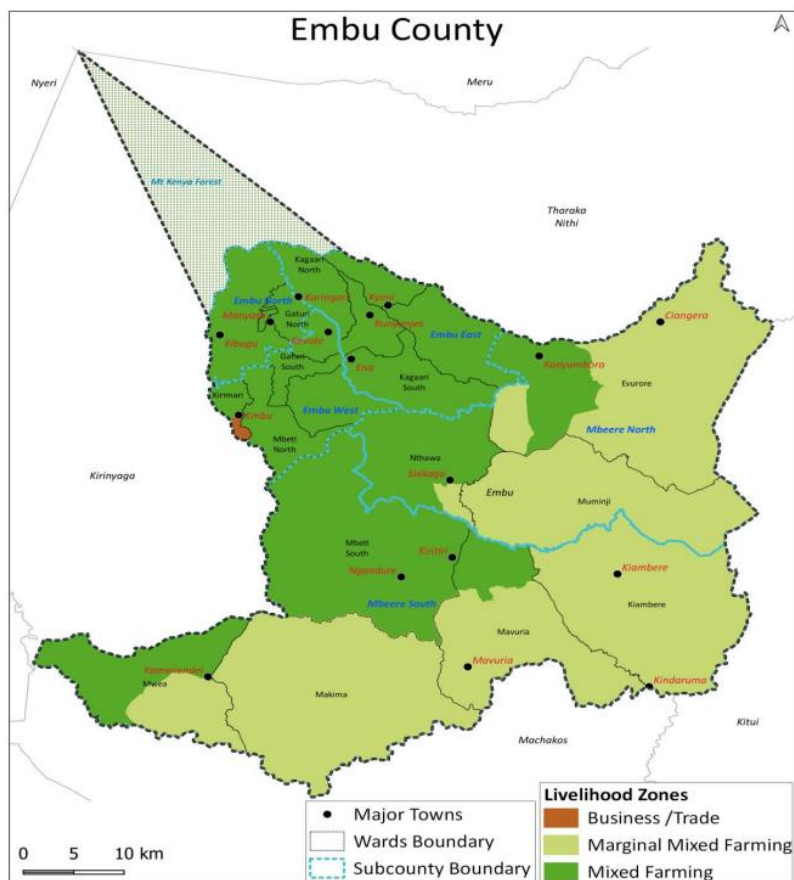


EMBU COUNTY (MBEERE) **2025 LONG RAINS FOOD SECURITY ASSESSMENT REPORT**



**A Joint Report by the Kenya Food Security Steering Group (KFSSG)1 and
 Embu County Steering Group (CSG)**

July 2025

EXECUTIVE SUMMARY

The Kenya food security and nutrition assessment for Embu County (Mbeere) was undertaken from 21st – 25th July 2025 conducted by sector working group technical members. The assessment covered three sub-counties namely Mbeere North, Mwea and Mbeere South within the Mixed Farming (MF) and Marginal Mixed Farming (MMF) livelihood zones. The broad objective of the assessment was to develop an objective, evidence-based and transparent food and nutrition security situation analysis, taking into account the cumulative effect of previous season impacts, other shocks and hazards and suggest possible food and non-food intervention recommendations.

The improved rainfall did lead to a slight increase in rain-fed crop production compared to the previous year, supported by the distribution of free certified seeds and subsidized fertilizer. Maize production increased by 7.4% and green gram production by 6.5% over their long-term averages, while bean production declined by approximately 28.2% due to pest attacks and suboptimal seed varieties. Irrigated crop production for tomatoes and watermelons remained stable, but kale production decreased by about 24% due to aphid and powdery mildew infestations.

Current food stocks show a modest 7.1% increase in maize availability above the long-term average, driven by farmers and traders. However, bean availability declined by nearly 12%. Cowpeas and green gram stocks increased by 5.5% and 14.3% respectively, reflecting a shift towards drought-tolerant varieties. Food commodity stocks are expected to last 2-3 months in Mixed Farming (MF) zones and 1-2 months in Marginal Mixed Farming (MMF) zones, which is below the normal duration.

Livestock body conditions are fair to good across both livelihood zones, supported by crop residues and conserved pastures. Pasture and browse conditions are currently good in MF zones and fair to good in MMF zones, expected to last around 2-2.5 months. Milk production is 3.5 liters/household/day in MF zones (above normal) and 1.0 liters/household/day in MMF zones (below normal). Livestock mortality rates remain normal (<0.5%). Distances to water sources for livestock are 2-5 km in MMF and 0.5-1 km in MF zones, which is within normal ranges.

Market operations indicate a lower-than-usual volume of livestock sales, as most households have sufficient food stock and feed. Trade in cereals and pulses is high due to good harvests in some areas. The return distance for households to fetch water is generally fair, though some isolated areas in the MMF zone, such as Kiambere, Kamarandi, and Makima, report distances up to 4 km. Waiting times at water sources and the cost of water (Kshs. 5 per 20L jerrican) remain normal.

Food consumption scores show that households in MF zones consume three to four meals per day, primarily from three to four food groups, while MMF zones consume three meals per day from two to three food groups. There is no milk consumption among children in either zone. The proportion of households not adopting any coping strategies marginally rose to 76.4% by June, suggesting increased resilience. However, a small percentage of households continued to experience deeper distress, with crisis coping at 1.6% and emergency coping at 0.8%.

Morbidity trends for children under five and the general population show spikes in cases of Upper Respiratory Tract Infections (URTI), diarrhea, and malaria, attributed to weather changes and water contamination. Latrine coverage varies across wards, and some areas, notably Mwea, Kiritiri, and Nthawa, reported higher rates of open defecation.

School enrolment at the Early Childhood Development Education (ECDE) level increased, primarily due to increased parental awareness. However, primary, junior secondary, and secondary levels experienced decreases in enrolment, attributed to transfers of learners outside the county and truancy. Approximately 76,194 learners benefit from the Community Supported School Meals Programme, where parents provide food or cash. Some schools experienced collapsed pit latrines due to heavy rains, but this did not disrupt learning. Considering all indicators, Embu County (Mbeere) is currently classified as IPC Phase 2 (Stressed) for food security.

Table of Contents

EXECUTIVE SUMMARY	ii
1.0 INTRODUCTION	1
1.1 County Background	1
1.2 Methodology and Approach	1
2.0 DRIVERS OF FOOD AND NUTRITION SECURITY IN THE COUNTY	2
2.1 Rainfall Performance	2
2.2 Other shocks and hazards	3
3.0 IMPACTS OF DRIVERS ON FOOD AND NUTRITION SECURITY	4
3.1 Availability	4
3.1.3 Livestock Production	8
3.1.4 Impact on Availability	12
3.2.1 Market Prices	12
3.2.2 Terms of Trade.....	14
3.2.4 Water Access and Availability.....	15
3.2.5 Food Consumption.....	16
3.2.6 Coping Strategy.....	17
3.2.7 Livelihood Coping	17
3.5 Education	22
3.5.1 Enrolment.....	22
4.0 FOOD SECURITY PROGNOSIS	24
4.1 Prognosis Assumptions	24
4.2 Food Security Outlook	24
5.0 CONCLUSION AND INTERVENTIONS	25
5.1 Conclusion	25
5.1.1 Phase classification	25
5.1.2 Summary of Findings.....	25
5.1.3 Ward Ranking	26
5.2 Ongoing Interventions	27
5.3 Recommended Interventions	32

1.0 INTRODUCTION

1.1 County Background

Mbeere region covers three sub counties of the lower part of Embu County namely Mbeere North, Mwea and Mbeere South. Mwea sub county borders Machakos county to the east and Kirinyaga county to the west while Mbeere South sub county borders Kitui county to the south and Machakos county to the south east. On the other hand, Mbeere North sub county borders Tharaka Nithi county to the west, Kitui County to the east and also borders Runyenjes region of Embu County to the north. Mbeere region covers an area of approximately 2,096 square kilometres with a population of 346,749 (KNBS Projections 2023).

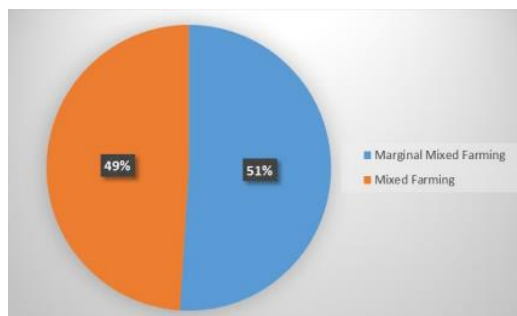


Figure 1: Population proportion by livelihood zone

The two main livelihood zones are Mixed Farming (MF) and Marginal Mixed Farming (MMF) with a population proportion of 49 and 51 percent respectively (Figure 1). In the marginal mixed farming zone, food crop, livestock and cash crop production contribute about 40, 23, and 10 percent to household cash income respectively. Cash crop production contributes majorly to cash income by about 30 percent in Mixed Farming and food crop and livestock production each contributes 20 and 10 percent to cash income respectively. The rainfall pattern for Mbeere is bimodal with October–November–December (OND) season rains being the most reliable in production compared to the March–April – May (MAM) rainfall season in the marginal mixed farming zone while the farmers in the mixed farming zone rely of the March April-May rainy season for food production.

1.2 Methodology and Approach

The overall objective of the long rains’ assessment was to conduct an objective, evidence based and transparent food and nutrition security situation analysis following the long rains season of 2025 and considering the cumulative effect of previous seasons, and to provide recommendations for possible response options based on the situation analysis. During the pre-assessment period, secondary data was gathered through quantitative and qualitative methods through administration of sectoral checklists and review of previous assessment reports, sector situation reports and data from other secondary sources including; health information system, Satellite rainfall estimates and weather forecast reports. During the assessment, primary data was also gathered using semi-structured data collection methods like; focus group discussions, observation through transect drives, markets interviews, household and community interviews.

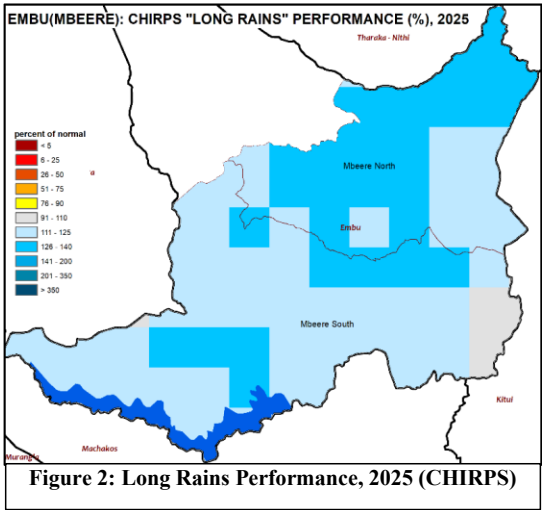
A multi-sectorial approach was adopted whereby technical working group composed of government departments and non-state agencies was assembled and guided through the assessment protocols and procedures during a three-day pre-assessment training. The team reviewed the checklists from the sectors and conducted a field transect drive through all the wards in Mbeere region on 22nd and 23rd July 2025 after which this report was produced after careful evaluation of data analysis results for all the food and nutrition security indicators. The technical members analyzed both quantitative and qualitative data collected and based on convergence of evidence developed thus situation report for the county highlighting the key recommendations for the current findings and also in projected

scenario based on technically possible assumptions. The preliminary findings were disseminated during the county steering group meeting held on 25th July 2025 at County commissioner’s boardroom in Embu County.

