wild.



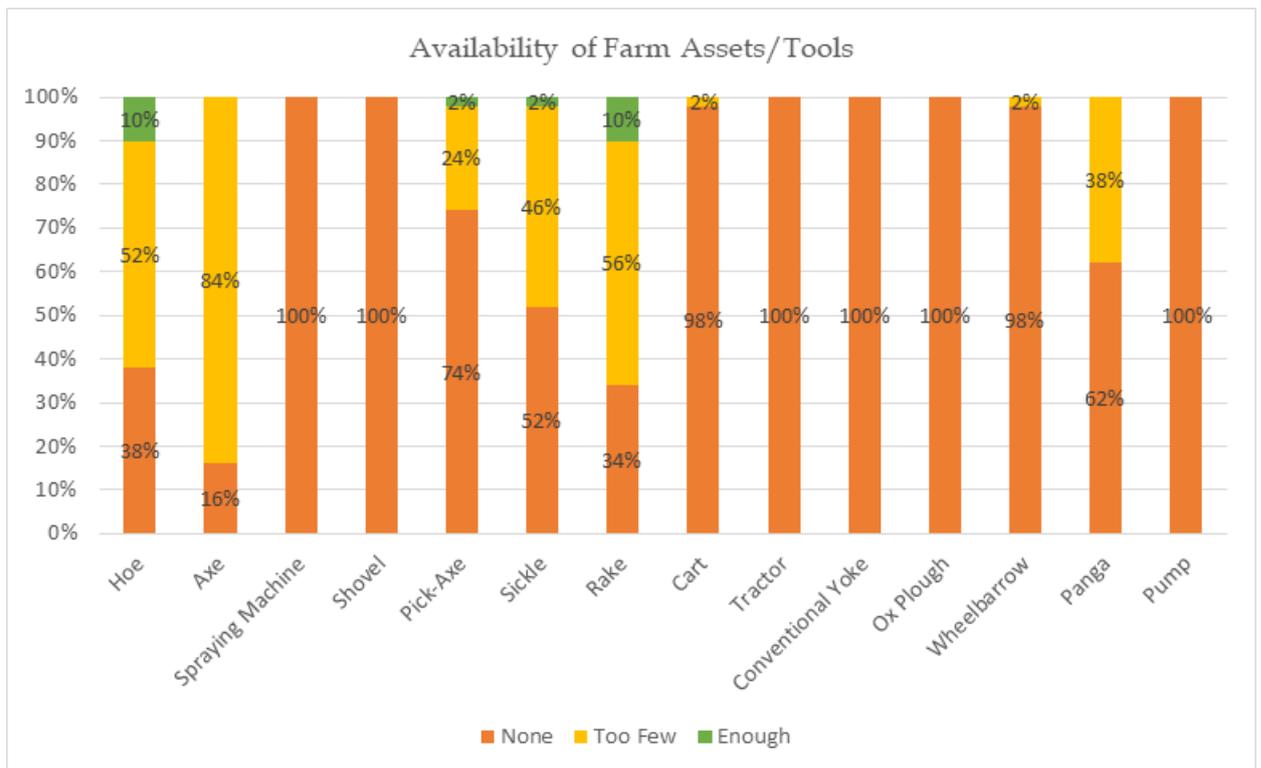
2.2 Incidences of Loses

More than 53% of the community members lost their assets during the floods that engulfed the entire county from July, 2020. It was however discovered that 43% of the community members reported no incidence of loses with their assets. Those who were affected however reported to have lost a number of cattle, goats, sheep and other valuables during the displacement.



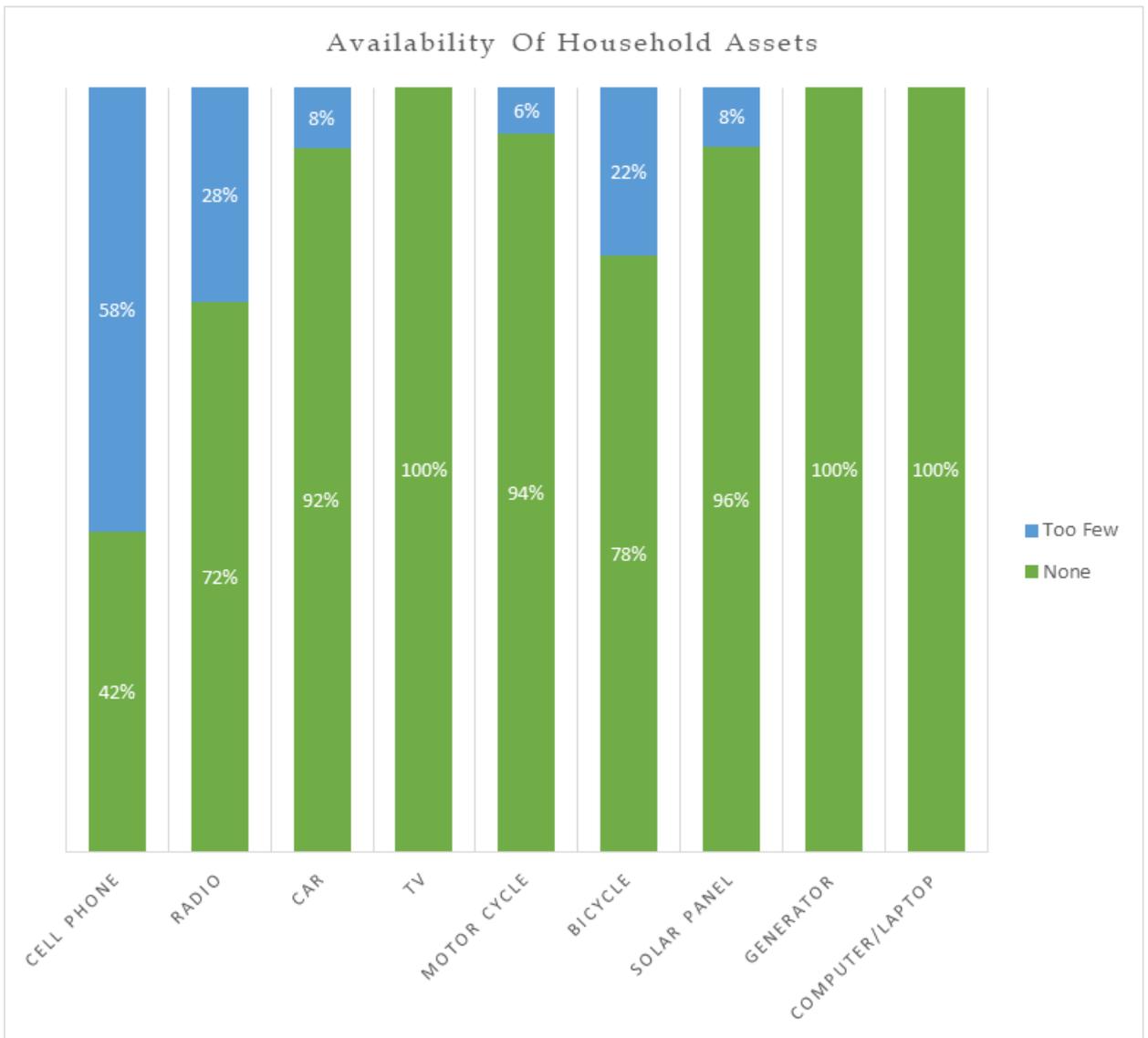
2.3 Availability of Farm Assets

Majority of households did not have farm assets, few farm assets that were found at household level can be linked to previous Food Security and Livelihoods distributions by Coalition for Humanity in Mayendit County funded by FAO and SSHF. Items like rakes were available to 56% of households, with 10% having enough, 84% had few axes, 52% had few hoes, 10% had enough hoes, 38% had few pangas. None of the household had tractor, ox plough, pump, spraying machine, shovel. Only 2% had few wheelbarrows, enough pick axe, enough sickles.



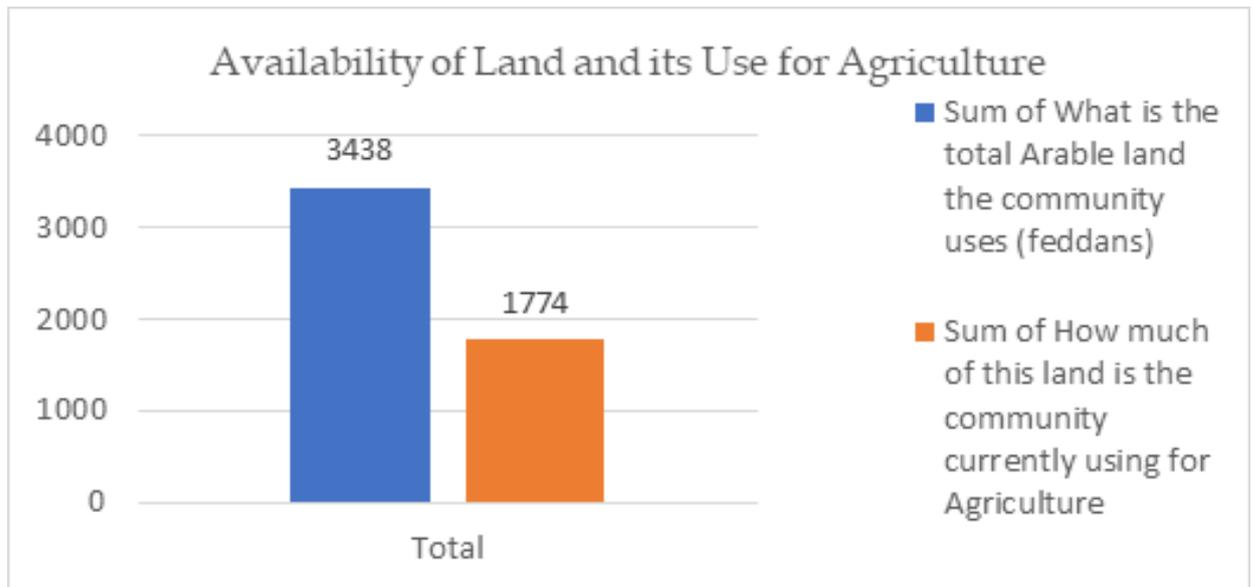
2.4 Availability of Household Items

Most household items were found to be too few with majority of the households having none. Cell phones were recorded at 58% availability but the network coverage in the area not reliable. Radios at 28%, cars 8%, Motorcycles at 6%, Bicycles 22% and solar panels at 8% availability. None of the households had TV sets, Generators and computers/Laptops.



2.5 Availability of Land

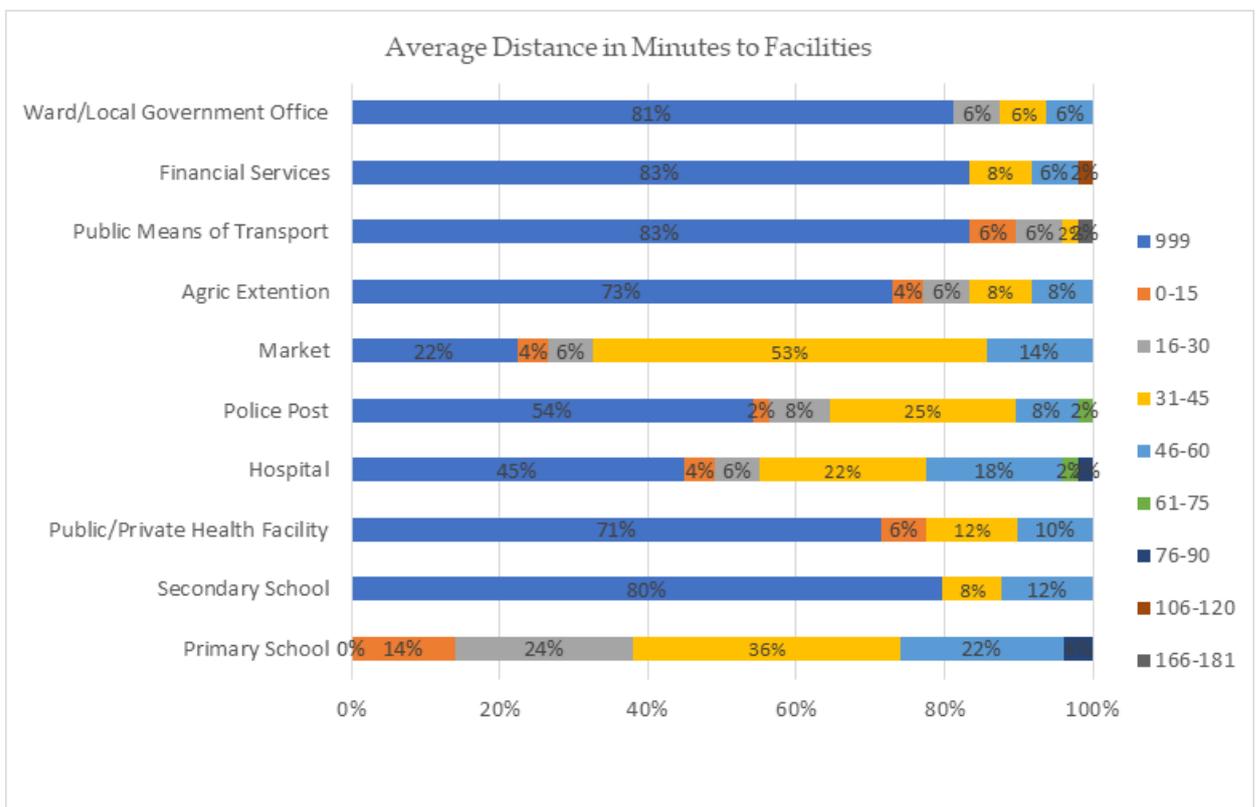
Findings revealed that Land as an asset was available to every community member. Sum of Arable land the community used in Feddans was 3438 while land that had been set aside for agriculture was 1774 feddans.



3.0 COMMUNITY ACCESS TO SERVICE

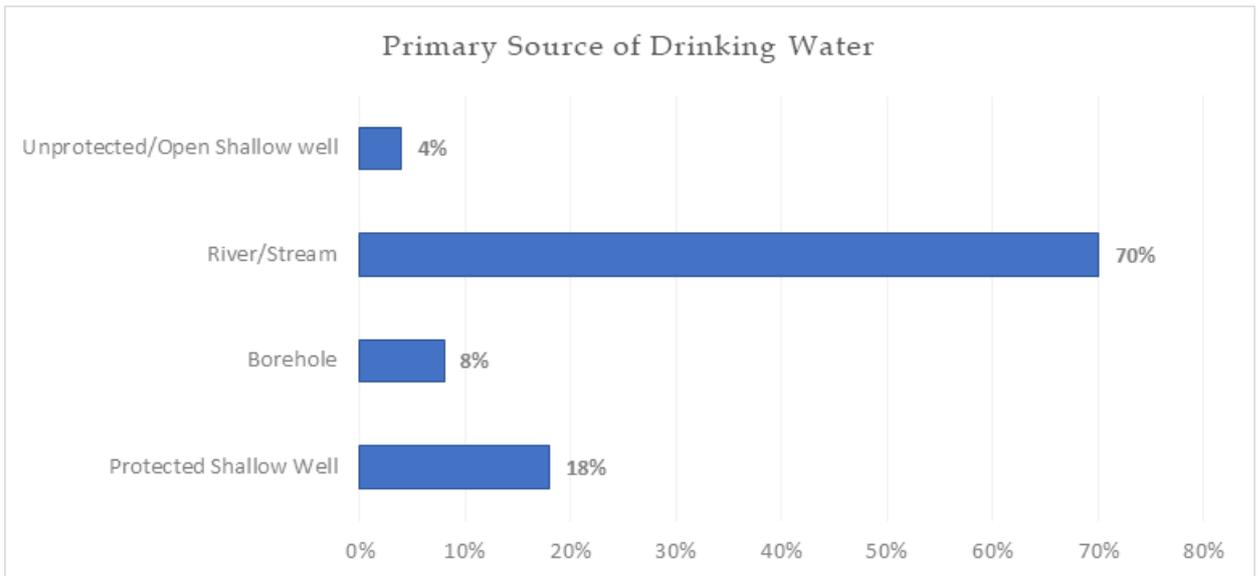
3.1 Access to Community Facilities

More than 80% of the community members lacked access to Ward/local government offices, Financial services, Public means of transport and Secondary schools. More than 71% had no access to Agricultural extension services and public/private Health Facilities. The primary schools are accessible within 15 minutes' walk 14%, within 30 minutes' walk, 24%, within 45 minutes' walk 36% and within 1 hour walk, 22%. More than half 54% do not have access to police post, 45% have no access to hospital, 22% have no access to markets.

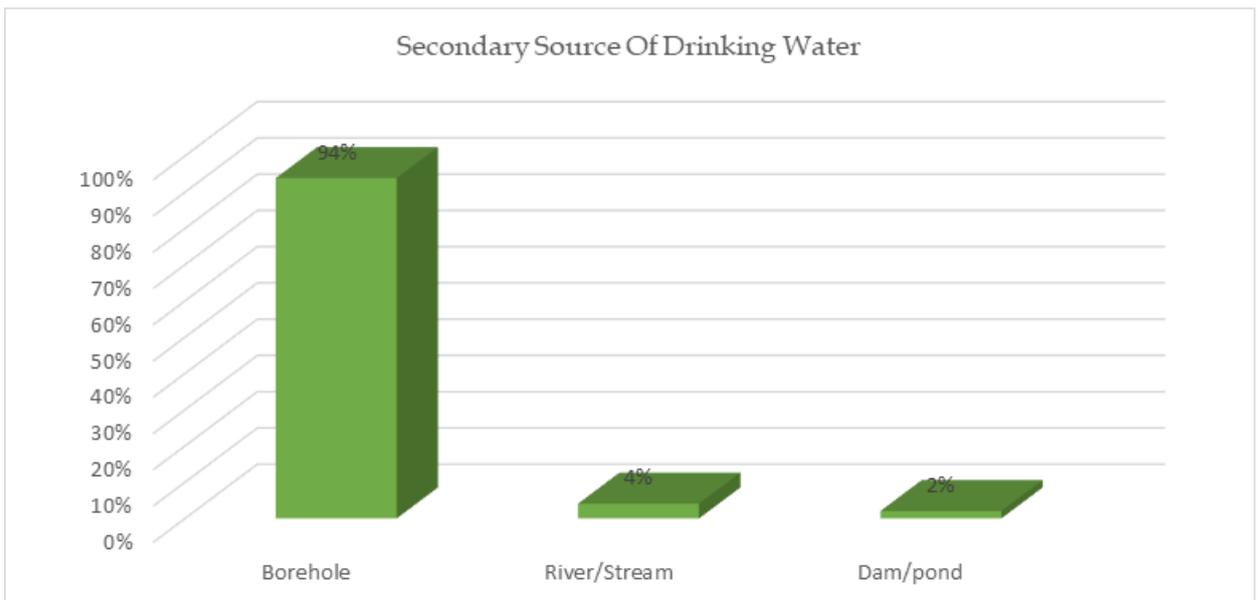


3.2 Sources of Drinking Water

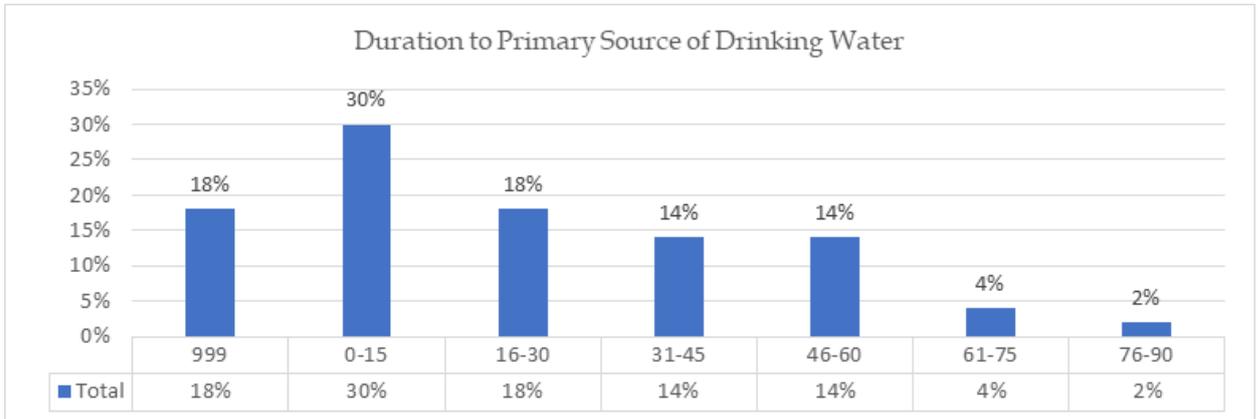
Findings indicated that 70% of the community members were fetching their drinking water directly from Rivers/streams as their primary sources of water, 18% fetched from protected shallow wells, 8% Boreholes and 4% fetched their water from unprotected/open shallow wells.



Boreholes at 94% were accessed by most community members as secondary sources of drinking water. However, Rivers/Streams at 4% with Dams/ponds at 2% were also mentioned as other secondary sources of drinking water that were being used by community members.



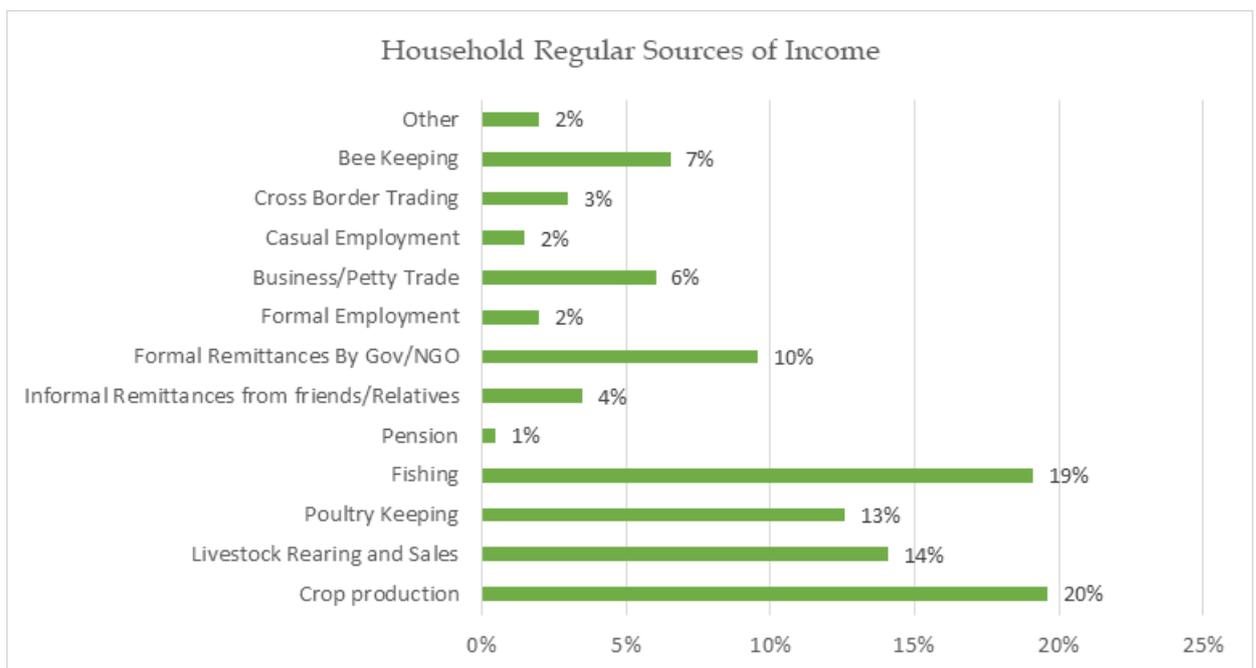
Findings indicate that 30% of community members would take between (0-15) minutes to get to their primary sources of drinking water, 18% would take (16-30) minutes, 14% (31-45) minutes, another 14% would take (46-60) minutes, 4% (61-75) minutes and 2% said they would take between (76-90) minutes to reach the primary source of drinking water.



