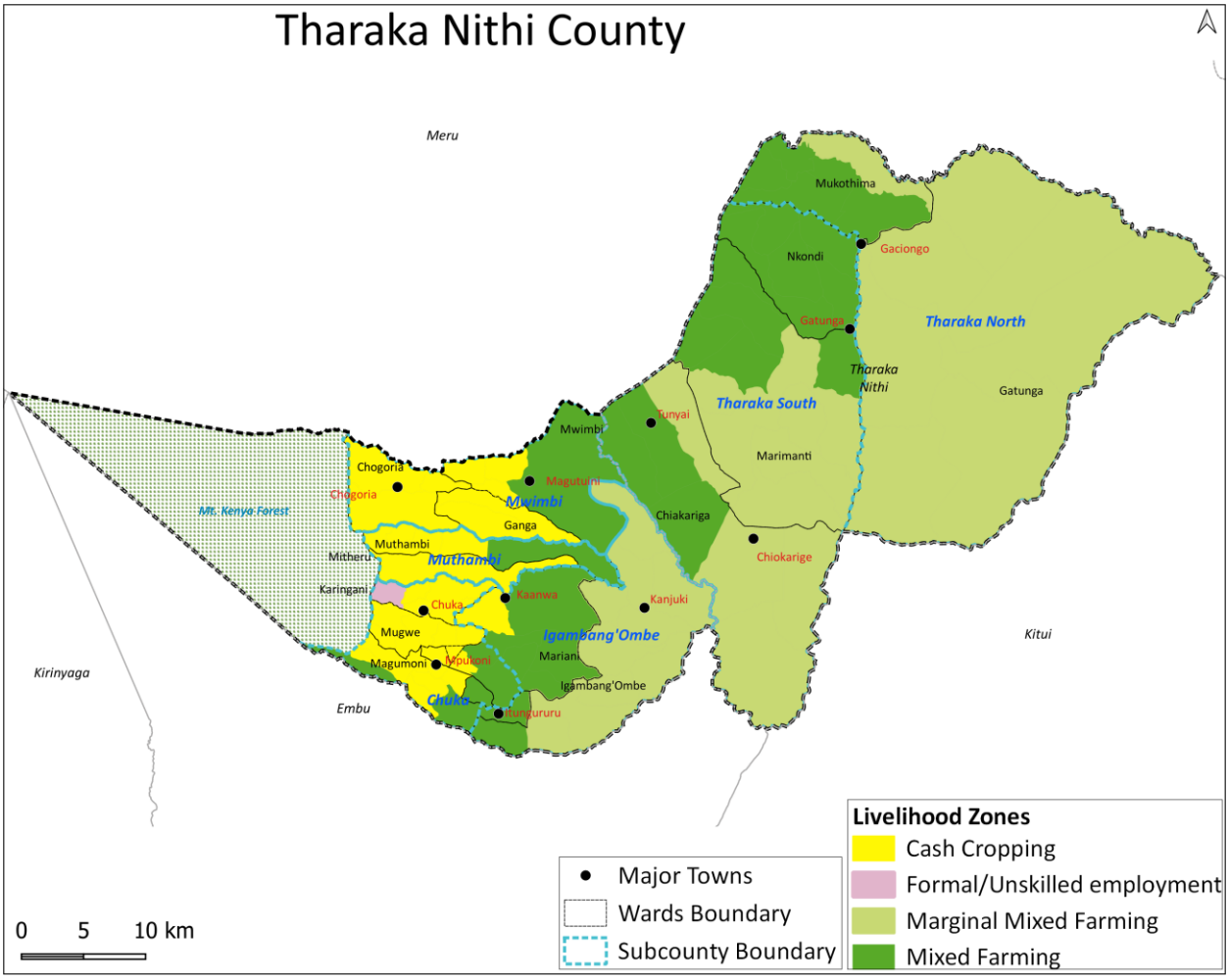
THARAKA NITHI COUNTY
2023 SHORT RAINS FOOD AND NUTRITION SECURITY ASSESSMENT REPORT



A joint Report by the Kenya Food Security Steering Group (KFSSG)[1] and Tharaka Nithi County Steering Group

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EXECUTIVE SUMMARY

Food and nutrition security assessment is a multi-sector and multi-agency bi-annual exercise conducted by representatives from the Kenya Food Security Steering Group whose membership includes both government and non-state actors. The Short Rains 2023 food and nutrition security assessment in the county was carried out from 22nd to 9th January 2024 and covered two main livelihood zones in the county including: Marginal Mixed Farming and Mixed Farming. The aim was to conduct an objective, evidence-based and transparent food security situation analysis following the performance of the Short Rains of 2023 while taking into consideration the cumulative effect of the previous two seasons and consequently providing recommendations for possible response options across the various livelihood sectors.

The onset of the 2023 Short Rains season was timely during the second dekad of October over all areas of the county. Rainfall received was above normal resulting to flooding in some parts, with the distribution in time being good while in space it was even. Concerningly, the area under maize production was below the corresponding long-term average but production is projected to be above the long-term average. Additionally, Sorghum and maize stocks held by farmers were above the long-term average but below among traders. Farmers held 146 percent apiece of the long-term average for maize and sorghum accordingly. With respect to livestock productivity, the body condition of all livestock species was generally good to very good owing to availability of pasture and browse within shorter trekking distances and that resulted to increase in milk production compared to the previous season and fell above the long-term average.

The price of milk was lower than the long-term average over all the livelihood zones by about 25 percent while the return trekking distances to water points from grazing areas was within the seasonal norm by about 33 percent and had declined significantly. Average water consumption per person per day was 40-50 litres compared to 30-40 litres usually in the Marginal Mixed Farming Livelihood Zone while in the Mixed Farming Livelihood Zone it was 30-40 compared to the normal 25-30 litres. The market price of a kilogram of maize was KSh. 64 representing a 42 percent margin above the long-term average price for the period while a mature medium size goat was trading at KSh 7,400, a price that was above the long-term average by 81 percent. Consequently, the recorded terms of trade were favourable in comparison to long-term average and improved considerably in relation to a similar period over the previous year when households acquired 62 kilogrammes less from sale of a similar goat. Proportion of households classified as having a borderline food consumption score (15 percent) remained stable compared to the proportion of 17 percent that was reported during the month of July 2023. However, the Mixed Farming Livelihood Zone reported a higher proportion within the same category of 27.9 percent.

Households continued having a fairly adequate diet as evidenced through the reduced coping strategy index (rCSI) that was recorded to be 4.5 with proportion applying crisis+ consumption based coping strategies being about 1.7 percent. Improvement in the nutrition status was reported based on the proportion of children that were considered to be at risk who averaged one percent; hence remained within acceptable levels. Consequently, the overall integrated food security phase classification for the county is ‘Stress’ (IPC Phase II).

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1.0 INTRODUCTION

1.1 County Background

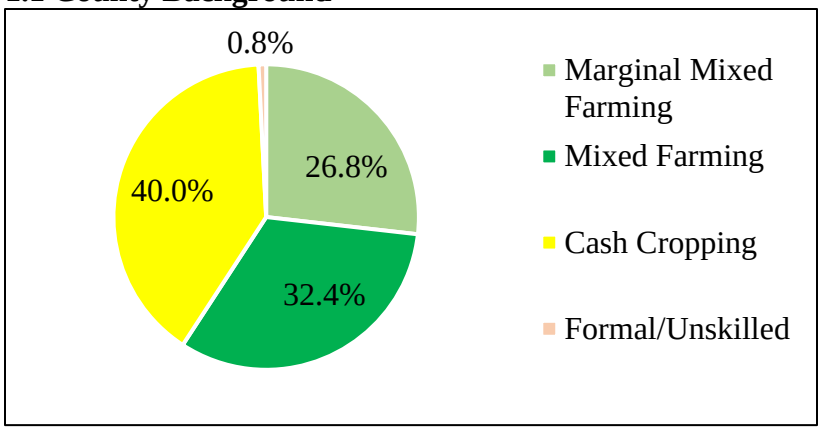


Figure 1: Population Proportion by Livelihood Zone

Tharaka-Nithi County is located in Eastern Kenya and borders Meru County to the North East, Embu County to the South West, Kitui County to the South East, Kirinyaga and Nyeri counties to the West. For the purpose of the assessment, the coverage included: Tharaka North, Tharaka South and Igambang'ombe sub-counties that constitute the semi-arid part of the county with an approximate area of 2,600 square kilometres. Administratively, the three sub counties are divided into seven wards and 42 locations with a total population of 177,709 persons (KNBS Census, 2019).

The county has four main livelihood zones namely; Cash Cropping, Mixed Farming, Marginal Mixed Farming and Formal/Unskilled Employment with population proportions of 40,32.4,26.8 and 0.8 percent accordingly (Figure 1). Agriculture (crop and livestock production) is the main occupation for the households in the former three livelihood zones. Majority of residents in the county are small-scale farmers with an average landholding of two acres. Livestock reared primarily consists of indigenous breeds that are common in the Marginal Mixed Farming livelihood zone. The Cash Cropping Livelihood Zone is localized to Maara Sub county and for purposes of the assessment, it was not covered. Other economic activities in the county include formal employment, casual waged labour, gemstone mining, sand harvesting, stone quarrying among others.

The proportion of the very poor, poor, middle and better off households in the Marginal Mixed Farming Livelihood Zone is 10, 30, 50, and 10 percent while in the Mixed Farming Livelihood Zone is 10, 25, 50 and 15 percent accordingly. Food poverty incidence levels are higher and affect about 32 percent of the population. In addition, the overall poverty incidence is 28.1 percent with a relatively low hardcore poverty incidence of 0.6 percent.

1.2 Methodology and Approach

The 2023 short rains assessment adopted a multi-sectoral and multi-agency approach constituting of the County Steering Group (CSG) and non-state actors such as Kenya Redcross and IAS. The assessment was conducted between 22nd and 9th January 2024 covering two livelihood zones in three sub counties. The main objective of the assessment was to conduct an objective, evidence-based and transparent food and nutrition security situation analysis following the October to December (OND 2023) rainfall season in Tharaka Nithi County, while taking into consideration the cumulative effect of previous seasons and consequently providing appropriate sector specific recommendations for possible response options.

The assessment started with a briefing of the CSG on the objectives of the assessment followed by sector briefs and a review of the completed sector checklists (quantitative data) that had been administered two weeks earlier by the technical team that had been mandated to conduct the assessment. Sites to be visited for primary data collection were purposively selected with a special consideration of the factors driving vulnerability including rainfall performance, flooding hotspots, agricultural areas, human and livestock disease hotspots while also factoring representativeness in terms of livelihood zones as a unit of analysis. Primary data was collected from the community through market interviews, key informant interviews, and semi-structured focus group discussions (comprising both gender) in the two main livelihood zones.

The Cash Cropping and Formal/Unskilled Employment Livelihood Zone were excluded in the assessment. Key informant and focus group discussions in the Marginal Mixed Farming Livelihood Zone were held at Marimanti, Kathwana and Nkondi while in the Mixed Farming Livelihood Zone they were held in Igamba, and Gatunga. Visual inspection technique was also applied along the transect drive with a total of eight market interviews being conducted across the two livelihood zones. Additional secondary data including satellite rainfall estimates, routine health and nutrition data from the Kenya Health Information Systems (KHIS), prices, and the National Drought Management Authority (NDMA) bulletins among others was availed to the assessment team. Based on livelihood zone as the unit of analysis, the primary data was then collated, analysed and triangulated with the secondary data. Further, integrated food security phase classification (IPC) protocols were followed in the identification of food insecurity causes and severity classification. Preliminary findings of the compiled county food and nutrition security report were later shared during the debriefing CSG held on 9th January, 2024 for adoption as a true reflection of the county food security situation.