2.0 DRIVERS OF FOOD AND NUTRITION SECURITY IN THE COUNTY

2.1 Rainfall Performance

Embu County experienced a timely onset of the long rains season in the second week of March, which aligns with the normal onset period. Wards that received near-normal rains included; Mbeti South, Mavuria, Mwea, parts of Kiambere and Evurore. This ranged between 111 – 125 percent of normal. Wards that received above-normal rains included; Muminji, Nthawa, Evurore, parts of Makima. This ranged between 126 – 140 percent of normal. Spatial and temporal distribution ranged from good to fair and uneven across both livelihood zones with the cessation also coming early in the second week of May as opposed to the third week of May. Weather stations in the Mbeere region recorded above 300 mm of rain, with some receiving as high as 700 mm. According to Kenya Metrological Services, the mixed farming zone recorded a cumulative MAM amount of 600 - 750 mm within a while the marginal mixed farming zone recorded a cumulative total of between 250 – 350 mm.



Temporal Rainfall Performance

In Embu (Mbeere) region, the March to May rainfall period exhibits a robust rainfall performance, characterized by two primary peaks that significantly surpass the long-term averages as shown in figure 3. The first surge in precipitation occurs from late March through early April, with observed rainfall (RFE 2025) reaching close to 60 mm. This exceeds the historical average

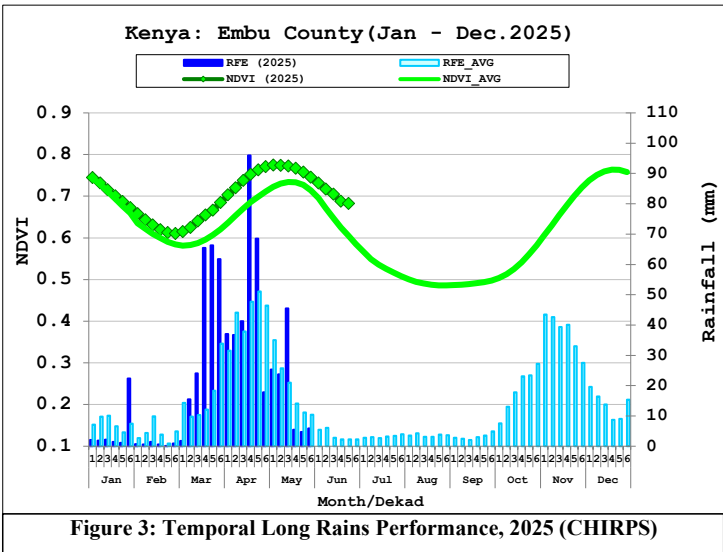


Figure 3: Temporal Long Rains Performance, 2025 (CHIRPS)

(RFE_AVG) for this time of year, indicating an unseasonably wet start to the long rains. A second, slightly less intense but still substantial, rainfall peak is recorded from late April into early May, with measurements hovering between 40-45 mm. Again, this volume of rainfall is discernibly higher than the long-term average for this latter part of the season.

The Normalized Difference Vegetation Index (NDVI) closely mirrors these favourable rainfall patterns. As rainfall intensifies from March, the NDVI values show a corresponding upward trend, reflecting increasing vegetation health and density. The NDVI reaches its peak in late April to mid-May, consistently registering values between 0.77 and 0.78. This elevated NDVI range is significantly higher than the long-term average NDVI (NDVI_AVG) for the same period. This suggests that the above-average rainfall during March, April, and May 2025 has directly contributed to exceptionally vigorous and healthy vegetation cover across Embu County (Mbeere region), indicating positive agricultural and ecological conditions.

2.2 Other shocks and hazards

Livestock Diseases and Mortalities

Livestock mortality rates remain normal (<0.5%). The primary causes are endemic diseases such as Lumpy Skin Disease (LSD), Foot and Mouth Disease (FMD), Contagious Caprine Pleuropneumonia (CCPP), Pestes des Petits Ruminant (PPR), and Newcastle Disease (NCD). Vaccination programs are ongoing to mitigate outbreaks.

High food commodity prices

While prices of beans, maize, and green grams were slightly lower compared to previous periods, they are still above average. The demand for milk is high due to the increasing population, with

supplementation from upper Embu Regions and Kirinyaga County. Milk prices are estimated to remain high due to the high cost of dairy meal concentrates.

Crop failure

Bean production declined by approximately 28.2% from its long-term average due to pest attacks and suboptimal seed varieties. Kale production also decreased by about 24% due to aphid and powdery mildew infestations. The report also notes that the overall market situation has improved and food availability is gradually stabilizing, but the effects of earlier stock shortages caused by past erratic rainfall are still being felt across both livelihood zones.

Weather Factors and Water Contamination

Spikes in cases of Upper Respiratory Tract Infections (URTI), diarrhea, and malaria, attributed to weather changes and water contamination. Specifically, URTI cases spiked in May, likely due to weather changes as the long rains ended. Diarrhea cases were higher in January (possibly due to declining water sources) and increased in March, April, and May (due to contamination of water sources by surface runoff during the long rains). Malaria cases were higher in January and May, which could be due to stagnant water pools left by both short and long rains creating mosquito breeding sites.

3.0 IMPACTS OF DRIVERS ON FOOD AND NUTRITION SECURITY

3.1 Availability

Crop production under rain-fed farming recorded a slight increase, supported by enhanced rainfall during the season. The harvest was notably better compared to the same period in the previous year, which had been affected by below-average rains, high land surface temperatures, pest infestations, and the use of uncertified seeds. The improved performance was also attributed to the distribution of free certified maize, green gram, cowpea and bean seeds by the county government, along with the availability of subsidized fertilizer from the National Cereals and Produce Board (NCPB) through both satellite stores and the main depot.

Production realized during the 2025 long Rains (LRA) season improved compared to same time last year thus improving households' food stocks within the county. During the months of January, February, March and April food commodity supplies in local markets were still limited, largely due to previous production deficits. The improved rainfall during the season led to increased crop production and a modest recovery in trader stock levels. As a result, prices of beans, maize, and green grams were slightly lower compared to previous periods, though still above average. While the effects of earlier stock shortages caused by past erratic rainfall across both livelihood zones are still being felt, the overall market situation has improved, and food availability is gradually stabilizing.

3.1.1 Crops Production

The main crops grown in the Mbeere region include; maize, green gram, cowpeas, and beans. Other crops grown are pigeon peas, sorghum, and millet. Maize contributes 50 percent to food and 10 percent to cash income in the Marginal Mixed Farming zone, while in the Mixed Farming zone it contributes 75 percent to food and 25 percent to cash income, while beans contribute 17 percent to food and 6 percent to cash income in the Marginal Mixed Farming zone, while in the Mixed Farming zone it contributes 23 percent to food and 15 percent to cash income (Table 1).

Table 1: Crop Percentage contribution to food and cash income per livelihood zone

Livelihood Zone	Crop type	% to food	% to cash income
Marginal Mixed Farming	Maize	50	10
	Beans	17	6
	Green grams	10	30
	Cow peas	15	5
Mixed Farming	Maize	75	25
	Beans	23	15

Rain-Fed Crop Production

The crop production data for the 2025 Long Rains season indicates relatively stable planting trends, with the area under cultivation for major rainfed crops remaining consistent with the long-term average. This stability was due to no significant shift in land use for crop farming during the season. However, variations in yields reflect the influence of seasonal conditions and support interventions.

For maize, the area planted stood at 9,900 hectares, matching the long-term average. Production, however, was recorded at 99,000 bags, representing a 7.4% increase over the average of 92,200bags. This improvement was due to the enhanced rainfall experienced during the season, along with enhanced access to agricultural inputs—particularly free certified maize seeds distributed by the county government and subsidized fertilizers available through both NCPB depots and satellite stores. These factors contributed to improved production per hectare.

Similarly, green gram production performed well. The area under cultivation remained at 6,600 hectares, consistent with the long-term average, but output rose significantly to 52,800 bags, compared to the historical average of 49,600 bags. This 6.5% increase was attributed to a combination of improved weather conditions and better farming practices, including the use of higher-quality seed.

In contrast, bean production declined, despite the area planted also remaining unchanged at 5,200 hectares. The harvest totaled 39,000 bags, falling short of the long-term average of 50,000 bags by approximately 28.2%. This shortfall was caused by crop-specific challenges such as pest attacks, suboptimal seed varieties and planting that was not well aligned with rainfall patterns especially in MMF livelihood zones.

Overall, the 2025 Long Rains season reflected a moderate improvement in crop production, especially for maize and green grams, driven by favorable weather and timely government support. However, the underperformance of beans signals a need for targeted interventions to address specific constraints affecting this crop. (Table 2).

Table 2: Rainfed Crop Production in terms of area Planted and Production

Crop	Area planted during 2025 long rains season (Ha)	Long term average (5 year) area planted during the short rains season (Ha)	2025 long rains production (90 kg bags) Projected/Actual	Long term average production (5 year) during the short rains season (90 kg bags)
1. Maize	9,900	9,900	99,000	92,200

2.Green Grams	6,600	6,600	52,800	49,600
3. Beans	5,200	5,200	39,000	50,000

Conclusion

The 2025 long Rains season showed a positive trend in the production of maize and green grams, both exceeding long-term average yields with no expansion in cultivated area—highlighting improved productivity. However, bean production fell below average, signaling a need for further investigation into agronomic or environmental factors affecting its performance. The overall crop performance reflects moderate recovery supported by improved rainfall and government agricultural input support.

Irrigated Crop Production

The data compares crop performance during the 2025 Long Rains season with the three-year average for the same season. Overall, the area planted for tomatoes, watermelons, and kales remained the same as the long-term average, showing consistent land use for irrigated farming. For tomatoes, 390 hectares were planted, and production reached 7,250 tons—exactly matching the three-year average. This indicates stable production, likely supported by good farming practices and favorable weather or irrigation conditions.

Watermelon production also remained steady. Farmers planted 300 hectares, producing 6,000 tons, which is equal to the long-term average. This shows that watermelon farming maintained normal performance with no major challenges during the season. However, kale production declined. Although the area planted was consistent at 160 hectares, yields dropped to 640 tons compared to the usual 840 tons. This decrease of about 24% may be due to infestation by aphids and Powdery mildew. (Table 3).