4.0 HOUSEHOLD INCOME AND EXPENDITURE PATTERNS

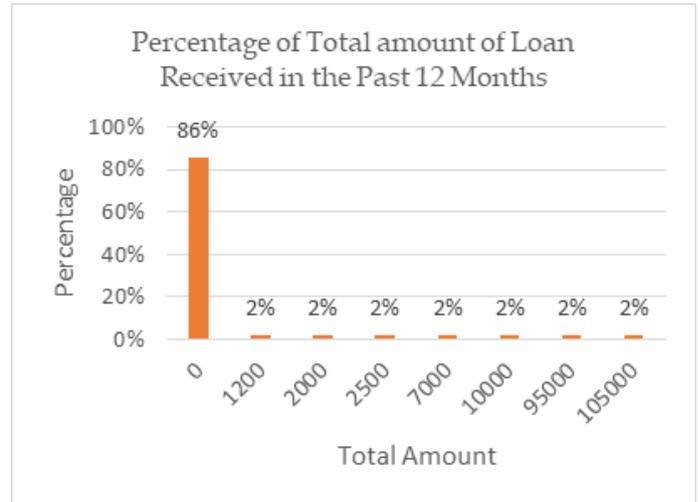
4.1 Regular Sources of Income

Crop production was the main source of income with 20% dependency, fishing at 19%, Livestock rearing and sales was recorded at 14%, poultry keeping at 13%, informal remittance from friends and relatives at 4%, formal remittance by government/NGO at 10%, formal employment 2%, Business/petty trade 6%, casual employment 2%, cross border trading 3%, Bee keeping 7%, other source of income 2% and pension which was the least source of income was at 1%.



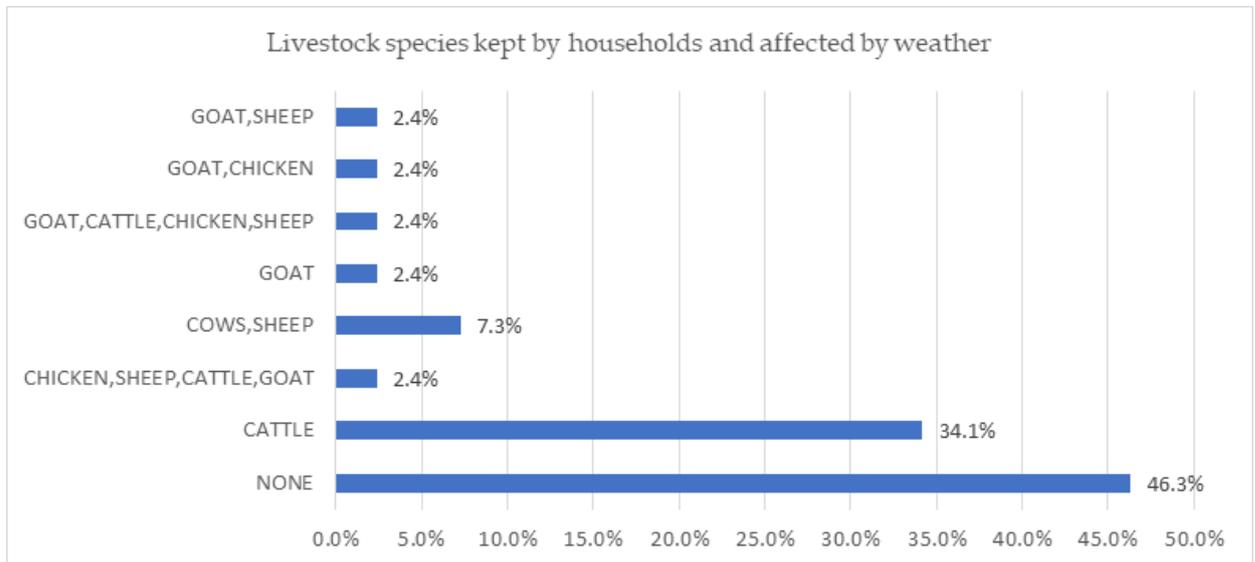
4.2 Loans

Loans were not common in the community, Majority, 86% had not received any loan in 12 months period. 2% had received at least 1200 SSP, up to 105,000 SSP. The total amount of loan received from the survey findings was minimal, this can be attributed to lack of lending facilities or not meeting the requirements hence not credit worthy.



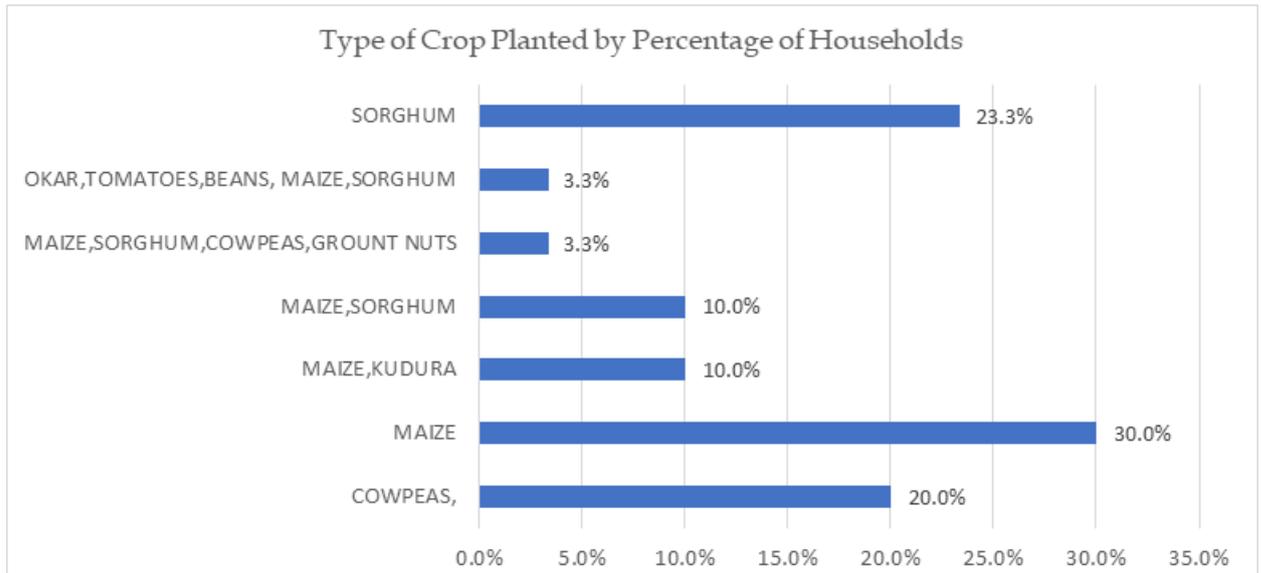
4.3 Types of Livestock Reared

A good number of households, 46.3% do not keep any livestock, 34.1% keep cattle, 7.3 kept cows 2.45 kept goats only while another 2.4 practiced mixed animal rearing by keeping chicken, cattle and goat,



4.4 Types of Crops Cultivated

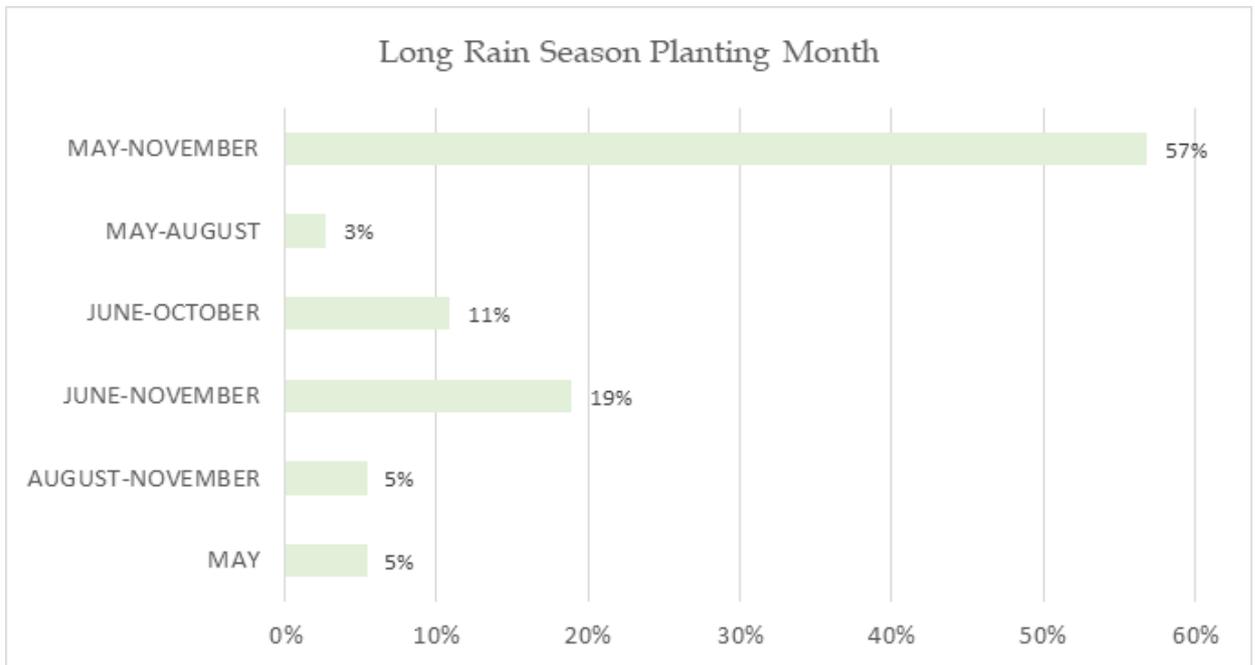
Majority of the households planted one type of crop, 30% planted maize only, 23.3% planted sorghum only, 20% planted cowpeas only, 10% planted Maize and Kudura, 10% planted maize and sorghum, 3.3% practiced mixed crop farming of okra, beans, groundnuts, maize, sorghum crops during the long rain seasons and the short rain season.



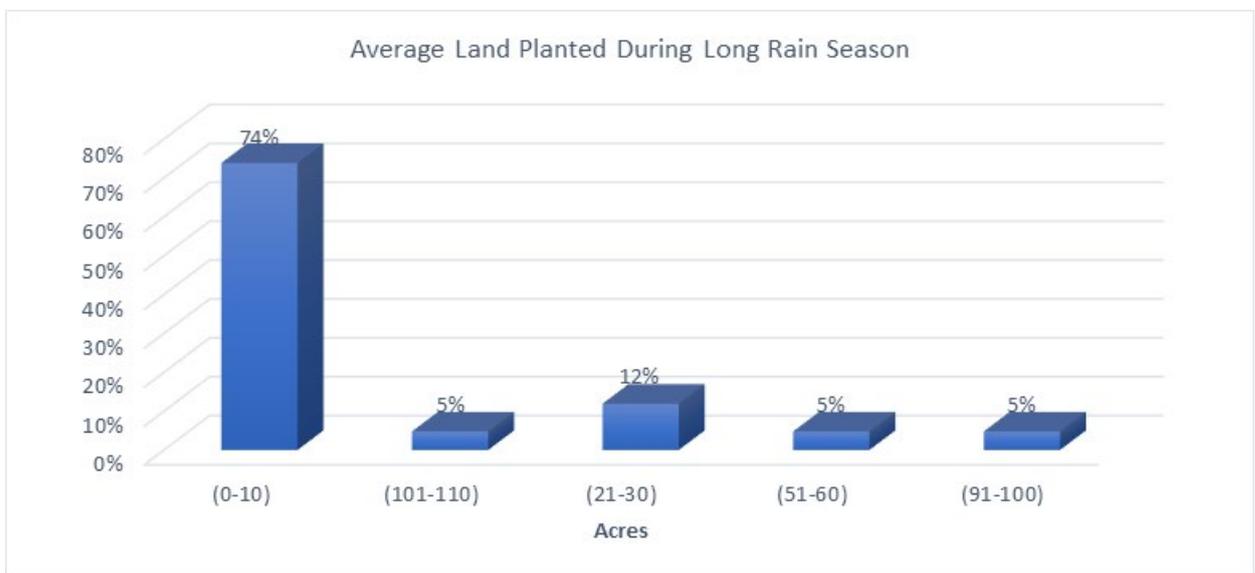
4.5 Crop Production Long Rain Season



Findings showed that majority of the households, 99.99% planted crops during the long rain season. Most farmers, 57% prepared their farms and planted crops between the month of May and November. 19% said to have planted and harvested between June and November, 11% mentioned June and October, 3% May and August, 5% August to November and some other 5% highlighted to have begun the process in May.

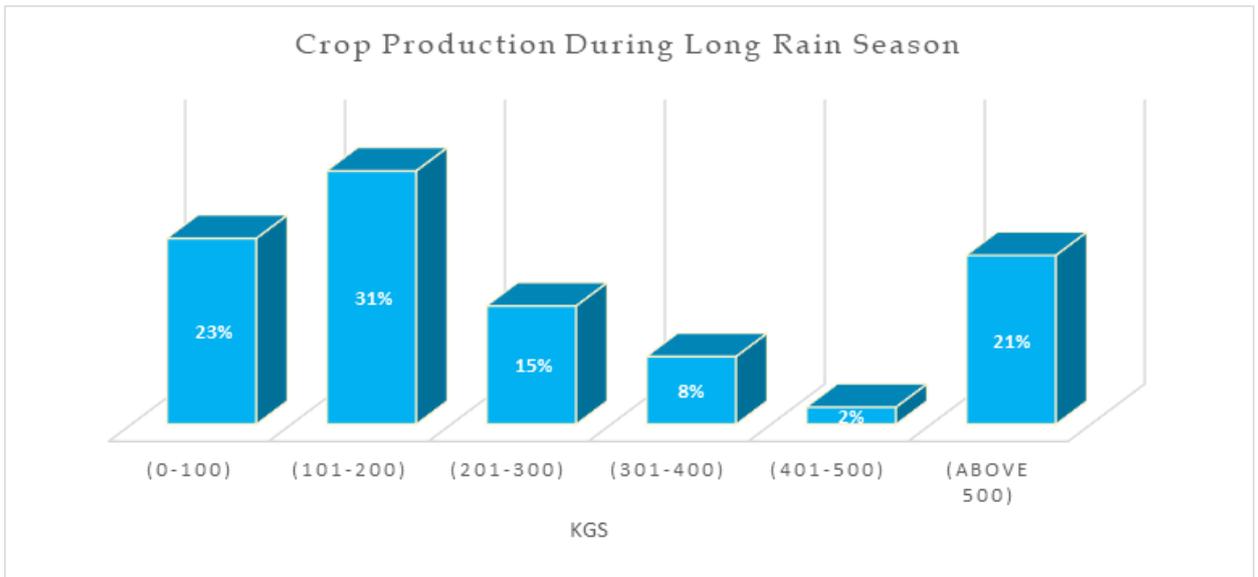


On average, majority of the community members 74% planted between (0-10) Acres of land during Long rain season, 12% utilized (21-30) Acres and 5% planted between (50-110) Acres of land.

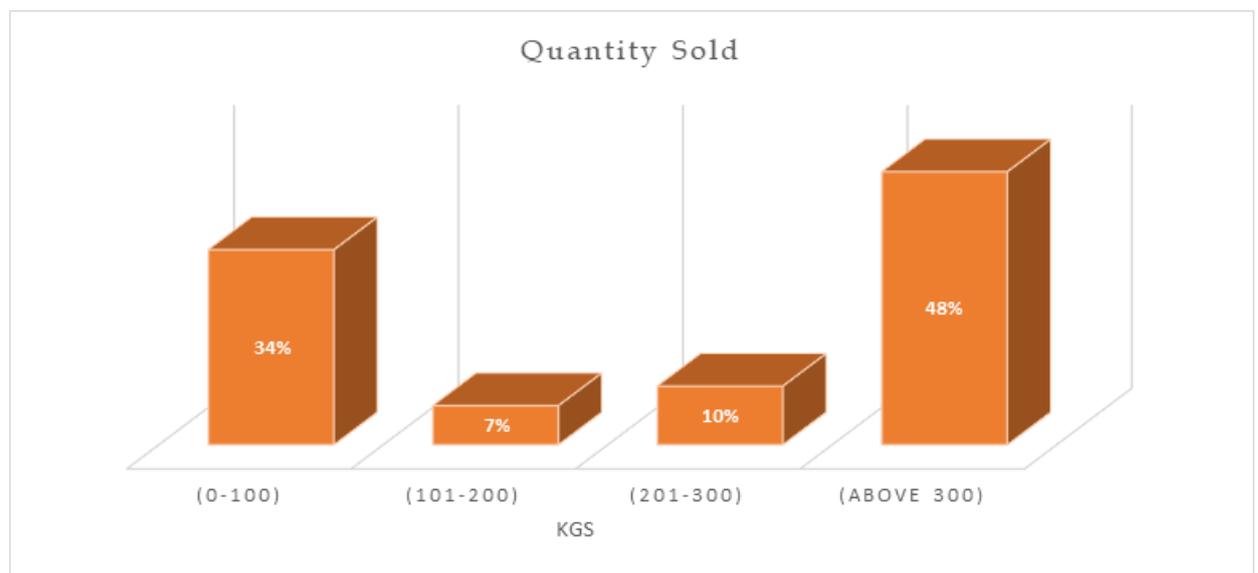


4.6 Crop harvesting during Long Rain Season

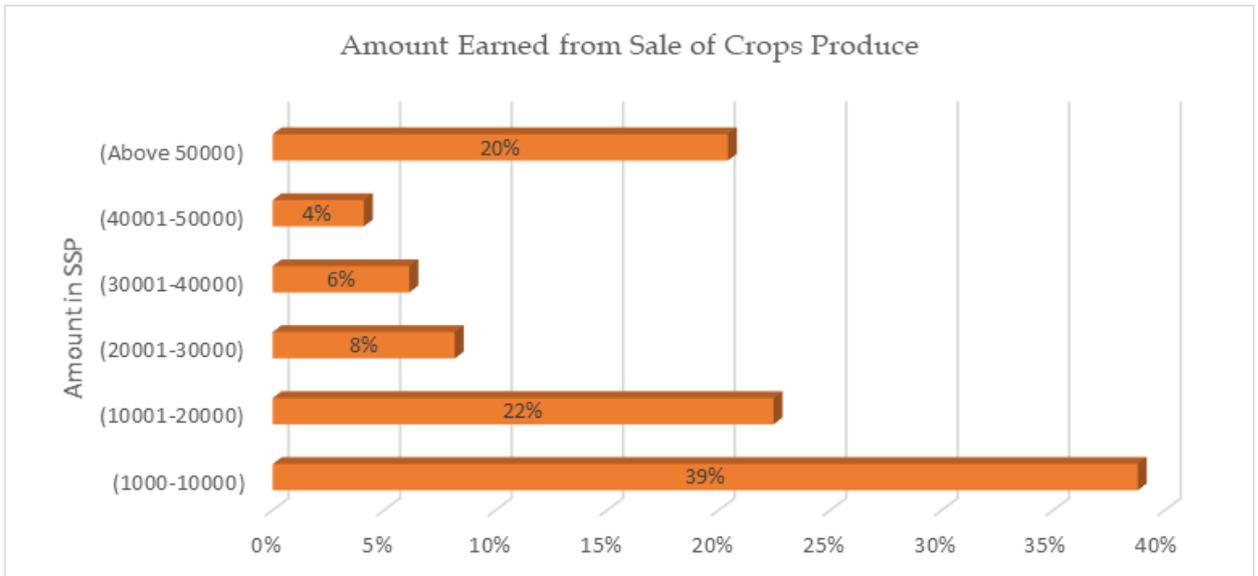
Further findings revealed that 31% of the community members harvested between (101-200) Kgs of produce from the long rain season, 23% who harvested between (0-100) Kgs and 21% who had harvested above 500Kgs of produce. However, 15% managed to harvest between (201-300) Kgs, 8% between (301-400) Kgs and 2%, the least among the farmers recording between (401-500) Kgs as their total crop production.



Out of the produce realized, the community members sold part of it. It was found that 34% sold between (0-100) Kgs of the farm produce, 7% (101-200) Kgs, 10% (201-300) Kgs and 48%, majority of the community members sold more than 300Kgs of what they had harvested.

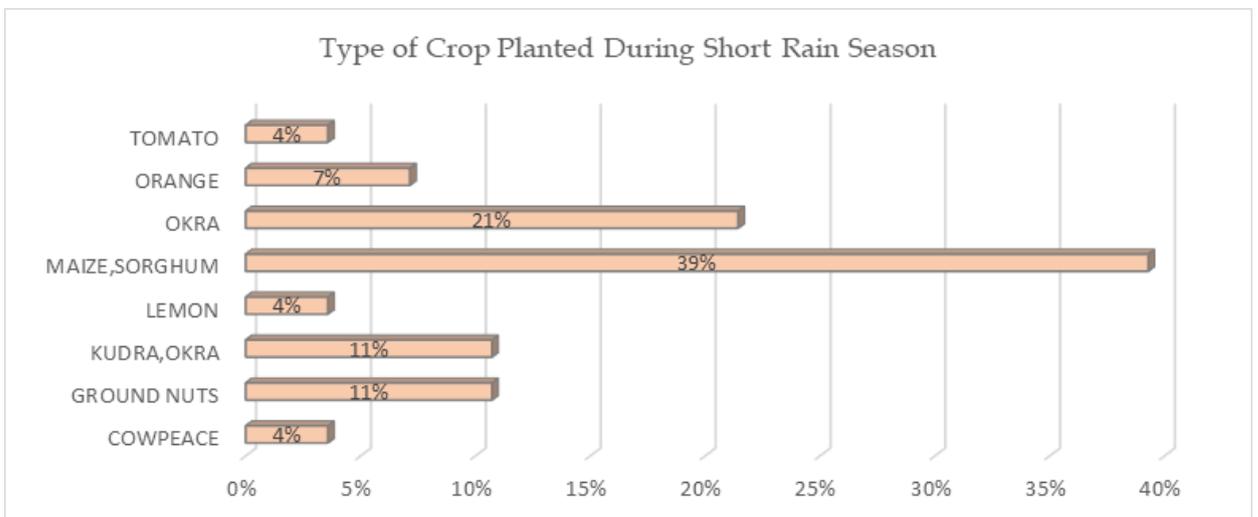


Out of the crop produce sold from the long rain season, 39% earned between (1000-10000) SSPs from their sales, 22% earned between (10001-20000) SSPs, 8% (20001-30000) SSPs, 6% (30001-40000) SSPs, 4% (40,001-50000) SSPs only 20% earned more than 50,000 SSPs from their produce.

