



OFDA_ ENDLINE EVALUATION REPORT_ WEST POKOT JULY 2021



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Background

Most families in West Pokot County depend on agriculture, livestock and livestock by-products as their main source of income and livelihoods in the urban and rural Households with the county having three main livelihood zones namely: pastoral, agro-pastoral and mixed farming composed of 33%, 37% and 30% respectively. 69% of the households in West Pokot County derive their food and income from livestock and livestock by-products. The prolonged heavy rainfall experienced in West Pokot led to poor performance of the season because of heavy rainfall that led to water logging in mixed and agro-pastoral livelihood zones, reducing crop production. In addition, most irrigation infrastructure was destroyed, and high incidences of pests and diseases reported, notably desert locusts. Cases of livestock disease outbreak like Foot and Mouth Disease (FMD) and Lumpy Skin Disease (LSD) were prevalent in various parts of the county.

A recent evaluation of the systems revealed various gaps which include: under-reporting of zoonotic diseases, lack of integration due to challenges in data sharing, which itself may be a consequence of technological barriers, inadequate number of trained personnel, lack of harmonization of reporting among different sectors making it harder to then collate and interpret. Further risky practices such as drinking unpasteurized milk, eating uninspected meat and failure to vaccinate animals has led to outbreaks of zoonotic diseases in the county such as anthrax, rabies and brucellosis. Due to the vastness of the County, the veterinarian officers may not respond to immediately save livestock and prevent livestock disease outbreaks. As a result, the communities are unable to meet the veterinary service fee for logistical arrangements required by the County Veterinary Department to vaccinate their animals.

In response to this, Action Against Hunger through the Office of U.S Foreign Disaster assistance funding (OFDA) (15-08-2020 to 15-09-2021) through livestock and agriculture interventions which included training of TOTs and sensitization of Community Disease Reporters and Community Health Volunteers on One Health Approach, Sensitization of the Community on Diseases and Animal Husbandry. Other interventions on livestock include training of Livestock Technicians and Sensitization of Community Disease Reporters on Participatory Disease Surveillance, Support timely response, vaccination and treatment of livestock in hard to reach areas of West Pokot County. In agriculture, Action Against Hunger intends to support the community through poultry farming at community level, training on Good Agricultural Practices (GAP) with focus on crop diversification and utilization of nutritious food at household level and promotion of beekeeping through provision of modern/improved hives.

1.1 Objective

To assess the impact of the food security and livelihood interventions supported by Action Against Hunger in 8 Mother to mother support group members which include the food security situation, nutrition status of children 6-59 months and PLWs in Pokot South, Pokot Central and Pokot North.

1.2 Specific objectives

To determine:

- The socio economic status of the households
- Whether the households are food insecure
- The nutrition status of children 6-59 months and pregnant and lactating women
- The Mother to mother support groups (mtmsg) members are able to measure, interpret MUAC (Mid Upper Arm Circumference) colours and refer cases.

2.0 Methodology

2.1 Study Population

The study population included eight mother to mother support groups (mtmsgs) in Pokot south(3), Pokot south(3) and Pokot North(2).

2.2 Sampling method and sample size determination

The survey incorporated all members of the targeted mtmsgs that benefited from the seed funds as well as trainings and sensitizations to improve their livelihood. The final sample size was 178 households.

2.3 Data Collection

Data Collection was done for 4 days (8th to 11th July 2021) by four teams composed of four members (three enumerators and 1 team leader). This was done in strict adherence to COVID-19 preventive measures as stipulated by the MOH. The teams were trained for a day prior to field work on the survey objectives, methodology, sampling methods, data collection tools, Open Data Kit (ODK) data collection process as well as interviewing skills as part of data quality assurance measures. A role-play was included in the training to give the teams practical skills on data collection.

2.4 Data Analysis

All the quantitative data was analyzed using Excel and SPSS.

2.5 Ethical consideration

Informed consent was obtained from the study participants after explaining the purpose of the study. Participation of all respondents in the assessment was on voluntary basis, respect, dignity, confidentiality, and freedom of each assessment participant was maintained during and after the assessment.

3.0 Key Findings and Results

3.1 Socio demographic characteristics

Information regarding the gender of the respondent, age, population distribution in the household, residency status, education level and the sex of the household head were assessed in order to map the demographic characteristics of the project target beneficiaries. (Table 1)

Table 1: Socio demographic characteristics

| Characteristic | | Frequency | Percent (%) |
|--|----------------|-----------|-------------|
| Household headship | Male | 147 | 82.6 |
| | Female | 31 | 17.4 |
| Household residency | Resident | 178 | 100 |
| Pay for house | Yes | 3 | 1.7 |
| | No | 175 | 98.3 |
| Incidence of adult premature death in household | Yes | 49 | 27.5 |
| | No | 129 | 72.5 |
| Age of respondent | Above 55 years | 21 | 11.8 |
| | 18-24 years | 26 | 14.6 |
| | 25-34 years | 69 | 38.8 |
| | 35-44 years | 36 | 20.2 |

| Characteristic | | Frequency | Percent (%) |
|------------------------|-----------------------|------------|-------------|
| | 45-54 years | 26 | 14.6 |
| Marital status | Divorced | 1 | 0.6 |
| | Married | 157 | 88.2 |
| | Separated | 2 | 1.1 |
| | Widowed | 18 | 10.1 |
| Education level | Primary (class 1 - 8) | 94 | 52.8 |
| | Secondary (form 1 -4) | 14 | 7.9 |
| | Tertiary | 15 | 8.4 |
| | None of the above | 55 | 30.6 |
| Total | | 178 | 100 |