Table 3: Area and production of irrigated crops

Crop	Area planted during the 2025 Long rains season (ha)	Long term average (3 years) area planted during short rains season (ha)	2025 Long rains season production (90 kg bags/MT) Projected/Actual	Long term average production (3 years) during short rains season (90 kg bags/MT)
1.Tomatoes	390	390	7,250 Tons	7,250 Tons
2.Water melons	300	300	6,000Tons	6,000Tons
3.Kales	160	160	640Tons	840 Tons

In summary, tomato and watermelon production remained stable during the 2025 Long Rains season, while kale yields declined despite unchanged planting area. The drop in kale output

highlights the need for closer attention to crop health and management practices for leafy vegetables.

Current Stocks

The availability of maize has remained relatively stable overall, showing a modest increase of about 7.1% above the long-term average (LTA). This slight growth is entirely driven by farmers, whose current stocks are 6.6% above the LTA. Traders have also increased their holdings by 10%, reinforcing the steady market presence of maize. Despite the absence of stocks from millers, food assistance programs, and NCPB, the total maize availability suggests a stable maize supply outlook for the season.

Beans, however, there is a noticeable decline across both farmer and trader levels. Farmers' stocks are 12% below the LTA, while traders have reduced their holdings by 11%. This has led to an overall decrease of 11.8% in bean availability compared to the seasonal average. The shortfall may impact food and nutrition security, particularly in areas where beans are a major protein source, and some farmers offloaded stocks early and experienced lower yields.

In contrast, cow peas and green gram have shown promising improvements. stocks have risen by 5.5% above the LTA, with farmers contributing a 3.5% increase and traders showing a 14.3% rise. Green gram has recorded the highest improvement of all the cereals, with farmer stocks increasing by 15.2% and traders by 10%, leading to an overall stock increase of 14.3% above the norm. These upward trends reflect favorable weather for short-cycle crops and a shift by farmers toward drought-tolerant varieties, signaling positive diversification in production systems. (Table 4).

Table 4: Quantities of Cereal Stocks Held Currently by various players (in 90-kg bags)

Actor	Maize		Beans		Cow peas		Green gram	
	Current	LTA	Current	LTA	Current	LTA	Current	LTA
Farmers	32,000	30,000	22,000	25,000	15,000	14,500	28,800	25,000
Traders	5,500	5,000	8,000	9,000	4,000	3,500	5,500	5000
Millers	0	0	0	0	0	0	0	0
Food Assistance	0	0	0	0	0	0	0	0
NCPB	0	0	0	0	0	0	0	0
Total	37,500	35,000	30,000	34,000	19,000	18,000	34,300	30,000

Summary

Maize stocks have shown a modest 10% increase above the long-term average, with farmers and traders contributing 6.6% and 10% to the rise respectively indicating a stable supply outlook. In contrast, bean availability has declined by nearly 12%, driven by reduced stocks from both farmers and traders, raising concerns for food and nutrition security. Cowpeas and green gram have performed well, with overall stock increases of 14.3% for both reflecting favorable conditions and a shift toward drought-resilient crops.

The available food commodity stock was expected to last for 2 to 3 months in the mixed farming livelihood zone, and 1 to 2 months in the marginal mixed farming zones compared to the normal period of 3-4 months in mixed farming zone and 2-3 months in the marginal mixed farming zones. The duration was far below normal occasioned by drastic reduction in production. (Table 5).

Table 5: Duration stocks will last

Livelihood zone	Duration the stock will last	Normal duration
MF zone- Mbeti South, Nthawa, Kanyuambora, Parts of Mavuria, Mwea	2-3	3-4
MMF zone- Kiambere, Makima, Muminji, Parts of Mavuria, Mwea and Evurore	1-2	2-3

3.1.3 Livestock Production

Main livestock species kept in Mbeere North, Mbeere South and Mwea region are cattle, goat, sheep and chicken. In the Marginal Mixed Farming zone, poultry keeping contributes 40 percent to food and 25 percent to cash income while goat keeping contribute 25 percent to food and 50 percent to cash income. In Mixed Farming zone, goat rearing contributes 15 percent to food and 35 percent to cash income while poultry and cattle rearing contribute 35 and 30 percent to food and 25 and 10 to cash income respectively as shown in Table 6.

Table 6: Percentage contribution of livestock to food and cash income

Livelihood Zone	Livestock Species	Contribution to Food (%)	Contribution to Cash Income (%)
MMF	Goat	25	50
	Poultry	40	25
	Cattle	15	10
MF	Goat	15	35
	Poultry	35	25
	Cattle	30	10

The regions received normal to slightly above rainfall during the MAM period. The rainfall was characterized by late onset and early cessation, which improved overall forage biomass growth for pasture; pasture is currently adequate since MAM rains cessation but declining in quantity and quality. Livestock production performed fairly to good during the season. Farmers are continually sensitized on fodder, pasture and water conservation.

Pasture and Browse Condition

The pasture and browse condition in MF zone is currently good compared to the normal good condition, expected to last about 2 to 2.5 months compared to the normal 2.5 months. In MMF zones, pasture and browse is fair to good, expected to last 2.0 month compared to the usual 2.5 months. The near normal duration is due to enhanced rainfall during the MAM period. Pastures harvesting is ongoing as the season ends. Browse conditions are good in both MF & MMF

except parts of lower Kamarandi, lower Ndurumori, lower Kirie, Nthingini, Malikini, Kaseve and Kathiani areas with both expected to last approximately 2.0 months compared to normal durations of 2.5 to 3.0 months. Factors affecting browse include the presence of unpalatable species in MMF zones mainly Prosopis Juliflora (Mathenge) and thorny shrubs in both zones.

Contribution of crop residues as livestock feed is currently 30% compared to normal 40% utilization in normal situation. There is relatively sufficient biomass due to adequate rainfall and feed reserves are adequate. (Table 7).

Table 7: 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
Mixed farming (MF)	Good	Good	2.0	3.0	Good	Good	2.0	2.5
Marginal Mixed farming (MMF)	Good	Fair to Good	2.0	2.5	Good	Good	2.5	3.0

Livestock Productivity

Livestock Body Condition

Livestock body conditions are currently fair to good across both livelihood zones, aligning with normal expectations. This has led to high productivity in terms of milk and meat thereby affecting source of incomes. The condition is supported by the use of crop residues and conserved pastures, reducing trekking distances for grazing. The body condition is expected to improve as the pasture and browse improve in dry matter content and with increase in crop residues. Birth rates remain normal and are projected to improve with feeding of conserved forage. (Table 8).

Table 8: Livestock Body Condition

Livelihood zone	Cattle		Camel		Goat		Sheep	
	Current	Normal	Current	Normal	Current	Normal	Current	Normal
Mixed farming (MF)	Fair-Good	Good	N/A	N/A	Fair-Good	Fair-Good	Good	Good
Marginal Mixed farming (MMF)	Fair-Good	Good	N/A	N/A	Fair-Good	Fair-Good	Good	Good

Tropical livestock units (TLUs)

Average TLUs are 30% lower in poor-income households compared to medium-income households. Farmers in MF are keeping fewer but improved cattle for milk hence the reducing TLU's. This zone has also seen increased muguka farming and land subdivision, hence reducing number of TLU's. In MMF zones, households maintain higher TLUs as livestock is the primary livelihood. For the last 10 years, TLUs in both livelihood zones have been reducing. The decline in TLUs is due to recurrent droughts, increased muguka farming, and reduced land parcels. Restocking initiatives are underway to boost TLUs. The county government and other stakeholders are Supporting Farmer groups with Restocking. Alternatively, Households are Diversifying to Other Forms Livelihoods e.g. Muguka, Horticulture, Trading, Pasture Selling, as shown in table 9.

Table 9: Tropical Livestock Units (TLUs) by Household Income Groups

Livelihood zone	Poor income households	Medium income households		
	Current	Normal	Current	Normal
Mixed farming (MF)	0.5	1	1.0-1.5	2
Marginal Mixed farming (MMF)	1.0	1.5	3	4

Milk Production and Consumption

The current milk production in the MF livelihood zone is 3.5 liters compared to 3.0 liters which is the normal. In the MMF zone, current milk production is 1.0 liters in comparison to 1.5 liters in the normal. Demand for milk is still high due to the increasing population, with the demand being supplemented from upper Embu Regions and Kirinyaga County. Milk prices are estimated to remain high due to the high cost of dairy meal concentrates. Farmers are advised to utilize conserved fodder and feed supplements to enhance milk production. (Table 10).

Table 10: Milk Production, Consumption and Prices

Livelihood zone	Average milk Production (Litres)/Household/day		Average milk consumption (Litres) per Household/day		Prices (Kshs)/Litre	
	Current	LTA	Current	LTA	Current	LTA
MF	3.0	3.5	2.0	3	60-70	60
MMF	1.0	1.5	1	1	70-80	70

Livestock Diseases and Mortalities

Livestock mortality rates remain normal (<0.5%), primarily due to endemic diseases like Lumpy Skin Disease (LSD), Foot and Mouth Disease (FMD), Contagious Caprine Pleuropneumonia (CCPP), Pestes des Petits Ruminant (PPR) and Newcastle Disease (NCD). Vaccination programs are ongoing to mitigate against outbreaks. (Table 11).

Table 11: Estimated Livestock mortalities

Sub county	Livestock species	Total Sub County/ county livestock Population	Livestock deaths per species	Mortality rate per species	Remarks
Mbeere North,	Cattle	36,684	0	0 %	Normal
	Goat	99,450	10	0.00010%	Normal
	Sheep	15,616	2	0.000128%	Normal
	Camels	n/a	n/a	n/a	n/a
	Donkeys	3,418	0	0 %	Normal
Mbeere South and Mwea	Cattle	174,106	17	0.0097%	Normal
	Goat	169,983	57	0.0335%	Normal
	Sheep	14,880	13	0.0873%	Normal
	Camels	n/a	n/a	n/a	n/a
	Donkeys	8519	5	0.0586%	Normal

Migration

Due to fair to good situation of forage and water availability in the three sub counties during the reporting period, there were no livestock migrations.

Water for Livestock

Water sources include rivers, dams, boreholes, and piped systems. Surface water recharge rates are normal to LTA. The average return distance to water sources is 2-5 km in MMF and 0.5-1 Km in MF zones, compared to a normal of 2-8 Km in MMF and 0.5-1 Km in the MF zones. Water availability is projected to be stable in the next two months unless and decline in the third month. Projected outcomes in water decline will increase trekking distance, lower body condition due to energy wastage in trekking, weight loss, decreased milk production and these will lower income from animal and products sale. (Table 12).