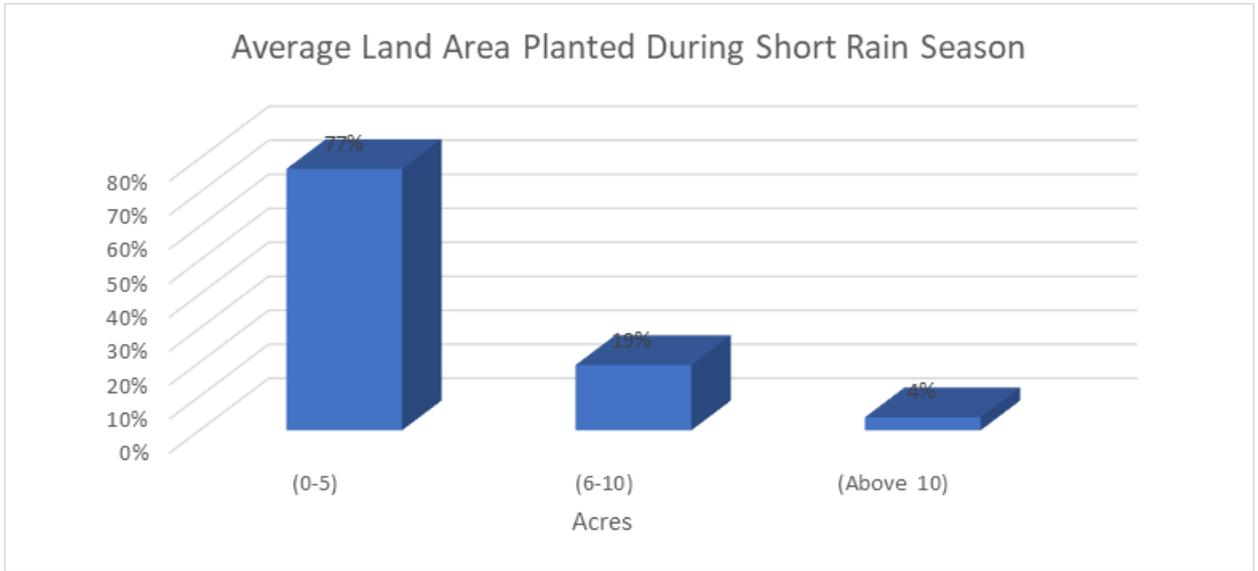


4.7 Crop Production During Short Rain Season.

Findings showed that 67% of the community members managed to plant crops during the short rain season while 33% did not plant. Findings indicated that 39% planted maize and sorghum during the short rain season, 21%, purely planted Okra, 7% planted oranges, 4% tomatoes, some other 4% lemon, 11% ground nuts, 4% cowpeas and 11% opted for a mix of Kudra (Jew's mallow) and Okra

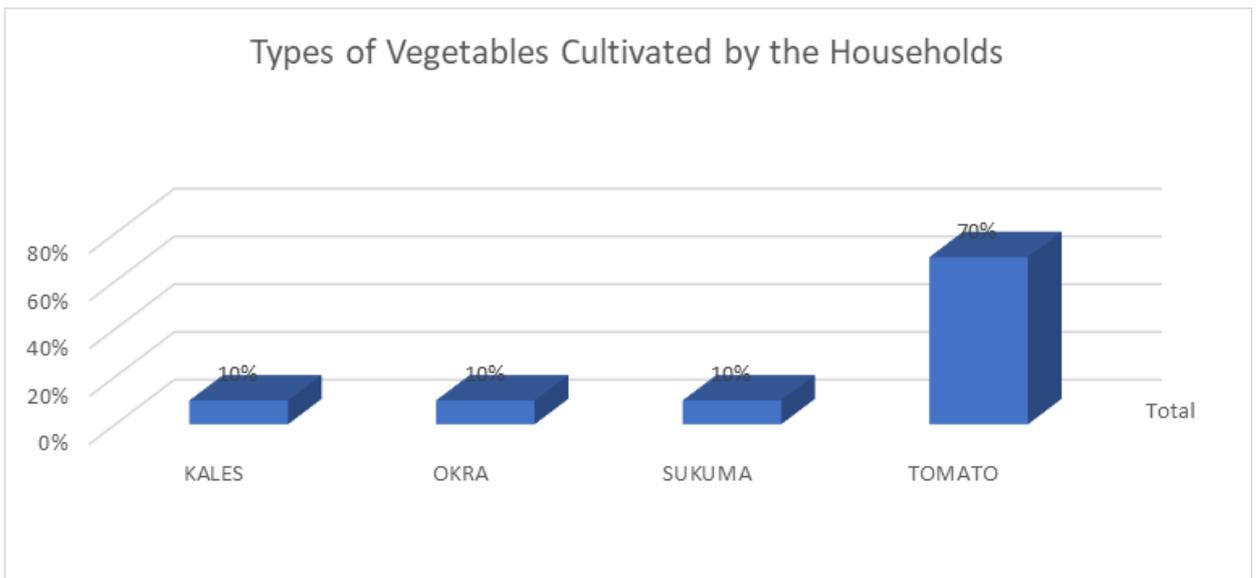


On average, 77% of the community members (majority) planted between (0-5) Acre area of land during the short rain season. 19% reported (6-10) Acres and 4% said to have planted more than 10 Acres of land.

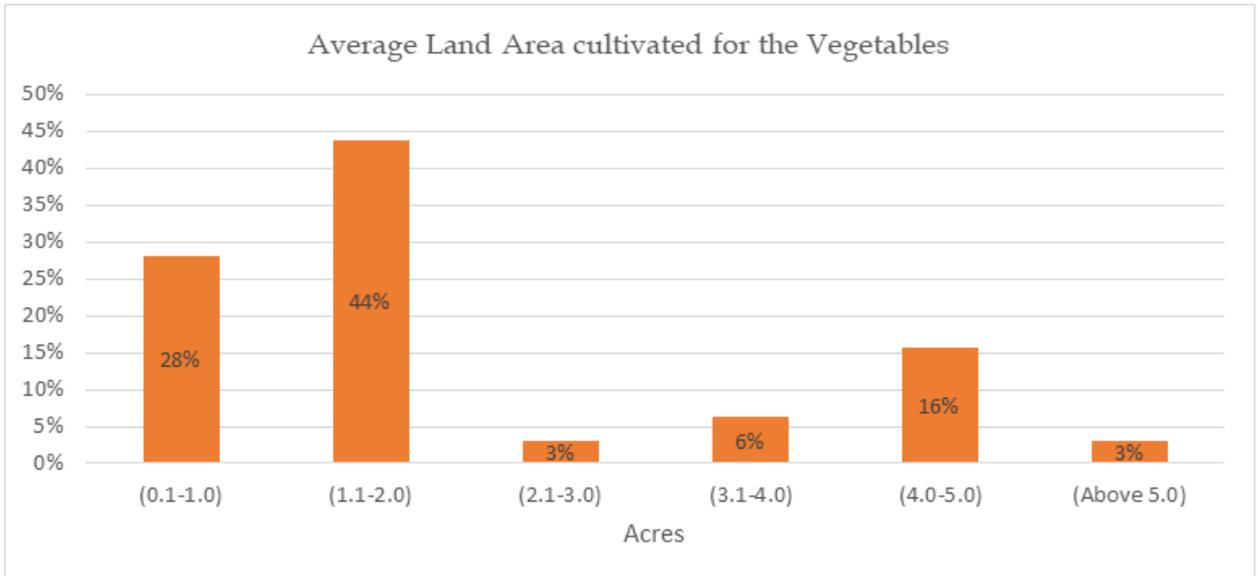


4.8 Vegetable Production

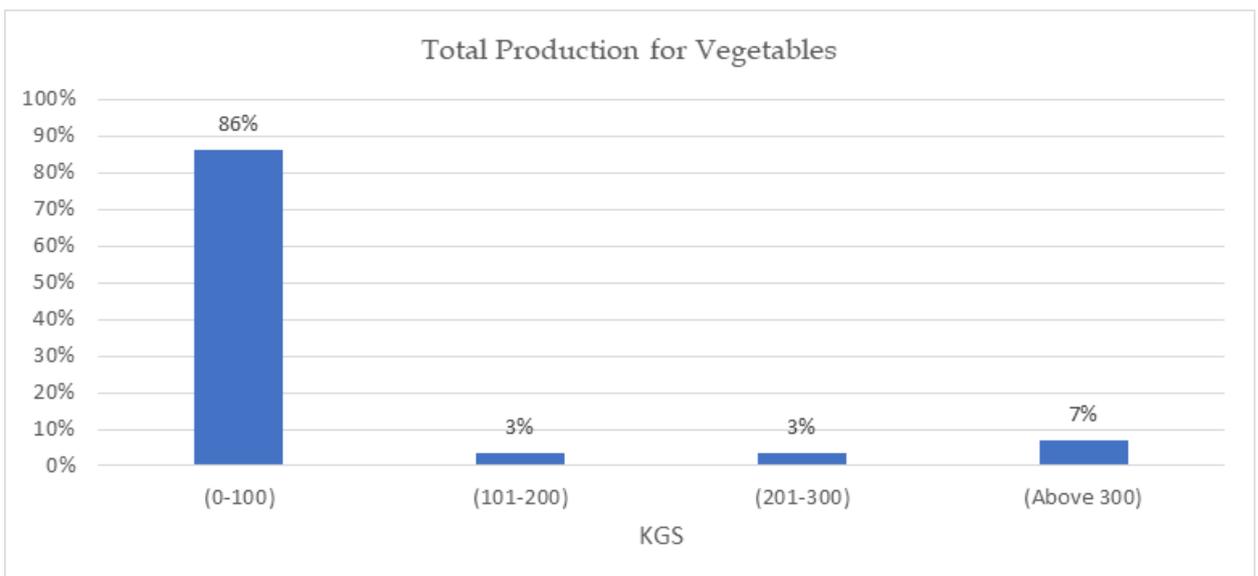
Tomato was the most commonly cultivated type of vegetable by 70% of households. Other vegetable types were also planted though in small scale. Kales/Sukuma were planted by 20% of the households while Okra was planted by 10%.



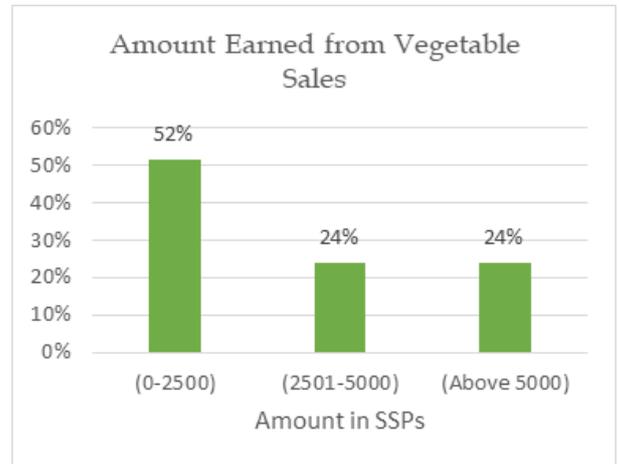
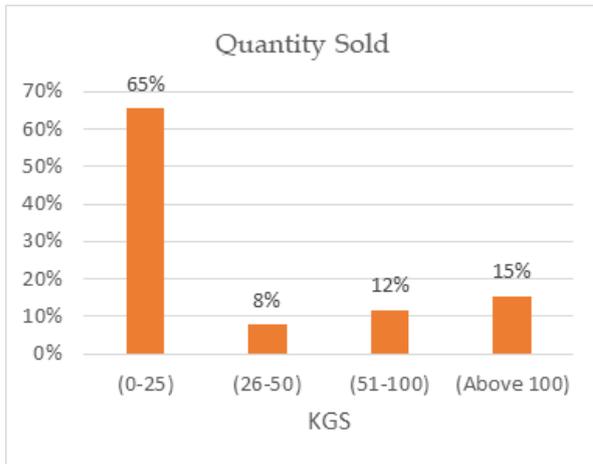
On average, majority of the community members, 44% planted vegetables in (1.1-2.0) Acres of land, 28% (0.1-1.0) Acres, 16% (4.0-5.0) Acres, 3% (2.1-3.0) Acres, 6% (3.1-4.0) Acres and some other 3% planted vegetables in more than 5.0 Acres of land.



Majority of households 86% produced very little vegetables between (0-100) Kgs, 3% reported to have harvested between (101-200) Kgs, some other 3% (201-300) Kgs and 7% mentioned more than 300Kgs total vegetable production.

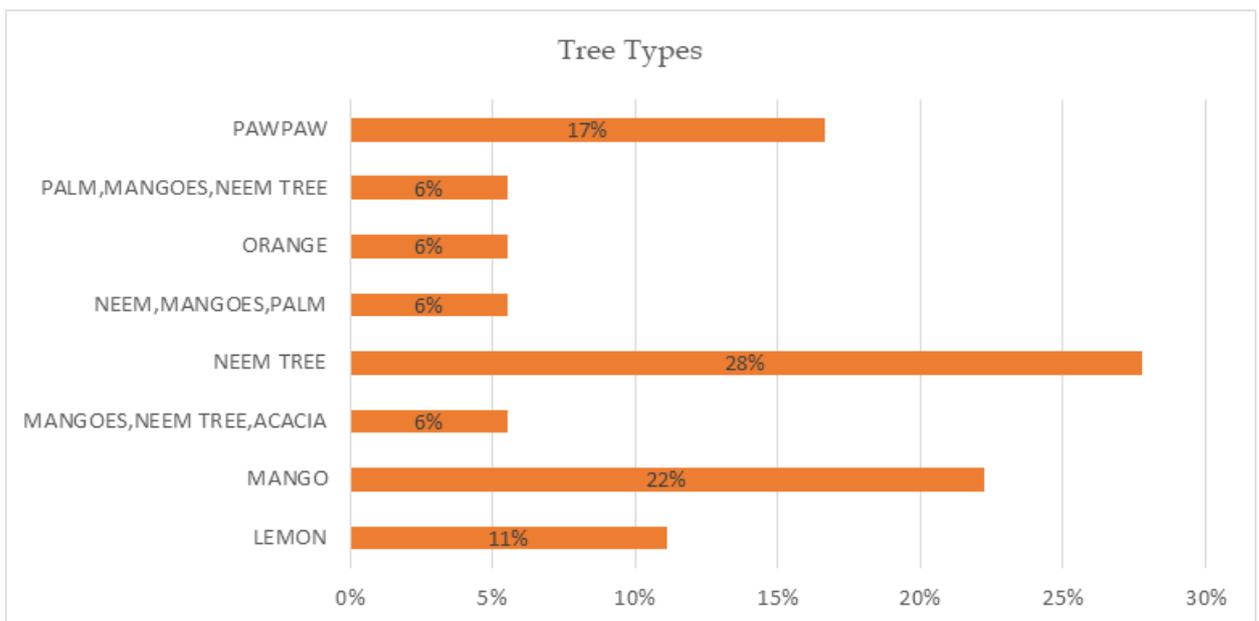


Out of the total production realized from vegetables, 65% of the farmers sold (0-25) Kgs, 8% (26-50) Kgs, 12% (51-100) Kgs and 15% had sold more than 100 Kgs of vegetables from what they had planted. The farmers did not earn much from produce, 52% of the farmers earned (0-2500) SSPs, 24% (2501-5000) SSPs and some other 24% of farmers earned above 5000 SSPs

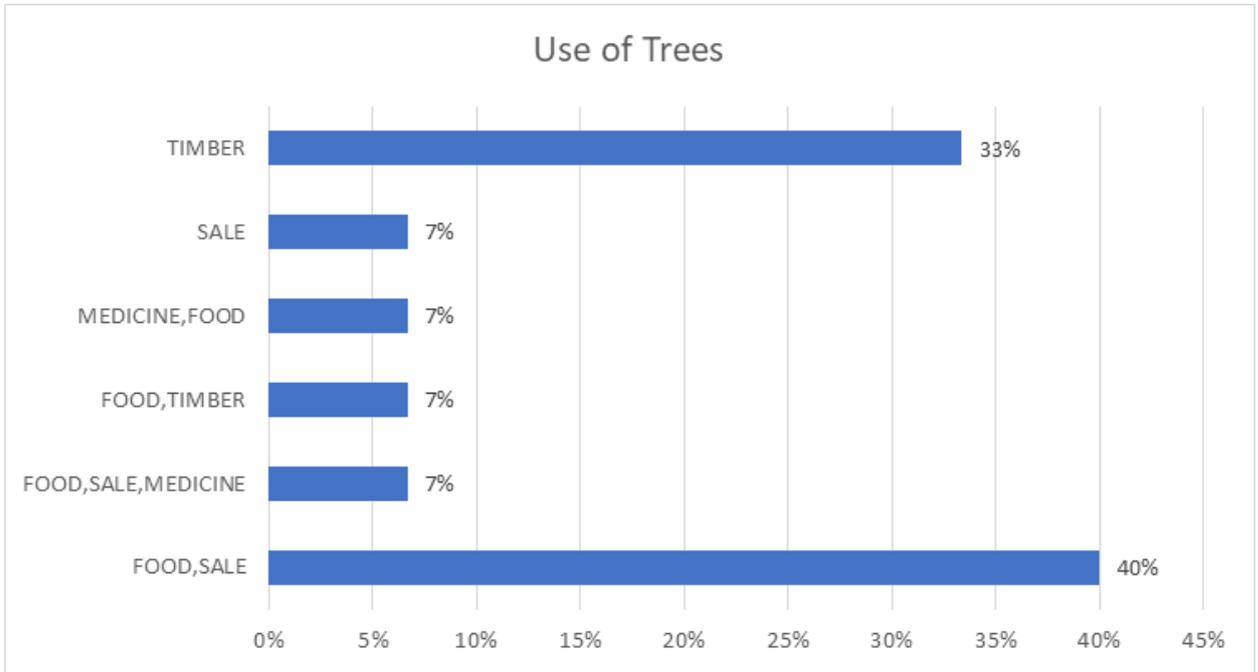


4.9 Tree Planting

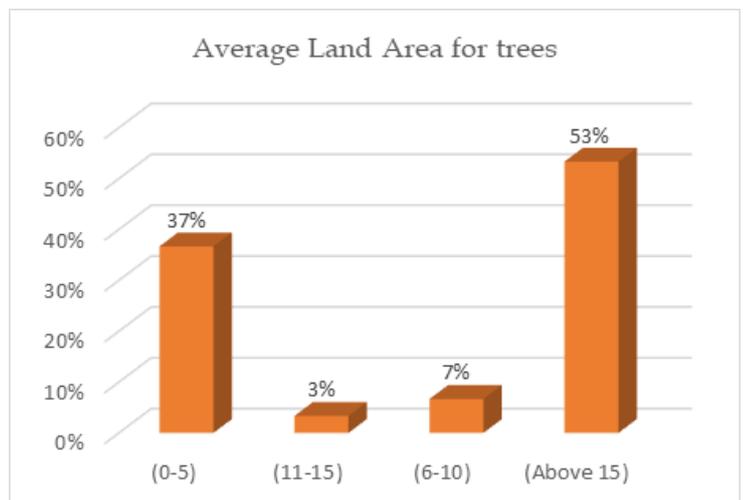
The neem tree was planted by 28% of the households, 22% planted Mango tree, 17% pawpaw, 11% lemon and oranges were planted by 6% of farmers. Some other 6% of farmers had a mixture of the trees i.e., they planted mangoes, neem tree, acacia and palm trees together in the same farm.



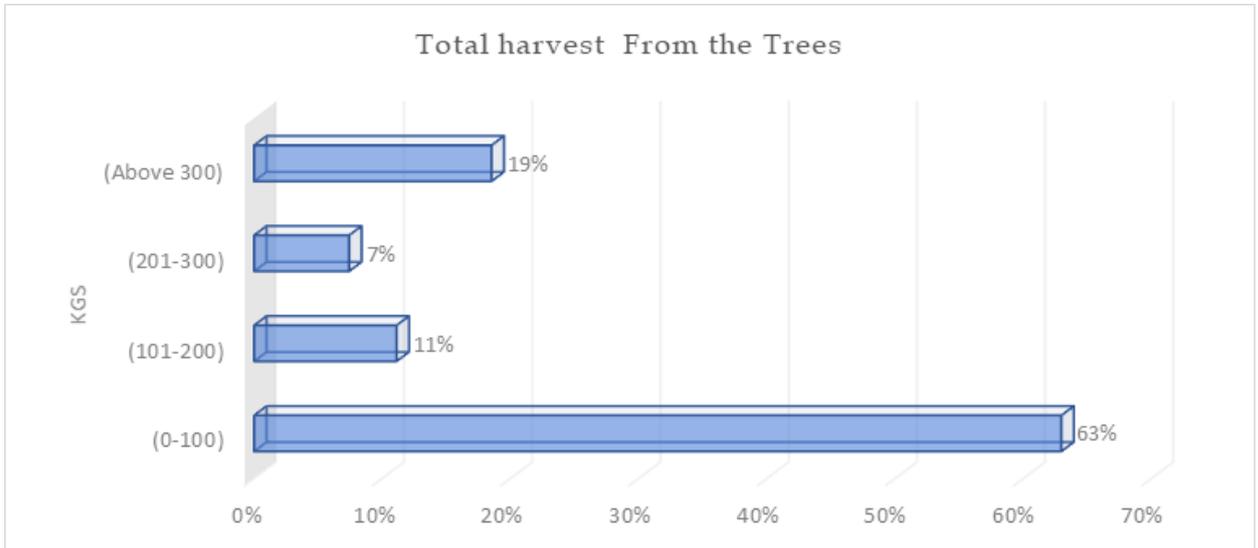
Findings indicated that 40% of the community members said they were using the trees for sale and food purposes, 33% of the trees were harvested for timber only, 7% sold or used for medicinal and food purposes or used for food and timber.