3.2 Household Composition

The average household composition was 7 members (mean 7.46 ± 2.909) with the minimum number being 2 members and maximum number being 16 members. The average number of males per household was 3 (mean 3.76 ± 2.064) with a minimum of 0 and a maximum of 10. On the other hand, average number of female members was 3 (mean 3.67 ± 1.628) with the minimum number being 1 and the maximum being 8. 77% (n= 137) of the households had children under 5 years of age, the average number of children per household being one child (mean 1.65 ± 0.723). The maximum number of children per household was 3 while the minimum number was 1. The number of households with children aged 6-59 months was 130 (73%).

16.3% (n=29) of the households reported that a child had come to live with them in the recent past whereas 83.7% (n=149) did not. These children were in the present household due to reasons such as death of the caregiver (24.1%), lack of access to food (13.8%) and some had reported that the parent had left home (27.6%). Other reasons (34.5%) cited include visitation, relatives, coming to help with childcare and as well as going to school.

4.0 Households source of income, expenditure, savings and borrowing

4.1 Source and predictability of income

The main source of income was sales from farm products (47.8%, n= 85), followed by salaries and/or wages (17.4%, n=31), business (21.3%, n=38) a significant increase from what was reported during baseline 13.9% (n=23). This is an indication that some of the MtMSG members had started practicing what they were trained on IGAs through the support of Action Against Hunger. Other sources of income included rental income and interest and remittances (10.7% n=19) a 7% increase from what was reported during baseline. Majority (42.1%, n=75) reported that their income was predictable but changes dramatically depending on the season, while 33.1% (n=59) reported predictability with slight changes depending on the season, 19.7% (n=35) unpredictability and only 5.1% (n=9) having a predictable source of income.

Table 2: Sources of Income

| Sources of income | Baseline | | Endline | |
|----------------------------------|-----------|---------|-----------|---------|
| | Frequency | Percent | Frequency | Percent |
| Salaries/wages/commission | 35 | 21.1 | 31 | 17.4 |

| | | | | |
|--|-----|------|-----|------|
| Income from business | 23 | 13.9 | 38 | 21.3 |
| Remittances (money received from people living elsewhere) | 0 | 0 | 3 | 1.7 |
| Grants | 0 | 0 | 2 | 1.1 |
| Sales of farming products and services | 105 | 63.3 | 85 | 47.8 |
| Other income sources e.g rental income, interest | 3 | 1.7 | 19 | 10.7 |
| Total | 165 | 100 | 178 | 100 |

4.2 Ability to meet basic needs.

On the ability of households to meet basic needs, which included food, shelter, education and health care, most of the households (78.7%) stated that they usually pay for food but struggle to make lump sum payments for health and education expenses.