Table 12: Water for Livestock

Livelihood zone	Return average distances (km)		Expected duration to last (months) for each source		Watering frequency (no. of days per week)	
	Current	Normal	Current	Normal	Current	Normal
MF	7	7	2 months	3 months	7	7
MMF	7	7	1.5 months	2 months	7	7

There were no major factors limiting access to water

Table 13: Watering frequency

Livelihood zone	Cattle/Sheep	Goats

	Current	Normal	Current	Normal
MF	7	7	7	7
MMF	7	7	7	7

3.1.4 Impact on Availability

The region experienced normal to slightly above normal rainfall, characterized by a timely onset and early cessation with fair spatial and time distribution. Although forage remains adequate following the MAM rains in most parts, its quantity and quality will slightly deteriorate with onset of the dry period. Livestock production performed fairly well during the long rains ensuring fodder availability. However, feed reserves will decline, and farmers are encouraged to conserve excess fodder and water to ensure steady production. The contribution of crop residues to livestock feed has declined to 30% from the normal 40% due adequate forages in the fields. There are no expected feed shocks in the season. A projected decrease in water reserves will increase trekking distances for livestock, leading to energy wastage, weight loss, and deteriorating body conditions. This will result in lower milk production and reduced income from livestock sales, further straining the livelihoods of farmers and pastoral communities.

3.2 Access

3.2.1 Market Prices

Market Operations

Across all local markets, there's been a lower-than-usual volume of livestock sales. This is primarily because most households have enough food stock, hence reduced sale of livestock. Additionally, there is enough livestock feed available in the farms for feeding. Some farmers are using crop residues from early harvests for their animals. Similarly, the trade in cereals and pulses is high, following the good harvest realised in some areas within the county. The primary food items being traded include; maize, beans, cowpeas, and green grams. For livestock, the main species are cattle, goats, sheep, and poultry. All sourced from both local areas and major markets; Ishiara, Kiritiri, Makutano, Mutuobare, Siakago, and Ngiiri.

Market supply and demand is predicted to increase in the next three months, with improved livestock nutrition. This is due to availability of feeds for livestock and also due to availability of crop residues which are currently being harvested and conserved since harvesting of the early maturing crops. Further, the expected OND rains if timely will ensure enough livestock feed from regeneration of pastures and fodder.

Market Prices

Maize Price

The average market price of one kilogram of maize remains moderate at Kshs. 48 in the month of July 2025 which is 27% lower than the 2020-2024 short term average as shown in figure 4. Markets in the Marginal Mixed Farming zone recorded higher price for maize at Kshs. 54 while those in mixed and marginal farming zones recorded slightly lower average prices ranging between Kshs. 44 per kilogram.

Goat Price

The average goat price in July 2025 was Kshs. 7,350 which was 22 percent higher than the 2020 - 2024 short term average price of Kshs. 6040, as shown in figure 5. The good price for goats is attributed to sustained good body condition occasioned by good browse due to the impacts of just MAM season rains. The prices of goats recorded in the year 2025 consistently remained above the short-term average. The prices are expected to remain stable for the next two months as dry matter from harvest being consumed by goats, hence improved body condition.

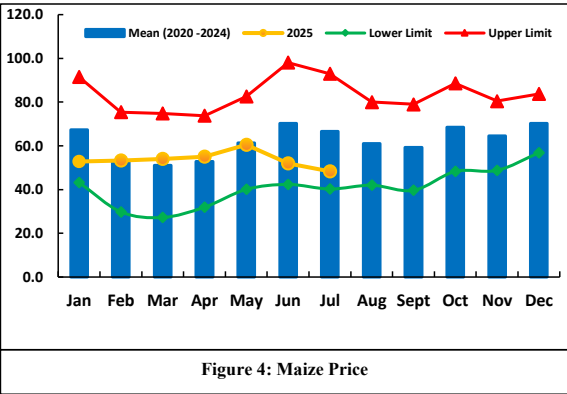


Figure 4: Maize Price

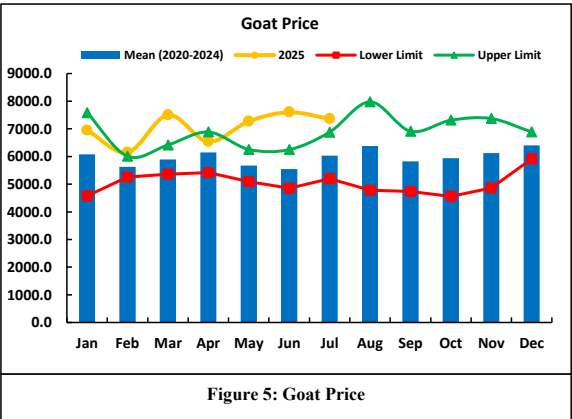


Figure 5: Goat Price

Beans price

Average price for beans in July 2025 was Kshs 118 per kilogram, 6.3 percent below than the 2020-2024 short term average of Kshs. 125, as shown in figure 6. This is attributed to the improved harvest for beans and other pulses during the current and in the previous seasons, hence large stock quantity in the market. The price trend has remained downwards since May 2025. Higher prices were recorded in marginal mixed farming livelihood zones due to high transportation costs and dependance of markets for beans supply with one kilogram of beans retailing at Kshs 128 while in the mixed farming zone the price of beans was at Kshs.110.

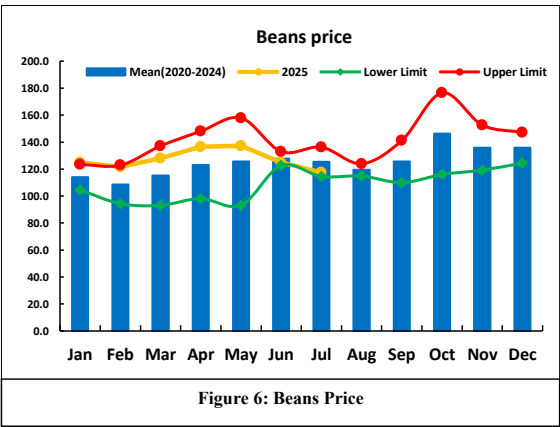


Figure 6: Beans Price

3.2.2 Terms of Trade

The terms of trade in July 2025 were 138 kilograms of maize for sale of one goat which was 29 percent above the above 2020 – 2024 short term average of 107 kilograms of maize for sale of one goat as shown in figure 7. The favorable terms of trade are attributed to good prices for goats and also stably low prices of maize. The Terms of trade will likely remain stable for three months as more harvests are being realized.

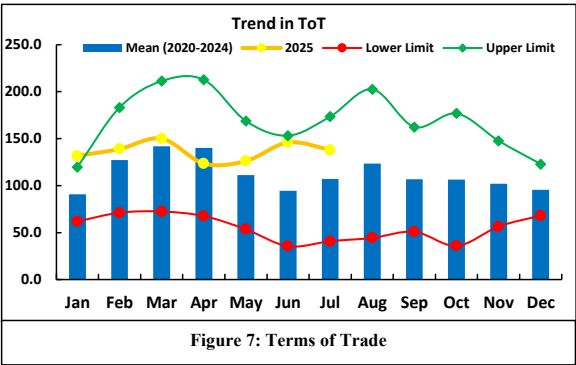
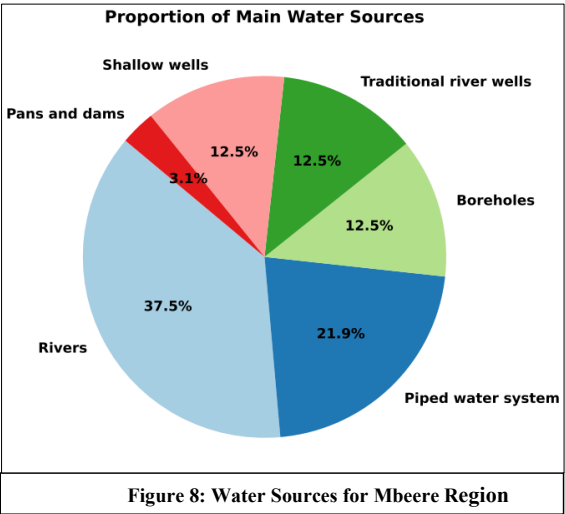


Figure 7: Terms of Trade

3.2.4 Water Access and Availability

Major Water Sources

During the period under review, major water sources in Mbeere North, Mwea and Mbeere South sub counties were Rivers, piped water systems, and boreholes as shown in figure 8. The current status of the water sources is; permanent rivers flowing at 50 - 70 percent of their normal flow, seasonal rivers were 10 – 30 percent full, with others being totally dry. Recharge capacity for earth dams was at 60 - 70 percent across both livelihood zones. Boreholes were also well recharged by the long rains and currently are in use in both the marginal mixed farming zone and the mixed farming zone. However, 20 boreholes were non-operational due to mechanical faults. The recharge of earth dams during the long rains season was up to 80 percent in both livelihood zones and the water is expected to last for 3-4 months in the marginal mixed farming livelihood zone and for up to 6 months in the mixed farming zone. About 85 percent of households in the Mixed Farming and 70 percent in the Marginal Mixed Farming zone relied on protected water sources respectively. About 40 percent of households in the mixed farming zones and 25 percent in the Marginal Mixed farming zones treated water. The households primarily using chemicals like chlorine to treat their water with very few households boiling water as a form of treatment.



Distance to Water Sources.

Overall, the distance it takes for households to fetch water and return in both livelihood zones is currently fair. This is thanks to the long rains, which have replenished surface and groundwater sources well. However, there are some isolated areas within the marginal mixed farming zone specifically Kiambere, Kamarandi, and Makima locations where residents are walking up to 4km to access clean water. This is a bit further than usual for this time of year, as these communities depend on major rivers like; Masinga, Ena, and Thiba for their household water needs.

The longest distances, up to 4 km, are being reported in Karura, Riciina (Kiambere ward), and 3km in Kogare (Kamarandi). Currently, average daily water consumption per person is normal in the mixed farming livelihood zone. (Table 14).

Table 14: Return Distance to Water Sources

Ward / livelihood zone	Return Distance to Water for Domestic Use (Km)		Watering frequency	
	Current	Normal	Current	Normal
Marginal mixed farming zone	1 - 4	1 - 5	Daily	Daily
Mixed farming zone	0.1 – 1.5	0.5 - 2	Daily	Daily

Waiting time and cost of water at the Source.

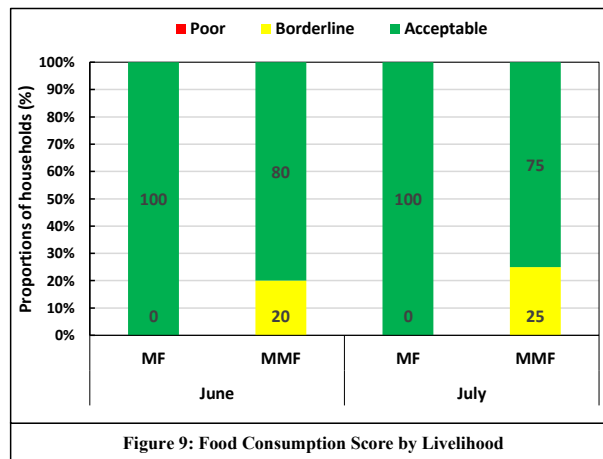
The average waiting time to get water from various water sources across both livelihood zones is currently within normal due to the good recharge of surface and ground water sources occasioned by normal to above normal rains during the long rains period. Additionally, the cost of water at various pipeline system kiosks and boreholes remains normal at Kshs. 5 per 20L jerrican. (Table 15).

