

National Drought Management Authority
KWALE COUNTY
DROUGHT EARLY WARNING BULLETIN FOR APRIL 2017



A Vision 2030 Flagship Project



APRIL 2017 EW PHASE



Drought Situation & EW Phase Classification

Biophysical Indicators

- Below normal rainfall amounts received in both livelihood zones.
- The Vegetation Condition Index was below normal at 4.63.
- The state of water sources was inadequate and below normal.

Socio Economic Indicators (Impact Indicators)

Production indicators

- Livestock body condition was below normal at this time of the year.
- Milk production was below normal.
- No livestock migration was witnessed during the month.

Access indicators

- Milk consumption was below normal but stable compared to last month.
- Return distances to water sources were higher than normal.

Utilization Indicators

- The proportion of children at risk of malnutrition was slightly above normal for this time of the year.

Early Warning (EW) Phase Classification

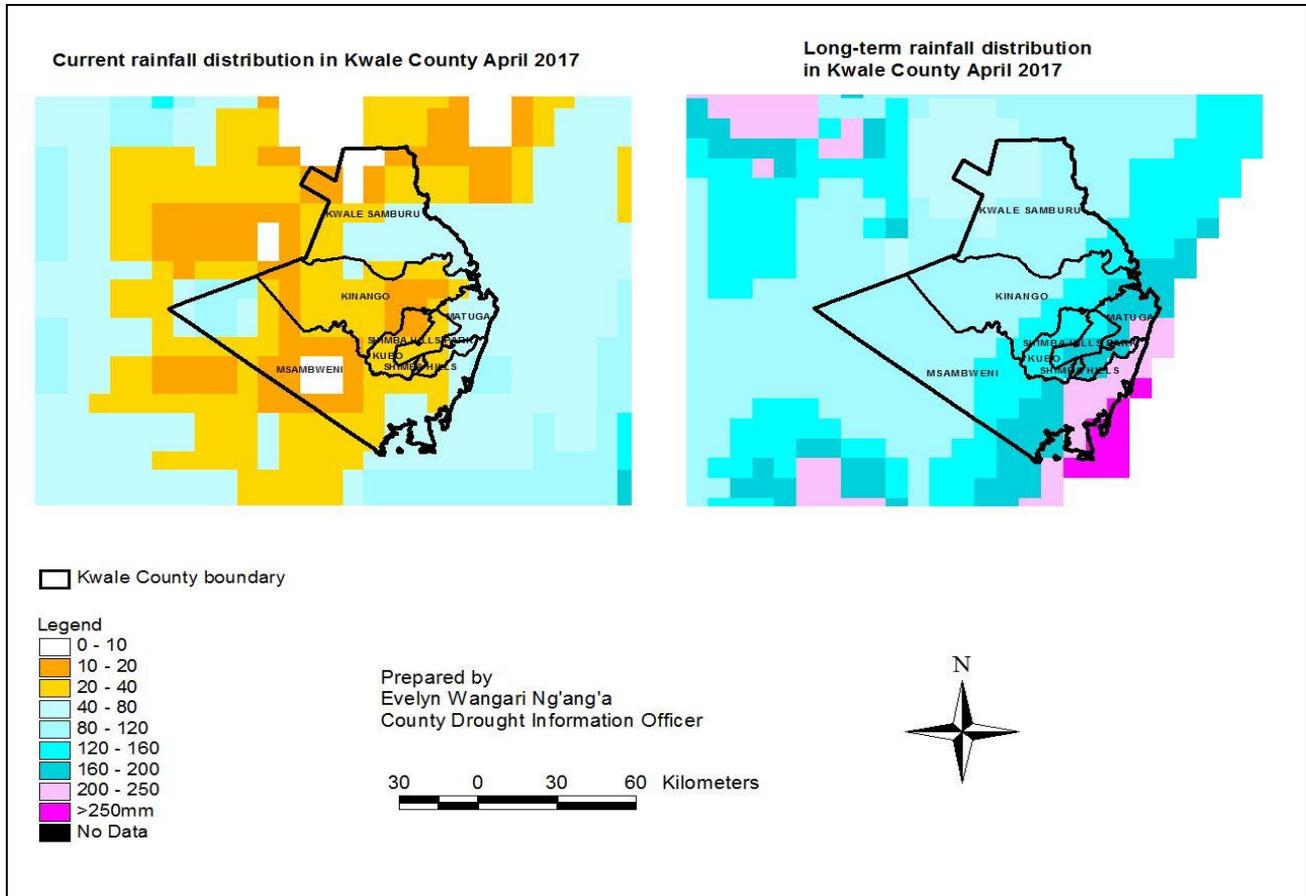
Livelihood Zone	Phase	Trend
Mixed Farming	Alarm	Worsening
Livestock Farming	Alarm	Worsening
County	Alarm	Worsening
Biophysical Indicators	Value	Normal Range/Value
VCI	4.63	42
State of Water Sources	3	5
Production indicators	Value	Normal
Crop Condition (specify crop)	Fair	good-
Livestock Body Condition	3	5
Milk Production (Litres)	3.2	4.8
Livestock Migration Pattern	No migration	No migration
Livestock deaths (from drought)	-	-
Access Indicators	Value	Normal
Milk Consumption (litres)	1.6	1.8
Return distance to water sources (km)	3.9	2.3
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	6.7	5.75