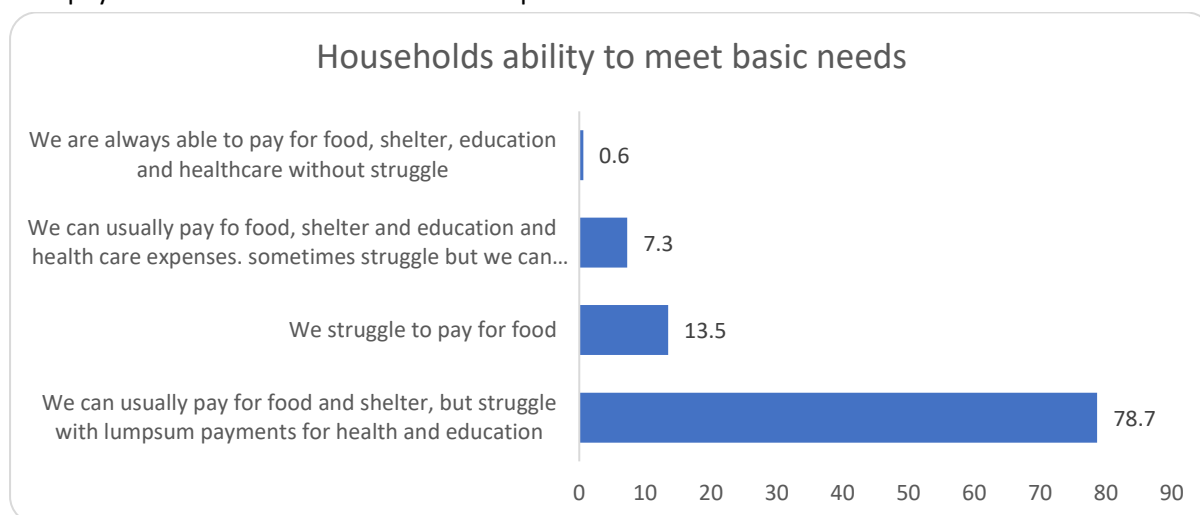


Figure 1: Households ability to meet basic needs

The respondents were further asked on the mitigation measures that they would put in place if something bad happened and they could no longer earn money through their primary source of livelihood. 31.8% stated that they would rely on family for support, 11.1% would rely on charity a significant decrease from what was reported during baseline; 50.2% and 40% which indicates that households have become self-reliant and less vulnerable. 24.1% would start new income generating activities, and 21.3% would rely on other existing income generating activities, while 8% would find new informal jobs respectively.

Table 3: Households mitigation measures

| | Baseline | Endline |
|---|-----------------|----------------|
| | Percent | Percent |
| Find new formal job | 0 | 3.7 |
| Start a new Income-generating activity | 15.7 | 24.1 |
| Rely more on other existing income-generating activity | 34.3 | 21.3 |
| Find new Informal job | 4.8 | 8 |

| | | |
|-----------------------------------|------|------|
| Rely on family for support | 50.2 | 31.8 |
| Rely on charity | 40 | 11.1 |

On household assets such as livestock, food stores or personal belongings that could quickly be turned into cash, it was established that most of the respondents 53.9% had some liquid assets, but the amount changed a lot during the year. 33.7% had some liquid assets but the amount changed a little during the year while 12.4% never had many liquid assets while (Figure 2).

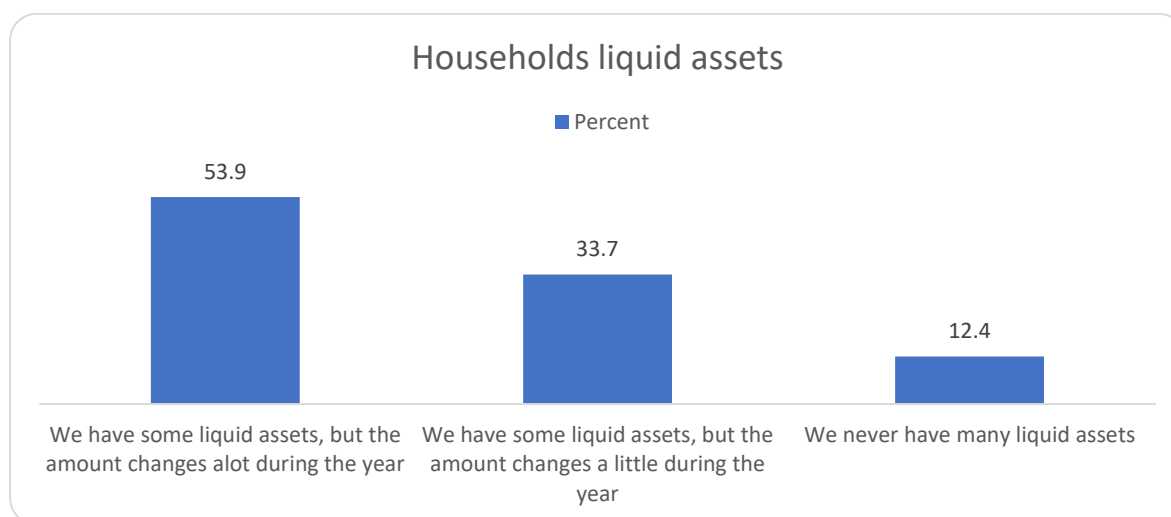


Figure 2: Households liquid assets

4.3 Households expenditure, savings and borrowing

In regards to household expenditure in the last one month the assessment revealed that majority of respondents had spent Ksh. 2,001- 5,000 (50.6%), followed by Ksh. 5,001-10,000 (23.6%), Ksh. 1-2,000 (20.8%) and greater than Ksh. 10,000 (5.1%). When asked how much they had in savings, 18.5% (n=33) responded that they had none or nearly none in savings, 49.4% (n=88) had some savings with the amount changing a lot during the year, 32% (n=57) had some savings with the amount changing a little during the year. A comparison on the amount of money saved and borrowed in the past one month was further done and it was established that there was a significant increase in people who saved Ksh. 1-2000 from 39.2% to 56.2%. This is an indication that the training they received on loans and savings was useful and they can caution themselves in case of an emergency. (Figure 3).