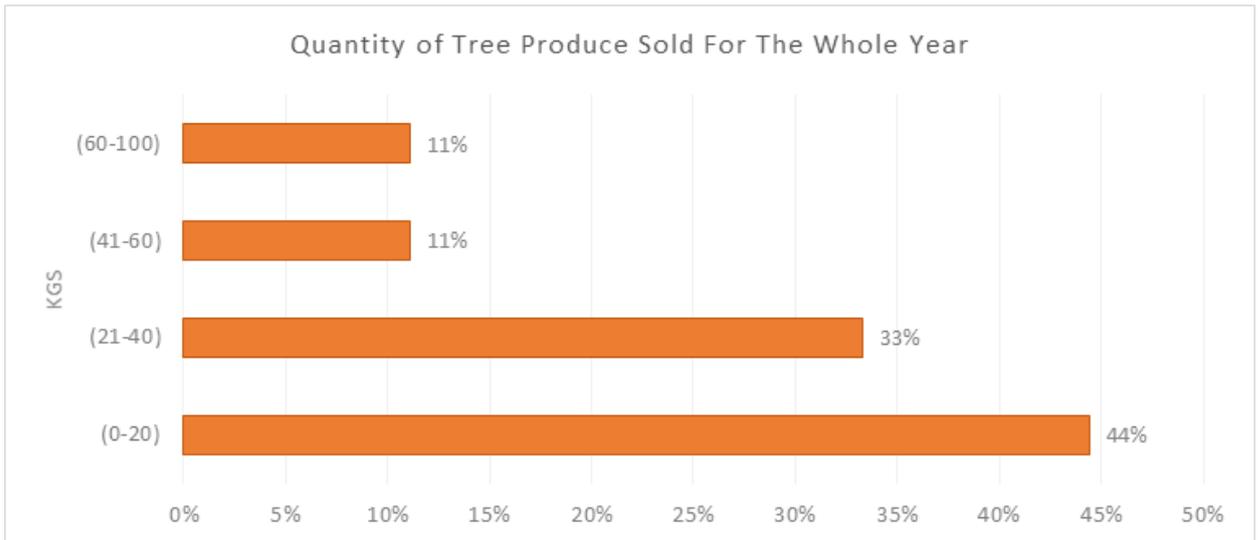
The study sought to find out the amount of land under tree production. Findings indicate that 53% of the households planted trees on more than 15 Acres of land, 37% planted (0-5) Acres, 3% planted (11-15) Acres and 7% planted between (6-10) Acres of land.



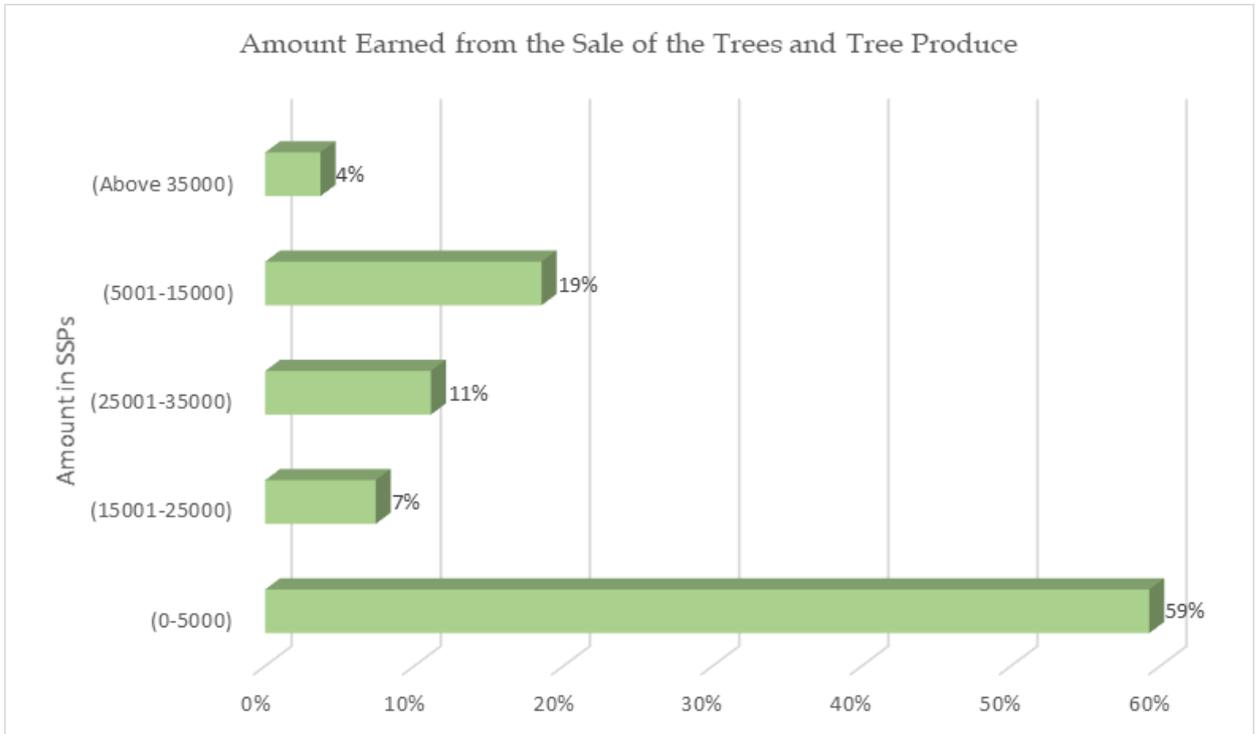
Households did not harvest a lot from trees, 63% harvested between (0-100) Kgs of fruit from trees, 11% harvested (101-200) Kgs, 7% harvested (201-300) Kgs. Only 19% of the community members were harvesting more than 300Kgs of produce from the trees.



Most households harvested for consumption. Out of the fruit harvest, 44% of the households sold between (0-20) Kgs, 33% sold (21-40) Kgs, 11% sold (41-60) Kgs and some other 11% were selling between (60-100) Kgs.



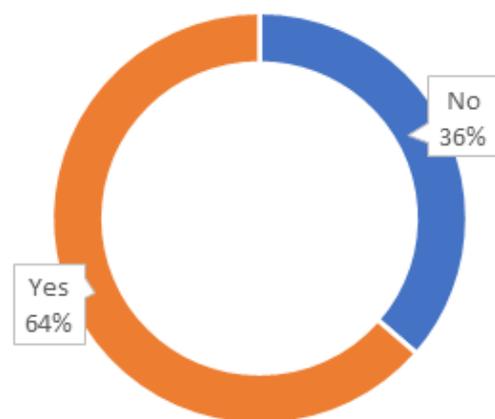
Farmers did not earn much from the tree produce sales, 59% earned between (0-5000) SSPs from sales of the tree produce, 19% earned between (5001-15000) SSPs, 7% earned between (15001-25000) SSPs, 11% (25001-35000) SSPs, only 4% earned 35000SSPs and above.



4.10 Incidences of Loses

Majority of community members, 64% had incidences of loses from weather and climate factors. However, 36% claimed not to have had any experiences and recorded no loses i.e., from floods and droughts. Those who were affected lost a number of assets ranging from crops to animals. On average, 150Kgs of maize, 100Kg of Okra, 70Kg of Beans and 30,000 heads of cattle, goats and sheep were lost due to floods. Tomatoes were most affected by droughts and an average of 200Kgs were lost.

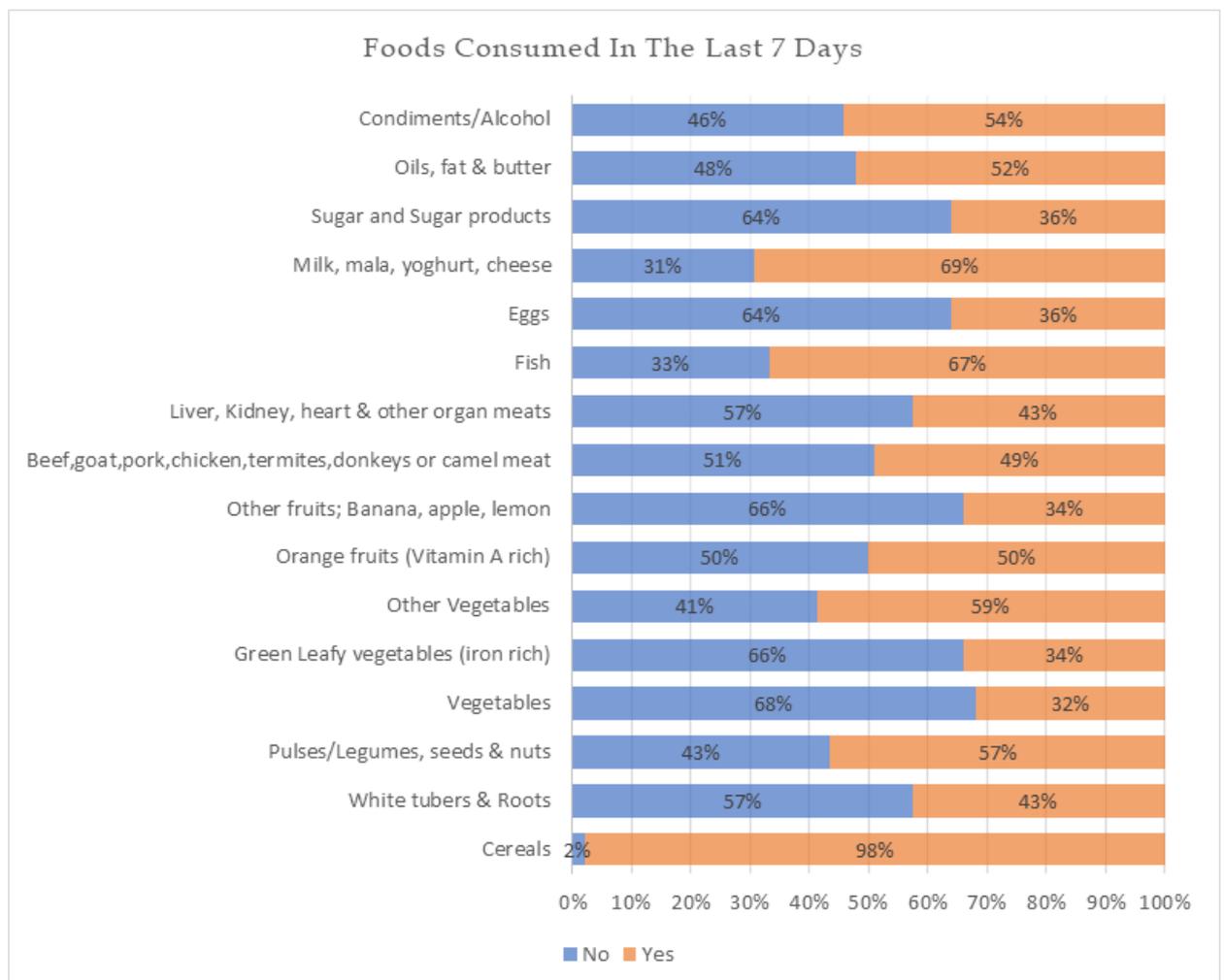
Incidences of Loses



5.0 HOUSEHOLD NUTRITION STATUS

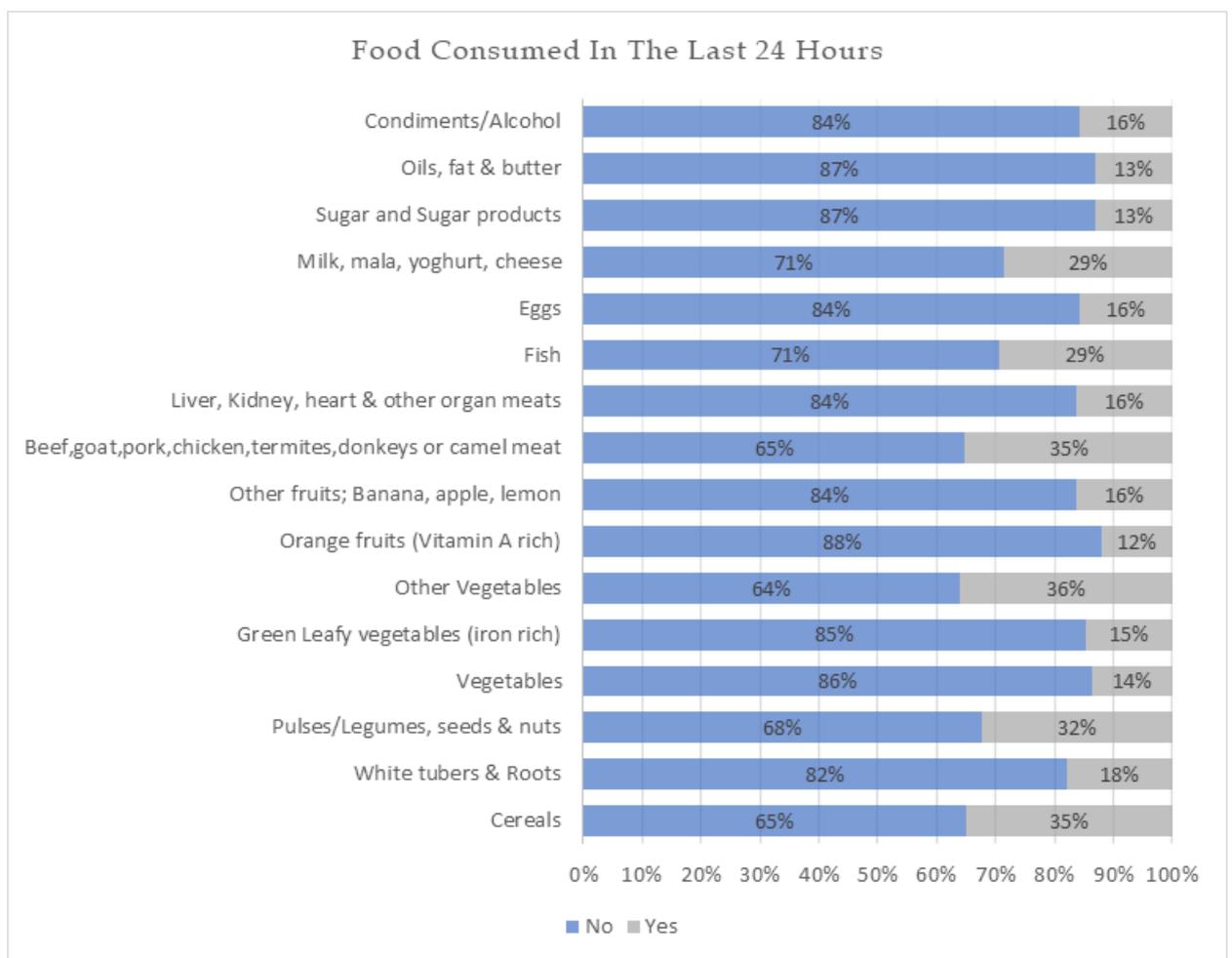
5.1 Foods consumed in the last 7 Days

Findings indicated that in a period of 7 days, majority of the community members, 98% consumed cereals. Only 2% had not eaten any cereals. Households also consumed milk, mala, yoghurt & cheese 69%, Fish was consumed by 67%. More than half, 54% consumed condiments/alcohol, 52% oils, fat & butter, 36% sugar and sugar products, 36% consumed eggs, 43% liver, kidney, heart & other organ meats, 49% beef, goat, pork, chicken, termites, donkeys or camel meat, 34% other fruits i.e., banana, apple and lemon, 50% orange fruits (vitamin A rich). Vegetables were also consumed by 59% while 34% consumed green leafy vegetables (iron rich). More than half, 57% also consumed pulses/legumes, seeds & nuts and 43% consumed white tubers & roots



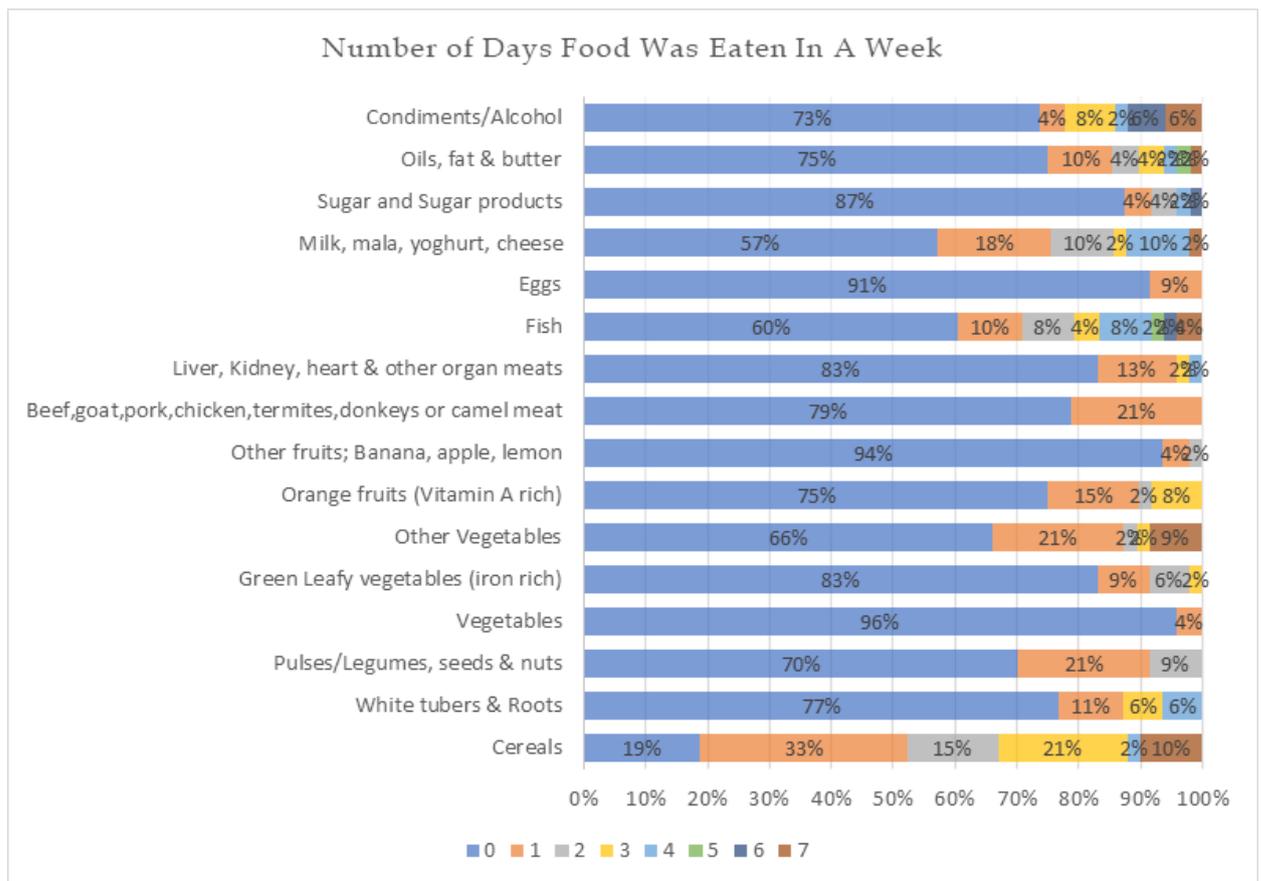
5.2 Foods Consumed within 24 Hours

Households consumed a variety of foods, 36% had consumed vegetables within the 24 hours of the day of the survey, 35 % consumed cereals another 35% had consumed beef, 32% had consumed pulses/legumes, seeds & nuts, 29% had consumed fish, 29% reported to have consumed milk, mala, yoghurt & cheese, 18% white tubers & roots and 16% had consumed condiments/Alcohol. Another 16% had consumed liver, kidney, heart & other organ meats, goat, pork, chicken, termites, donkeys of camel meat, 16% consumed eggs, 16% other fruits; Banana, apple & lemon, 15% green leafy vegetables (iron rich), 14% other vegetables, 13% consumed oils, fat & butter, some other 13% had consumed sugar and sugar products, 12% orange fruits (vitamin A rich), 12% orange fruits (vitamin A rich).



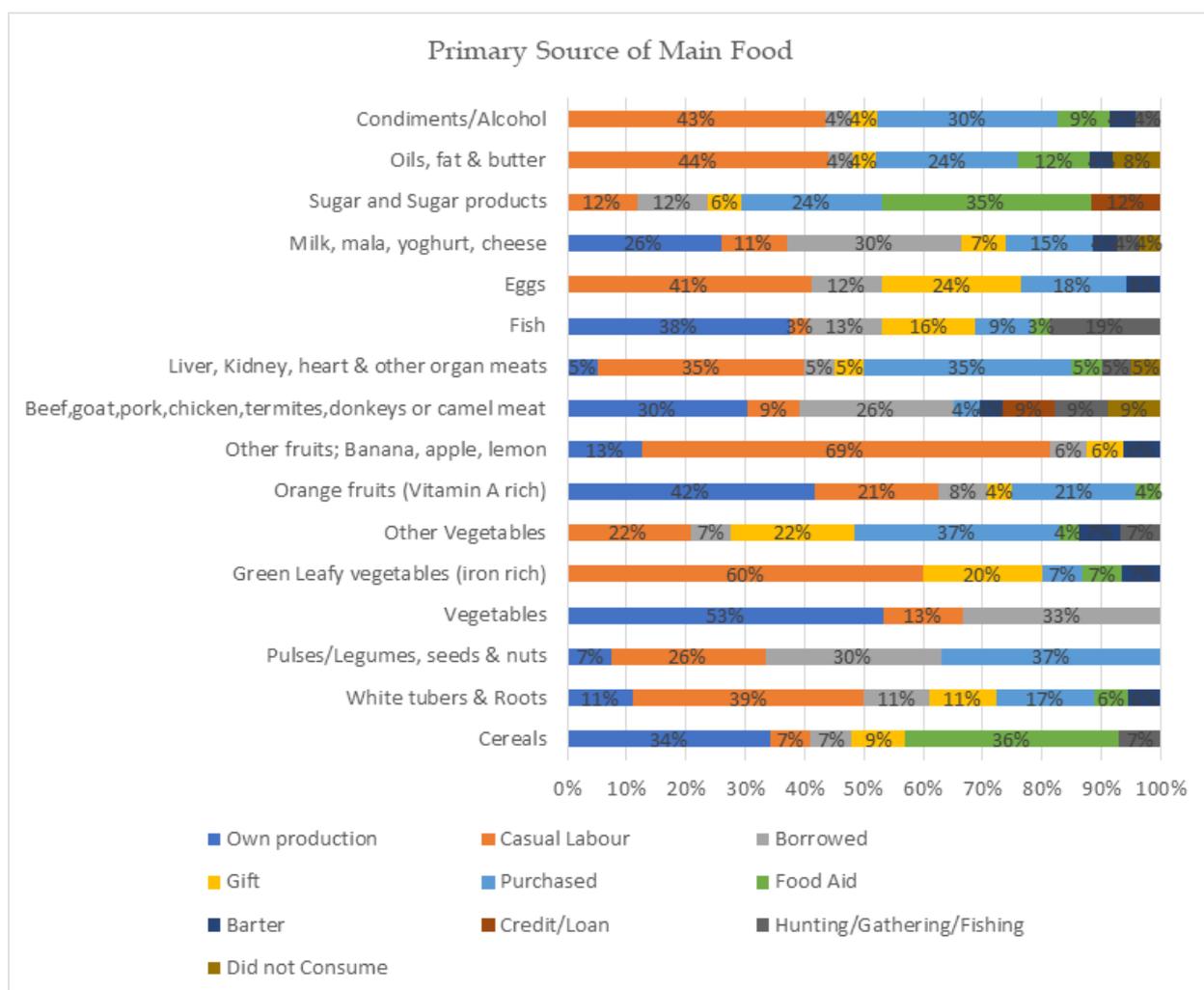
5.3 Weekly Diet for Households

The weekly nutrition for households was not well balanced. Findings revealed that cereals were more frequently consumed than any other food category. Within a week, 33% consumed once, 15% twice, 21% thrice, 2% four times and 10% had consumed the cereals on a daily basis for seven days. More than 70% had not consumed green leaf, iron rich vegetables, or other vegetables, eggs, white tuber, bananas, apples, sugar and sugar products, orange fruits, vegetables, pulses and legumes, oils fats and butter, alcohol. Fish and milk products were consumed by few households, 57% had not consumed milk or milk products within the week of the survey while 60% had not consumed any fish. Fish was eaten once by 10%, twice by 8%, thrice by 4%, four times by 8%, five times by 2%, six times by some other 2% and daily for seven days by 4% of the community members. Few households consumed Milk, mala, yoghurt and cheese in a week, 18% consumed once, 10% twice, 2% thrice, 10% four times and 2% daily within seven days. Beef, goat, pork, chicken, termites, donkeys or camel were eaten by 21% of the community members once a week. Liver, kidney, heart & other organ meat were eaten once by 13% of the residents, 2% ate them thrice and other 2% said to have eaten them four times in week. Eggs were not very common and only 9% reported to have eaten once within a span of seven days.