Table 15: Average waiting time and cost of water at source

Livelihood Zone	Waiting time at the source (minutes).		Cost of Water at source Kshs per 20-liter jerry can	
	Current	Normal	Current	Current
Marginal Mixed Farming zone	5-10	10	5	5
Mixed Farming zone	5-10	10	5	5

3.2.5 Food Consumption

During the month of July 2025, 87.5 percent of the sampled household (120) recorded acceptable food consumption while, 12.5 percent of the sampled household recorded borderline food consumption. In the month of July, 100 percent of the households in the Mixed Farming livelihood zone recorded acceptable food consumption while none recorded borderline or poor category. In the Marginal Mixed Farming livelihood zone, 75 percent of the households



recorded acceptable food consumption while 25 percent recorded borderline consumption as shown in figure 9.

3.2.6 Coping Strategy

The mean coping strategy index for households in the mixed farming zone remained stable in July 2025 when compared to the month of June. Households in Marginal Mixed Farming (MMF) zone decreased from 6.4 in June to 5.4 in July occasioned by the realization of harvests and availability of casual labor thus boosting the purchasing power. Similarly, households in Mixed Farming decreased from 4 to 3.8 in the mean CSI, as shown in figure 10.

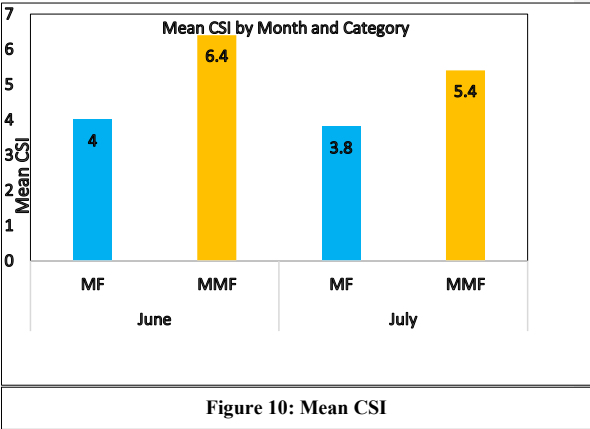


Figure 10: Mean CSI

3.2.7 Livelihood Coping

From March to June 2025, the overall trend in livelihood coping reflects a population largely maintaining stability, with a few experiencing increasing pressure. In March, a high 74.8% of households reported no coping strategies, indicating relative food security and access to livelihoods. Stress coping was at 24.4%, a sign that some households were beginning to face mild stress, while crisis and emergency coping remained almost nonexistent at 0.0% and 0.8%, respectively, as shown in figure 11. In April, the situation remained fairly similar, with no coping strategies dropping slightly to 71.2%, and stress coping rising to 28.0%, hinting at worsening conditions. This shift could be attributed to early seasonal pressures such as depleted food stocks or market price hikes, which often occur post-harvest.

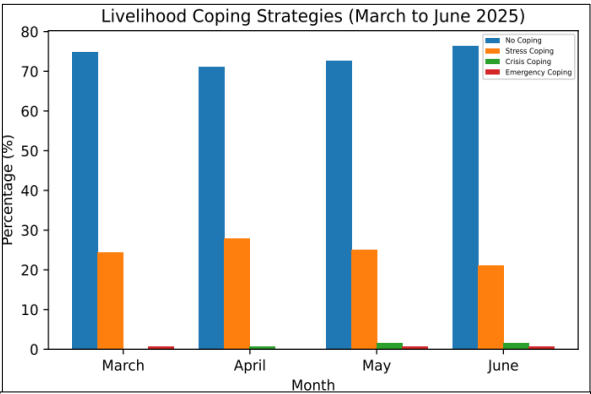


Figure 11: Livelihood Coping Strategy

In May, the proportion of households not adopting any coping strategies rose marginally to 72.7%, suggesting a slight improvement or temporary reprieve, possibly due to market stabilization or short-term aid. Stress coping decreased slightly to 25.0%, while crisis coping increased to 1.6%, and emergency coping remained at 0.8%, signaling that a small number of households were experiencing deeper distress. By June, no coping further improved to 76.4%, indicating greater resilience or recovery, while stress coping dropped to 21.1%. However, crisis and emergency coping remained unchanged, suggesting a consistent group facing chronic vulnerability. The

persistence of these severe strategies, although in small proportions, underscores the need for targeted support to prevent deterioration among the most affected households.

3.3 Utilization

3.3.1Morbidity and mortality patterns

Morbidity trends/pattern for children under five years

During the period under review, URTI was the most prevalent disease among children below five years compared to diarrhea and malaria, as shown in figure 12. A notable downward trend was observed in 2025 compared to 2024. This improvement in the cohort’s respiratory health may be attributed to a combination of factors, including warmer weather following the early cessation of the 2024 short rains, as well as strengthened public health interventions. These included regular screening, rehabilitative outreach activities in schools and communities, and capacity building for healthcare providers and community health promoters.

During the months of January and February, diarrhea cases among children below five years were fewer compared to the same season previous year. The cases were more in January which could be due to declining water sources, and also increased in the months of March, April and May which could be due to contamination of water sources by surface run off during the long rains. The cases are however still with the Long-Term Average (LTA), as shown in figure 13.

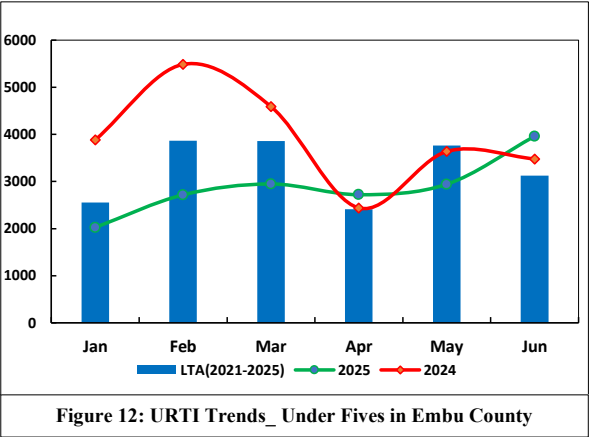


Figure 12: URTI Trends_ Under Fives in Embu County

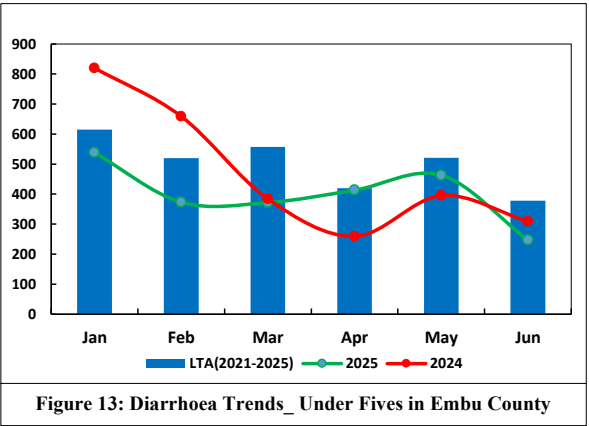
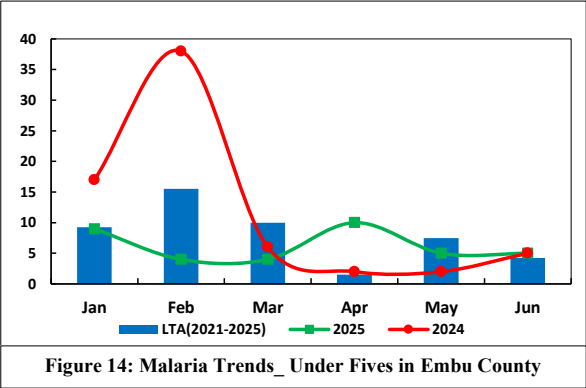


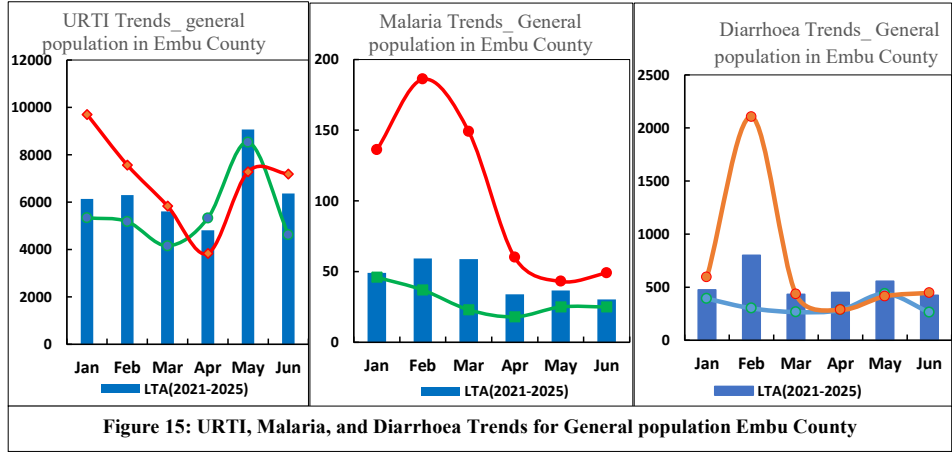
Figure 13: Diarrhoea Trends_ Under Fives in Embu County

During the period under review, Malaria cases were few among children below five years compared to same period previous year. Cases were higher in January but declined in February, then increased in the month of April. Due to poor rains experienced in the months of October, November and December, there were no many pools of stagnant waters left after the rains which could have dried up in February and therefore no much breeding sites for mosquitoes. The increase in April could be due to the peak of the long rains bringing back the breeding sites for mosquitoes. The cases were still within the Long-Term Average (LTA). This is illustrated in figure 14.



Morbidity trends/pattern for the general population

During the period under review, URTI was the most prevalent among the general population compared to diarrhea and Malaria. Cumulatively, cases of the three diseases were however low compared to the same period previous year.



There was a spike in the cases of URTI in the month of May which could be attributed to the weather changes as the long rains came to an end. Just like for the children below five years, the cases were more in January which could be due to declining water sources, and also increased in the months of March, April and May which could be due to contamination of water sources by surface run off during the long rains. Malaria cases were higher in January and May which could be due to the

pools of stagnant waters left by both the short and long rains creating breeding sites for mosquitoes. This is illustrated in figure 15.

Epidemic and waterborne disease

There was a decline in the epidemic and waterborne diseases except for dysentery and typhoid cases which could be due to poor recharge of water sources following the below normal short rains of 2024. People could have ended up with insufficient water supply hence the contamination, as shown in figure 16.

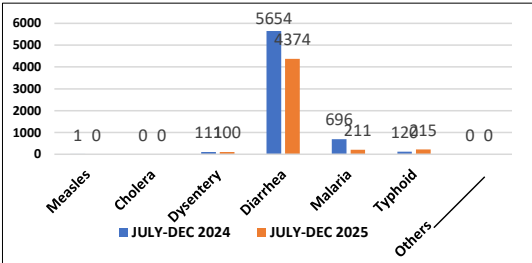


Figure 16: Epidemic and waterborne disease in Embu

Immunization and Vitamin A supplementation

The percentages of fully immunized children dropped during the period under review compared to the previous year in the same season of analysis, as shown in figure 17. The drop would be attribute to the stock out of polio vaccines in the month of April and May and erratic supply of measles rubella within the same months.