2.0 DRIVERS OF FOOD AND NUTRITION SECURITY IN THE COUNTY

2.1 Rainfall Performance

Tharaka Nithi County has a bi-modal rainfall pattern with the long rains being experienced from March to May (MAM) and short rains from October to December (OND). Not only is the short rains a very important season for livestock keepers in the Marginal Mixed Farming Livelihood Zone as it promotes recovery of rangelands after the July to September dry period but also farmers who practise crop production along the Mixed Farming Livelihood Zone and the former zone. Rainfall onset was timely over the second dekad of October. The performance of the rainfall was above normal across all the sites that recorded either 126-140 or 141-200 percent of the normal rainfall (Figure 2). Equally, the distribution in time and space was good and even respectively. However, early cessation was witnessed over the second dekad of December.

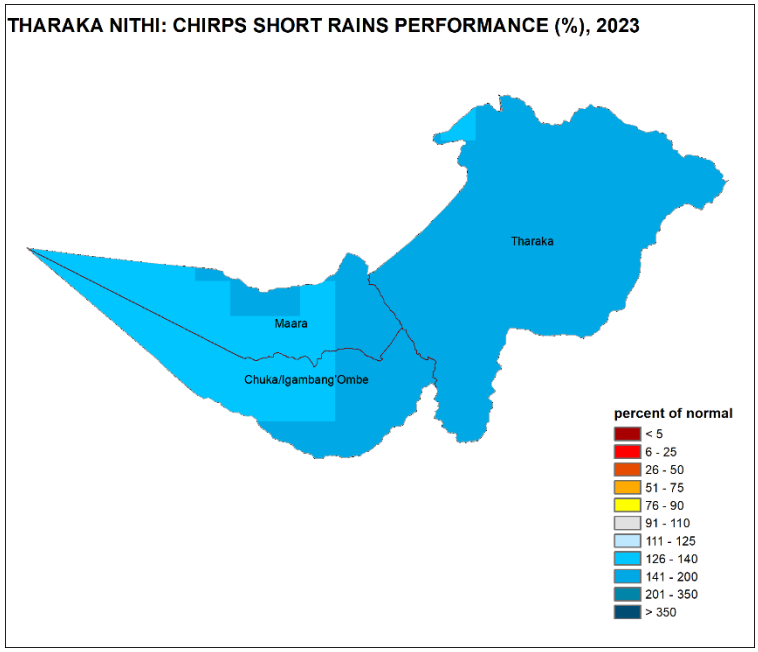


Figure 2: Rainfall Performance (% of Normal)

Most parts received enhanced rainfall with the lower zones (Gatunga, Chiakariga, Marimanti) whose LTA is 375 mm recorded 849.9 mm representing 226 percent of the LTA. The middle zones including Nkondi, Mukothima, Igambang'ombe whose LTA is 550mm received 956.9mm of rainfall accounting for 173 percent of the LTA. The upper zones whose LTA 750mm recorded 1,308.1mm representing 174 percent of LTA. Among the various livelihood zones, Mixed Farming recorded the highest precipitation levels, notably in regions like Tunyai, Nkondi, Marimanti and Mukothima. Meanwhile, the Marginal Mixed Farming reported average rainfall levels in regions like Kathangachini, Kiamiramba, Maragwa, and certain areas of Nkiruni.

2.2 Insecurity/Conflict

There were no notable cases of insecurity reported over the short rains season.

2.3 Other Shocks and Hazards

Floods

Following the above normal rainfall received in some areas in the county, destruction of infrastructure was witnessed across the short rains period. Floods were experienced at the peak of the rainfall season in November in areas such as Nkondi and Mukothima. Houses were swept away, structures collapsed and properties destroyed in some places. Crops planted by the riverine were washed away and some farms were submerged. About 250 acres of crop land was affected by water logging, and 140 schools with collapsed structures such as toilets. Interruption of transportation over some places in the county equally occurred.

High Food Commodity Prices

The food prices were higher than the long-term average due to limited supplies caused by successive seasons of crop failures and dependence on outside markets to supplement food stocks. In January, the average maize price reached Ksh. 64 per kg, which was 20 percent higher than the three-year average price of Ksh. 51 per kg. As a result, the coping Strategy Index (CSI) rose from 3.1 in July to 4.5 in January 2024.

High prices of farm input

As a result of the high cost of production, the available land for production was not fully utilized. However, the County Government intervened by donating green gram seedlings with the National Government offering subsidized fertilizer.

3.0 IMPACTS OF DRIVERS ON FOOD AND NUTRITION SECURITY

3.1 Availability

3.1.1 Crop Production

The short rains season is the major season in the county since it accounts for 64 percent of the annual crop production consequently contributing by about 50 and 25 percent to cash income for households along the Mixed Farming and Marginal Mixed Farming Livelihood Zones in that order. Maize, millet, pigeon peas, green grams, beans, sorghum and cowpeas constitute the crops grown in these zones across all livelihood zones with maize, cowpeas, and pigeon peas primarily being grown for household consumption while green grams and sorghum (Gadam variety) are predominantly cultivated for income generation. Maize, millet, pigeon peas and beans are mostly cultivated in the Mixed Farming Livelihood Zone while green grams, sorghum and cowpeas take precedence in the Marginal Mixed Farming Livelihood Zone. Maize is the predominant crop in Mixed Farming Livelihood Zone, accounting for 40 percent of household food consumption. On the other hand, in the Marginal Mixed Farming Livelihood Zone, millet contributes by 50 percent to the food supply and is increasingly becoming a popular cash crop due to high demand. More

than 60 percent of potential land for rain-fed Agriculture has been exploited whereas less than 15 percent of the potential land is under irrigation in the county.

Rain-fed Production

The good October to December season that was characterized with above normal rainfall promoted crop production in the two livelihood zones. Save for maize that recorded a decline of eight percent, area under green grams, sorghum, and millet production during the 2023 Short Rains season was 24, three, 29 percent above the long-term average (LTA) respectively (Table 1). Among the drivers of the above average area under production for the three latter crops included the forecast of above normal rainfall by Kenya Meteorological Department (KMD), availability of subsidized fertilizer by the National Government and issuance of free certified seeds by Tharaka Nithi County Government (TCG). Decline in area under maize was as a consequence of good and guaranteed market for sorghum and millet by Kenya breweries as well as embracing them as drought tolerant crops leading to replacement of maize in its tradition growing areas. Maize, green grams, sorghum and millet yield is projected to be 55, 67, 38 and 60 percent above the respective LTA in that order. Notable factors contributing towards the enhanced production ranged from above normal rainfall, and better agronomic practices like utilization of manure and fertilizer by farmers.

Table 1: Rain-fed Crop Production

Crop	Area planted during 2023 Short Rains season (Ha)	Long Term Average (5 years) area planted during the Short Rains season (Ha)	2023 Short Rains season production (90 kg bags) Projected	LTA production during the Short Rains season (90 kg bags)
Maize	8,435	9,110	48,460	31,229
Green grams	14,400	11,606	45,877.5	27,375
Sorghum	12,230	11,829	74,250	53,479.8
Millet	5,120	3,970	66,560	41,560

Irrigated Production

Irrigated agriculture is mainly practised along the Mixed Farming areas in Tharaka South sub county. Area under green maize and banana production was four percent above the LTA while for pawpaw it was 12 percent below the corresponding LTA (Table 2). Opening up of a new irrigation scheme at Ruungu contributed to the increase in area under banana and maize while area under papaya declined due to the adverse pest attacks and shrinking markets. Green maize production is projected to be 61 percent above the LTA while for banana would be at par with the respective LTA with that of pawpaw being 23 percent below the LTA.

Table 2: Irrigated Crop Production

Crop	Area planted during 2023 Short Rains season (Ha)	Long Term Average (3 years) area planted during the Short Rains season (Ha)	2023 Short Rains season production (90 kg bags) Projected	LTA production during the Short Rains season (90 kg bags)
Banana	540	517	9,954Tonnes	9,877Tonnes
Pawpaw	300	343	386Tonnes	477Tonnes
Maize	355	339	3,920Bags	2,430Bags

Cereals Stocks

Staple food consumed in the Mixed Farming Livelihood Zone is maize, millet and beans while in the Marginal Mixed Farming Livelihood Zone majority of households consume millet, green grams and cowpeas. Cereal stocks held by farmers over the season were generally above their corresponding LTA while those held by traders were below the respective LTA. Maize stock held by farmers and traders accounted for 146 and 15 percent of the LTA while that of sorghum held by farmers and traders represented 146 and 34 percent of their respective LTA in that sequence (Table 3). With respect to green grams, farmers and traders' stocks accounted for 103 and 46 percent of the LTA while there were no rice stocks held by both actors.

Cereal stocks held by farmers are high due to the ongoing harvesting but is anticipated to decline gradually as households sell more to cater for education, medication and other basic needs. Stocks held by traders are below the LTA since farmers usually sell green grams first before resorting to the other crops. Cereal stocks held by both farmers and traders can last for 4-5 months compared to 3-4 months normally, however, on condition that more sales are not observed. Currently, intensive supplies internally and externally more so for green grams and cowpeas is being witnessed.

Table 3: Commodity Stocks in the County

Actor/Agency	Maize		Sorghum		Green gram	
	Current	LTA	Current	LTA	Current	LTA
Farmers	11,842	8,100	59,080	40,450	39,112	38,050
Traders	1,220	8,100	400	1,150	6,950	15,000
Total	**13,062**	**16,200**	**59,480**	**41,600**	**46,062**	**53,050**

3.1.2 Livestock Production

The main livestock species kept in the county include; cattle, goats, sheep, and poultry. Livestock production is a major source of household income and food in the county with a contribution of about 65 and 40 percent to household income, 40 and 60 percent to food for residents of the Marginal Mixed Farming and Mixed Farming Livelihood Zones accordingly. The substantial amount of rainfall received during the short rains period impacted positively on livestock production. The rainfall supported pasture/browse rejuvenation/germination, establishment and maturity for both planted and natural pasture across all the livelihood zones. Moreover, the good rains supported the good crop performance resulting in availability of crop residues for livestock use throughout the livelihood zones. The availability of livestock feed led to improved tropical livestock units (TLUs) at household level in all wealth group categories and livelihood zones as a consequence of the farmer-based restocking that took place with high livestock prices being recorded across all markets.

Pasture and Browse Condition

The condition of browse and pasture was good across all the livelihood zones due to the above normal rainfall that promoted rejuvenation of forage. In addition, crop performance was also good resulting to availability of enough residues to bridge on any shortfalls across all zones. The observed forage level was at par with the situation witnessed usually over the period. Consequently, available forage is anticipated to last for three months across all the livelihood zones (Table 4). There was no notable limiting factors to forage access reported during the short rains 2023 season.

Table 4: Pasture and Browse Condition

Livelihood Zone	Pasture				Browse			
	Condition		How long to last (Months)		Condition		How long to last (Months)	
	Current	Normal	Current	Normal	Current	Normal	Current	Normal
Marginal Mixed Farming	Good	Good	3	3	Good	Good	3	3
Mixed Farming	Good	Good	3	3	Good	Good	3	3

Baled Hay Status

Fodder production and storage greatly improved in all the zones with the National, County Government and other development partners such as Agricultural Sector Development Support Programme (ASDSP), CARTUS and KENDATT taking lead in provision of inputs, capacity building, as well as putting up the storage structures. Operational fodder stores were 20 (one by ASDSP for silage), one by the National Government, nine by CARITUS, four apiece by NDMA and KENDAT and one by upper Tana) with approximate carrying capacity of 23,600 bales of hay and 850 bales of silage (Table 5). Estimated 2,000 bales of hay and 450 bales of silage are held at GASP fodder store – Marimanti, Kaume Women Group (a private group investing in commercial fodder production) and Mbogoni dairy fodder stores retailing at Kenya Shilling 350 for hay and 950 for silage.