5.4 Primary Source of Main Food

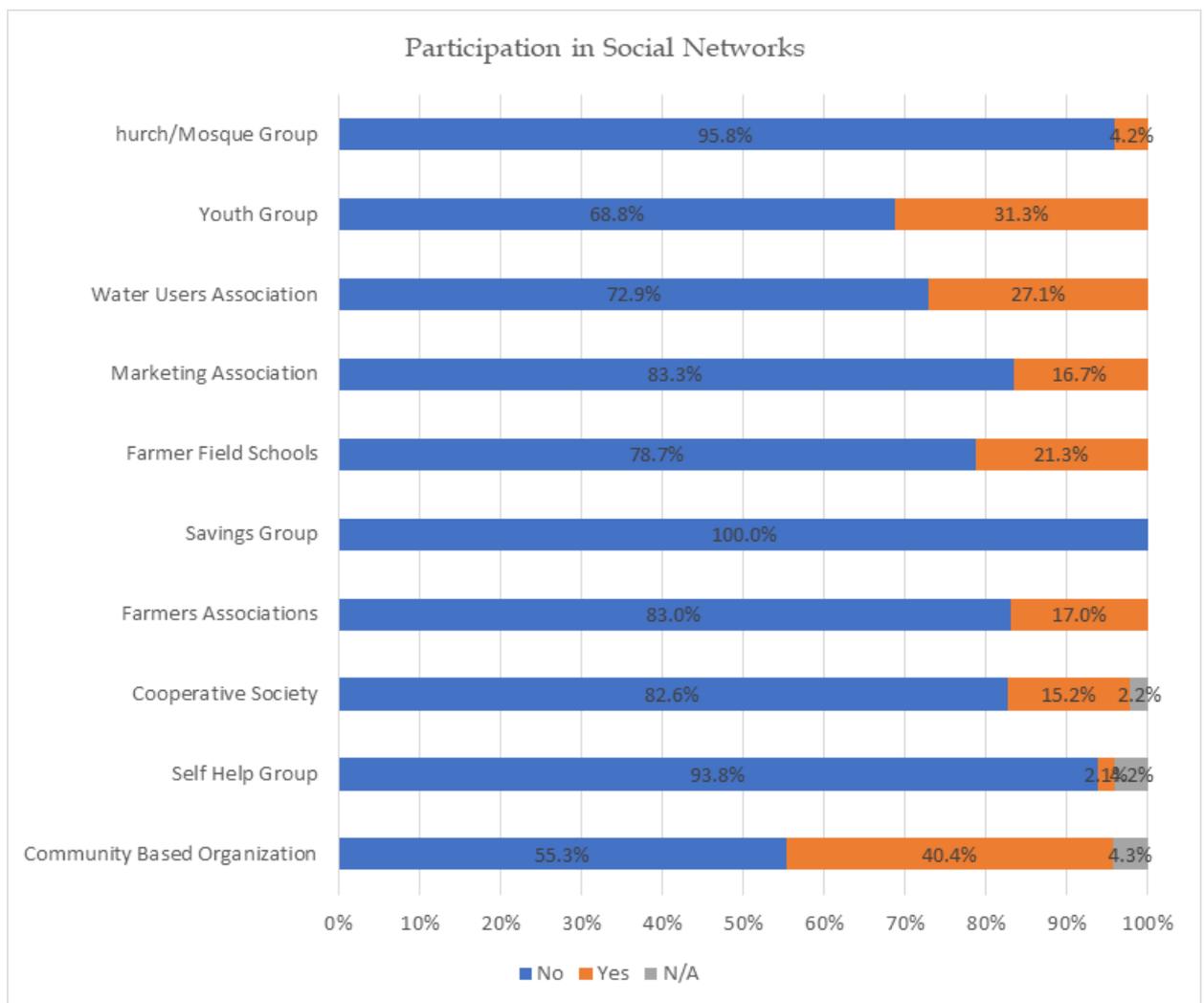
Findings indicated that, cereals were the most consumed food and 36% depend on aid for cereals, 34% mentioned own production, 7% depend on daily wage as casual labours, 7% depend on borrowing, 9% depended on well-wishers' gifts and 7% gathered. Of the households who consumed sugar, 35% depended on aid, 24% purchased, 12% borrowed on credit, another 12% borrowed from friends, while 12% mentioned casual labour as a source. Oil's fat and butter, 12% is one of the foods households received from aid, 44% mentioned casual labour while 24% mentioned purchasing. Some households also consumed fish from various sources, 38% produced, 11% borrowed, 16% were gifted, 9% purchased, 19% engaged in fishing. Out of those who consumed legumes, 37% purchased, 30% borrowed, 26% depended on casual labour and 7% produced own pulses and legumes. Of those who consumed Milk, yogurt and other milk products, 26% produced it themselves, 30% borrowed, 15% purchased, 11% depended on casual labour, 7% were gifted. Of those who consumed condiments/ alcohol 43% consumed condiments/alcohol after casual labour, 30% purchased, 9% borrowed, 4% were gifted, 4% barter and 4% gathered.



6.0 COMMUNITY CAPACITY BUILDING AND TRAININGS

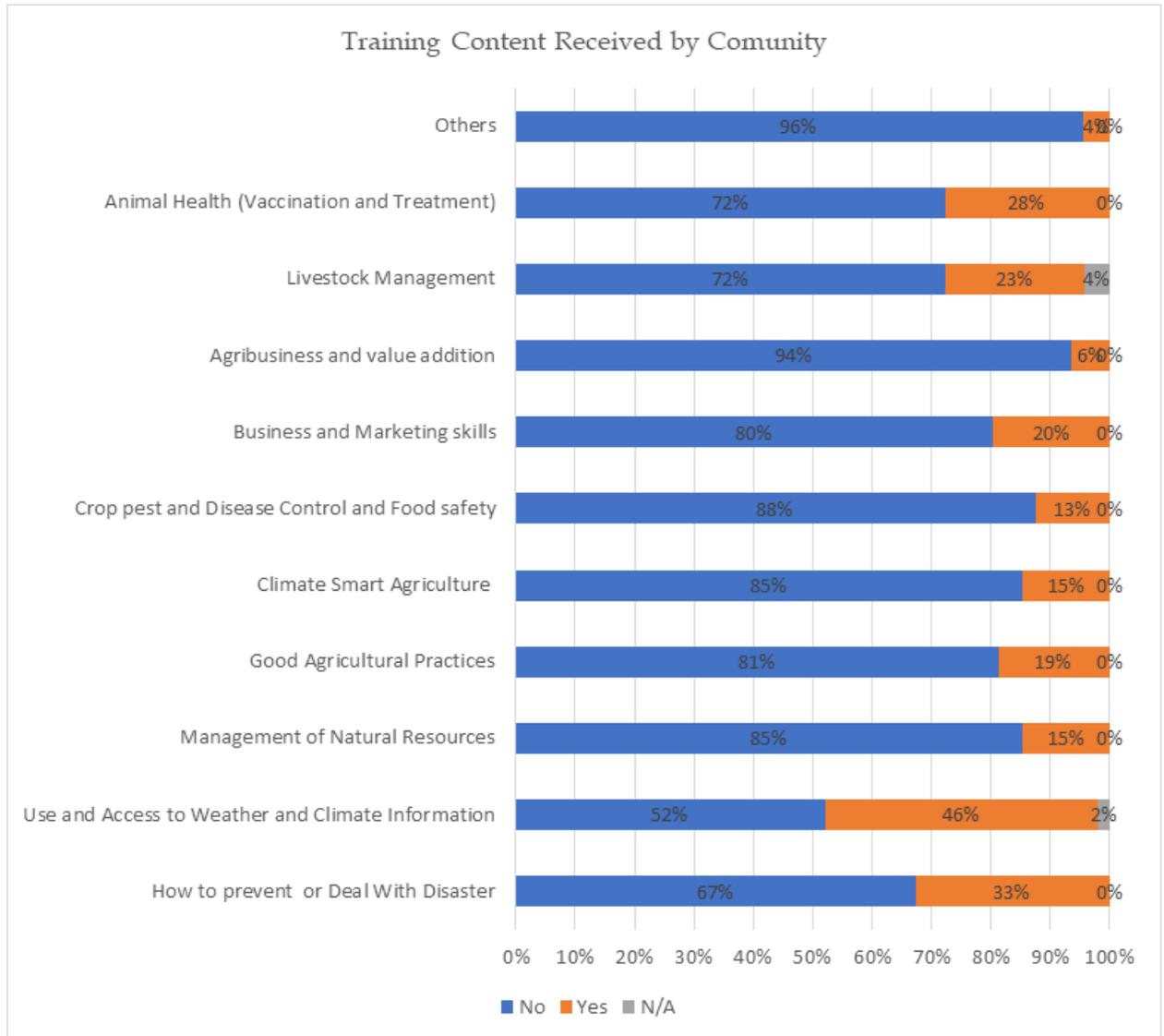
6.1 Participation in Community Social Groups

Findings indicated that the community is socialized in different ways, 40.4% participated in Community Based organizations, 21.3% attended farmer field schools, 27.1% were members of water users' associations, 31.3% were members of youth groups, 16.7% engaged in marketing associations and 17.0% were members of farmers associations. None of the community members had joined any saving groups and only 4% were in a self-group. The lack of participation in savings and credit could have a negative impact on development of local economies at the community level.



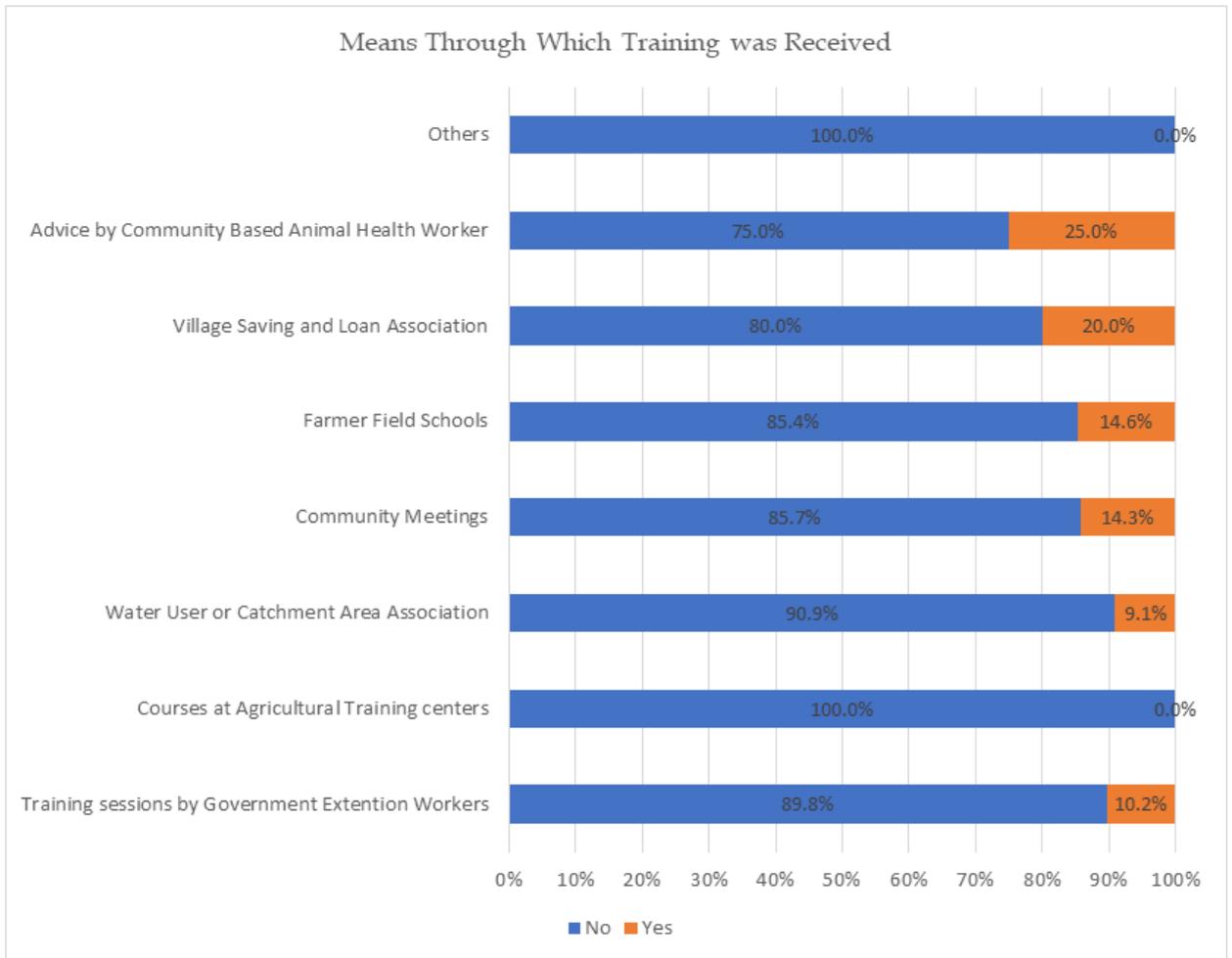
6.2 Training Content

Through the intervention by Coalition for Humanity funded by UKAID in partnership with FAO, 46% received training on use and access to weather and climate information, 33% were trained on how to prevent or deal with disaster, 28% animal Health (vaccination & treatment), 23% Livestock management and 19% received content on good agricultural practices.



6.3 Training Process

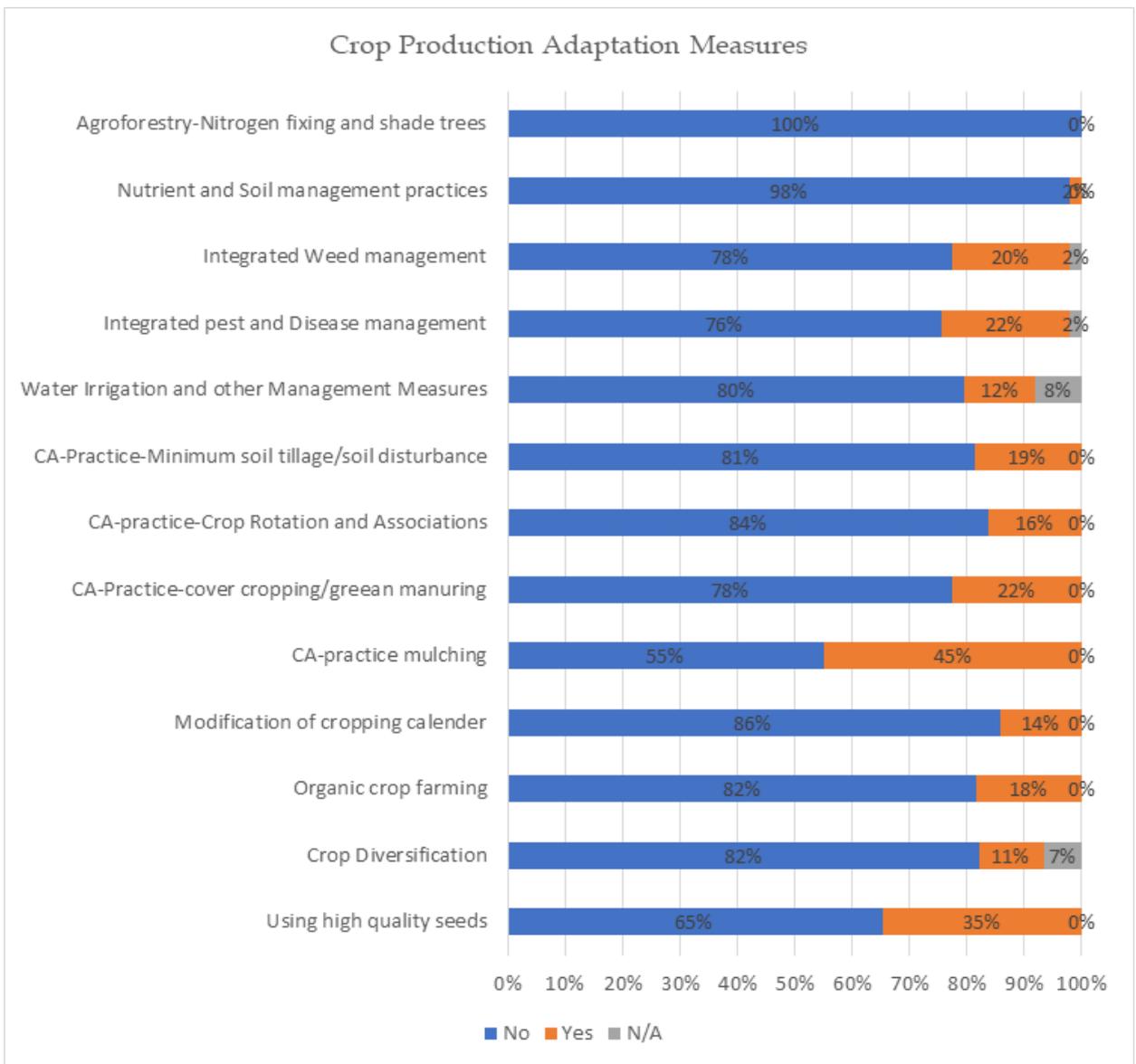
Findings revealed that 25% of community members were advised by community-based animal health worker, 14.6% were trained through farmer field schools, 14.3% attended community meeting trainings, 9.1% water users or catchment area association and 10.2% received training through government extension workers.



7.0 NEW TECHNOLOGIES, FARMING & CLIMATE ADAPTAION PRACTICES

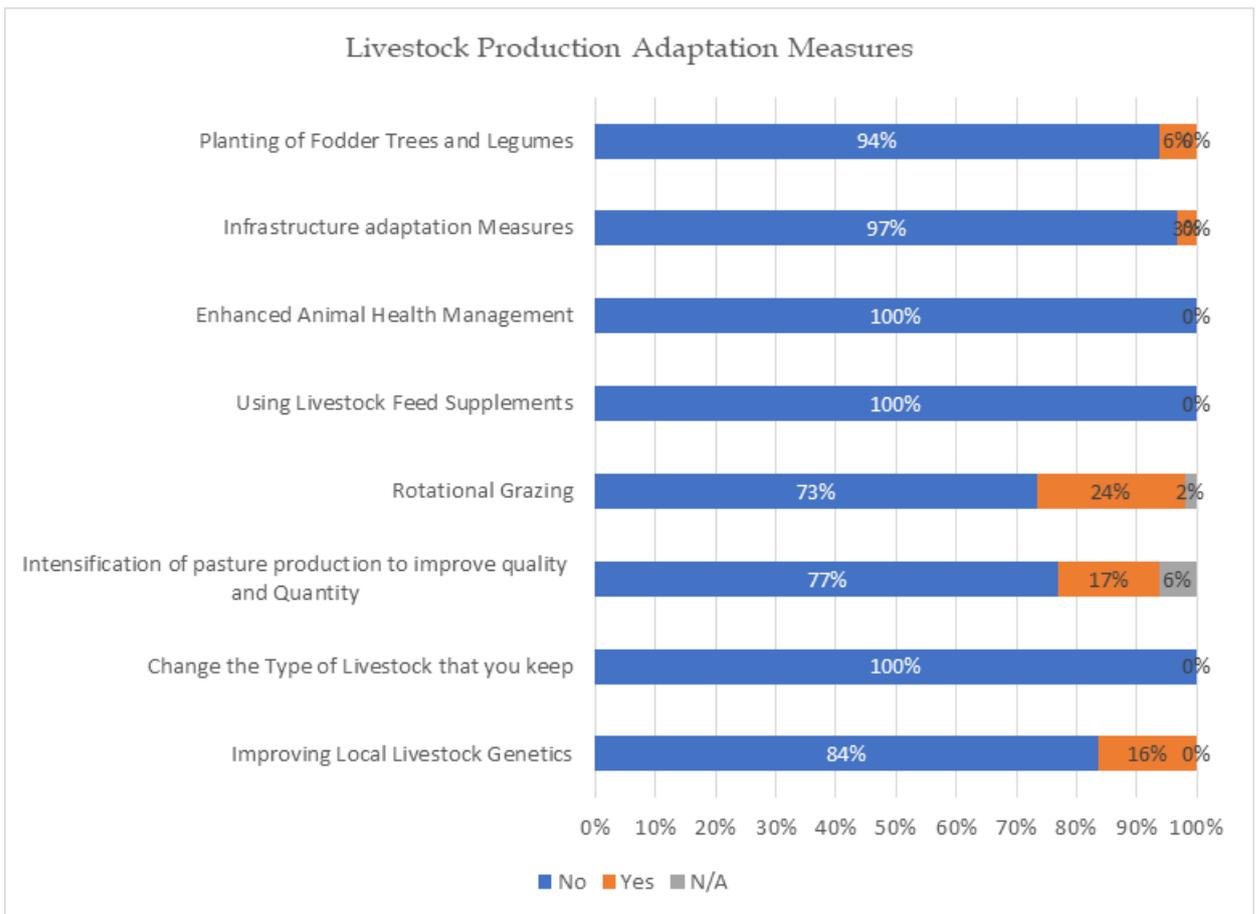
7.1 Crop production

Community members implemented a number of crop production adaptation measures, 45% practiced mulching, 35% high quality seeds, 22% did cover cropping/green manuring, 16% crop rotation and associations, 19% minimum soil tillage/soil disturbance, 12% water irrigation and other management measures, 18% organic crop farming, 22% integrated pest and disease control measures, 20% integrated weed management and least practiced crop production adaptation measure was nutrient and soil management practices at 2%.