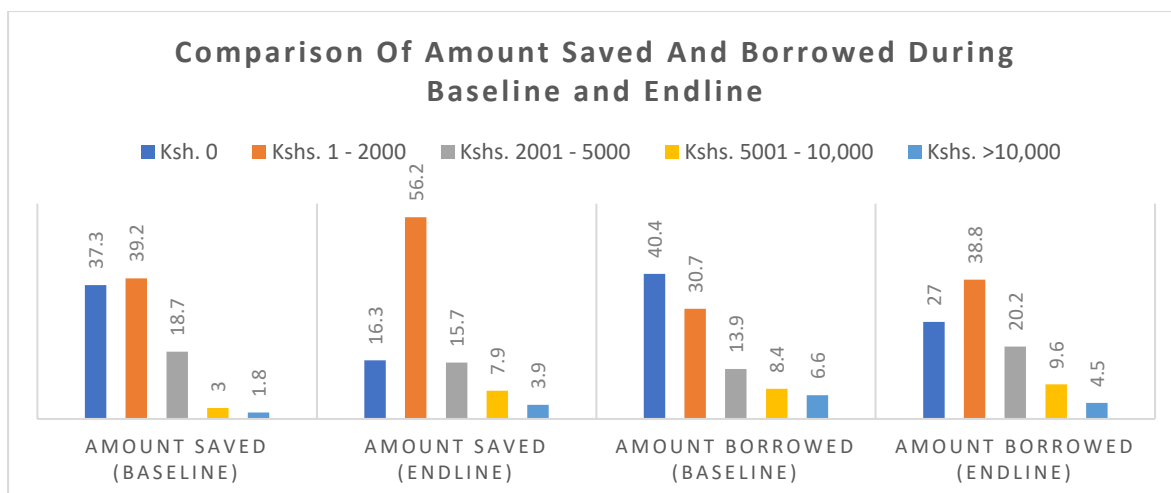


Figure 3: comparison of amount borrowed and saved during baseline and endline

5.0 Household Food Security

Food security means having, at all times, both physical and economic access to sufficient food to meet dietary needs for a productive and healthy life.¹In regards to food security situation in the households, 60.7% (n=108) stated that there were instances in the past 30 days where there had no food to eat because of lack of resource to get food. Among them, 52.8% (n=38) cited a rare frequency of 1-2 times, 33.3% (n=36) cited that it happened sometimes (3-10 times) while 13.9% (n=15) cited that it happened often (more than 10 times).

When asked whether there was any instance in the past 30 days where there was no food to eat because of lack of resource to get food, 50% (n=89) responded 'Yes' and the other 50% (n=89) responded 'No'. 58.4% (n=52) of those that responded positively cited a rare frequency of 1-2 times, 31.5% cited that it happened sometimes (3-10 times) while the remaining 10.1% (n=9) cited that it happened often (more than 10 times).

To the question of whether in the past 30 days any household member went to sleep at night hungry because there was not enough food, a negative response was obtained from 68.1% (n=113) whereas 31.9% (n=53) responded positively. Of these, 62.3% (n=33) reported a frequency of 1-2 times while a frequency of 3-10 times was reported by the remaining 37.7% (n=20).

On the other hand, the question of whether any household member went a whole day and night without food due to there not being enough food in the past 30 days elicited a negative response from 82% and a positive response from 18%. This was reported to have happened 1-2 times (43.8%), 3-10 times (50%) as well as more than 10 times (6.3%).

Majority of the respondents were moderately food insecure 33.1% (n=59). Only 13.5% (n = 24) were severely food insecure. There was a significant decrease of households that were food secure from 57.8% during baseline to 31.5% at endline as shown in the figure 4 below:

¹ <https://www.usaid.gov/what-we-do/agriculture-and-food-security>

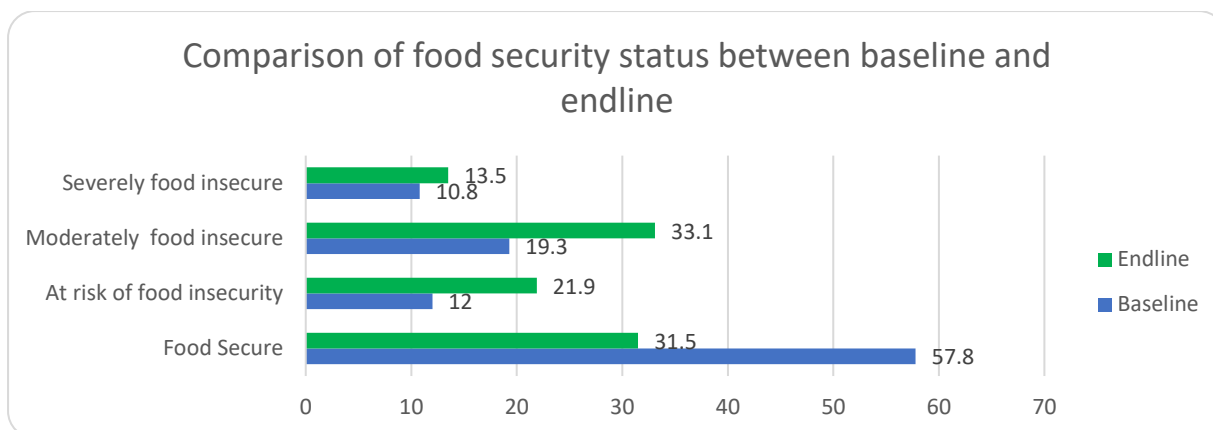


Figure 4: Comparison of food security status during baseline and endline

Food security status distribution per sub – county revealed that majority of respondents from Pokot South (39%) were food secure, whereas those hailing from Pokot North were severely food insecure (24.%) as shown in the table below:Of importance to note, there was a significant decrease of households that were severely food insecure in Pokot Central from 24.6% during baseline to 13% at end line. This can be attributed to.....