Fodder harvesting was delayed due to prolonged rainfall and therefore very little is available at farmer managed stores except in Igambang'ombe where the store is full to capacity. Mbogoni dairy ensiling silage bales for individual farmers and up to date 1,300 bales have been processed. Currently there is very little in store but farmers are beginning to replenish the stores in preparation for the dry spell. There are approximately 5,000 hay bales in all the stores in Tharaka north and Tharaka south and 1,300 silage bales in Igambang'ombe. Supplements were available in local Agro vets across the livelihood zones and included mineral blocks that were retailing at Kenya Shilling 320, kienyeji poultry feed at Kenya Shilling 750 per 20 kilogrammes and dairy meal at Kenya Shilling 950 per 20 kilogramme bag respectively. Livestock lime was equally available at Kenya Shilling 140 in the two wards of Igambang'ombe Sub county. Normally crop residues, supplement pasture by roughly 20 over all the livelihood zones. Substantial residues are anticipated with the likelihood of bridging the pasture gap by about 60 and 15 percent in the Mixed Farming and Marginal Mixed Farming Livelihood Zones accordingly.

Table 5: Baled Hay Status

Sub County	No. of Hay Stores	Storage Capacity (No. of bales)	No. of Bales currently being held	How long is expected to last (months)	Sub County demand	Average Weight per bale (in Kgs)	Average price per bale (Kshs.)
Tharaka South	3	Approximately 7,000	2,000	2months	1,000/month	15	350/=
Chiakariga	2	Approximately 4,000	Nil	N/A	800/month	N/A	N/A
Tharaka North	13	Approximately 12,600	Nil	N/A	2,500/month	N/A	N/A
Igamba Ng'ombe	1	850	450	2weeks	Approximately 3,600bales per month	60 (silage bales)	700/=

Livestock Productivity

Livestock Body Condition

The body condition for all livestock species was generally good to very good as is normally the case (Table 6). Availability of quality forage in adequate quantities as a result of the enhanced rainfall received over the October to December period was the major driver of the observed body condition. In addition, good recharge of water facilities reduced water stress hence shorter trekking distance resulting to improvement in the body condition. The current situation is expected to stabilize until the next rainfall season. Stabilization of the current livestock body condition is consequently projected to bring about a positive effect on livestock prices hence relatively better incomes to households and increased purchasing power to acquire other essential foodstuffs.

Table 6: Livestock Body Condition

Livelihood Zone	Cattle		Sheep		Goat		Camel	
	Current	Normal	Current	Normal	Current	Normal	Current	Normal
Marginal Mixed Farming	BCS 4-5	BCS 4-5	BCS 4-5	BCS 4-5	BCS 4-5	BCS 5	N/A	N/A
Mixed Farming	BCS 4	BCS 4-5	BCS 4	BCS 4	BCS 4-5	BCS 5	N/A	N/A

Note: BCS – Livestock Body Condition Score
BCS 1 – Very Poor (Emaciated) BCS 2 – Poor BCS 3 – Fair BCS 4 – Good BCS 5- Very Good

Birth Rates

Birth rates were normal for the period under review in all livelihood zones. Following, the above normal rainfall, livestock had recovered well especially in the areas that were affected previously. Other drivers likely to promote increase in birth rates over the next 2-3 months included good nutrition occasioned by availability of forage, and reduced trekking distance to water sources.

Birth Rate and Tropical Livestock Units (TLUs)

Save for the poor households in the Marginal Mixed Farming Livelihood Zone, the TLUs for the poor households in the Mixed Farming and medium-income households in both zones were below normal (Table 7). Below normal TLUs were as a consequence of previous poor seasons that had occasioned mortalities. However, compared to a similar period the previous year, they had marginally improved due to the past two good seasons that had prompted farmers to restock through the market and currently the county government is implementing various interventions like subsidized artificial insemination among others in an effort to boost the TLUs. The recorded birth rates were normal across the short rains season.

Table 7: Tropical Livestock Units

Livelihood Zone	Poor Income Households		Medium Income Households	
	Current	Normal	Current	Normal
Marginal Mixed Farming	1	1	6	8
Mixed Farming	1.5	2	3	4

Milk Production, Consumption, and Price

Cattle and goats are the main milk producers for both household consumption and sale of surplus over the two livelihood zones. Milk produced was generally above average across most parts of the three sub counties over the Short Rains 2023 season. Milk produced and consumed across all the areas exceeded the long-term average by over 200 percent with the price of milk also being 75 percent of the LTA (Table 8). Increase in milk production could be attributed to improved livestock body condition due to the significant reduction in the trekking distances in search of water and forage.

Table 8: Milk Production, Consumption and Pricing

Livelihood Zone	Milk Production (Litres)/Household		Milk Consumption (Litres) per Household		Prices (KSh)/Litre	
	Current	LTA	Current	LTA	Current	LTA
Marginal Mixed Farming	3.2	1.0	2.0	1.0	60	80
Mixed Farming	4.7	2.5	2	1.5	80	100

Migration

There were no livestock migrations within the County for the period under review and it's a normal observation at this time of the year.

Livestock Diseases and Mortalities

High prevalence of endemic livestock diseases like Contagious Caprine Pleuropneumonia (CCPP), Rabies, Fowl pox, New Castle among others was noted over the reference period across all the livelihood zones. Notably, there were no reported cases of notifiable livestock diseases in the county during the short rains season. In relation to mortalities, there were no unusual livestock mortalities reported except for the normal ones due to slaughter across all zones.

Table 9: Estimated Livestock Mortalities as at January 2024

Livestock species	Total county Population	Livestock deaths	Mortality rate (= number of deaths per species/ total population per species)	Remarks
Cattle	82,635	No un-usual deaths	The mortalities are within the normal range of 2% in all species	The mortalities are within the normal range due to the normal slaughter and not drought or any other hazard
Goat	163,186			
Sheep	42,100			
Donkeys	2,410			

Water for Livestock

The main sources of water for livestock in the Marginal Mixed Farming livelihood zones were seasonal rivers, water reservoir points, water pans, boreholes and permanent rivers while in the Mixed Farming Livelihood Zone, livestock were watered at seasonal rivers, water reservoir points, piped water systems, boreholes and permanent rivers; these are the normal livestock watering points. Noteworthy, return trekking distance from grazing zones to sources of water had declined significantly from the previous season and were below the normal range for the period by roughly two kilometres across all the livelihood zones (Table 10). Available water in the Marginal Mixed

Farming Livelihood Zone is projected to last for a period of two months for sources like seasonal rivers and up to 12 months for others compared to one and half months to 12 months usually while in the Mixed Farming Livelihood Zone, it is anticipated to last for two and half months up to 12 months compared to two to 12 months normally.

Table 10: Water for livestock in Tharaka Nithi County

Livelihood zone	Sources		Return average distances (km)		The expected duration to last (months)	
	Current	Normal	Current	Normal	Current	Normal
Marginal Mixed Farming	Seasonal rivers water reservoir points, water pans, boreholes and permanent rivers	Seasonal rivers water reservoir points, water pans, boreholes and permanent rivers	4	6	2-12	1.5-12
Mixed Farming	Seasonal rivers water reservoir points, piped water, boreholes and permanent rivers	Seasonal rivers water reservoir points, piped water, boreholes and permanent rivers	2	4	2.5- 12	2-12

Watering Frequency

The watering frequency for all livestock species in the Marginal Mixed Farming and Mixed Farming Livelihood Zones was seven times just like the usual watering frequency. Improved livestock watering frequency was as a consequence of the significant recharge that took place following the above normal rainfall recorded over the Short Rains 2023 season. Water shortage for livestock use is not expected within the next three months with the forecasted normal rainfall over the Long Rains 2024 season likely to replenish sources to last beyond six months.

Table 11: Watering Frequency (Number of Days Per Week)

Livelihood zone	Cattle		Camels		Goats		Sheep	
	Current	Normal	Current	Normal	Current	Normal	Current	Normal
Marginal Mixed Farming	**7**	**7**	**N/A**	N/A	**7**	**7**	**7**	**7**
Mixed Farming	**7**	**7**	**N/A**	**N/A**	**7**	**7**	**7**	**7**

3.1.3 Impact on Availability

The performance of the 2023 Short Rains season was characterized with a timely onset over all parts of the county. Equally, the distribution in time and space resulted to varied impacts across most sectors. Generally, high household stocks are expected especially in the Mixed Farming Livelihood Zone as a result of the enhanced production witnessed due to availability of subsidized fertilizer, free certified seeds and spurred by the enhanced rainfall across the season. Consequently, stocks will most likely be above average over the next two months. Improved livestock productivity witnessed attributed to considerable rejuvenation of the rangelands shall imply that

livestock farmers more so in the Marginal Mixed Farming Livelihood Zone will most likely be well provisioned to meet basic needs without excessive levels of stress. However, the high prevalence of livestock diseases in some areas poses a significant risk to the household disposable income as many farmers are likely to use more of their income for livestock treatment.

3.2 Access

3.2.1 Markets Operations

The major livestock and commodity markets in the county include Kachoroni, Gatungu, Kathangachini, Chiakariga, Kathwana, Mukothima, Kibung'a, Katithini, Tunyai and Karocho. All the markets across the two livelihood zones were operational over the Short Rains 2023 season and as the time of the assessment in January 2024. Livestock prices increased due to improved body condition occasioned by good pasture and browse from the positive impacts of OND rainfall.

Market Supplies and Traded Volumes

The volume of commodities sourced within and from other counties was comparable to the long-term average. Sales of food commodities were mainly done both at market and at household level. Cereal sales were conducted both at market places and at the household level. However, the availability of staple commodities decreased in local markets compared to normal times due to average harvests, especially in areas affected by adverse El Nino effects. The prices of local commodities like cowpeas, green grams, millet, sorghum, and pigeon peas decreased due to moderate supplies resulting from enhanced harvests. Prices of vegetables and fruits remained within the normal range due to a continuous supply.

Market Prices

Maize Price

The county average maize price for January was Ksh. 64 per kilogram of maize which is 42 percent above the long-term average and 15 percent below 2023 prices (Figure 3). The trend in price of maize indicates a consistent decline from October to December with the situation mainly attributed to households having food stocks and some relying on supplies from outside markets to substitute their demands.

During the transect drive across the major markets, price of maize in the Marginal Mixed Farming and Mixed Farming markets averaged Ksh. 70, and Ksh. 60. The highest price of Ksh. 68 in the Mixed Farming was recorded in Mukothima, while Gatunga market in the Marginal Mixed Farming reported a price of Ksh. 75.