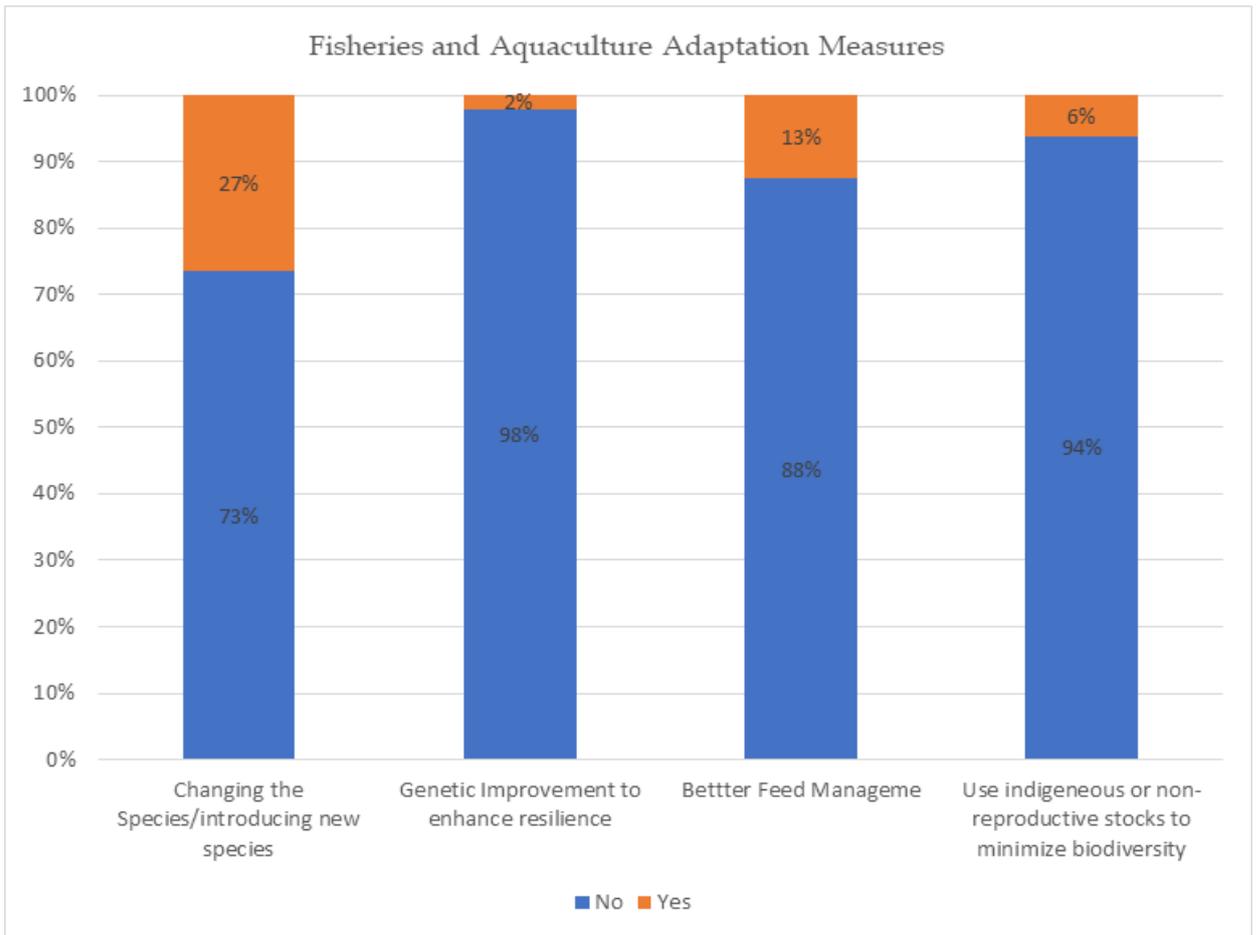
7.2 Livestock Production

Community practiced few livestock production adaptation measures. Rotational grazing was practiced by 24% of the community members, intensification of pasture to improve quality and quantity by 17% and improving local livestock genetics was practiced by 16% of community. Community members did not change the type of livestock they keep, use livestock feed supplements and enhance animal health management as methods of livestock adaptation measures.



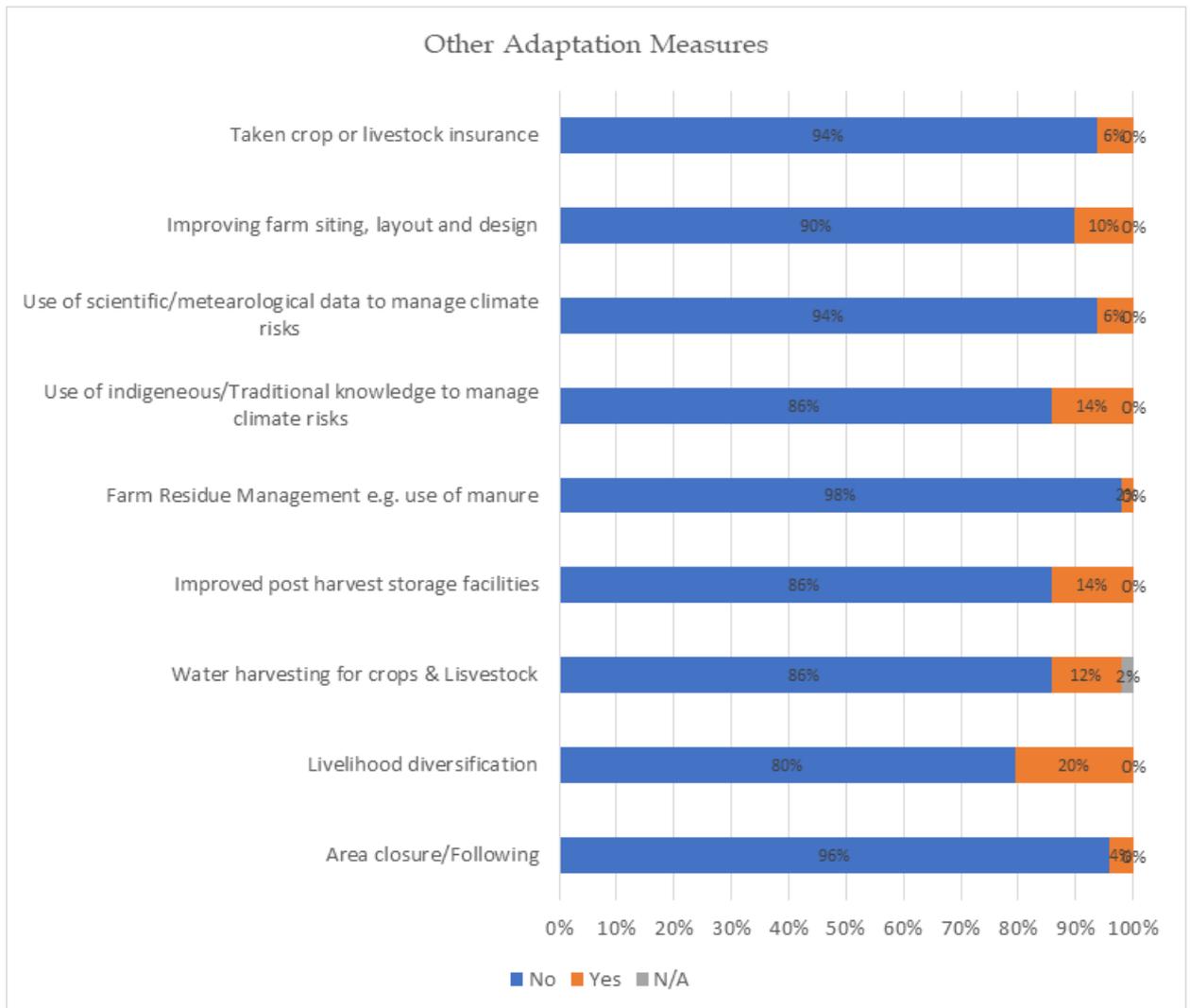
7.3 Fisheries and Aquaculture Adaptation Measures

A lot of community members did not practice fisheries and aquaculture adaptation measures. However, 27% claimed to have changed the species/introduced new species of fish, 2% did genetic improvement of fish to enhance resilience, 13% adopted use of better feed management as a measure and 6% maintained use of indigenous species or non-reproductive stocks to minimize biodiversity.



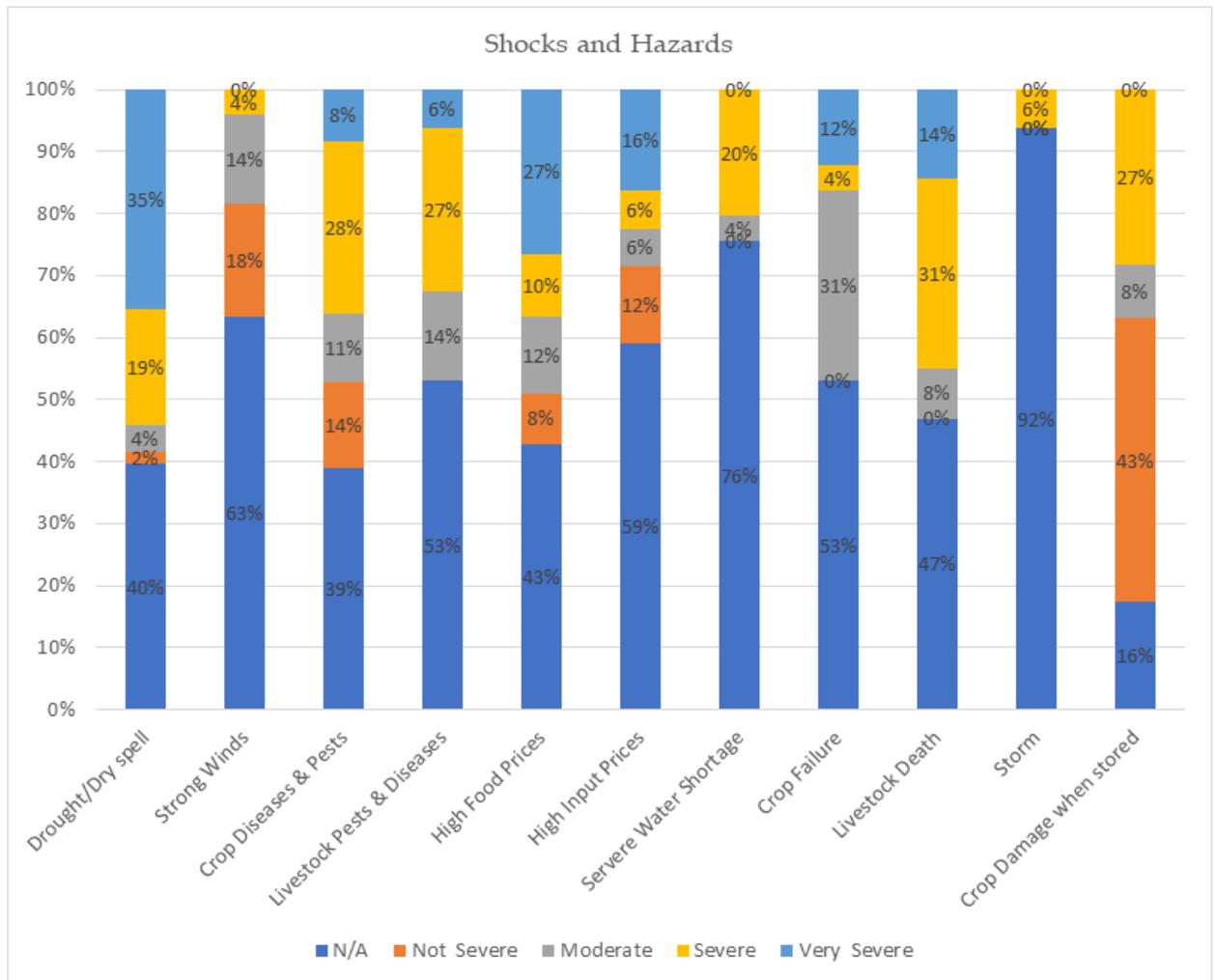
7.4 Other Adaptation Measures

The community also adopted other climate adaptation measures and 20% said they were doing livelihood diversification to cushion impacts of climate change, 12% mentioned water harvesting for livestock and crops, 14% were using improved post-harvest storage facilities and 10% said they were improving farm siting, layout and design among other adaptation measures.



7.5 Shocks and Hazards

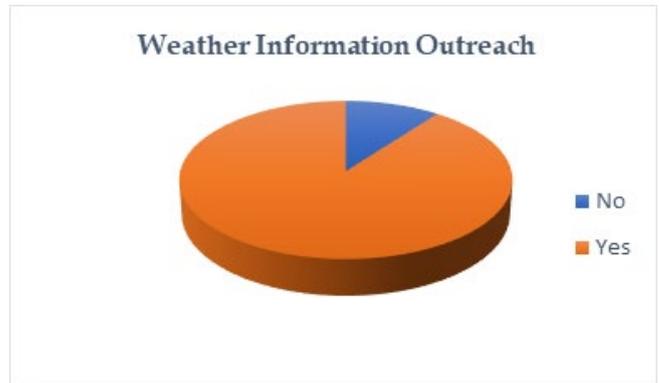
A number of shocks and hazards were reported though the severity levels varied significantly. Storm shocks were rated very severe by 92% of the residents, 76% said water shortage was severe, 63% strong winds, 59% high input prices, 53% crop failure, 40% drought, 39% crop diseases and pests and 53% livestock pests and diseases. Crop damage when stored was the least with 16% severity.



8.0 WEATHER AND CLIMATE INFORMATION

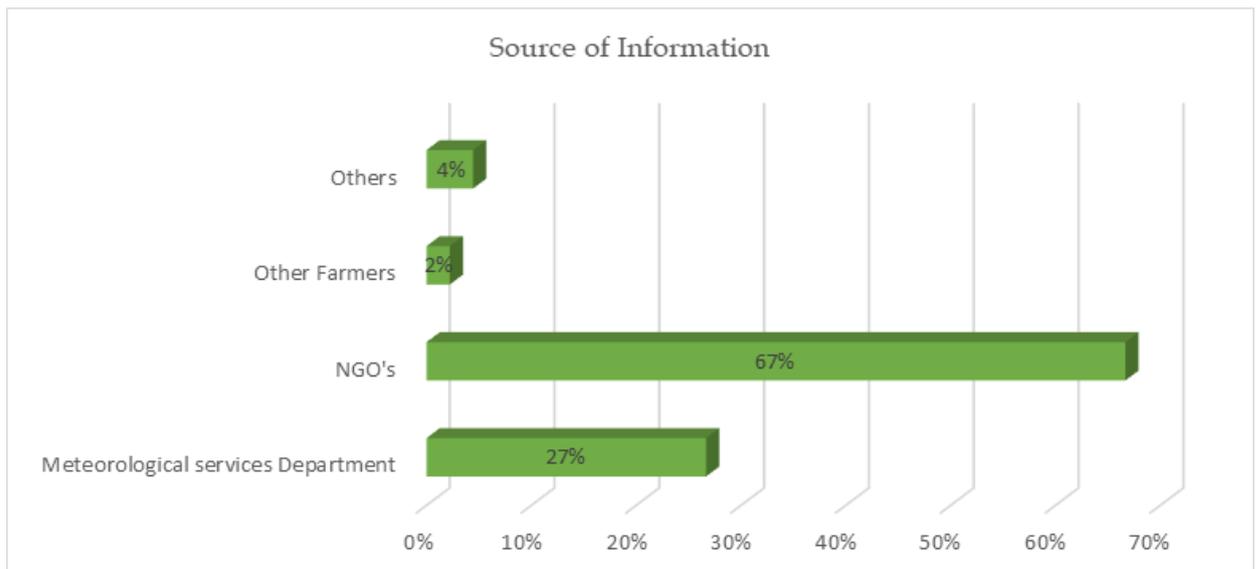
8.1 Scientific weather information

Respondents were asked if they had received any scientific information on weather and climate. Findings indicated that 90% of the community members had received scientific weather information. However, 10% had not and were not aware of any such information.



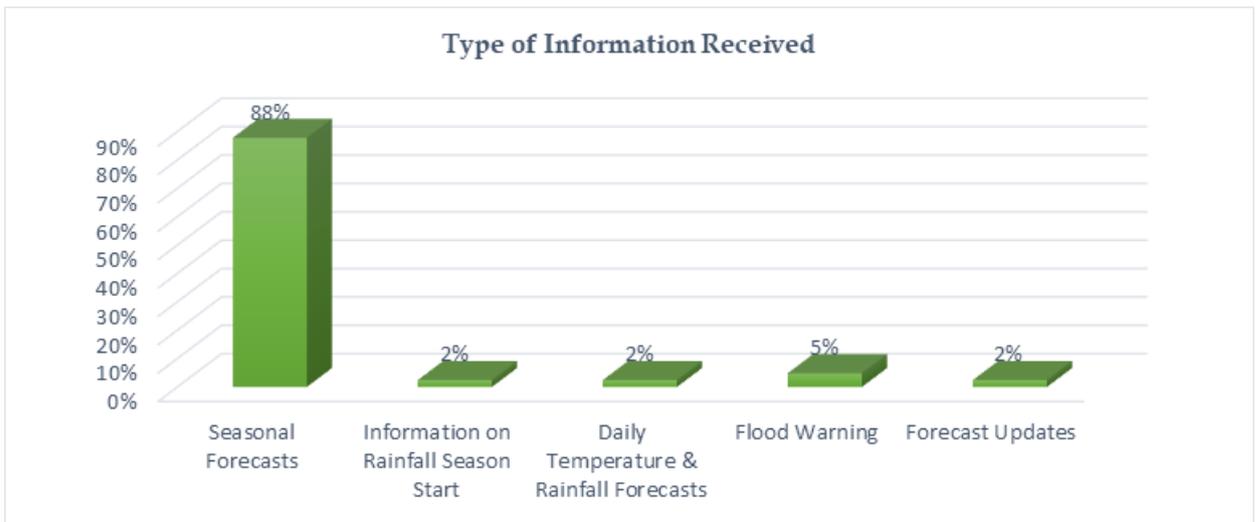
8.2 Source of Information

Findings indicated that most community members 67%, received weather and climate information through NGOs, this can be attributed to the activities by Coalition for Humanity in passing weather information. Another 27%, mentioned the Meteorological services Department as their source of information. Further findings revealed that some 2% were receiving information from other farmers while 4% were getting their information from other sources.



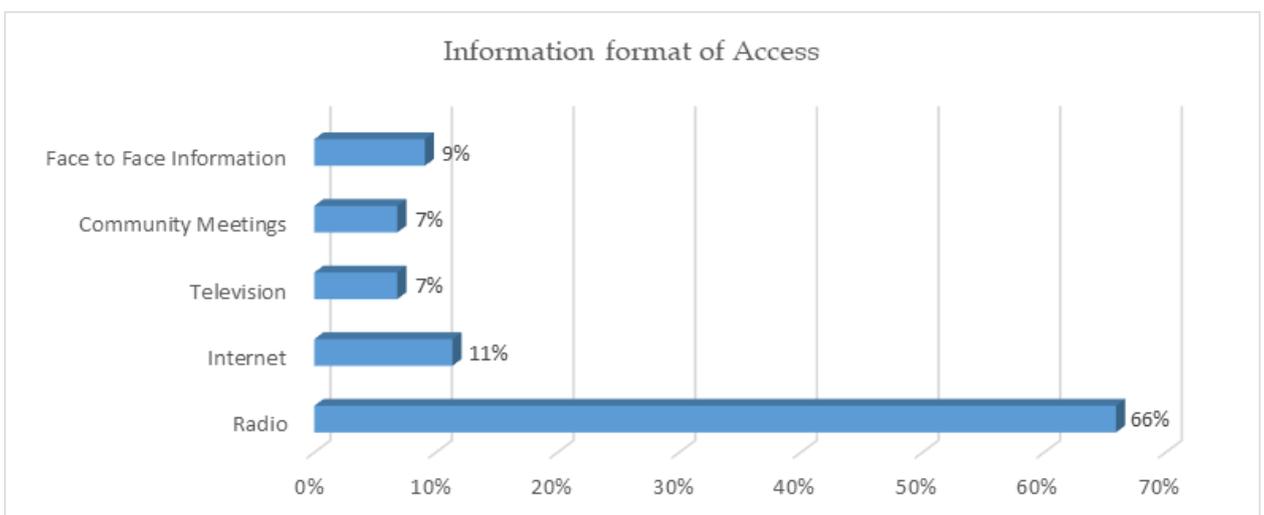
8.3 Type of information received

Seasonal forecasts were the most received type of information by 88% of the households, 5% received information on flood warning, others received information on rainfall season start 2%, Daily temperature and rainfall forecast 2%, and forecast updates 2%.



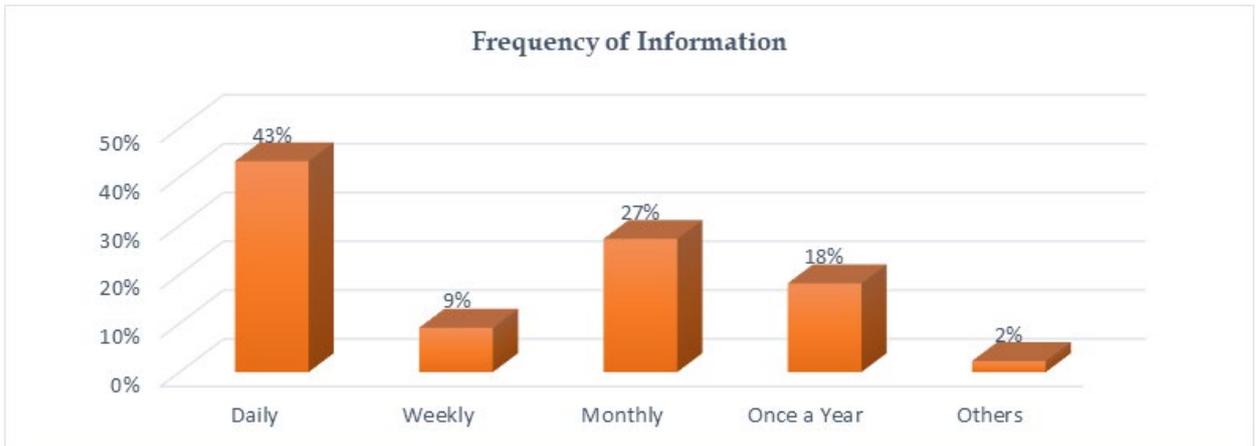
8.4 Channel of information Access

Findings indicate that 66% received information through radio. About 11% said to have received the information through the internet, 7% through the Television and community meetings and 9% claimed to have acquired information via face-to-face interaction.