Vitamin A coverage of 6-11 months decreased with 28.7% from the same period previous year while the coverage of 12-59 months decreased with 17.7%. The decrease could be attributed to issues of stock outs of the vitamin A capsules within the semester, an issue that affected the entire country. This is shown in figure 18

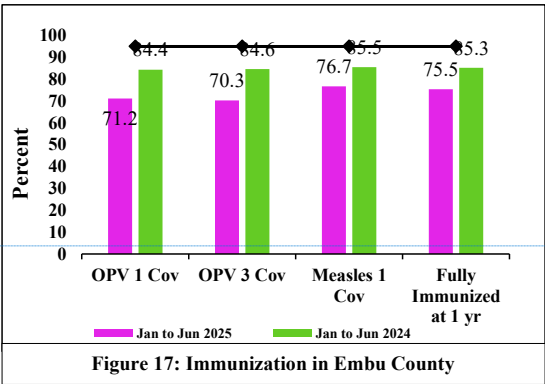


Figure 17: Immunization in Embu County

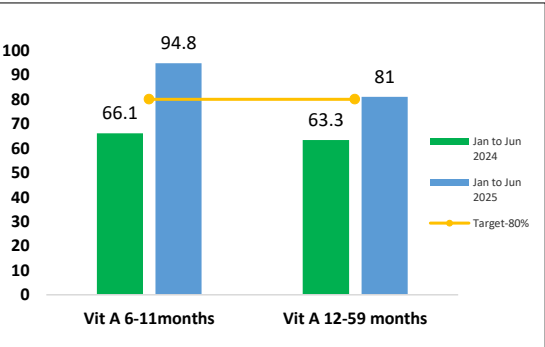


Figure 18: Vitamin A Supplementation coverage in Embu

Commented [H1]: The drop was mainly due to the stock outs. Data capture for immunization in the system is ok

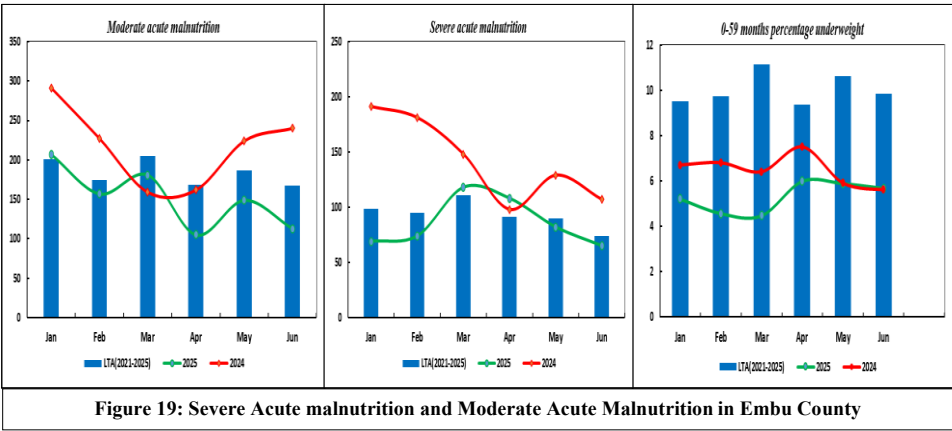
Nutrition status

Severe Acute malnutrition and Moderate Acute Malnutrition (SAM and MAM)

Cases of underweight children, those with Severe Acute Malnutrition (SAM) and Moderate Acute Malnutrition (MAM) have decreased compared to the same period last year. Despite crop failure during the short rains, majority of the households maintained a stable food consumption. There has also been improved efforts by the CHPs in promoting good child care practices, growth monitoring and referral. This is illustrated in figure 19.

Commented [H2]: Add the information among children attending CWC

Dietary diversity



Currently, both children and adults in households within the MF zones consume three to four meals per day, primarily consisting of three to four food groups: grains, legumes, vegetables, and vitamin A-rich fruits. In these areas, vegetables and vitamin A-rich fruits, such as mangoes and pawpaw, are currently available on the farms. Households in the MMF zones are also consuming three meals per day but comprising two to three food groups: grains, legumes and Vitamin A rich fruits, mainly pawpaw. Vegetables are not available in MMF zones, only by purchasing in the markets. There is no milk consumption among children in either zone.

Sanitation and Hygiene

Latrine Coverage and Utilization

In the MF zones, latrine coverage was 89% in Mbeti South, 85% in Mwea, 92% in Nthawa and 89% in Kanyuambora. It was noted that the latrine coverage dropped due to the collapsing of latrines in some of the schools in Mbeti south. In MMF zones, latrine coverage was 91%, 84%,94% and 96% for Kiritiri, Kiambere, Evurore and Muminji respectively. Kiambere recorded the lowest latrine coverage while Mwea recorded the highest open defecation. In terms of open defecation Mwea, Kiritiri and Nthawa were leading in open defecation with 10 and 8%.

3.5 Education

3.5.1 Enrolment

At Early Childhood Development Education (ECDE) level, there was an increase in enrolment of 68 boys and 47 girls. The increase was attributed to the increased Parental awareness on the importance of education and improved transition to Early Years Education (EYE)

At primary level, there was a decrease in enrolment by 11 boys and 10 girls. This was attributed to transfers of learners to schools outside the County as a result of change of residence by families.

At the junior secondary level, there was a decrease in enrolment of 91 for boys and 23 for the girls. The decrease was attributed to transfers outside the county as a result of change of residence by families.

At the secondary level, there was a decrease in enrolment by 91 for boys and 23 for the girls. The decline was attributed to transfers outside the County and truancy. (Table 16).

Table 16: Enrolment in public learning institutions in Mbeere region.

Level	Term I 2025			Term II 2025			% variation [Increase (+) and Decrease (-)]	Reasons for increase/ decrease
	Nº Boys	Nº Girls	Total	Nº Boys	Nº Girls	Total		
Pre-Primary	4770	4513	9286	4806	4602	9402	Increase (+)	Parental awareness on schooling importance and enhanced enforcement of compliance to free and compulsory Education policy.
Primary	21268	20047	41315	21277	20037	41314	Decrease (-)	There were minimal transfers outwards and inwards
Junior School	9792	9845	19673	9788	9836	19624	Decrease (-)	There were transfers out of the Sub County
Secondary	11621	10832	22453	11530	10809	22339	Decrease (-)	There were transfers out of the Sub County and truancy

3.5.2 Effects of Short rains in schools

There were a few reported cases of school infrastructure destruction e.g. sinking of pit latrines as a result of the recent rains. However, this did not affect the reopening and continuity of learning in the schools. The schools' BOMs made arrangements to rehabilitate the latrines or build new ones depending on the damage caused by the rains in the course of the year. There were no cases of IDPs in any of our learning institutions. (Table 17).

3.5.3 School Feeding Programme.

3.5.3.1 Public Schools

Table 17: School Feeding Programme

Category of School	Total Number of Public schools in Sub-County	Number of schools with School Meals Program in the sub-county	Number of learners benefitting from the different types of School Meal Programmes offered								Total number of learners benefitting from the school meals program		Total number of Learners NOT benefitting from the school meals program	
			In-kind School Meals Programme (IKSMP)		Cash Transfer (CT)		Community/Parents supported (CSSP)		Other types (Please specify.)					
			No Boys	No Girls	No Boys	No Girls	No Boys	No Girls	No Boys	No Girls	No Boys	No Girls	No Boys	No Girls
Pre-Primary	238	238	0	0	0	0	4806	4602	0	0	4806	4602	0	0
Primary	241	241	0	0	8375	8309	13012	11811	0	0	21387	20120	0	0
Junior School	229	229	0	0	0	0	9788	9836	0	0	9788	9836	0	0
Secondary	102	102	0	0	0	0	11530	10809	0	0	11530	10809	0	0
Subtotal	810	785	0	0	8375	8309	39136	37058	0	0	47511	45367	0	0
Grand total (boys + girls)			0		16684		76194		0		92878		0	

In Mbeere region, about 76,194 (39136 boys and 37058 girls) learners currently benefit from the Community Supported School Meals Programme whereby parents provide food commodities to the schools or pay cash equivalent to the items to enable schools prepare food. The schools mainly cook *Githeri* (maize mixed with beans) for primary and junior school learners while either porridge or a combination of rice and beans is prepared for ECD learners. The Cash Transfer programme in which funds are disbursed directly into the schools' accounts to support schools feeding programme is erratic due to financial challenges. However, this term the Ministry of Education has disbursed HGSMF funds to 178 schools out of the 241 schools in the County. The funds will be used to procure foodstuffs during term three of 2025. The Ministry of Interior provided relief food to some specific schools in Mbeere South and Mwea sub counties during the first and second terms of 2025. Plans are underway to have local farmers across the region produce food stuff and supply to schools in clusters under a program being spearheaded by National Council for Nomadic Education in Kenya (NACONEK) within the Ministry of Education.

Retention and participation rates in the schools were greatly enhanced in schools with school meals however there is need to consider enhancement of Government supported schools' meals program especially for schools in the drought prone hot spots to enhance participation of learners in schools.

3.5.4 Inter Sectoral links where Available

Water, Sanitation and Hygiene

The situation in most schools remained stable except for specific pockets in the three sub-counties where some pit latrines in the schools collapsed due to heavy rains during the long rains. The schools had access to water supply owing to roof water harvesting projects in most public learning institutions though most tanks had accumulated lots of dirt hence compromising on the quality of water harvested and stored. Some schools in Mbeere North, Mwea and Mbeere South received water

treatment tabs (Aquatabs) through the Impact Kenya Organization in order to improve on quality of drinking water. The girls were provided with enough sanitary towels for the period ending 31st July, 2025. It was observed that in some schools, hand washing programme was not well embraced due to water shortages.

Health

The children in the Pre-primary level received vitamin A supplementation as well as de-worming drug through collaboration with the County Department of Health. The learners in the primary and junior schools below 15 years of age have received Measles Rubella and Typhoid vaccinations in all the schools.