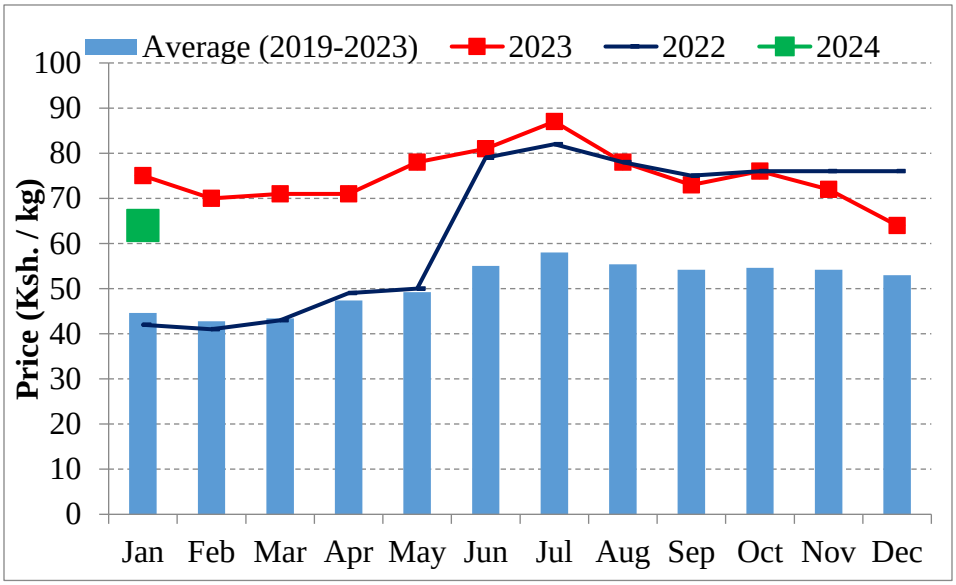


Figure 3: Average Price of a Kilogram of Maize

Goat Prices

According to NDMA sentinel site data, there has been a consistent increase in goat price since the onset of the short rains in October 2023. The price of a two-year old medium size goat was Ksh. 7,400 in January (Figure 4) which was above the long-term average and the 2023 prices by 81 and 85 percent accordingly. The upward price trajectory could be attributed to improved body condition of the goats and increased demand. In addition, the increase in goat prices was attributed to households holding onto their goats due to availability of alternative income sources for households such as sale of green grams. Marginal Mixed Farming recorded a price of Ksh. 5,050 while the Mixed Farming Zone Livelihood Zone recorded a price of Ksh. 9,600. Over the two livelihood zones, market prices of a two-year old medium size goat ranged from Ksh. 6000 – 8000 in the markets. Notably, majority of the poor households conduct their trading at the farmgate with middlemen being the buyers at relatively lower prices ranging from Ksh. 4000-5000.

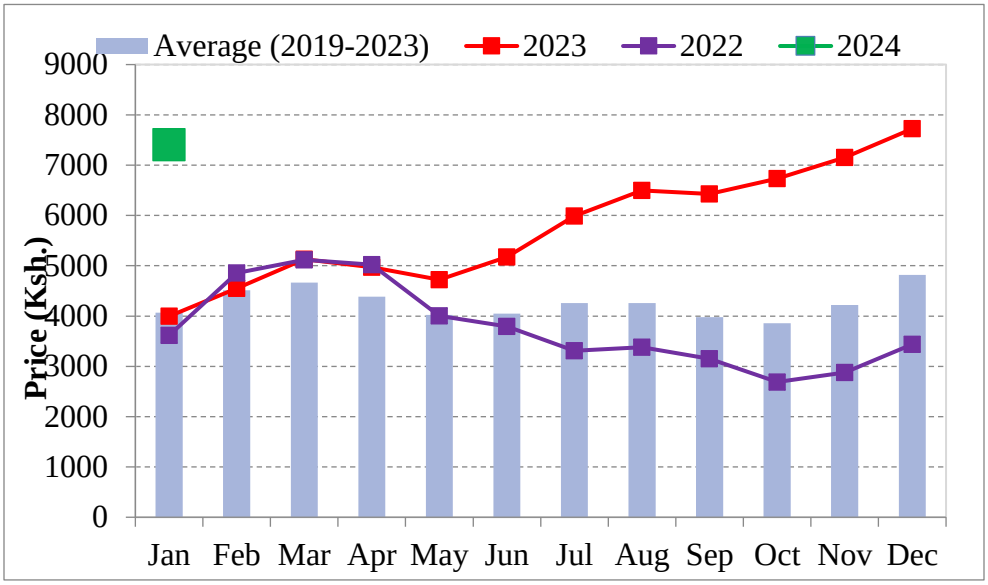


Figure 4: Average Price of a Medium Size Goat

3.2.2 Terms of Trade

The terms of trade (ToT) represent the quantity of maize in terms of kilograms that can be acquired from proceeds of a mature goat and normally is a proxy for household food access. The current ToT for January 2024 is 116 kilograms of maize from the sale of a goat which is higher than the one posted for the same period the previous year by about 114 percent and above the long-term average by 27 percent (Figure 5). The Marginal Mixed Farming Livelihood Zone reported a ToT of 92 with the Mixed Farming Livelihood Zone recording a ToT

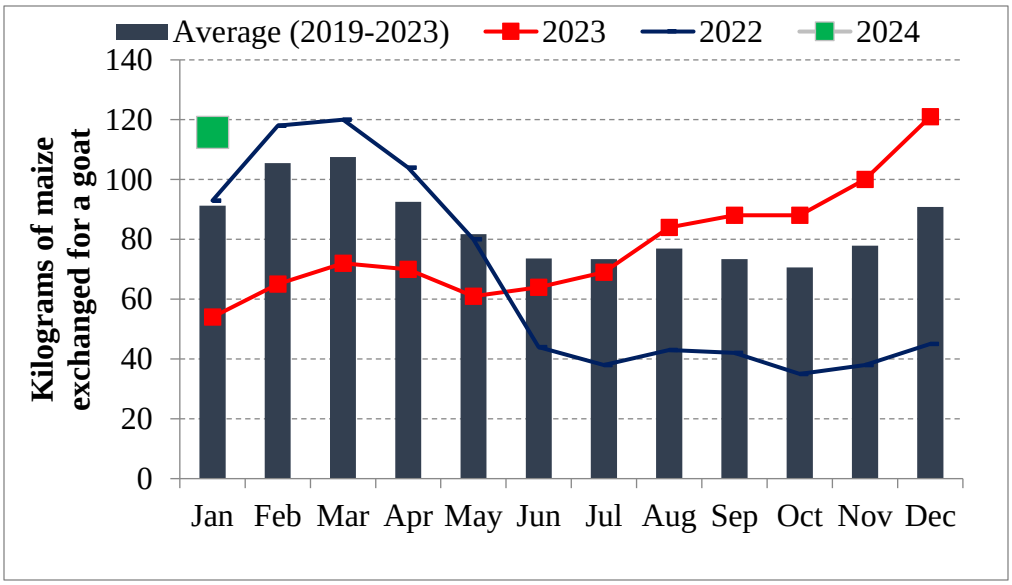


Figure 5: Comparative Terms of Trade

of 100 during the reference period. The lower ToT in the former zone was as a consequence of the high prices of maize.

3.2.3 Income Sources

Majority of the households across the two livelihood zones depend on livestock production, food crop production and poultry production as their main income sources. Other sources of income include: charcoal burning/firewood collection, cash crop production, and casual waged labour (Table 12).

Table 12: Main Sources of Cash Income

Sources of Income	Contribution to Cash Income per Livelihood Zone (Percent)	
	Marginal Mixed Farming LHZ	Mixed Farming LHZ
Livestock Production	40	10
Food Crop Production	20	45
Poultry Production	20	10
Casual Waged Labour	5	8
Charcoal Burning/Firewood Collection	5	6
Cash Crop Production	5	8
Others (formal waged labour, small businesses, petty trading and Remittances).	5	13

3.2.4 Water Access and Availability (Including Cost and Consumption)

Major Water Sources

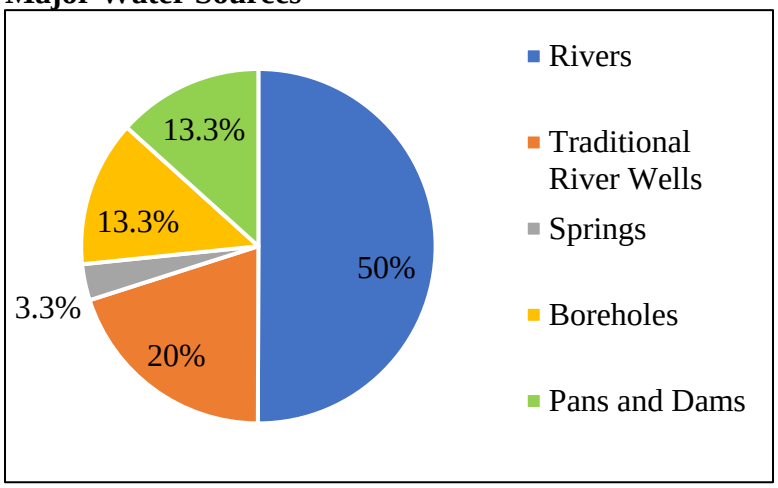


Figure 6: Water Sources as at January 2024

Rivers, traditional river wells, boreholes and pans were the major sources of water throughout the reference period with approximately 50 percent of the population meeting their water needs through rivers while another 13.3 percent apiece drew their water from boreholes and pans with 20 percent drawing water from traditional river wells (Figure 6). Additional support from the continuous operation of the piped water system in urban centers like Marimanti, Mukothima, Gatunga, Tunyai, Chiakariga, Kibung'a, and Nkondi played a critical role in meeting the water needs of the urban population. Kijege springs demonstrated improved flows, providing benefits to the community surrounding kiosk outlets in Chiakariga. The volume in the rivers, boreholes, springs and streams had increased due to the enhanced short rains. The dams and pans had equally recharged but the water was highly turbid with high siltation in earth dams and unlined water pans.

Following the above normal rainfall received over the Short Rains 2023 season, the operational capacity of the boreholes improved and averaged 81 percent with the functionality of other water harvesting structures such as rivers and piped water systems being at 100 percent (Table 13). The non-functional boreholes in areas like Marimanti, Gatunga and Mukothima were due to break down of pumps. The areas with low water points concentration are within Kamanyaki and

Kamarandi location in Chiakariga, Kiegoti, Rurea, Ngunga and Makandara in Igambang'ombe Sub county, Gaceuni, Kamakarariki, Maragwa and Kamwathu in Tharaka North sub county due to the ground water in these areas being saline and not suitable for human consumption.

Table 13: Status of water Sources in Tharaka Nithi County

Ward/ Livelihood Zone	Water Source {Three (3) major sources}	No. of Normal Operational	No. of Current Operational Sources	Projected Duration (Operational Sources)	Normal Duration that water last in months	% of full Capacity Recharged by the Rains	Locality of Non-operational Water Sources
Mixed Farming Matakiri, Turima, Karocho, Tunyai, Mukothima, Itugururu)	Rivers (Mutonga, Thingithu, Kathita, Thanantu).	4	4	perennial	Perennial	100%	Not applicable
	Boreholes	102	85	1 year	12 months	100%	Distributed evenly.
	Piped water (Kibunga Kakimiki, Ruungu Irrigation, Mitunguu W.P., Ngurwe Gakirwe w.p. Jasho irrigation,	5	5	1 year	12 months	100%	Not applicable
(Nkondi, Marimanti, Gituma and Chiakriga, Gatunga, Kanjoro locations, Kamwimbi)	Rivers (Mutonga, Thingithu, Kathita, Thanantu, Ntenderu).	3	2	Perennial	Perennial	100%	Not applicable
	Boreholes	118	93	½ year	6 months	100%	Distributed evenly.
	Piped water (Kibunga Kakimiki, Kathita Marimanti, Kamatungu, Buffalo, Mutonga Gituma, Kijege springs, Materi St. Osola mission, Mwienderi)	9	9	1 Year	12 months	100%	Not applicable
Marginal Mixed farming (Kamanyaki, Kamarandi, Maragwa and Kathangacini, Kamaindi locations).	Rivers (Mutonga, Kathita, Tana)	3	3	Perennial	Perennial	100%	Not applicable
	boreholes	72	58	½ year	6 months	100%	Distributed evenly.
	Rain water harvesting structures (water pans and dams)	9	6	1 year	12 months	100%	Distributed evenly.