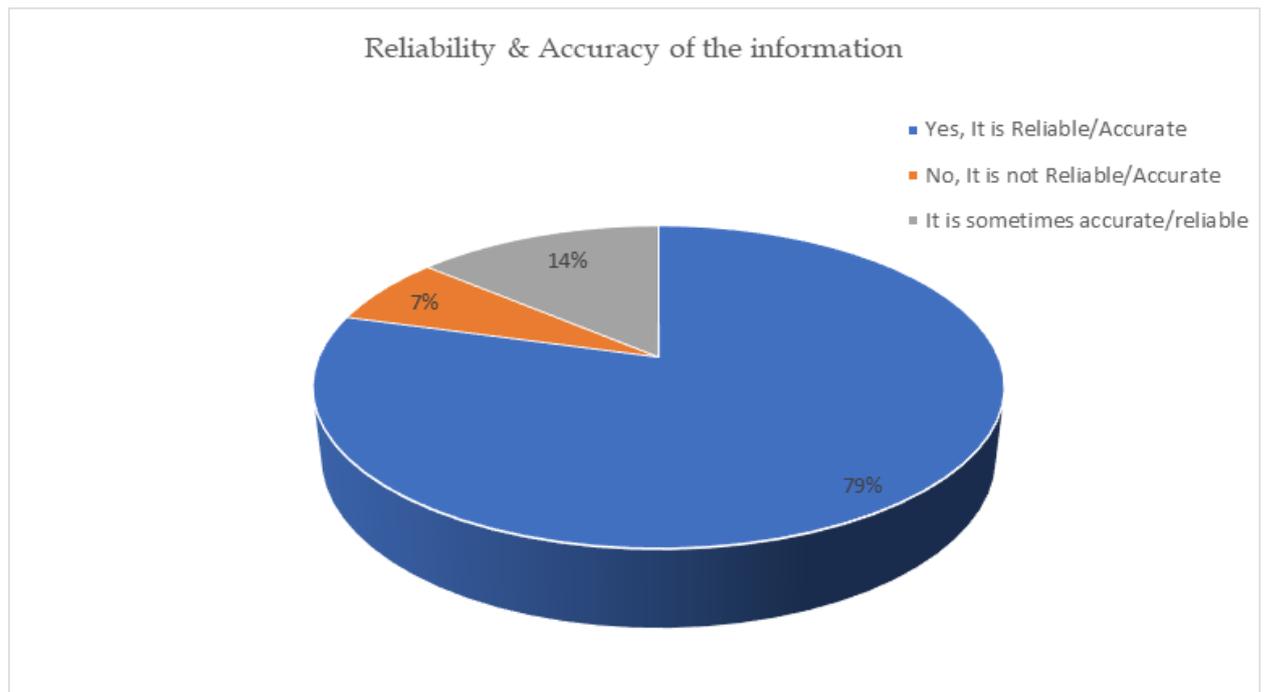
8.5 Frequency of Information

According to the findings, 43% of the information was received on a daily basis, 9% on weekly basis, 27% monthly and 18% was received once a year.



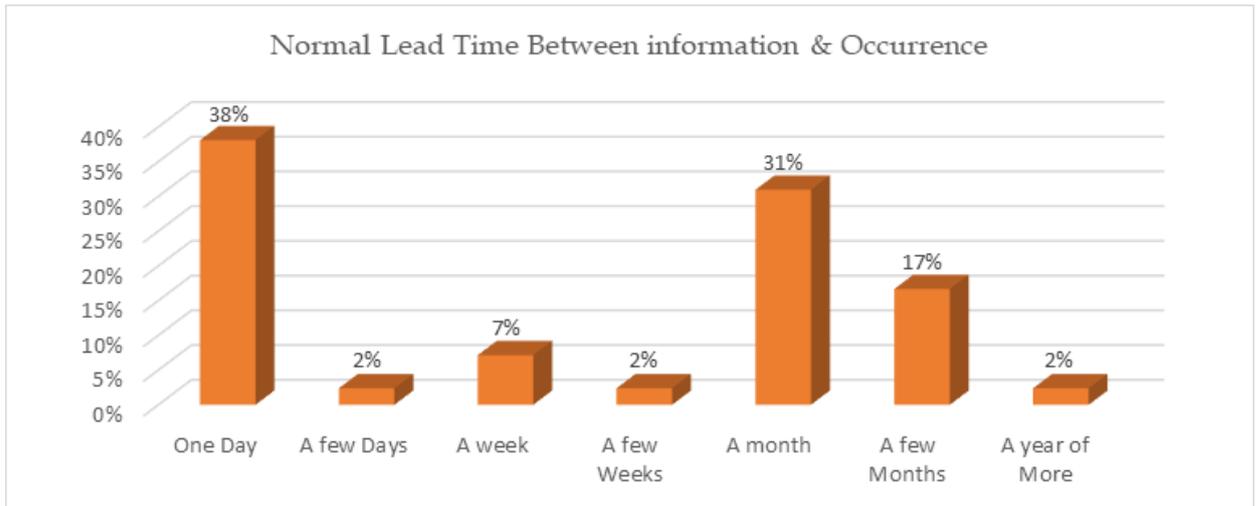
8.6 Reliability and Accuracy of the information

About 79% of the beneficiaries mentioned that the weather and climate information that was received was reliable/accurate, 14% said the information was sometimes accurate/reliable while 7% felt the information was totally not reliable/accurate.



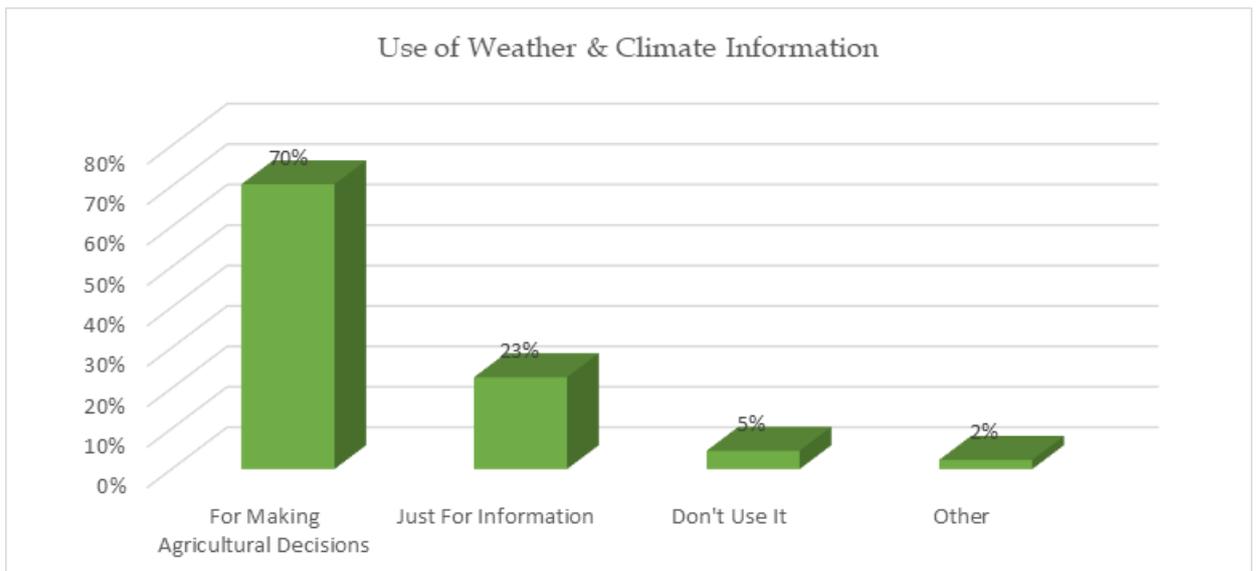
8.7 Normal Lead between information and occurrence

Normal lead time between information and occurrence according to 38% of the community members was daily, 2% said a few days, 7% mentioned a week, 2% a few weeks, 31% felt it would occur within a month, 17% a few months and 2% said it would take more than 1 year before the events would occur.



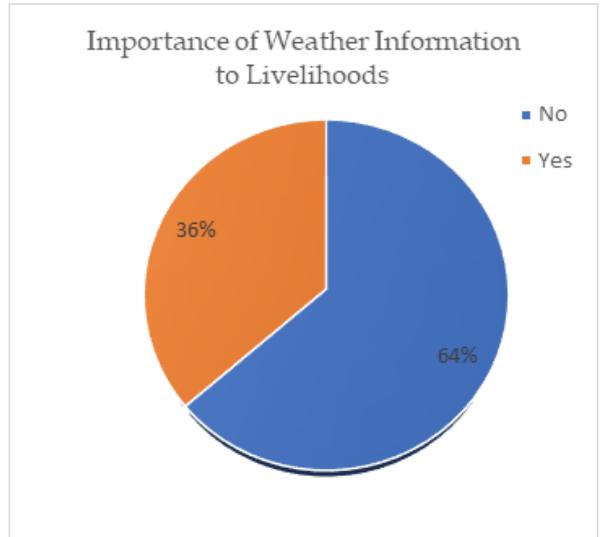
8.8 Use of weather and climate information

Majority of the community members, 70% said they used the weather and climate information they received to make agricultural decisions. However, 23% highlighted that it was just for their information while 5% said they did not completely use the information in any decision making.

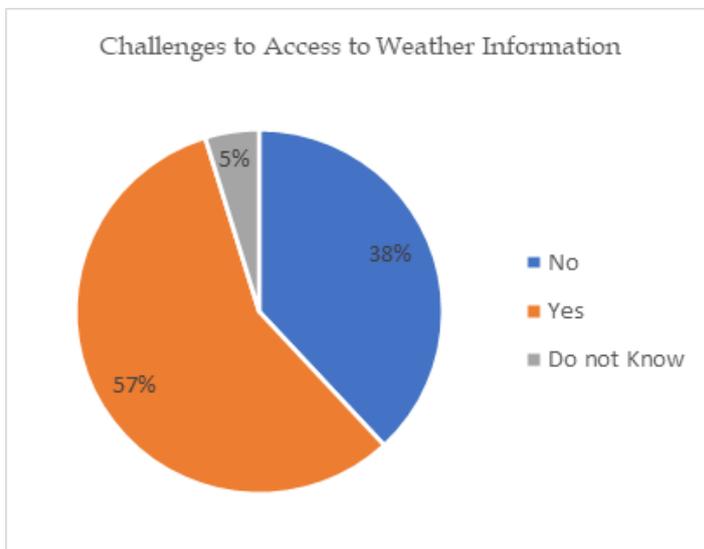


8.9 Importance of Weather Information

To 36%, dissemination of weather information was key in defining the community way of livelihoods. Majority, 64% of the community members however did not see the direct importance of the weather information with regard to livelihoods. According to the 36%, weather information was useful because farmers would be able to acquire information on how to plan their Agricultural activities, making decisions about season change as well as the type of crops to be planted so as to avoid loses.



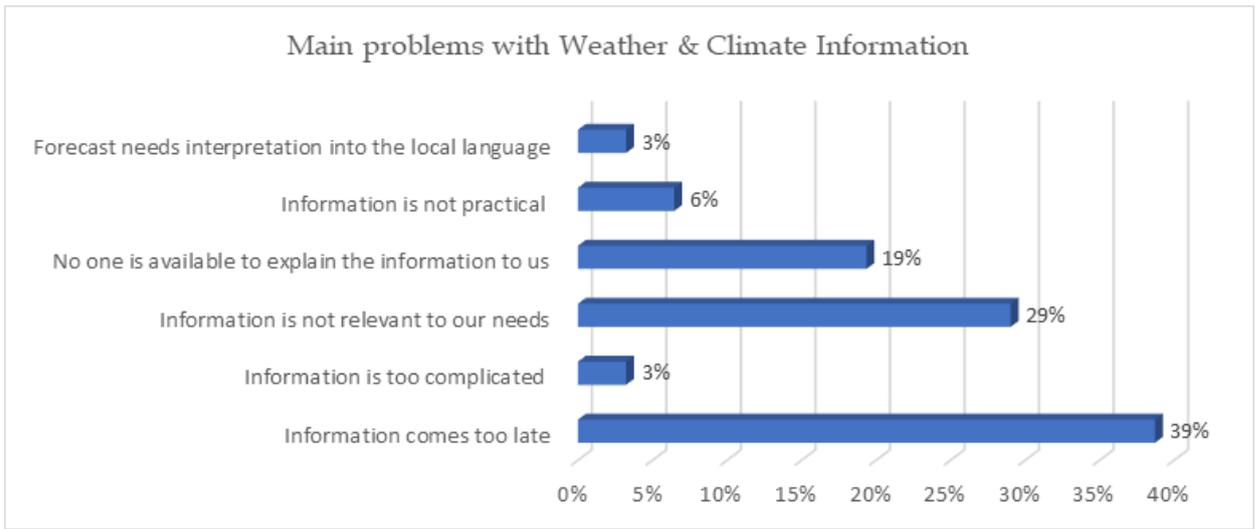
8.10 Challenges to Access to Weather and Climate Information



From the findings, 57% of the community members experienced challenges accessing weather information. This was however not the case to 38% though it was noticed that about 5% didn't know if they had any challenges towards accessing weather and climate information

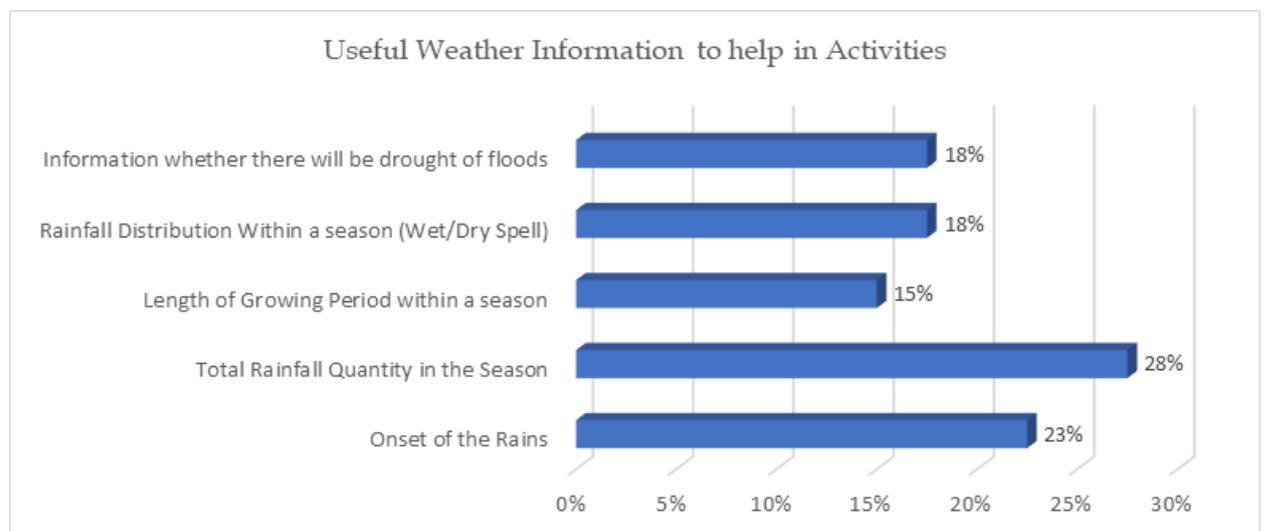
8.11 Main problems with weather & Climate Information

The main problem with weather and climate information according to majority of the community members, 39% was that the information came too late when the impacts had already been experienced. To 29%, the information was not relevant to their needs while 19% said there was no one to really explain the information to them. About 6% said the information was not practical and 3% felt the forecast needed interpretation into the local language.



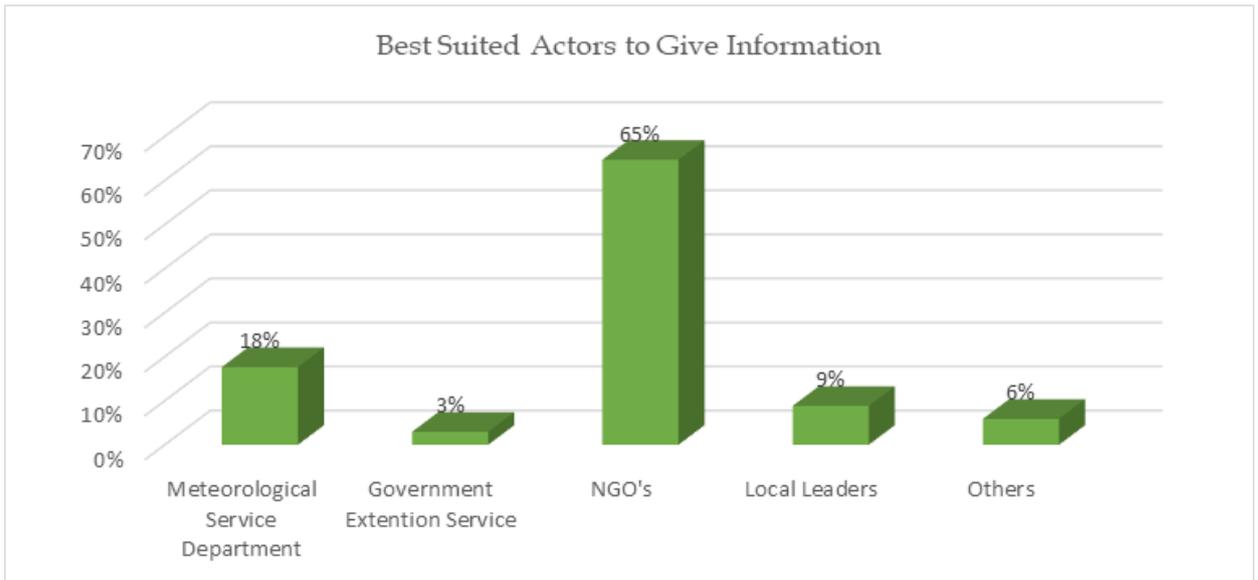
8.12 Type of weather information that can help in activities

Most community members, 28% felt that weather information that would relate to total rainfall quantity in the season would help them properly plan their daily activities. To 20%, information on the onset of rains would be good, 15% preferred length of growing period within a season and 18% mentioned rainfall distribution within a season (wet/dry spell) and information whether there was to be drought or floods.



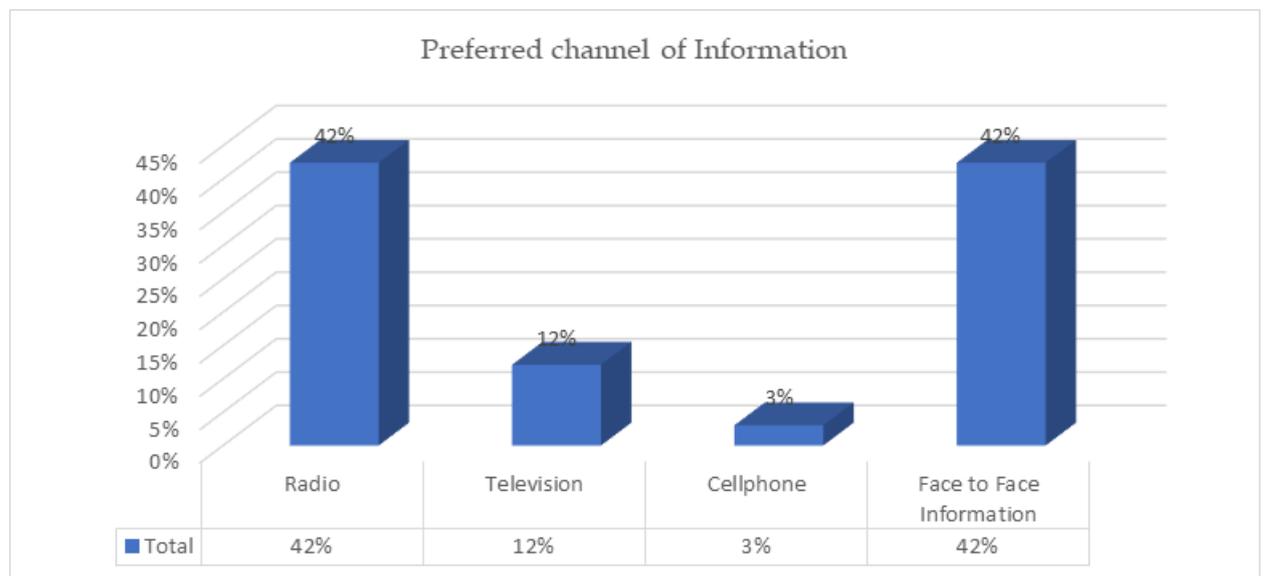
8.13 Best suited actors to give information about weather and climate

According to 65% of the community members, NGOs were best positioned to relay all information about weather and climate. However, 18% felt meteorological services departments would do it better. 3% said the government extension service and 9% preferred the information coming through the Local Leaders.



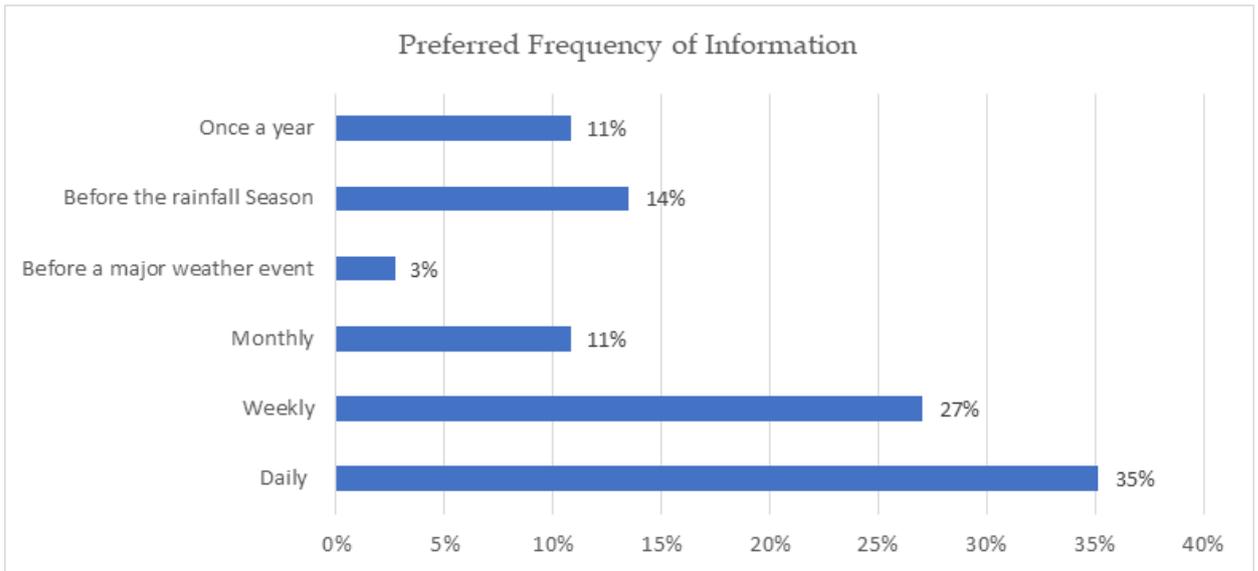
8.14 Preferred channel of communication

The radio was the most preferred channel of communication by 42% of the community members. The same preference 42% was given to face to face way of information delivery. However, some community members 12% mentioned the TV and 3% preferred the cell phones as better channels of information delivery.



8.15 Preferred frequency of Information

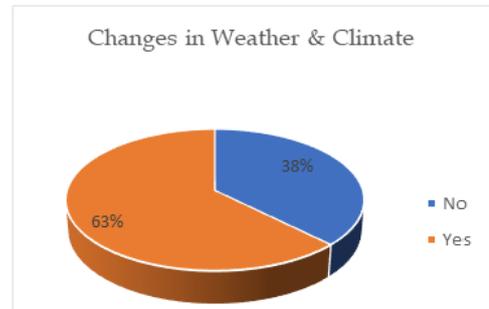
About 35%, majority of the community members were comfortable with daily frequency of information delivery, 27% preferred weekly, 11% monthly, 3% before major weather events, 14% before the rainfall season and 11% preferred receiving the information once a year.