Seasonal calendar

<ul style="list-style-type: none"> Short rains harvests Short dry spell Reduced milk yields Increased household food stocks Land preparation 	<ul style="list-style-type: none"> Planting/weeding Long rains High calving rate Milk yields Increase 	<ul style="list-style-type: none"> Long rains harvests A long dry spell Land preparation Increased household food stocks Kidding (Sept) 	<ul style="list-style-type: none"> Short rains Planting/weeding 								
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

1.1 RAINFALL PERFORMANCE

- The long rain season begun in the last week of March.
- Both livelihood zones received lower-than-normal amounts of rainfall compared to the long-term average as shown in the diagram below.
- The temporal distribution was poor and the spatial distribution uneven.
- The rains are still on-going in the county.



2. IMPACTS ON VEGETATION AND WATER

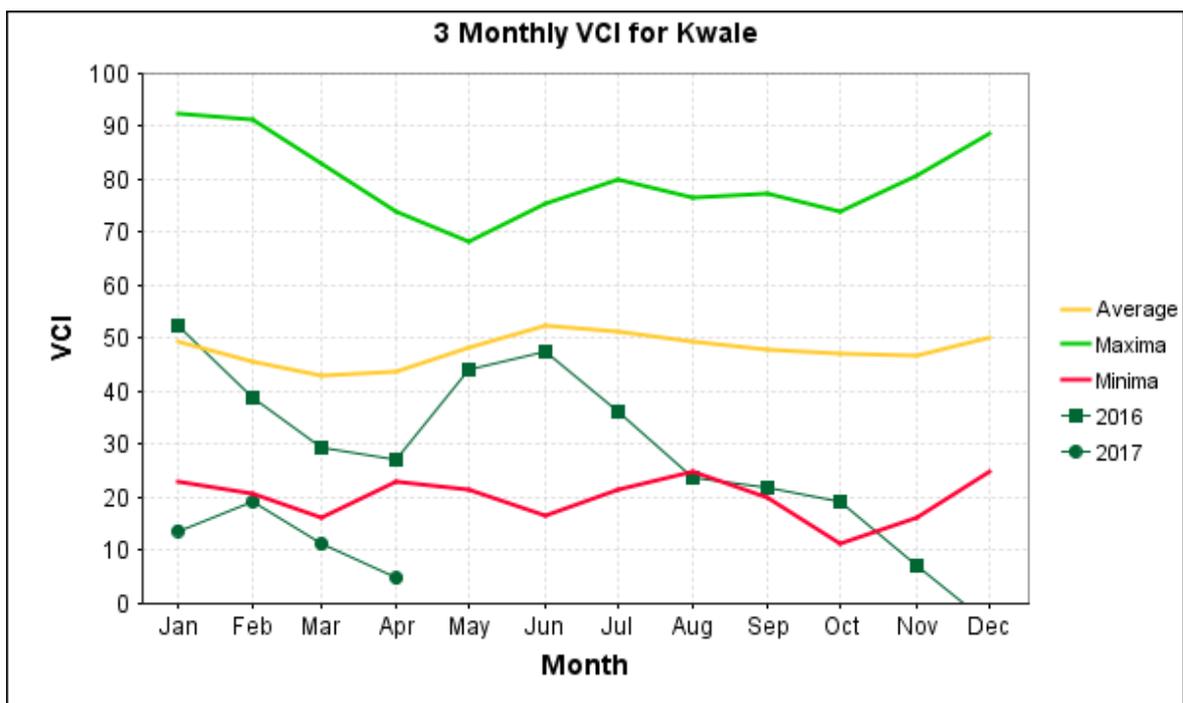
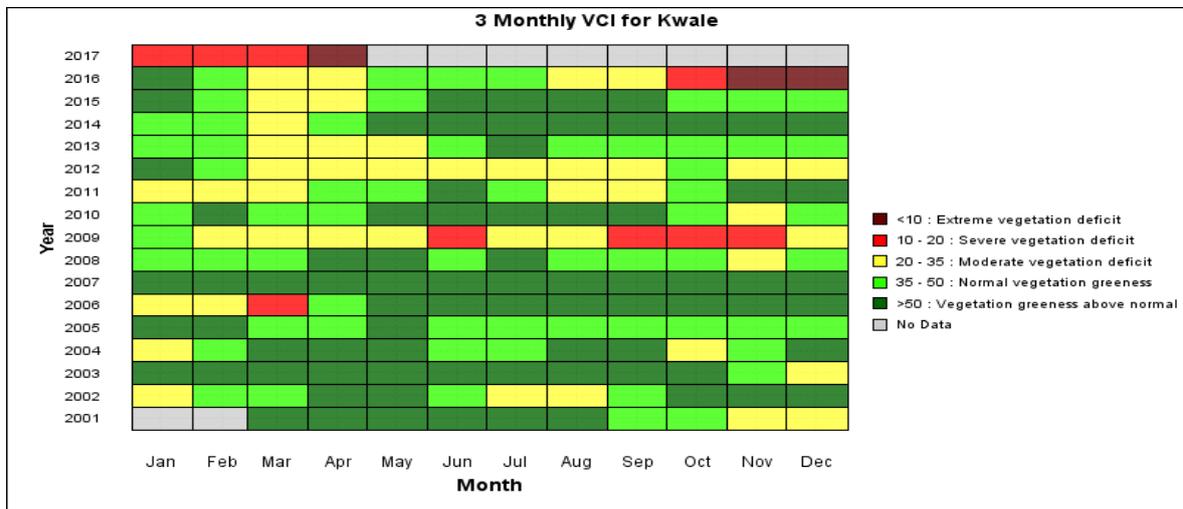
2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

- Despite the rains that were received in the county, the expected improvement has yet to be manifested in improved vegetation as the VCI decreased in the whole county compared to last month as shown in the table below.