The available water in majority of the open water sources is projected to last until the long rains 2024 season. There was no notable variation in the usage of water sources across the two livelihood zones. The usage of water by households in the Marginal Mixed Farming Livelihood Zone was high since the young ones of livestock were watered at the household as the rest of the livestock were taken to grazing areas.

Distance to Water Sources

The average return trekking distance to water points in the Marginal Mixed Farming Livelihood Zone averaged 0.3-0.35 kilometres compared to the usual distance of 0.5-0.6 kilometres while in the Mixed Farming Livelihood Zone it averaged 0.25-0.35 kilometres compared to 0.45-0.6 kilometres normally (Table 14). The decline in trekking distance across most sites could be attributed to increased functionality of multiple water sources in close proximity to households as a consequence of the recharge that took place.

Table 14: Distances to Water Sources, Cost, Waiting Time and Consumption

Livelihood zone	Return Distance to water for domestic use (km)		Cost of water at source (Ksh per 20 litres)		Waiting time at water source (minutes)		Average Consumption (litres/person/day)	
	Normal	Current	Normal	Current	Normal	Current	Normal	Current
Marginal Mixed Farming	0.5-0.6	0.3-0.35	3-5	3-5	30	20	30-40	40-50
Mixed Farming	0.45-0.6	0.25-0.35	2.50-5	2.50-5	25-30	15-20	25-30	30-40

Waiting time at the Source

Decline in waiting time was recorded over most sites in the county as a result of the above normal rainfall experienced over the 2023 Short Rains season. Households in the Marginal Mixed Farming and Mixed Farming Livelihood Zones spent an average of 20, and 15-20 minutes at the water sources compared to the usual waiting time of 30 and 25-30 minutes accordingly (Table 14). The waiting time has declined because people have water closer to their homes, for example, those who have structures that can harvest rain water. The number of water sources has also risen in all zones due to continuous repairs and upgrading the hand pumps to solar pumping and pipeline extension to the communities.

Cost of Water

The cost of water across all livelihood zones has remained unchanged and at par with the normal charges of less than five shillings per 20 litre jerrican except for areas with water scarcity and have been dominated by water vendors where it retails at Ksh. 10 in the Mixed Farming and Ksh. 20-50 in the Marginal Mixed Farming Livelihood Zone (Table 14). Water vending was mainly in areas such as Kathangacini, Maragwa, and Chiakariga, where there is no piped water supply. The proportion of households relying on water vendors was 20-30 percent in Chiakariga and Gatunga.

Water Consumption

The average water consumption per person per day improved during the Short Rains 2023 season in majority of the sites in the county. For instance, residents of the Marginal Mixed Farming Livelihood Zone consumed about 40-50 litres per person per day while those residing in the Mixed Farming Livelihood Zone consumed about 30-40 litres accordingly compared to the normal consumption of 30-40, and 25-30 litres (Table 14). Normal water consumption could be attributed to adequate supply and comparatively shorter distance to the water source. However, in Kamanyaki and Kamarandi locations in the Marginal Mixed Farming Livelihood Zone, water consumption remained at the usual low level of 15 litres per person per day due to inadequate supply and comparatively long distance to the water source.

3.2.5 Food Consumption

The Food Consumption Score based on NDMA surveillance data for the county was 43.6 Approximately 15 percent were categorized as having a borderline food consumption score while the proportion of households classified as having acceptable food consumption score was 85 percent (Figure 7). Consequently, a minimal percentage of households were consuming staples supplemented with vegetables including the green leafy wild ones and pulses a few times in a week. The main cereal varieties consumed by most households was maize and sorghum.

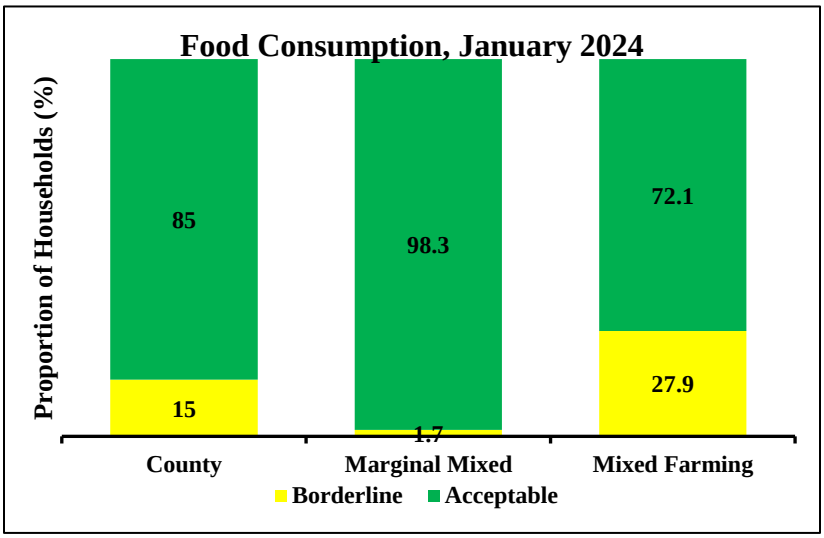


Figure 7: Food Consumption Patterns

Notably, the Mixed Farming Livelihood Zone presented the highest proportion of households (27.9 percent) that fell within the borderline food consumption score category based on their consumption patterns with the Marginal Mixed Farming Livelihood Zone reporting a small proportion of about 1.7 percent within the same category. The recorded decline in the proportions within the respective FCS categories in relation to a similar period the previous year and since the onset of the Short Rains could be attributed to availability of a variety of food commodities out of own production and market. Households in the Marginal Mixed Farming Livelihood Zone were able to integrate milk into their meals following the improved availability hence the positive results.

3.2.6 Coping Strategy

According to the NDMA sentinel site surveillance data, the coping strategy index (CSI) for the county was 4.5 implying households were having a fairly adequate diet. The recorded CSI

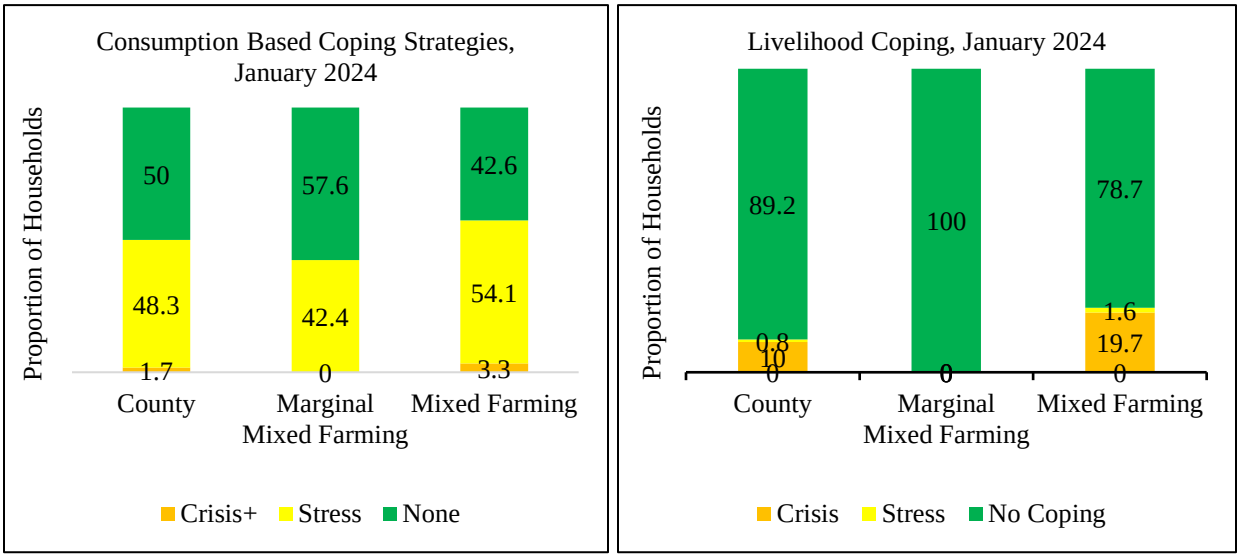


Figure 8: Coping Strategy Patterns

remained unchanged from the one reported of 4.2 for a similar period during the previous year. Therefore, households have basically been applying relatively similar consumption based coping strategies over the reference period in order to bridge the food gaps. The proportion of households applying stress and crisis consumption based coping strategies was 48.3 and 1.7 percent respectively with majority being residents of the Mixed Farming Livelihood Zone as exhibited by the significant proportion of 54.1 and 3.3 percent recorded under those categories in the zone (Figure 8). Approximately 42.4 percent of the residents of the Marginal Mixed Farming Livelihood Zone were applying stress consumption based coping strategies in order to meet their minimum daily energy needs. The decline albeit marginal in food commodity prices occasioned by the good performance of the agriculture and livestock sector coupled with the slight drop in fuel prices enhanced the level of food commodity quantities households could access through their disposable income and thus were not applying severe coping mechanisms over the Short Rains 2023 duration.

3.3 Utilization

3.3.1 Morbidity and Mortality Patterns

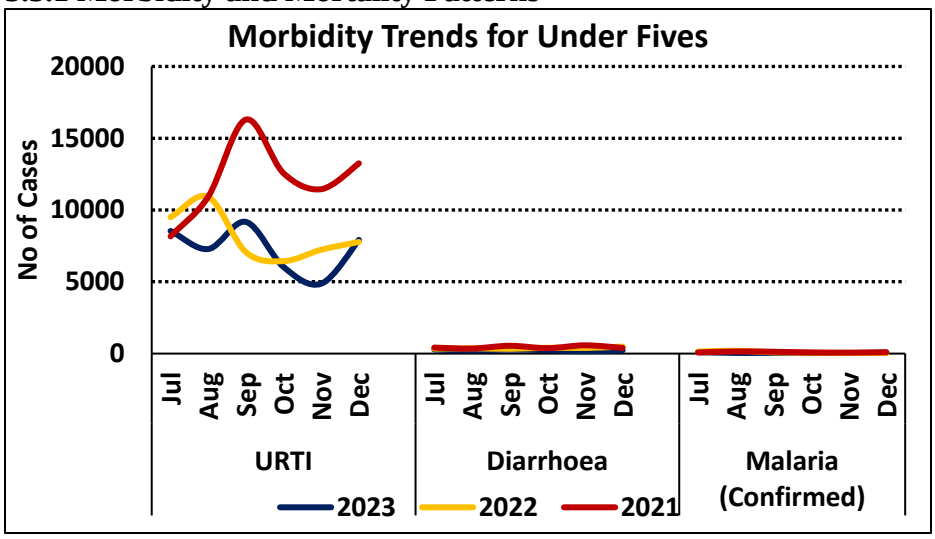


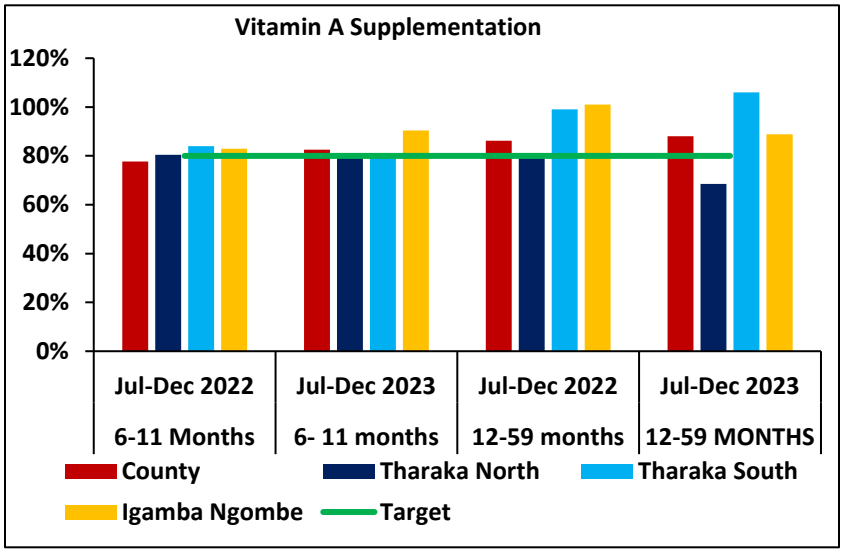
Figure 9: Morbidity Trends among Under-Fives

Cases of Upper Respiratory Tract Infections (URTI) declined over the Short Rains season before peaking in December but were generally below those recorded over the similar period during the previous two years (Figure 9). Comparatively, URTI cases were higher than the other two leading causes of morbidity including diarrhoea and malaria with the trend being similar for both under-fives and the general population. Diarrhea cases significantly decreased across the sub counties which is attributed to the intensified primary health care trainings by the CHPs to the communities with the support from County government and partners like Village Hope Core International. There has also been availability of Rota Vaccine which is one of the vaccines that prevents Diarrhea in Children. Notably, diarrhoea and malaria cases remained significantly low during the reference period as a consequence of the mosquito nets and water storage tanks issued by County Government. The morbidity cases among children under five years of age decreased significantly over the month of July, November and December 2023 compared to the same period in 2022 for Upper Respiratory tract infections (URTI), While for the month of August, September and October increased slightly.