4.0 FOOD SECURITY PROGNOSIS

4.1 Prognosis Assumptions

- **The forage conditions:** The pasture and browse condition in Mixed Farming (MF) zones is currently good and expected to last about 2 to 2.5 months compared to the normal 2.5 months. In Marginal Mixed Farming (MMF) zones, pasture and browse are fair to good, expected to last 2.0 months compared to the usual 2.5 months. There were no livestock migrations due to fair to good forage and water availability during the reporting period. Although forage remains adequate following the MAM rains in most parts, its quantity and quality will slightly deteriorate with the onset of the dry period
- **Distances to water sources:** Water availability is projected to be stable for the next two months but decline in the third month. A projected decrease in water reserves will increase trekking distances, leading to energy wastage, weight loss, and deteriorating body conditions, resulting in lower milk production and reduced income from livestock sales.
- **The market prices:** Market supply and demand are predicted to increase in the next three months, with improved livestock nutrition due to the availability of livestock feeds and crop residues from early maturing crops. Additionally, expected October-November-December (OND) rains, if timely, will ensure enough livestock feed from regenerating pastures and fodder.
- **Food Consumption:** Households in Mixed Farming (MF) zones are likely to continue consuming three to four meals per day from three to four food groups. Households in Marginal Mixed Farming (MMF) zones are expected to maintain three meals per day from two to three food groups
- **Food imports from other regions:** Demand for milk is still high due to the increasing population, with the demand being supplemented from upper Embu Regions and Kirinyaga County.
- **Coping Strategies:** The trend of a higher proportion of households not adopting any coping strategies (which reached 76.4% in June) may continue, suggesting increased resilience or recovery in some areas.

4.2 Food Security Outlook

Outlook for August to October 2025

This period is anticipated to be challenging, with August and September being dry months, and October seeing the partial onset of the short rains. Current food commodity stocks, which were reported as lasting 2-3 months in Mixed Farming (MF) zones and 1-2 months in Marginal Mixed Farming (MMF) zones, will be significantly depleted. As stocks diminish, many households,

particularly in the MMF zone, will likely face considerable difficulty in affording adequate meals, potentially leading to a deterioration in food consumption and an increase in the adoption of various coping strategies. Market prices for staple foods are expected to remain high due to increasing demand and reduced local supply, further straining household purchasing power, with terms of trade likely remaining unfavorable. Livestock conditions and productivity will decline significantly during the dry months due to diminishing forage and water, resulting in increased trekking distances for both livestock and households. The level of crisis and emergency coping strategies is likely to increase as the dry spell intensifies before the full impact of the October rains is felt.

Outlook for November to January 2026

This period is projected to see a significant improvement in food security, with November and December being rainy months due to the short rains, and January being hot and dry. The robust performance of the October-November-December (OND) short rains will support intensified farm labor activities, thereby improving cash income for poor households and boosting their purchasing power. Livestock conditions will recover notably with the regeneration of pasture and browse, leading to increased milk production and consumption, which is anticipated to contribute to a reduction in malnutrition prevalence. By January 2026, household food consumption will most likely improve substantially as harvests from fast-maturing crops become available, replenishing household food stocks and enhancing both the quantity and diversity of meals. Consequently, the reliance on negative coping strategies will significantly reduce as food availability, accessibility, and utilization improve across both mixed and marginal mixed farming livelihood zones, driven by own production and vibrant market operations.

5.0 CONCLUSION AND INTERVENTIONS

5.1 Conclusion

5.1.1 Phase classification

The indicative food security phase classification for both mixed and marginal mixed farming livelihood zones is IPC Phase 2 (Stressed).

5.1.2 Summary of Findings

The July 2025 assessment indicates that Embu County (Mbeere) remains in IPC Phase 2 (Stressed) across both Mixed Farming (MF) and Marginal Mixed Farming (MMF) livelihood zones. While the March-April-May (MAM) long rains led to a slight increase in overall rain-fed crop production, with maize and green gram output rising above long-term averages, bean production significantly declined (by 28.2%) due to pests and suboptimal seeds. Kale production also decreased. Current food stocks are modest, expected to last 2-3 months in MF zones and 1-2 months in MMF zones. Livestock mortality rates are normal, and forage conditions are fair to good, though overall Tropical Livestock Units (TLUs) have been reducing over the past decade due to recurrent droughts and land-use changes.

Market prices for staple foods generally remain above average, and milk prices are high due to expensive concentrates, with demand necessitating supplementation from other regions. While most areas have normal access to water sources, some isolated areas in the MMF zone face longer household trekking distances (up to 4km). Food consumption patterns show MF zones consuming 3-4 meals from 3-4 food groups, while MMF zones consume 3 meals from 2-3 food groups, with a notable absence of milk consumption among children in both areas.

Coping strategy analysis reveals some increased resilience, with 76.4% of households not adopting any strategies by June. However, persistent vulnerability is evident as crisis (1.6%) and emergency (0.8%) coping strategies remain in use by a small percentage of households. Other contributing shocks and hazards include disease spikes linked to weather changes and water contamination (URTI, diarrhea, malaria), as well as infrastructure damage like collapsed pit latrines in schools due to heavy rains.

5.1.3 Ward Ranking

Table 18: Ward Ranking

	Mwea	Makima	Mavuria	M.South	Kiambere	Nthawa	Muminji	Evurore	Score	Rank
Mwea		Makima	Mwea	Mwea	Kiambere	Mwea	Muminji	Evurore	3	5
Makima			Makima	Makima	Kiambere	makima	Makima	Makima	6	2
Mavuria				Mavuria	Kiambere	Mavuria	Muminji	Evurore	2	6
M.South					Kiambere	M.South	Muminji	Evurore	1	7
Kiambere						Kiambere	Kiambere	Kiambere	7	1
Nthawa							Muminji	Evurore	0	8
Muminji								Muminji	5	3
Evurore									4	4
Ward					Rank (1- worst; 8best)					
Kiambere					1					
Makima					2					
Muminji					3					
Evurore					4					
Mwea					5					
Mavuria					6					
M.South					7					
Nthawa					8					

1. Kiambere (Rank 1 - Worst) Located in the Marginal Mixed Farming (MMF) zone, Kiambere received insufficient rainfall. This poor rainfall led to total crop failure in parts. Households also face severe water stress, walking up to 4km to fetch water. Additionally, it has the lowest latrine coverage (60%), contributing to poor WASH conditions.

2. Makima (Rank 2) Also in the MMF zone, Makima experienced insufficient rainfall, impacting production. Parts of Makima recorded crop failure, and households endure long water fetching distances (up to 4km). Latrine coverage is relatively low at 89%.

3. Muminji (Rank 3) As part of the MMF zone, Muminji generally received less rainfall, leading to production challenges. While not marked by extreme water issues or widespread crop failure, it still faces the inherent food security difficulties of its livelihood zone. It does, however, have good latrine coverage at 96%.

4. Evurore (Rank 4) Mainly in the MMF zone, Evurore's rainfall was less than sufficient. This contributed to crop failure in parts of lower Evurore. Despite this, it shows a good latrine coverage of 94%, which is a positive health indicator.

5. Mwea (Rank 5) Mwea, an MMF ward, received less rainfall, impacting its agricultural output, with crop failure in parts. It also has the highest open defecation rate (10%) and experienced collapsed school latrines, though water treatment tabs were provided.

6. Mavuria (Rank 6) Within the MMF zone, Mavuria experienced less rainfall, leading to crop failure in parts. Its ranking reflects the general food security challenges of its zone, with good latrine coverage at 95%.

7. Mbeere South (Rank 7) Mbeere South likely benefited from better rainfall conditions compared to the lowest-ranked MMF wards, contributing to more stable food security. While not having widespread crop failure, some areas faced collapsed latrines and an 8% open defecation rate. The provision of water treatment tabs to some schools helped mitigate health risks.

8. Nthawa (Rank 8 - Best) Nthawa ranks best due to more favourable conditions, likely receiving higher rainfall. This enabled minimal harvests rather than total crop failure, strengthening its food production. It maintains good latrine coverage (92%), contributing to overall better food security indicators.

5.2 Ongoing Interventions

5.2.1 Food interventions

5.2.2 Non-food Interventions

Agriculture Sector

Sub County	Ward	Intervention	No. of beneficiaries	Implementers	Impacts in terms of food security	Cost (Kshs)	Time Frame
Mbeere South, Mbeere North, Mwea	Mbeti South Mavuria Kiambere Makima Mwea Nthawa Evurore Muminji	Mobilization of individual farmers CIGs/VMGs, FBO to join wards SACCOs	28,800	NAVCDP	Increased Participation in marketing and value addition		JAN 2024-JUNE 2027
Mbeere South, Mbeere North, Mwea	Mbeti South Mavuria Kiambere Makima Mwea Nthawa Evurore Muminji	Follow up on Mobilization and recruitment of NAVCDP CIGs/VMGs, FBO and verification of lead farmers	50,000	NAVCDP	Increased Participation in marketing and value addition		JAN 2024-JUNE 2025
Mbeere South, Mbeere North, Mwea	Mbeti South Mavuria Kiambere Makima	ELRP (Emergence Locust Response Project) Follow up on the Funded groups.	3,840 direct beneficiaries	ELRP/MOA	Increased productivity and profitability	About 8M	2024-2025

	Mwea Nthawa Evurore Muminji						
Mbeere South, Mbeere North, Mwea	Mbeti South Mavuria Kiambere Makima Mwea Nthawa Evurore Muminji	Promotion of high value nyota beans	80 schools	Farm Africa, Kalro, ECG	Improve nutrients in school feeding diets	About 8M	MAM 2025 season.
Mbeere South, Mbeere North, Mwea	Mbeti South Mavuria Kiambere Makima Mwea Nthawa Evurore Muminji	Supply of certified seeds	11,000	The County Government of Embu	Increase productivity.	82M	MAM 2025 season.
Mbeere South & Mbeere North	Mwea Evurore Muminji	Fruit trees nursey establishment	30,000	ELRP	Increased fruit production for increased food security and incomes	0.3M	MAM 2025

Medium term / Long Term interventions

Sub County	Ward	Intervention	No. of beneficiaries	Implementers	Impacts in terms of food security	Cost (Kshs)	Time Frame
Mbeere South	Mbeti South	Irrigation water- Rupingazi Weru irrigation scheme	741 HH	NARIGP	Increased productivity and profitability	350M	5 years
Mbeere South, Mbeere North, Mwea	Mbeti South Mavuria Kiambere Makima Mwea Nthawa Evurore Muminji	Provision of assorted tree seedlings	6,000HH	Embu County government and other stakeholders	Improve environment, increase food security and livelihood incomes.	50M	2025-2027

Water Sector

Intervention	Location	No. of beneficiaries	Implementers	Cost	Implementation Status (% of completion)
Pipeline Rehabilitation and extension	Runyenjes sub county		ECG	40M	Phase 2 Ongoing
Digging of new borehole-kariguri	Kiambeere	250 H/H		10M	50%
Digging of new borehole-kariguri	Kiambeere	150 H/H and Kiambere health facility	Tana water works deECG velopment agency	7M	50%
Water harvesting in schools-	Kiamugongo primary, Kirie Primary and Michegethiu Secondary	600 learners	NDMA	5M	95%
Drilling and equipping of 10 new boreholes	Mbeere region Runyenyes and manyatta region		ECG	6 by 10	Drilling complete Equipping for 6 B/H Ongoing
Rehabilitation of Gatororo sand dam and pumping of water to communal points of collection	Karambari	300 HH	NDMA	20M	At design stage
Excavation of 4 earth dams and the extension of Rupingazi Weru irrigation scheme	Makima, Mavuria, Evurore and Nthawa		NAVCDP	40M	At Approval stage
Construction of Rukera earth dam	Njigi village	400 HH	NDMA	19M	At design stage
Laying of mainline pipes in Kanyuombora irrigation project-	Kanyuombora and Nguthi	300 H/H	National Irrigation Authority	281M	100%
Long/Medium term					
Piping of water from kamburu dam to Community	Mavuria and Mbeti south wards		Tana water works development agency		40%
Improvement and upgrading of EMBEWASCO infrastructure	Nthawa, Ishiara	1000HH	Tana water works development agency	59M	40%