Table 4: Households food security status per sub county

| | | Household food security | | | | Total |
|-------------------|---------------|-------------------------|----------------------------|--------------------------|------------------------|-------|
| | | Food secure | At risk of food insecurity | Moderately food insecure | Severely food insecure | |
| Sub county | Pokot Central | 14 | 17 | 28 | 9 | 68 |
| | | 21% | 25% | 41% | 13% | 100% |
| | Pokot North | 15 | 2 | 14 | 10 | 41 |
| | | 37% | 5% | 34% | 24% | 100% |
| | Pokot South | 27 | 20 | 17 | 5 | 69 |
| | | 39 | 29 | 25 | 7 | 100% |
| Total | | 56% | 39% | 59% | 24% | 178 |
| | | 31.5 | 21.9 | 33.1 | 13.5 | 100% |

5.1 Household Economic Status

An unstable economic status was reported by majority of the respondents (87.6%) with them struggling to make ends meet. 7.9% described their status as being prepared to grow, in that they were mostly stable and investing in stable opportunities, 9.0% described themselves as being destitute in that they were barely surviving while only 4.9% reported to be stable and secure. There was no much difference based on the enumerator’s assessment as they cited 83.1% of the households to be struggling to make ends meet, 11.8% prepared to grow, 4.5% destitute while 0.6 were not vulnerable. In regards to households productive assets that are used to generate income such as livestock and business, it was established that there was a significant increase in households that owned few productive assets from 51.8% during baseline to 69.7% at endline. This indicates that majority of the households have capacity to generate income in the future and cope with future shocks.(Table 5)

Table 5: Households productive assets

| | Baseline | | Endline | |
|---------------------------------------|-----------|---------|-----------|---------|
| | Frequency | Percent | Frequency | Percent |
| We have no productive assets | 39 | 23.5 | 4 | 2.2 |
| We have few productive assets | 86 | 51.8 | 124 | 69.7 |
| We have some productive assets | 41 | 24.7 | 50 | 28.1 |
| Total | 166 | 100 | 178 | 100 |

5.2 Household crop cultivation

It was established that 32.6% (n=58) had 1 acre under cultivation, 28.7% (n=51) had more than an acre, 30.3% (n=54) had 0.5 acres, 4.5% (n=8) had less than 0.25 and 3.5% (n=7) had 0.25 acres under cultivation. The most cultivated crop was maize at 59.9% (n=145), then vegetables cited at 13.6% (n=33), potatoes at 10.3% (n=25), millet at 7.4% (n=18), sorghum at 7% (n=17) and the least one was fruits cited at 1.7% (n=4). The mean amount of crop harvested was 73kg for beans, 852kg for maize, 73kg for sorghum, and 35kg for millet, 758kg for potatoes 107kg for fruits and 2kg for vegetables respectively.

5.2 Ownership of Kitchen Garden

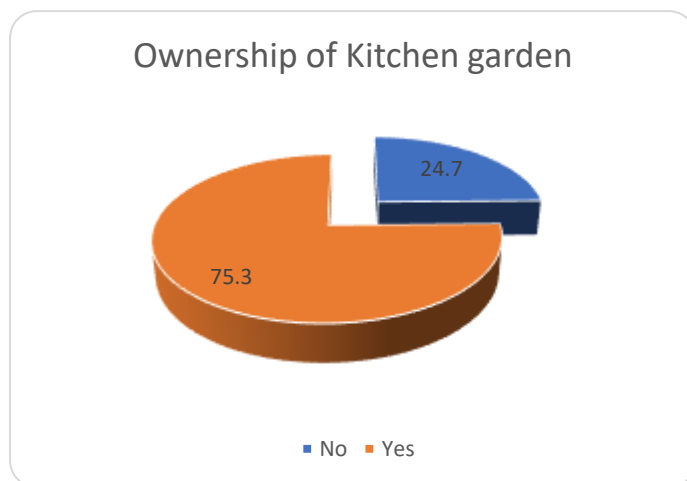
Ownership of a kitchen garden was reported by 75.3% (n=134) (Figure 5) a significant increase from what was reported at baseline at 54.2% (n=90). This is a good indication that the MtMSG members replicated kitchen gardens at their homesteads courtesy of the training and kitchen garden demonstration by the Ministry of Agriculture with Support from Action Against Hunger. However, there were some groups such as Kalemngorok and Korelach that performed poorly in replicating kitchen gardens at their homesteads as only 34.8% and 38.5% respectively had. Of those with kitchen garden, only 28.4% (n=38) agreed that they had access to vegetables from the garden throughout the year with 71.6% (n=77) not having all year round access.