3.3.2 Immunization and Vitamin A supplementation

Vitamin A supplementation for the period between July to December 2023 was above the national target at 88 percent for the 12-59 age cohort while for the 6-11 age cohort it was 82 percent and thus improved with respect to a similar period the previous year when it was reported to be 86 and 77 percent for those cohorts respectively. The increase at the county level to above national target

of 80 percent was mainly due to the support for the vitamin A supplementation and deworming by a partner called HELLEN Keller INTL and intensified routine supplementation. Igambang'ombe subcounty increased the coverage by 7 percentage from 90 percentage to 97.1 percentage for 6-11 months population, and Tharaka South from 99 percentage to 106 percentage for 12-59 months coverage. 13). This was attributed to good coordination within partners, and follow up mechanism from the county – sub county – health facility and community. Vitamin A Supplementation for children 6-11 months and 12-59 months was at 82.60 percent and 88.10 percent respectively. This was a noticeable improvement from the previous year same period.



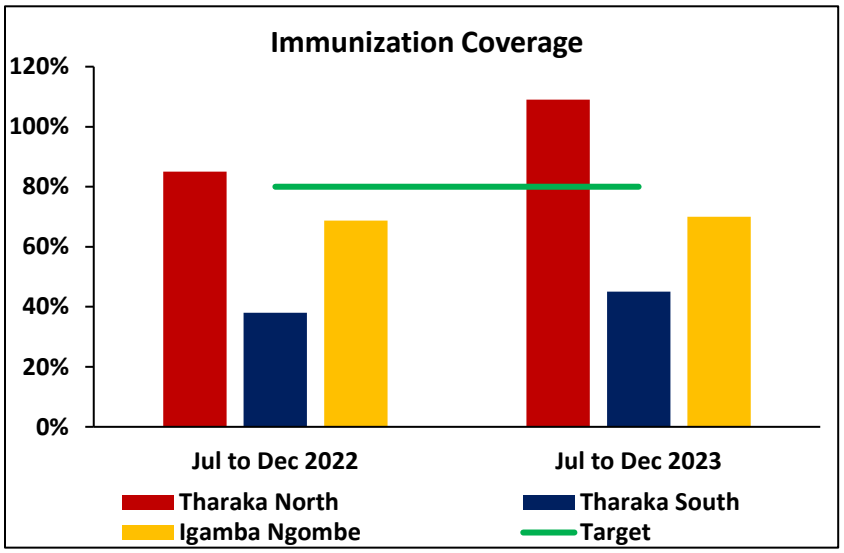


Figure 10: Vitamin A Supplementation and Immunization Coverage

However, Tharaka North did not attain the national target during the period for the 12-59 age cohort while it declined in Igambang'ombe. Regarding immunization, the proportion of children who received the three antigens from July to December 2023 was below the national target of 80 percent in both Tharaka South and Igambang'ombe and stagnated in the latter sub county while improving in the former sub county albeit marginally. The increase in Tharaka North was due to availability of all the vaccines, community follow ups by the CHPs and community outreaches. Coverage for OPV1, OPV3 and measles is above the national target in Tharaka North (Figure 10).

Good coordination within partners, and follow up mechanism from the county – sub county – health facility and community contributed to the observed positive results. Vitamin A Supplementation for children 6-11 months and 12-59 months was at 82.60 percent and 88.10 percent respectively. This was a noticeable improvement from the previous year same period.

3.3.3 Nutritional Status and Dietary Diversity

The proportion of children at risk of malnutrition based on the Middle Upper Arm Circumference (MUAC) measurement of less than 135mm was on a downward trend from November to January 2024. The proportion recorded in the month of January was one percent and was lower compared to December when it was 6.2 percent. The percentage of children at risk of malnutrition in January was 67 percent below than the LTA. The low percentage of proportion of children at risk of malnutrition could be attributed to improved food availability over the Short Rains period following the ongoing harvesting. The main supplementary food for children between 6 to 59 months in Tharaka Nithi County was mainly millet porridge and goat milk. The current risk of malnutrition is attributed to positive changes in environmental conditions, commencement of the green grams harvesting period and food aid interventions.

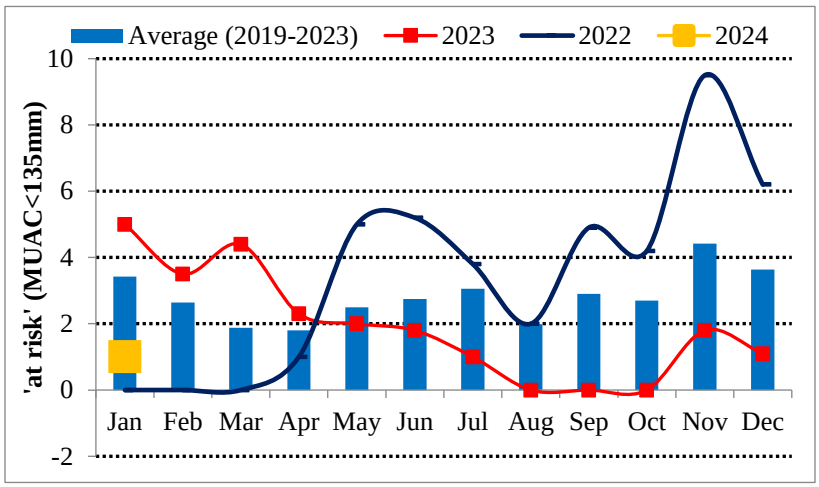


Figure 11: Trends in Malnutrition

The majority of households within the communities were consuming 2-3 meals daily. These meals predominantly consisted of green grams and beans sourced from household provisions, borrowed from family or neighbours, or purchased from local markets. Instances of households reducing their meal frequency were attributed to limited purchasing power and insufficient household food stocks, particularly in areas affected by crop failures. The primary causes of malnutrition included food insecurity, disease, and inadequate health-seeking behaviour. Elevated food prices emerged as the primary barrier to achieving satisfactory dietary diversity within households. Safety net measures implemented to mitigate the adverse effects of poor harvests on vulnerable households included cash transfers, food aid, and initiatives like "Kazi mtaani." However, despite the implementation of these safety net measures, the available support proved inadequate in addressing the needs of the large number of affected individuals

3.3.4 Sanitation and Hygiene

Households fetch water from rivers and boreholes using jerrican containers or for some households it is delivered by water vendors. Water storage tanks and Jerrycans are used to store water. Water treatment was done by 40 percent of households, out of which 70 and 30 percent use boiling and chemical treatment method respectively. In the Mixed Farming Livelihood Zone, water treatment chemicals were available and widely used. From the community interviews it was reported that boiling water was not consistently done by some households.

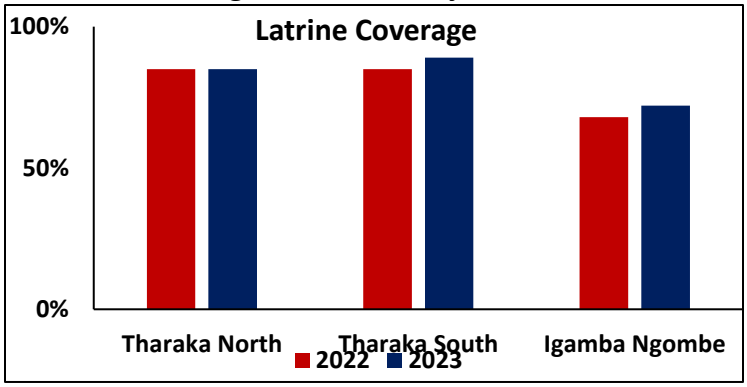


Figure 12: Latrine Coverage

Water contamination was mainly from human and animal waste in the Marginal Mixed Farming Livelihood Zone, while in the Mixed Farming Livelihood Zone, contamination was by human waste and agricultural activities. According to the public health survey the percentage of households washing hands at four critical times was 77 percent. The emphasis on hand hygiene during the pandemic had contributed to increased frequency and regular hand washing.

Based on the public health record, latrine coverage was estimated at 87 percent almost comparable to that of 2022 (Figure 12). Community Lead Total Sanitation (CLTS) triggering activities have drastically scaled up and open defecation was at 14 percent.

3.4 Trends of Key Food Security Indicators

Table 15 shows trends of food security indicators from the long rains' assessment in July 2023 to the short rains' assessment in January 2024.

Table 15: Food Security Trends in Tharaka Nithi County

Indicator	Long Rains Assessment, July 2023	Short Rains Assessment, January 2024
% of maize stocks held by households	52% of LTA	146% of the LTA
Livestock body condition	Marginal Mixed Farming: Fair to Good Mixed Farming: Good	Marginal Mixed Farming: Good to Very Good Mixed Farming: Good to Very Good
Water consumption (litres per person per day)	Marginal Mixed Farming: 25 Mixed Farming: 30	Marginal Mixed Farming: 25 Mixed Farming: 30
Price of maize (per kg)	87	64
Distance to grazing (km)	Marginal Mixed Farming: 1-3 Mixed Farming: 0.8-1	Marginal Mixed Farming: 25 Mixed Farming: 30
Terms of Trade	69 kg	116kg
Coping strategy index	rCSI: 3.1	rCSI: 4.5
Food Consumption Score	**Marginal Mixed Farming** Borderline: 25.0% Acceptable: 75% **Mixed Farming** Borderline: 7.7% Acceptable: 92.3%	**Marginal Mixed Farming** Borderline: 1.7% Acceptable: 98.3% **Mixed Farming** Borderline: 27.9% Acceptable: 72.1%

3.5 Education

3.5.1 Access- (Enrolment)

Enrolment increased across all the three levels except Primary level (that decreased by 775 learners) with that of pre-primary increasing by 15 learners while that of Junior school and Secondary level increased by 3,926 and 2,016 learners respectively (Table 16). Drop was experienced in primary schools due to difference in number of learners transiting into the new system of education and those completing the old one. Its only grade 1-6 learners who remained in primary level after class 8 candidates completed Kenya Certificate of Primary Education in 2023, this translated to more pupils exiting than those joining school at early years of education.