9.0 CLIMATE CHANGE

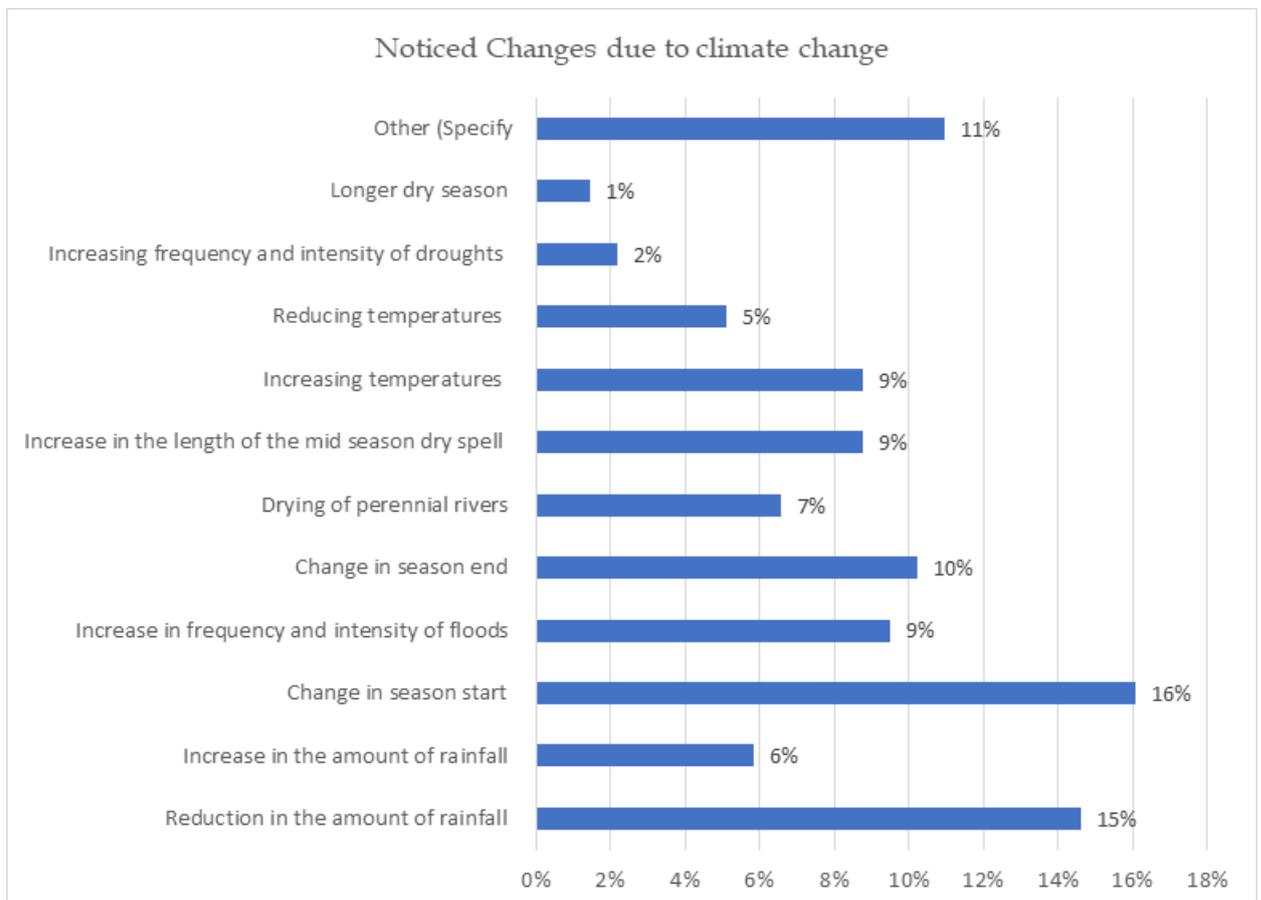
9.1 Changes in Weather and Climate

The survey sought to find out if the community had experienced in changes in climate. The findings revealed that majority of the community members, 63% had experienced changes in weather and climate. However, 38% said not have had any feeling of climate change.



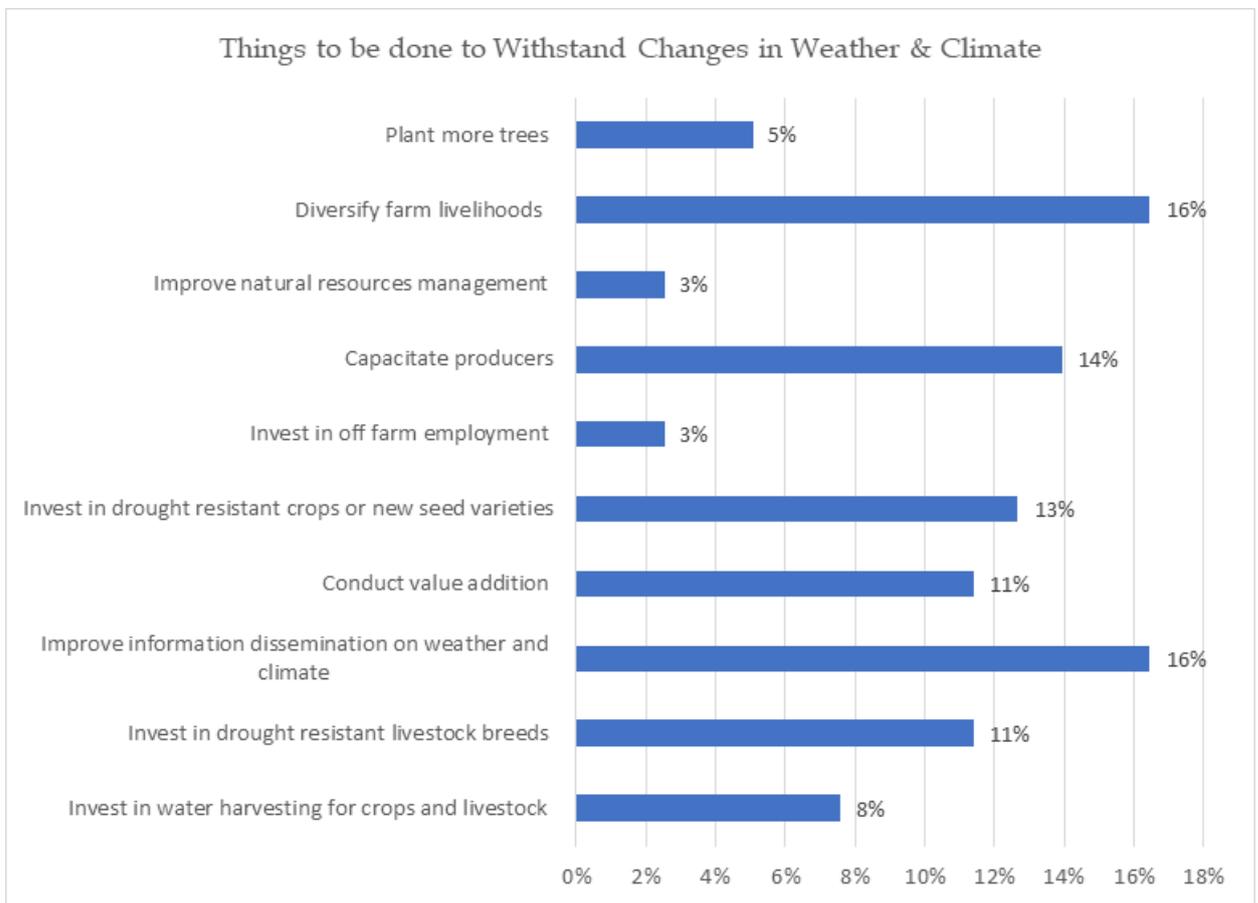
9.2 Changes Noticed as a Result of Climate Change

A number of indicators were sighted as evidence to climate change. 15% said reduction in the amount of rainfall, 6% could feel increase in the amount of rainfall, 16% (majority) had seen change in season start, 9% increase in frequency and intensity of floods, 10% change in season end, 7% drying of perennial rivers, 9% increase in the length of the mid-season dry spell, 9% increasing temperatures, 5% reducing temperatures, 2% increasing frequency and intensity of droughts and 1% said to have noticed longer dry seasons.



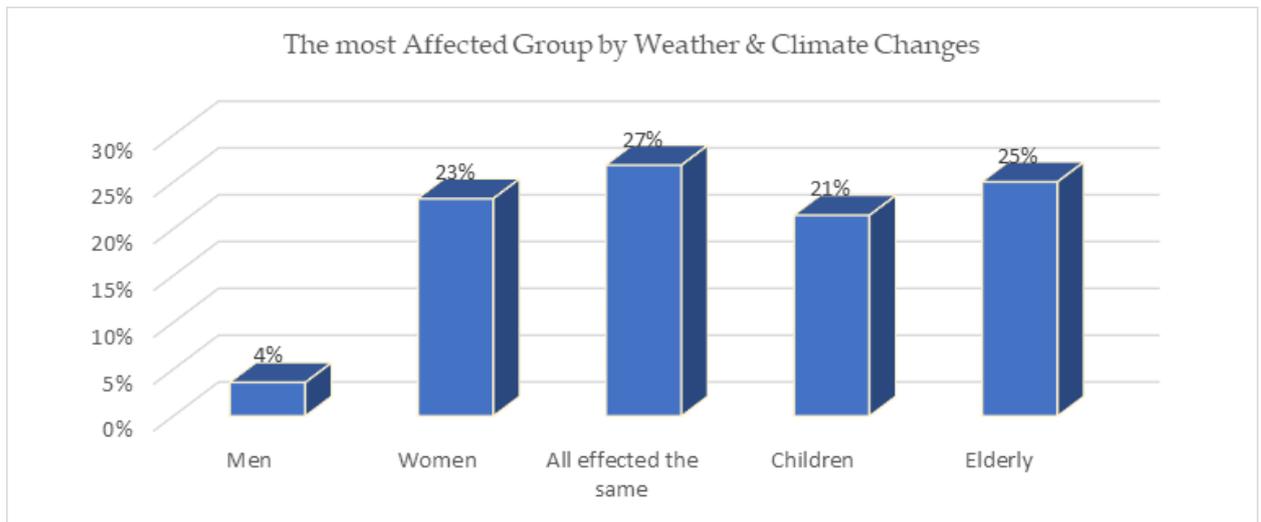
9.3 Things to be done to Withstand Changes in Weather and Climate

Since weather and climate change were an evident phenomenon to majority of the community members, 16% proposed the need to diversify farm livelihoods and improve information dissemination as a means of withstanding the impacts. 8% mentioned investing in water harvesting for crops and livestock, 11% proposed investing in drought resistant livestock breeds, 11% said conducting value addition of produce, 13% need to invest in drought resistant crops or new seed varieties, 3% had thoughts of investing in off farm employment, 14% proposed on the need to capacitate the producers, 3% said there would be need to improve natural resource management and some 5% reiterated the need to embrace planting of trees. Findings however indicated that majority of the households planted maize and sorghum and also kept cows and goats



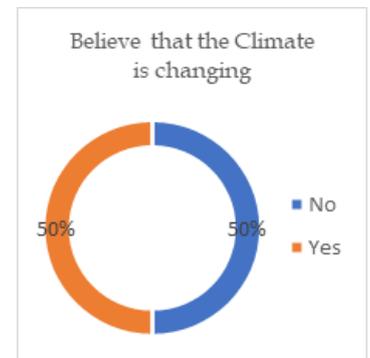
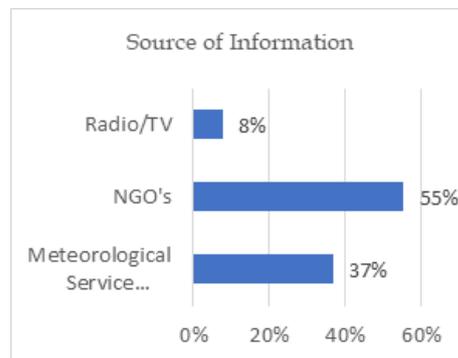
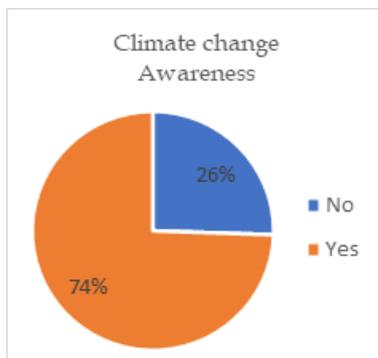
9.4 The most Affected Group of People

Findings revealed that all groups of people, 27% had severe impacts of climate change. However, the elderly had been affected by 25%, children at 21%, women 23% and men (the least affected) felt the impact at 4%.



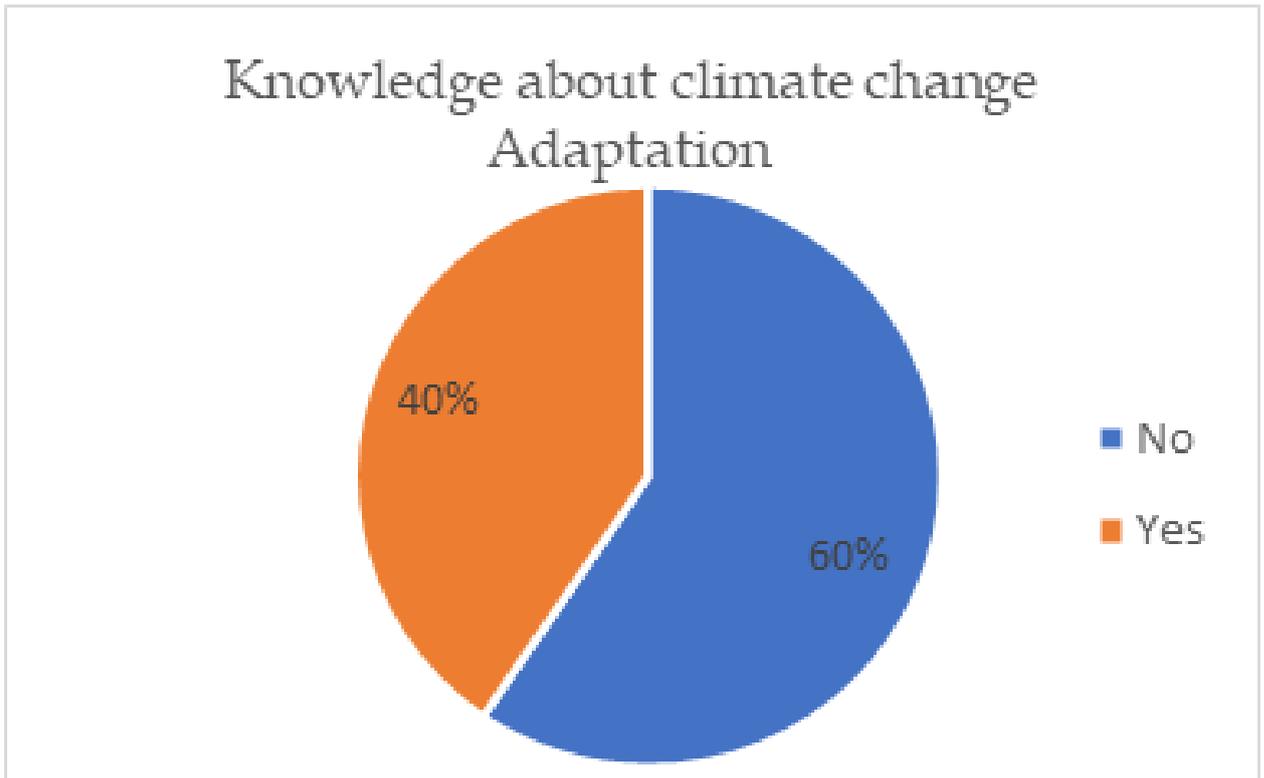
9.5 Awareness About Climate Change, Source of Information and Believe that climate was indeed changing

Majority of the community members, 74% were aware about climate change, 26% were not aware about climate change. According to 55% of the community members, NGOs were the main source of the information, 37% mentioned meteorological departments and some 8% said their source of information was through the radio and TV. It was further found that, 50% of the population believed that there was climate change while another 50% did not believe on climate change.



9.6 Knowledge about climate change Adaptation

Findings indicated that 40% of the community were aware about climate change adaptation while 60% were not aware. Building of water dykes are relocation to high grounds were some of the adaptation measures mentioned by community members.



10.0 CONCLUSION

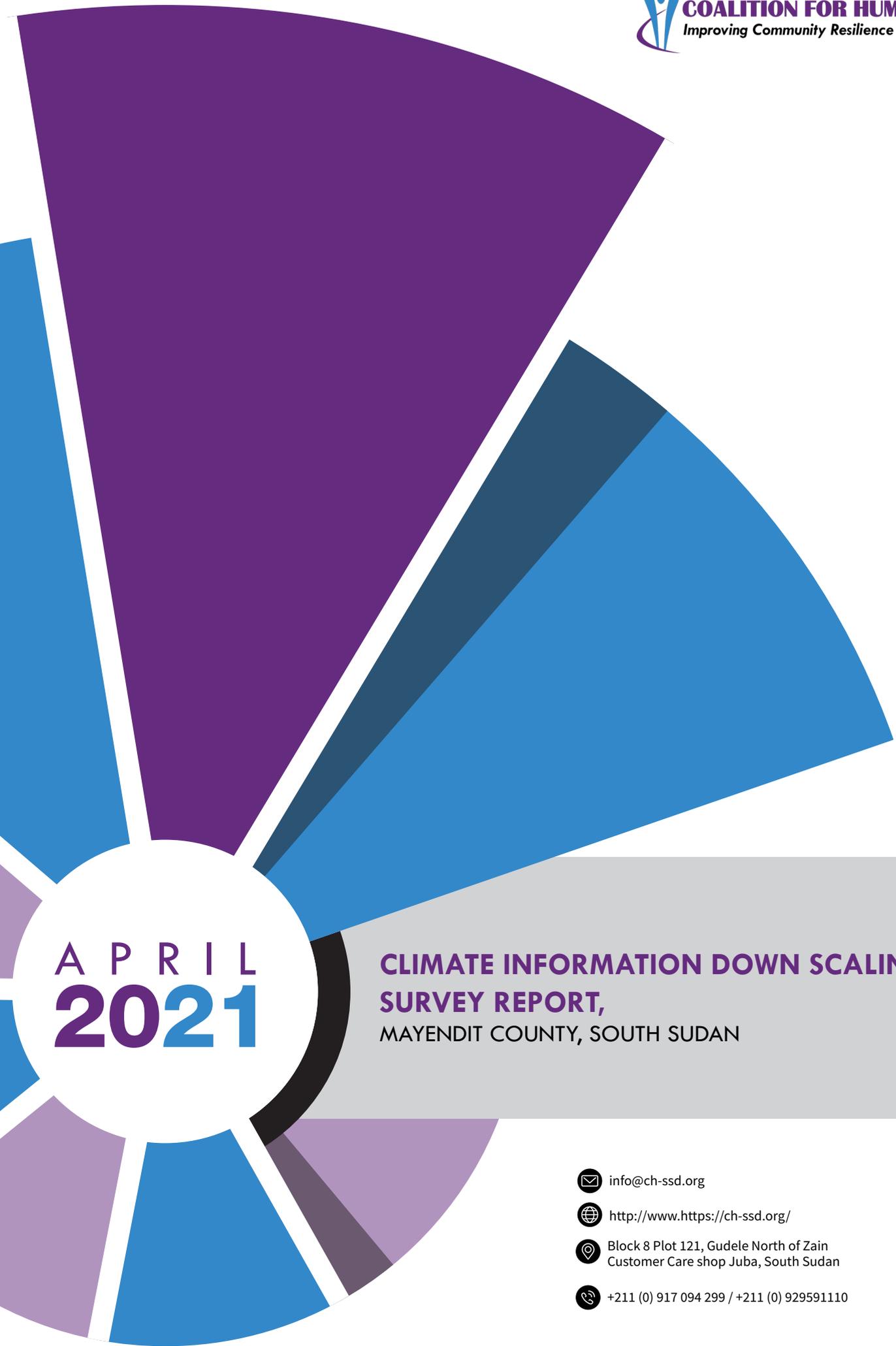
Floods have affected more than 50% of the population in Mayendit County of South Sudan, this has led to loss of livelihoods, animals drowned and crops were swept away. Households still depend on aid for livelihoods. For the few who engage in fishing and farming, the produce is not much, very little income is realized from farm produce. The community lacks access to essential services, government offices, healthcare, secondary schools are out of reach for many. The households do not have access to financial services, majority are not part of any savings and credit society, they are mostly engaged in borrowing food items. The households are not keen on dietary intake, majority do not take varieties, vegetables are essential but are less consumed, households consume mostly cereals, and this can be attributed to the distribution of aid by humanitarian partners. Households have enough land for cultivation, with basic tools.

Climate change adaptation remains a challenge to most community members. Due to low literacy levels and lack of scientific weather information, most community members lack correct information about prevailing weather patterns. Over time, the community has been relying on traditional methods of weather prediction which currently doesn't relay accurate information due to unusual and/or inconsistent global weather patterns. This hence puts the community into the risk of being caught unaware by extreme weather elements such as floods which are a risk to lives and property.

There is an overreliance on NGOs for essential information, households felt that NGOs are the best to pass information. The information on climate and weather changes has not been available, neither was it reliable, sometimes it came when the negative impact of floods or drought have already occurred. The information of climate information and adaptation of new technologies was useful, but the project was too short to measure impact.

11.0 RECOMMENDATIONS

- 1.** There is need to improve access to essential services like schools, hospitals, government services, water, sanitation and agricultural extension services in Mayendit county
- 2.** There is need to enhance the spirit of cooperation through the farmers' cooperative societies movements and savings and credit cooperatives, village savings model in order to improve the economic status of the households.
- 3.** There is need to build capacity of farmers on various crops, animal produce and their link to health and nutrition in order to improve balanced dietary intake.
- 4.** There is need to encourage crop and animal production beyond subsistence, and encourage households to practice farming as a business in order to improve their incomes.
- 5.** There is need to open up markets, connect farmers in Mayendit county to external markets beyond the county.
- 6.** There is need to scale up Climate Information Downscaling interventions to enrich the community with weather and climate information. This would include the need to diversify channels of information delivery through involvement of other actors a part from the NGOs who dominantly disseminate weather and climate information.
- 7.** There is need to translate weather and climate information into the local language for quick comprehension and adoption by the community members.
- 8.** There is need to sensitize and guide the community through various climate adaptation mechanisms that would enable them survive the shocks and hazards of climate change.
- 9.** There is need to capacity build the community on diverse means of livelihoods to serve as alternatives for survival in case of loses which would come as a result of impacts of climate change.



A P R I L
2021

**CLIMATE INFORMATION DOWN SCALING
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