Livestock Sector

ON – GOING INTERVENTIONS							
County	Sub County	Intervention	No. of beneficiaries	Implementers	Impacts on food security	Cost (Kshs)	Time Frame
IMMEDIATE							
Embu	Mbeere ,North,South & Mwea Sub counties	Farmers Saccos registration	Entire embu county	NAVCDP	Access to Microfinance for farmers and Fertiliser Subsidy acquisition.	5,000,000	Ongoing
Embu	Mbeere ,North,South & Mwea Sub counties	Sensitization on Routine animal husbandry	8000h/h	Livestock production department	Increased Production hence Increased Households income	Normal extension work	Year round
Embu	Mbeere ,North,South & Mwea Sub counties	Livestock vaccination on NCD, FMD, CCPP, LSD, Anthrax and black quarter disease	2500 H/h	County/Farmers own initiative	Sustained TLU's Sustained livestock Production	County Government Farmers own initiative	On-going
Embu	Mbeere ,North,South & Mwea Sub counties	Pasture conservation and preservation of stovers	1500 H/h	Livestock production department	Sustained TLU's Increased production	Normal Routine Extensions	On-going
MEDIUM AND LONG TERM							
Embu	Mbeere ,North,South & Mwea Sub counties	Awaiting funding in honey processing and marketing for Kirie beekeeper's farmer groups	600HH	NDMA	Increased food security with honey production	2,500,000	1 year
Embu	Mbeere ,North,South & Mwea Sub counties	Proposal development on fodder bulking with Mbeere North dairy farmers cooperative	500 HH	NDMA	Increased food security for livestock and fodder conservation	2,000,000	1 year
Embu	Mbeere ,North,South & Mwea Sub counties	BSF production for cheaper protein source and use of rice by products in poultry feed	800HH	KALRO/KOPIA	Increased food security for livestock Reduced cost of feeds	3.8 million	3 years
Embu	Mbeere ,North,South & Mwea Sub counties	Livestock Vaccination against FMD, LSD, NCD, Anthrax etc.	40,000 Animals.	Veterinary department	Improved living standards and	10 staff at 1500 for 6 days in all	1 year

					increased income.	wards for 4 quarters =2,000,000 -Inputs cost 3.0M TOTAL COST=5.0 M	
Embu	Mbeere ,North,South & Mwea Sub counties	Market data collection	1500 h/h	NAVCDP	Improved food security surveillance	3.5 M	3years

Health and Nutrition

Sub county	Intervention	Location	No. of beneficiaries		Implementers	Estimated Cost (Kshs)	Timeline
			Female	Male			
The entire Embu County	Vitamin A Supplementation	All Health facilities, households and ECD centers	33127	1826	Embu county dept of health, and Nutrition International	1,400,000	Routine and biannually
The entire Embu County	Zinc Supplementation	Only therapeutic at health facilities level	4545	4365	Embu county dept of health,	200,000	Routine
The entire Embu County	Management of Acute Malnutrition (IMAM)	All facilities implementing feeding programmes	1712	1644	Embu county dept of health,	8M	Routine
Selected community units	BFCI (Baby Friendly Community Initiative)	18 community Units	-	-	Embu county dept of health, and Nutrition International	2M	
The entire Embu County	Iron Folate Supplementation among Pregnant Women	All health facilities		6706	Embu county dept of health,	1M	Routine
The entire Embu County	Deworming		28921	27785	Embu county dept of health, and Nutrition International	1M	Routine and biannual
Embu county	Distribution of Iron rich Nyota beans	85 Community Units in Embu County	0	0	Harvest plus through the county dept' of Agriculture	N/A	

The entire Embu County	Chlorine tabs provision	All the Community Units	55,981 HH		Embu county dept of health,	N/A	Continuous
The entire Embu County	Formation of school Health Clubs	Selected schools	85 Primary schools		Embu county dept of Agriculture and Harvest plus	N/A	Continuous

Education

Sub-county	Ward/Zone	Location	Intervention	Level of school (Pre-primary/primary/Junior School/Secondary)	No. of beneficiaries	Implementers	Impacts in terms of food security	Timeframe (Months)
MWEA	ALL	ALL	Relief Food	All	55 Pre-primary, 55 primary, 50 Junior schools and 22 Secondary schools (16,070 learners)	Ministry of Interior Coordination	Enhanced attendance and retention	May 2025
MWEA	ALL	ALL	Supply of Planting seeds (Drought resistant)	10 PRIMARY, 10 JUNIOR SCHOOLS AND 5 SECONDARY SCHOOL	3200 LEARNERS	CEREAL GROWERS' ASSOCIATION	Improved food security	On going

5.3 Recommended Interventions

Agriculture sector

Immediate interventions

Sub County	Ward	Intervention	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
Mbeere South, Mbeere North, Mwea	Mbeti South Mayuria Kiambere Makima Mwea Nthawa Evurore Muminji	Provision of relief food	15,000 HH	Embu County government and other stakeholders	150M	Staff	JULY-SEPT 2025
Mbeere South, Mbeere North, Mwea	Mbeti South Mayuria Kiambere Makima	Provision of relief seed	30,000 HH	Embu County government and other stakeholders	150M	Staff	AUG- SEPT 2025

	Mwea Nthawa Evurore Muminji							
--	--------------------------------------	--	--	--	--	--	--	--

Medium term/Long Term interventions

Sub County	Ward	Intervention	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
Mbeere South, Mbeere North, Mwea	Mbeti South Mavuria Kiambere Makima Mwea Nthawa Evurore Muminji	Provision of farm inputs	8000 HH	Embu County government and other stakeholders	80M	Staff	AUG- SEPT 2025
Mbeere South, Mbeere North, Mwea	Mbeti South Mavuria Kiambere Makima Mwea Nthawa Evurore Muminji	Irrigation water	8,000HH	Embu County government and other stakeholders	160M	Land, labour	5 YEARS

Water Sector

Sub County/ Ward	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources
Mbeere South	Solarization of boreholes:				
	1. Kikulani borehole	Makima	1500 HHs	NDMA, County Government of Embu	Funds
	3. Nthingini Borehole	Mwea	600 HHs		
	Desilting of Dams				
	1.Kimweli, 2. Kathuri	Mavuria	400 HHs	NDMA, County Government of Embu	12M
				Other stakeholders	
	Mariari, Kariari Karura, Munandare, kawanga, kanjuki	Kiambere	500 HHs	NDMA, County Government of Embu Other stakeholders	10M
	Wango, Mulukusi	Mwea	300HHs	NDMA, County Government of Embu Other stakeholders	8M

	Rehabilitation and improvement of kwa musa and Nganjai boreholes Kamuthambui, Miranguti, ntharawe Newsite, Kariari	Kiambera	500HH	NDMA, County Government of Embu Other stakeholders	7M
Mbeere North	Rehabilitation and improvement of boreholes:				
	4. Itutheri	Siakago	1600 HH in total	NDMA, County government of Em	
	5. Ithendue	Siakago			20M
	6. Ciambu	Riandu		NDMA, County government of Embu	
	7. Kivue secondary school	Muminji			
	8. Kaungu	Riandu		NDMA, County government of Embu	
	9. Kambora	Riandu			
	10. Mukuyuri	Karambari			
	11. Gitua	Karambari			

Livestock Sector

RECOMMENDED INTERVENTIONS – SHORT, MEDIUM AND LONG TERM							
County	Sub County	Intervention	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
Embu	Mbeere ,North,South & Mwea Sub counties	Mechanization of pasture establishment and conservation (Equipping with tractors, and tractor implements for (planting, harvesting, and baling hay)	9000 HH	Atdc/ecg/gok/machanga machinery center	70,000,000	Technical expertise	July to December 2025
Embu	Mbeere ,North,South & Mwea Sub counties	Construction of community hay stores	1,300 HH	ECG/ NDMA	2,500,000	Technical expertise	July to September 2025
Embu	Mbeere ,North,South & Mwea Sub counties	Disease surveillance along the stock routes	6,000 HH	ECG/GOK.	4,000,000	Technical expertise	Continuous
Embu	Mbeere ,North,South & Mwea Sub counties	Capacity building of livestock and veterinary officers &	60 personnel	ECG/GOK/NDMA	2,500,0000	Technical manpower	Continuous

		facilitation in transport for extension					
Embu	Mbeere ,North,South & Mwea Sub counties	Provision of transport infrastructure (1 Isuzu pickup & 7 motor bikes)	20 personnel	ECG/GOK/NDMA	14,500,0000	Licensed drivers and extensionists	Continuous
Embu	Mbeere ,North,South & Mwea Sub counties	Establishment of a dog shelter and orphanage to manage stray dogs which are problematic & diseased risking human safety and contamination (baiting, restraint and management provision)	County wide	ECG/GOK/NDMA	20,000,000	Technical personnel	Continuous
Embu	Mbeere ,North,South & Mwea Sub counties	Livestock and veterinary policies enforcement, improvement, enactment & sensitization meeting	County wide	ECG/GOK/NDMA	1,000,000	Technical personnel	Continuous
Embu	Mbeere ,North,South & Mwea Sub counties	Fodder production and conservation in underutilized irrigation schemes	County wide	ECG/GOK/NDMA	2,500,000	Technical personnel	Continuous

Health and Nutrition

Immediate Recommended Interventions							
Sub County/Ward	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
Mbeere North, Mbeere south and Mwea	Procurement and distribution of nutrition supplementary and therapeutic feeds	All the health facilities in mbeere south, north and mwea	1773	Embu County, Dept of Health	10M	0	Immediately

Entire Embu County	Up-scaling of Baby-Friendly Community Initiative in all the community Units	All Community units in the three sub-counties	146 community units	Embu County, Dept of Health	10 M	0	Immediately
Medium- and Long-term Recommended Interventions							
Sub County /Ward	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
Mbeere North, Mbeere south and Mwea	Nutrition survey	All locations in Mbeere South	157,413	County government NI NDMA	4.3M	0	Dec 2025

Education Sector

Sub-county	Ward/Zone	Intervention	Level of school (Pre-primary/primary/Junior School/Secondary)	No. of schools	No. of targeted beneficiaries	Proposed Implementers	Required Resources Kshs	Available Resources Kshs	Resource Gap Kshs	Timeframe (Months)
Mwea	All	Renew Cash transfer programme	Primary schools	30	6556	NACONE K	10,900,000	Human resources	10,900,000	Continuous (yearly)