Table 16: Access- (Enrolment)

Level	Term III 2023			Term I 2024			Reasons for increase or decrease in enrolment
	№ Boys	№ Girls	Total	№ Boys	№ Girls	Total	
Pre-Primary	6,938	6,574	13,512	6,797	6,730	13,527	Transition; Those admitted to PP2 were more than those in PP1
Primary	28,642	28,046	56,688	28,303	27,610	55,913	Only grade 1-6 grades in schools after class 8 did KCPE; more pupils exited after 2023 KPSEA & KCPE than those admitted in grade one 2024
Junior School	2,950	2,924	5,874	4,934	4,866	9,800	Transition; Grade 8 & 7 admission in 2024
Secondary	8,691	8,839	17,530	9,626	9,920	19,546	Transition, more form ones admitted in 2024 than those exited after KCSE 2023

Increase in enrolment was experienced in pre-primary, Junior school and secondary schools due to meals support programme by parents at the school and the Ministry of education capitation to schools enhancing education access. There was no case of drop –out due to availability of meals both at home and at school.

3.5.2 Food Availability in Schools During the Season

The school feeding programme was being implemented in some learning centres at both the pre-primary and primary levels. International Aid Services (IAS-K) and PLAN International were supporting these centres through cash transfer and other programmes. The total number of learners benefitting from the School Meals Programme were 17,295 boys and 17,885 girls while those who did not benefit were 4,406 boys and 3,643 girls (Table 17). Cases of students skipping lunch was reported in the schools that were not implementing the School Meals Programme.

Table 17: School Meals Programme

№ of schools with school meals programme			Cash Transfer		Others Types NGOs: PLAN & IAS		Total number of beneficiaries on SMP		Total Learners NOT on SMP	
Level	No of schools	No. of Schools with SMP	№ Boys	№ Girls	№ Boys	№ Girls	№ Boys	№ Girls	№ Boys	№ Girls
Pre-Primary	241				822	955	822	955		
Primary	244	72	13,349	13,381	3,124	3,549	16,473	16,930	4,406	3,643
Junior School	210									
Secondary	67									
Subtotal	762	72	13,349	13,381	3,946	4,504	17,295	17,885	4,406	3,643
Total			**26,730**		**8,450**		**35,180**		**8,049**	

Availability of Water in Schools

Water availability occasioned by longer distances to water source, due to breakdown and destruction of water facilities posed a challenge to some schools. Approximately 71 secondary schools did not have water within their compounds, the available water in 152 pre-primary schools could not last for the next three months while about 237 were in need of water harvesting facilities (Table 18). Water available in institutions was not treated and there were no proper lids on water containers. Boreholes and piped water (taps) were the dominant source of water in institutions.

Table 18: Water for Schools

Main sources of water in schools	№ of schools which had NO access to safe water (functional source within 100m radius)				№ of schools with inadequate or no water to last for the next three months				№ of schools in need of water harvesting and storage facilities e, g gutters, water tanks			
	Pre-Primary	Primary	Junior School	Secondary	Pre-Primary	Primary	Junior School	Secondary	Pre-Primary	Primary	Junior School	Secondary
Taps	48	48	43	15	46	46	38	17	45	45	53	15
Rainwater	12	36	28	32	8	28	16	17	23	46	18	21
River	18	23	16	12	34	29	23	12	48	88	75	53
Borehole	47	49	43	12	64	58	14	62	64	58	43	14
Total	**125**	**156**	**130**	**71**	**152**	**161**	**91**	**108**	**180**	**237**	**189**	**103**

Effect of the Season on Learning Continuity

The learning season was not interrupted for Pre- Primary, Junior School and secondary schools as most learners were retained in schools due to high enrolment registered at the schools**.** Four schools hosted Internally Displaced Persons (IDPS) but fortunately it was during the December holiday. However, a total of 140 schools in pre-primary, primary, junior school and secondary schools had classroom roofs damaged by wind, toilets sunkening due to floods. Mud-walled classrooms were equally damaged by the rainfall. Availability of food and water both at school and home enhanced access attendance and learner participation in learning. Three million trees were planted across all schools in adherence to the presidential directive to grow 15 billion trees in the country. Noteworthy, 4k-Clubs in some schools embarked on agricultural projects to supplement diet in the school, water harvesting, livestock and crop farming around the school were some of the activities conducted to promote food security and mitigate climate change in schools. Challenges faced in storage of foodstuffs included; Inadequate storage rooms, lack of pallets, pest/weevil attack and theft risks to food stored.

3.6 Child Protection

Child protection is essential in providing children a conducive environment for an all-round growth and development, that is, mentally, socially, psychologically, intellectually and physically. However, the community and county at large have been grappling with a myriad of child protection issues the main ones being child neglect, violence against children, gender-based violence and teen pregnancies among others. There were no reported incidences of child migration. While there were few cases of separated children, and few child headed households, this could not be directly the short rains. The separated children were receiving services from various child protection payers led by the Directorate of children services.

About 14 children had experienced physical violence while four had experienced defilement. Most of the issues facing children involved neglect. Cases of child marriage had been noted in the county and where they had been exposed intervention measures had been taken.

The major contributor to early marriage was under age pregnancy and that could be attributed to general poverty in the lower parts of the county. Equally, teen pregnancies had been reported and was as a consequence of poverty and permissive culture. A particular group of children in special need schools emerged as a group that required special attention. However, there was a lot of mitigation from government agencies. The directorate of children services in conjunction with

other partners had collaborated to offer comprehensive services to children ranging from bursaries, school feeding programmes, rescue and legal assistance.

4.0 FOOD SECURITY PROGNOSIS

4.1 Assumptions

The February to July 2024 most likely food security scenario is based on the following assumptions for the South Eastern Marginal Agriculture cluster.

- Based on the Kenya Meteorological Department (KMD) preliminary forecast, World Meteorological Organization (WMO), other global forecasting centers and historical analogs, the March to May 2024 Long Rains will most likely be average to above average over most parts of the county.
- According to technical price projections by different agencies wholesale maize prices are expected to remain at least 10 percent above the long-term average but likely to decline with the ongoing harvest.
- Forage and water resources are anticipated to remain stable until the onset of the long rains season with the March to May rains projected to drive further rejuvenation of these resources.
- The prevalence of acute malnutrition is anticipated to remain within acceptable levels throughout the outlook period driven by a multiplicity of factors such as availability of food, improved access to market, low disease burden among others

4.2 Food Security Outlook for February to March 2024

Seasonal shift upwards across the rainfall period in the prices of all livestock species is expected as the body condition improves further and that will result to improved purchasing power due to the high terms of trade partly driven by the maize price that is also anticipated to drop further owing to the increased supply from the internal sources. Livelihood coping mechanisms will most likely be used by a negligible percentage of households with increased milk consumption likely to influence a decline in malnutrition levels across all sites. Subsequently, it will be highly probable that a very small proportion of households in all the livelihood zones will not be able to meet their basic food requirements.

4.3 Food Security Outlook for March to July 2024

Following forecasted the average to above average temperatures, vegetation and water resource will probably remain average across most sites thereby impacting on livestock productivity positively. Consequently, household income out of livestock production is anticipated to remain elevated due to the better rangeland conditions whose quantity and quality would have been aided by the MAM 2024 rainfall. The likelihood of market systems experiencing positive results shall remain high and therefore positive effects on household food and nutrition security will most likely be felt more so among the Marginal Mixed Farming households who rely on the market for their staple food commodities such as maize.

5.0 CONCLUSIONS AND INTERVENTIONS

5.1 Conclusion

5.1.1 Phase Classification

The food security situation for Tharaka Nithi County has improved since the long rains' assessment conducted in July 2023 with a reduction in the population falling under the worst phases. The overall indicative food security phase classification for Tharaka is "Stress phase" (IPC phase II). The indicative food security phase classification for Marginal Mixed Farming Livelihood Zone and Mixed Farming Livelihood Zone is equally "Stress phase" (IPC phase II).

5.1.2 Summary of Findings

Food consumption improved significantly during the season with approximately 85 percent of the population being classified as having acceptable food consumption score while 15 percent fell within the borderline category. The highest proportion (27.9 percent) of households classified as having a borderline food consumption score were residents of the Mixed Farming Livelihood Zone. The reduced coping strategy index (rCSI) remained fairly similar to those reported previously for the same period. Proportion of children aged five years and below categorized as being 'at risk' declined remarkably across the season and that was occasioned by the average to average performance of the livestock and crop production sectors.

5.1.3 Sub-County Ranking

Table 19: Ranking of Sub-County in Order of Food Insecurity Severity

Sub-County/ward	**Sub-County Ranking (1=Most food insecure,.6=Least food insecure)**	**Main food security threats**
Very Good (9-10)	Good (7-8) Fair (5-6) Poor (3-4) Very Poor (<2)	
TharakaNorth-Gatunga	6	Erratic rainfall Quelea Quelea infestation
TharakaSouth-Chiakariga	7	Poor fodder regeneration Quelea Quelea infestation
Igambang'ombe-Igamba ngombe	8	Presence of dominant entropogon spp fodder
Tharaka South-Marimanti	8	Erratic mode of rains
Tharaka South-Nkondi	9	Early cessation of rainfall
Tharaka South-Mukothima	9	Early cessation leading to wilting and drying of immature crops
Igambang'ombe-Mariani	9	Destruction of planted fodder

Table 20: Sub-County Ranking (Worst to best)

Sub County	Rank
Tharaka North	1
Tharaka South	2
Igambang'ombe	3

5.2 Ongoing Interventions

5.2.1 Food Interventions

The following food interventions are ongoing in Tharaka Nithi County:

- Distribution of relief including food (rice and beans), 1,600 bags of rice and 639 bags of beans by the National Government. Areas targeted included: Kamarandi rescue centre-Chiakariga, Rimmon children home – Igambang'ombe, Tumaini children home - Igambang'ombe, Connection gate/ rescue – Chuka, Ikuu special –Chuka, Kamatungu Primary, Kamatungu Sec special needs, Nkondi special, Karethani special school, and Kaironi – Maara. About 200 households affected by the Elnino Phenomenon were equally targeted.