Table 6: Ownership of kitchen garden per MtMSG

| Name of MtMSG | Do you have a kitchen garden? | | Total | Percentage |
|--------------------|-------------------------------|-----|-------|------------|
| | NO | Yes | | |
| Emkokon | 0 | 25 | 25 | 100 |
| Kalemngorok | 15 | 8 | 23 | 34.8 |
| Kapcheror | 1 | 17 | 18 | 94.4 |
| Kapkarawai | 0 | 24 | 24 | 100 |
| Kasaka | 0 | 17 | 17 | 100 |
| Korelach | 16 | 10 | 26 | 38.5 |
| Lalat | 5 | 15 | 20 | 75 |
| Tokorion | 7 | 18 | 25 | 72 |
| Total | 44 | 134 | 178 | 75.3 |

Methods used to access vegetables through the year included mulching, water harvesting, irrigation, crop rotation, sunken beds and Planting step by step.94.4%(n=168) confirmed that they had been

trained on sustainable good agriculture as compared to the low proportion 38.1% that was reported during baseline indicating that they were more knowledgeable on good agricultural practices. The topics trained on included dryland farming (17.7%), multi storey kitchen garden (23.4%), organic farming (27.6%), post-harvest and storage (11.9%), value addition (2.2%), double digging (4%) and water harvesting (13.3%).



A chi – square test of association revealed a significant association ($\chi^2(3) = 23.113, P = 0.00$) between household food security and ownership of kitchen gardens. Households that reported ownership of kitchen garden were food secure than those that did not have. However, there was an insignificant

Figure 5: Ownership of kitchen garden

Association ($\chi^2(3) = 5.468, P = 0.141$) observed between access to vegetables and household food security. It was evident that though ownership of a kitchen garden had significant contribution to the household food security, households with access to vegetables were statistically insignificant to household food security. It did not matter whether you had access to vegetables throughout the year to be food secure.

Table 7: Access to vegetables and household food security

| Household food security | | | | | | |
|-------------------------|-------------|----------------------------|--------------------------|------------------------|--------|--|
| Access to vegetables | Food secure | At risk of food insecurity | Moderately food insecure | Severely food insecure | Total | |
| Yes | 18 | 9 | 10 | 1 | 38 | |
| | 47.4 | 23.7 | 26.3 | 2.6 | 100.0% | |
| No | 32 | 26 | 10 | 15 | 83 | |
| | 38.6 | 31.3 | 12.0 | 18.1 | 100.0% | |
| Total | 50 | 35 | 33 | 16 | 134 | |
| | 37.3 | 26.1 | 24.6 | 11.9 | 100.0% | |

6.0 Household shocks or emergencies

Respondents were asked to state the last time the household experienced a shock or an emergency that had a major effect on the household’s finances. 59.6% (n=106) reported that shocks had never occurred to them, 20.2% (n=36) reported a period of 1-5 years ago, 8.4% (n=15) had shocks occur to them in the last year, 6.7% (n=12) reported 5-10 years ago whereas 5.1% (n=9) reported more than ten years ago. Types of shocks reported to have occurred in the past included natural disasters such

as drought (54.2%), loss of wages (8.0%), family conflict (2.8%), loss of wage earner (5.6%) business failure (.4%) and others (36.1%) such as spending money on illnesses, loss of livestock, and loss of a relative. The state of household recovery from the shocks as reported as shown in figure 6.

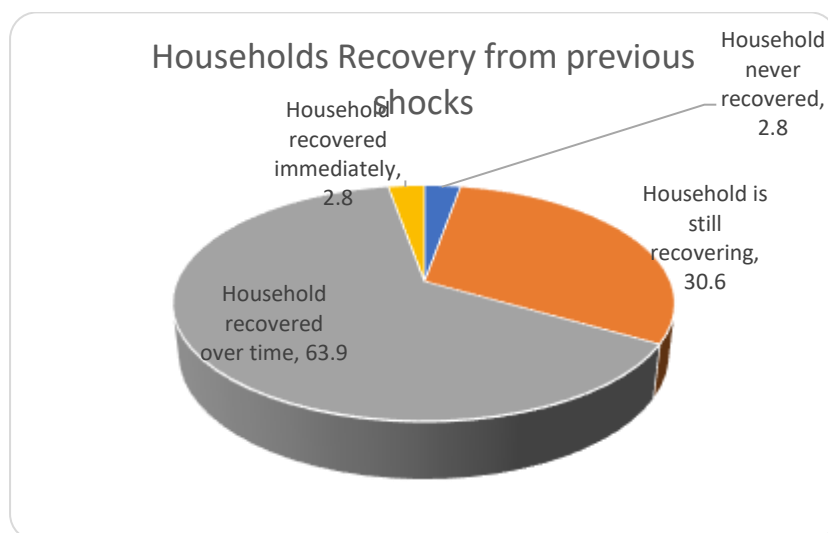


Figure 6: Households recovery from previous shocks

In case a similar shock recurred, 87.5% of the households would slowly recover, 6.9% would never recover, 2.9% would quickly recover while 2.8 would not be affected or would recover immediately.