5.2.2 Non-Food Interventions

Table below gives a summary of ongoing interventions

Table 21: Non-food Intervention

Sub County	Intervention	Specific Location	No. of beneficiaries	Implementer	Cost (Million)	Time frame
Agriculture						
Tharaka North	Cereal enhancement program	All	4,500HH	MoA/KCEP	20	Dec 2024
Tharaka South	Cereal enhancement program	All	4,500HH	MoA/KCEP	10	Dec 2024
Tharaka South	Construction of majarani earth dam	Marimanti	1,000HH	MoA/KCEP	20	June 2024
Tharaka South	Spring Protection at Kijege Hill	Chiakariga	100HH	MoA/KCEP	20	June 2024
Igamba ngombe	Cereal enhancement program	All	3,000HH	MoA/KCEP	10	Dec 2024
Tharaka North, Tharaka south & igamba ngombe	Agriculture Sector Development Support Program (ASDSP)	All	3,000HH	MoA/ASDSP	10	June 2024
Tharaka North, Tharaka south & igamba ngombe	Emergency locust response program (ELRP)	Gatunga, Nkondi Mariani	10,000HH	MoA/ELRP	100	Dec 2024
Tharaka North, Tharaka south & igamba ngombe.	Promotion of Dietary Diversification (Kitchen Gardening	All	9,000HH	Small Irrigation and Value Addition Project (SIVAP)	5	1 year
Education						
Sub County	**Intervention**	**Specific Location**	**No of Beneficiaries**	**Implementer**	**Cost (Million)**	**Time Frame**
Tharaka South, Chiakariga, Tharaka North & IgambaNg'ombe	School Meals Programme in schools	Marimanti Nkondi, Kajuki, Gatunga, Mukothima, Kajuki	12,856 schools	MOE, Parents	30	3 Months
Water						
Sub County	**Intervention**	**Specific Location**	**No of Beneficiaries**	**Implementer**	**Cost (Million)**	**Time Frame**
Igambang'ombe	Ruriini water project	Mutino	300 HH	NDMA	6	6 months
Countywide	Water trucking	Lower semi-arid zone	100,000 HH	County, TWWDA/ NIWASCO	7	5 months
Mukothima	Kauro ka mpuria water pan	Mauthini	305 HH	KCEP CRAL	6.48	5 months
Gatunga	Kamagajiu earth dam	Kathangachini	700 HH	NDMA	7.4	6 months
Marimanti ward	Capacity building on operation and maintenance, Group dynamics and crop husbandry	Marimanti	600 HH	County government, NDMA, NGOs And Donors	0.6	Immediately and continous
Chiakariga ward	Mutonga-Chiakariaga W.P	Chiakariga	1200 HH	County government	2	6 months
Nkondi ward	Capacity building	Nkondi	1200 HH	County government, NDMA, NGOs	1	2 months
Igambang'ombe	Construction of Kamonka Irrigation	Mutino/ Kajuki	500 HH	County	6	2023/ 24

Countywide	Drilling and equipping boreholes	countywide	25,000 HH	County, TWWDA	60	2023
Igambang'ombe	Completion of mainline for Kavando Irrigation project	Kamwimbi	500 HH	County	5	2022/ 2023
Igambang'ombe	Water reticulation from Governor's residence to Kirimankari	Kajuki Location	1500 HH	County	1.6	2022/ 2023
Nkondi	Construction of Kiaga Irrigation project	Nkondi	600 HH	County government	10	6 months
Nkondi	Construction of Rukuriini Irrigation project	Nkondi	600 HH	County government	11	6 months
Marimanti	Construction of Kinyingiri Irrigation project	Marimanti	600 HH	County government	8	6 months
Livestock						
Sub County	**Intervention**	**Specific location**	**No. of beneficiaries**	**Implementer**	**Cost (Million)**	**Time Frame**
Tharaka North	Pasture and crop residue preservation	Gatunga	250 HH	Livestock Production Office	1	Nov 2023 to Mar 2024
Tharaka South	Pasture preservation	Kamanyaki	300 HH	Livestock Production Office	1	Nov 2023 to Feb 2024
Tharaka North	Range lands rehabilitation	Kathangachini	250 HH	TWENDE and Livestock Production Office	0.5	From April, 2023
Tharaka South	Range lands rehabilitation	Kamarandi	300 HH	TWENDE and Livestock Production Office	0.5	From April, 2023
Health and Nutrition						
Sub county	**Intervention**	**Location**	**No. of beneficiaries**	**Implementer**	**Cost (Million)**	**Time Frame**
Tharaka North	Vitamin A Supplementation	Gatunga, Kiamiramba	Children 6-59 months	Hellen Keller International and TNCG	0.4	Continuous
Tharaka North	Zinc Supplementation	Gatunga	Children 6-59 months	TNCG	0.25	Routine
Tharaka North	Management of Acute Malnutrition (IMAM)	Gatunga, Kathangachini	Children 6-59 months	TNCG	0.3	Continuous

5.3 Recommended Interventions

5.3.1 Food Interventions

Following the short rains assessment on the impact of the October to December 2023 rainfall on various livelihood sectors, the team recommended cash transfer as the most appropriate implementation modality for delivering assistance to the most food insecure population in accordance with the proportions depicted in table 22

Table 22: Population in Need of Food Assistance

S/No	Sub County	Ward	Population Range (%)
1.	Tharaka North	Gatunga	15-20
2.	Tharaka South	Chiakariga, Nkondi, Marimanti, Mukothima	10-15
3.	Igambang'ombe	IgambaNg'ombe, Mariani	5-10

5.3.2 Non-Food Interventions

Table 23: Non-Food Recommended Interventions

Sub County	Specific Location	Intervention	No. of beneficiaries	Implementer	Required Resource (million)	Available Resource	Time Frame
Agriculture							
Tharaka north and South	Gatunga, Marimanti Chiakariga, Igamba ngombe	Provision of clean planting materials	20,000 HH	County govt National govt	Fertilizer, Seeds, Agro chemicals	60	Immediately
Tharaka North	Mukothima, kanyange and	Completion of a grain store	9,845 HH	MoA/ Stakeholders	5	Land	2yrs
Tharaka North	Gatue, Maragwa, Kanjoro, Kathangachini	Setting up of an irrigation	4,590 HH	MoA, Stakeholders	120	Land	2yrs
Tharaka South	Tunyai, Nkondi	Setting of an irrigation	5,400 HH	MoA, Stakeholders	120	Land	2yrs
Igamba Ngombe	Kamaindi, Kajuki And Kamwimbi Locations	Setting of an irrigation	4,000 HH	, MoA, Stakeholders	120	Land	2yrs
Education							
Tharaka South, Chiakariga, Tharaka North & Igambang'ombe	Marimanti, Nkondi, Kajuki, Gatunga, Mukothima, Kajuki	Food for fees for secondary schools	5,625 schools	NDMA, Interior	2.1	0.6	3 Months
Water							
County wide	Countywide	Water resources mapping	300,000 HH	County	15	GPS, GIS Lab	2023/2024
Igambang'ombe	Kajuki, Mutino, Kamaindi	Water trucking	2,000 HH	GOK, County gov't, NDMA, NGOs	5	Water Bowsers	Immediately
Tharaka North/ Tharaka South/ Igambang'ombe	Marimanti	Capacity building on Community Water management	600 HH	County government, NDMA, NGOs	10	technical personnel	Immediately
Mukothima, Gatunga, Marimanti/Nkondi, Chiakariga, Igambang'ombe	Mukothima, Gatunga, Marimanti/Nkondi, Chiakariga, Igambang'ombe	Repair of hand pumps and rehabilitation of boreholes	15,000 HH	County/ NDMA/ TWWDA	10	Personnel	1 year
Mukothima, Gatunga, Marimanti/Nkondi, Chiakariga, Igambang'ombe	Mukothima, Gatunga, Marimanti/Nkondi, Chiakariga, Igambang'ombe	Water trucking	2,000 HH	GOK, County gov't, NDMA, NGOs	10	Water Bowsers	Immediately
Countywide	Countywide	Construction of mega, medium and small dams	40,000 HH	National gov't/ County	200	Personnel	5 years

Sub County	Specific Location	Intervention	No. of beneficiaries	Implementer	Required Resource (million)	Available Resource	Time Frame
Countywide	Countywide	Strengthening WRA and WRUAs	50,000 HH	National gov't	100	Personnel	5 years
Countywide	Countywide	Enhance roof water harvesting storage through water pans for institutions	40,000 HH	GoK, TNCG, NGO and others	20	Personnel	5 years
Igambang'ombe	Mutino/ Kajuki	Construction of Kamonka Irrigation project	600 HH	GOK/ NIA, County government, NDMA, NGOS	85	Technical personnel	2024-2027
Igambang'ombe	Mutino/ Kajuki/ Kamaindi	Drilling and equipping 15 boreholes	2,500 HH	GOK/ NIA, County government, NDMA, NGOS	45	Technical personnel	2024-2027
Igambang'ombe	Mutino/ Kajuki/ Kamaindi	Construction of 6 water pans/ Small dams	3,000 HH	GOK/ NIA, County government, NDMA, NGOS	60	Land, Technical personnel	2024-2027
Igambang'ombe	Mutino	Distribution networks for Kathwana Water project	600 HH	GOK/ NIA, County government, NDMA, NGOS	10	Technical personnel	2024-2027
Igambang'ombe	Kamwimbi	Completion of Kavando Irrigation project	500 HH	GOK/ NIA, County government, NDMA, NGOS	20	Technical personnel	2024-2027
Igambang'ombe	Kamaindi	Augmentation of Gitogo Kamaindi domestic/ Irrigation	800 HH	GOK/ NIA, County government, NDMA, NGOS	25	Technical personnel	2024-2027
Countywide	Countywide	Dams and water pans for rain water harvesting	100,000 HH	National & County govt's, NGOs	100	Personnel	2024-2027
Mukothima/ Gatunga	Mukothima/ Gatunga	Drilling and equipping 10 boreholes	2,000 HH	GOK/ NIA, County government, NDMA, NGOS	30	Technical personnel, Drilling machine	2024-2027
Nkondi	Nkondi	Construction of Kiaga Irrigation project	600 HH	GOK/ NIA, County government, NDMA, NGOS	75	Technical personnel	2024-2027
Nkondi	Nkondi	Construction of Rukuriini Irrigation project	600 HH	GOK/ NIA, County government, NDMA, NGOs	85	Technical personnel	2024-2027
Marimanti	Marimanti	Construction of Kinyingiri Irrigation project	600 HH	GOK/ NIA, County government, NDMA, NGOs	90	Technical personnel	2024-2027

Sub County	Specific Location	Intervention	No. of beneficiaries	Implementer	Required Resource (million)	Available Resource	Time Frame
Marimanti/ Nkondi/ Chiakariga	Marimanti/ Nkondi/ Chiakariga	Drilling and equipping 15 boreholes	2,500 HH	GOK/ NIA, County government, NDMA, NGOs	45	Technical personnel	2024-2027
Marimanti/ Nkondi/ Chiakariga	Marimanti/ Nkondi/ Chiakariga	Construction of 6 water pans/ Small dams	3,000 HH	GOK/ NIA, County government, NDMA, NGOs	60	Land, Technical personnel	2024-2027
Livestock							
Tharaka north	Gatunga	Fodder preservation and conservation stores	120 HH	TNCG-Livestock Production, Caritas Meru and NDMA	0.6	Personnel	3months
Tharaka South	Marimanti	Fodder preservation and conservation stores	90 HH	TNCG-Livestock Production, Caritas Meru and NDMA	0.45	Personnel	3months
Tharaka south	Marimanti	Mass vaccinations against PPR, LSD and Rabies	3,000 HH	County Government, department of veterinary services,	0.5	Personnel	3 Months
Tharaka north	Gatunga	Mass vaccinations against PPR, LSD and Rabies	3,000 HH	TNCG-department of veterinary services, Caritus Meru and NDMA	5	Personnel	From February 2024
Igambang'ombe	Kajuki	Mass vaccination against CCPP, LSD and Rabies	1,500 HH	County government, veterinary department	2	Personnel	Feb to June 2024
Igambang'ombe	Kajuki	Community sensitization on the importance of fodder preservation, controlled grazing and proper stocking rate as well as creating awareness on prussic acid poisoning	300 HH	County government, Livestock production	0.15	Personnel	Feb to June 2024
Health and Nutrition							
All Sub counties	All Sub counties	Support supervision	100 health facilities	SCHMT	1	Man power	continuous
All Sub counties	All Sub counties	Targeted outreaches	<5yrs 10,000	SCHMT	0.5	Human Resource	Before June 2024
All Sub counties	All sub counties	Training health care workers on IMAM	500 HCWs	SCHMT	2	Human Resource	Before June 2024
All Sub counties	All Sub counties	Mass screening	<5yrs 15724 children	SCHMT	0.5	Human Resource	Before June 2024

Sub County	Specific Location	Intervention	No. of beneficiaries	Implementer	Required Resource (million)	Available Resource	Time Frame
All Sub counties	All sub counties	Establishment of growth monitoring points and mother to mother support groups	1000 caregivers	Partners and TNCG	0.5	Human Resource	continuous
All Sub counties	Tharaka Nithi	Nutrition Surveys	Community and policy makers	Donors, TNC,	5	Field interviewer supervisors, HCW, Records Officers	2024