Instances where unexpected shocks or major emergencies like death in the family would occur, most of the respondents (23.2%) stated that they would borrow from a friend or relative. No household reported that they would send children to others to be taken care or go without food an indication that they were economically stable and are prepared for any economic shock that may occur. (Table 6)

Table 8: Coping Strategies to economic shocks

| Response | Baseline | | Endline | |
|--|-----------|-------------|-----------|-------------|
| | Frequency | Percent (%) | Frequency | Percent (%) |
| Pay with cash on hand/savings | 1 | 1.3 | 12 | 6.2% |
| Request help from a charitable organization | 28 | 37.3 | 18 | 9.3% |
| Borrow from a friend or relative | 34 | 45.3 | 45 | 23.2% |
| Borrow from savings group or VSLA | 41 | 54.7 | 37 | 19.1% |
| Look for other source of income near my home | 1 | 1.3 | 9 | 4.6% |
| Reduce household spending a little | 1 | 1.3 | 6 | 3.1% |
| Reduce household spending a lot | 2 | 2.7 | 1 | 0.5% |
| Sell livestock, household goods or items | 36 | 48 | 40 | 20.6% |
| Migrate for work | 2 | 2.7 | 0 | 0.0% |

| | | | | |
|---|----|------|----|------|
| Sell bicycle, tool, land or other items that help produce income | 13 | 17.3 | 13 | 6.7% |
| Break up household – send children to others to care for | 2 | 2.7 | 0 | 0.0% |
| Go without food | 1 | 1.3 | 0 | 0.0% |
| Engage in gold mining for income | 2 | 2.7 | 0 | 0.0% |

6.1 Household Vulnerability

Household vulnerability is usually influenced by the economic status, which is sometimes dictated by the source of income and occupation. Therefore, to further understand the household's vulnerability status, chi – square tests for associations were conducted to establish if female – headed households were more vulnerable when compared to male – headed households. Gender of the households was determined to be significantly associated with household vulnerability for the following variables; household's liquid assets ($X(2) = 12.544, P = 0.002$ $P = 0.044$); household's productive assets($X(2) = 6.685, P = 0.035$); household's ability to withstand shocks or emergencies ($X(4) = 11.167, P 0.025$).

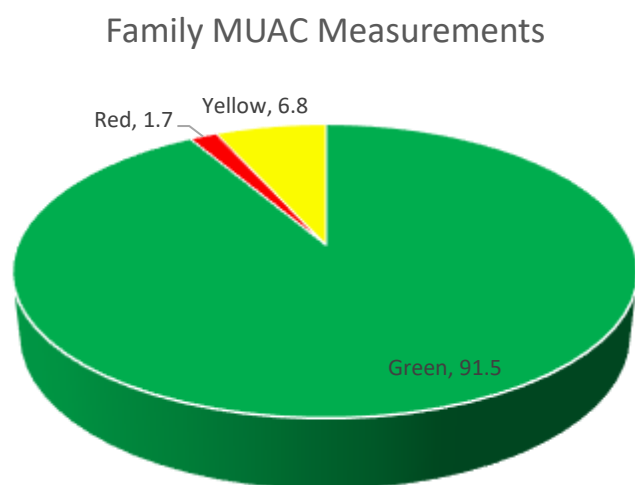
7.0 Family MUAC

The survey sought to establish the level of knowledge on family MUAC and 63.5% (n=113) a decrease from what was reported during baseline 66.3% (n=63) agreed that they had heard of it while 36.5% (n=36.5) did not have knowledge on MUAC. Among the mothers that reported to have the knowledge 52.2% (n=59) reported that they had used it to measure their children. All of them (100%) stated that they knew how to interpret MUAC tape. Results on how the level of knowledge on MUAC tape colour interpretation are illustrated in Table 10.

Table 9: Respondents interpretation of family MUAC colours

| Response | Frequency | Percent |
|--|-----------|---------|
| RED | | |
| Child is in bad condition | 8 | 13.5 |
| It means child is malnourished | 2 | 3.3 |
| Child is weak | 10 | 16.9 |
| The child is severely malnourished | 39 | 66.1 |
| YELLOW | | |
| At risk | 2 | 3.3 |
| Moderately malnourished | 40 | 67.7 |
| The child is fair | 1 | 1.6 |
| The child is not very bad | 6 | 10.1 |
| The child is suffering from lack of food | 1 | 1.6 |
| The child is not healthy | 9 | 15.2 |
| GREEN | | |
| The child is okay | 2 | 3.3 |
| The child is healthy | 7 | 11.8 |
| The child is normal | 50 | 84.7 |

When asked to state their child’s MUAC reading the last time they measured, 91.5% (n=54) had a green colour reading , 6.8% (n=4) obtained a yellow reading, while 1.7% (n=1) obtained a red colour as shown it figure 7. Of those who obtained the red and yellow colour 2 of them stayed at home while 3 referred to the health facility. They further reported that assistance was received at the health facility in the form of the child being enrolled in a program while got the health facility closed.



Monthly meetings were reported to be held by all of them. The topics discussed at these monthly meetings included infant and young child feeding, maternal nutrition, progress on income generating activities, family planning and child spacing.

An observation of caregivers’

Figure 7: MUAC measurements

ability to take the child’s MUAC measurement revealed that majority (66%, n= 39) could correctly take the measurement, 30.5% (n=18) struggled to take the measurement and only 3.4% (n=2) children were not at home.

7.2 Respondent physiological status

Of the 178 respondents, 18% (n=32) reported that they were currently pregnant or lactating. The average age of children for lactating mothers’ children was 4 months (std. deviation 3.694) with the oldest being 17 months and the youngest being 1 month old. The average MUAC measurement for both pregnant and lactating mothers was 264.6mm (std. deviation 34.007) with a maximum reading being 336mm and a minimum of 222mm indicating a normal nutritional status for all.

7.3 Child Anthropometrics

MUAC measurements were taken and recorded for children aged 6 – 59 months (n = 191). On average, the children aged 32 months (mean 32.65 months, stand dev 15.95), with the oldest being 58 months and the youngest aged 6 months. The mean MUAC was 145.95 mm (stand dev 13.445 mm) with the highest MUAC at 216mm and the lowest at 104mm. 85.3%(n=163) were normal, 10.5%(n=20) at risk, 3.1%(n=6) MAM,1 while 1.0%(n=2) were SAM

On further analysis there was a statistically insignificant difference between the male and the female MUAC readings as determined by one-way ANOVA ($F(1,189) = 14.377, P = 0.779$). The mean MUAC for females was higher (146.21mm) than that of males (145.66mm).

Table 10: Comparison of mean MUAC measurements by gender

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|--------|-----|--------|----------------|------------|----------------------------------|-------------|---------|---------|
| | | | | | Lower Bound | Upper Bound | | |
| Male | 92 | 145.66 | 14.254 | 1.486 | 142.71 | 148.61 | 104 | 216 |
| Female | 99 | 146.21 | 12.715 | 1.278 | 143.68 | 148.75 | 118 | 198 |
| Total | 191 | 145.95 | 13.445 | 0.973 | 144.03 | 147.87 | 104 | 216 |

One-way ANOVA tests revealed that there were no statistically significant relationships observed between nutrition statuses of the children (MUAC). The age of the respondent ($F(53,137) = 1.288, P = 0.124$), the education level of the respondent ($F(53,137) = 0.846, P = 0.753$), household’s productive assets ($F(53,137) = 1.047, P = 0.407$) and household having experienced shock or emergency ($F(53,137) = 0.601, P = 0.982$). However, there was an observed statistically significant relationship between household economic status and nutrition status of a child. ($F(4, 4) = 11.167, P = 0.025$).

8.0 Conclusion and Recommendation

8.1 Conclusion

Generally, among the households interviewed 31.5% were food secure, 33.1 were moderately, 21.9 were at risk of food insecurity, while 13.5% were severely food insecure. Of importance to note there was a significant decrease of food secure households from 57.8% during baseline to 31.5% which could be

attributed to.... In addition, a chi – square test of association revealed a significant association ($X^2(3) = 23.113, P = 0.00$) between household food security and ownership of kitchen gardens. In regards to households ability to meet basic needs such as food, shelter, education and health care most of them could not comfortably meet them as 78.7% could pay for food, but struggled to make lump sum payments for health and education expenses a slight increase from what was reported during baseline (71.1%).

Support of seed funds and trainings on financial management and good and sustainable agricultural practices from Action Against Hunger played a major role in households socio economic status. There was a significant increase in people who saved Ksh. 1-2000 from 39.2% during baseline to 56.2% and 53.9% had some liquid assets, and at least 69.7% had few productive assets.

The members validated sensitization of mother to mother support groups on family MUAC by Action Against Hunger and their knowledge on it was encouraging. At least 63.5% had the knowledge and all of them could interpret the colours. Most of the pregnant and lactating women and children 6-59 months nutrition status was established to be good. Nutrition status for both PLWs and children 6-59 months was good with a mean MUAC of 264.6mm (std. deviation 34.007)) for PLWs and 145.95 mm (stand dev 13.445 mm) for children aged 6-59 months respectively.

8.2 Recommendations

- CHEWs and the Ministry of Agriculture Officers to continue sensitizing groups especially those hailing from Kalemng'orok and Korelach on the importance of replicating kitchen gardens as the produce might contribute to the household food security as well as increasing the household income.
- Action Against Hunger in collaboration with the Ministry of Health to sensitize women on the use of family MUAC as only 63.5% stated that they had the knowledge of family MUAC. This will help in early detection and admission of malnourished cases in the community.
- There is need for the mtmsg members to be sensitized on the importance of referring their malnourished to the CHV or the health facility for further management in order to avoid further deterioration of their nutrition status as two of them stayed at home after obtaining a yellow reading from their children MUAC measurements.
- CHEWS in collaboration with Action Against Hunger to conduct a sensitization/ refresher training on family MUAC as 30.5% (n=18) of the respondents were still struggling to take the measurement.