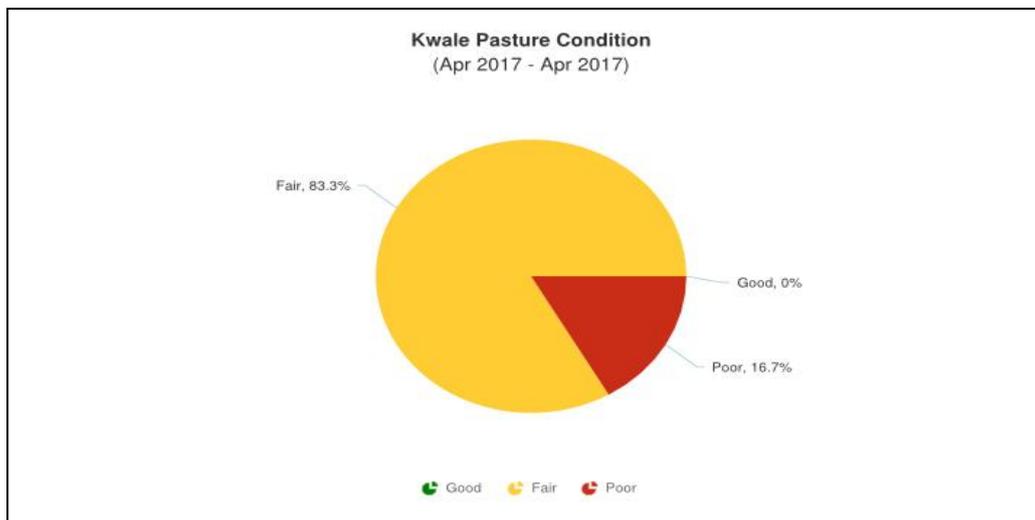
County/ Sub-county	3-month VCI Jan 2017	3-month VCI Feb 2017	3-month VCI March 2017	3-month VCI April 2017
Kwale County	13.58	19.03	11.04	4.63
Kinango	12.26	18.11	11.13	5.75
Lunga Lunga	12.77	16.27	6.42	-2.4
Matuga	19.2	26.94	16.98	8.96
Msambweni	18.49	22.72	16.76	13.92

- The county is largely categorized in the 'extreme vegetation deficit' band alongside Kinango, Lunga Lunga and Matuga sub-counties while Msambweni sub-county remained in the 'severe vegetation deficit' band.
- The VCI is the worst ever recorded since 2001.
- The matrix and graph below show the trend in vegetation deficit through to April 2017.

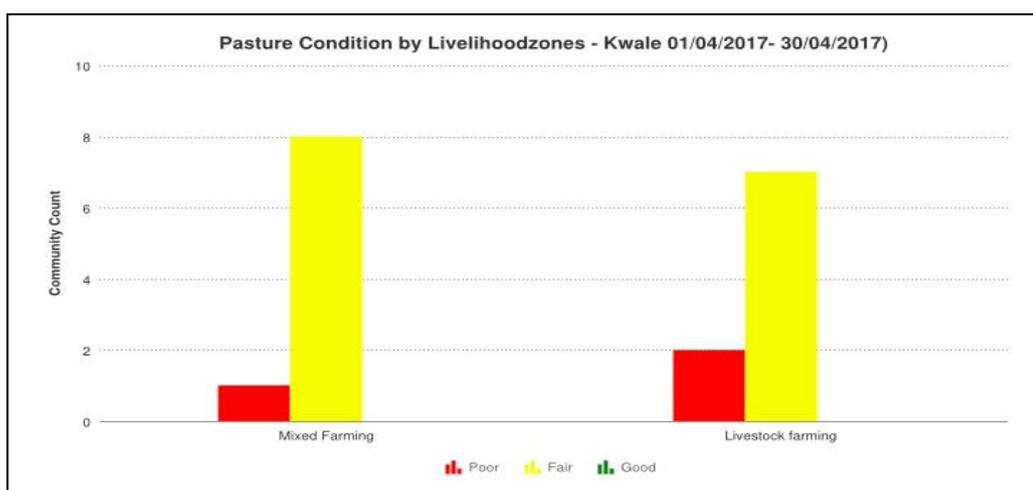


2.1.2 Pasture

- There was a slight improvement in pasture condition in April occasioned by the rains that were experienced during the month as the households who reported poor pasture condition reduced from 100 percent to 16.7 percent.
- The ones who reported fair condition took the lion's share at 83.3 percent as illustrated in the pie-chart below.

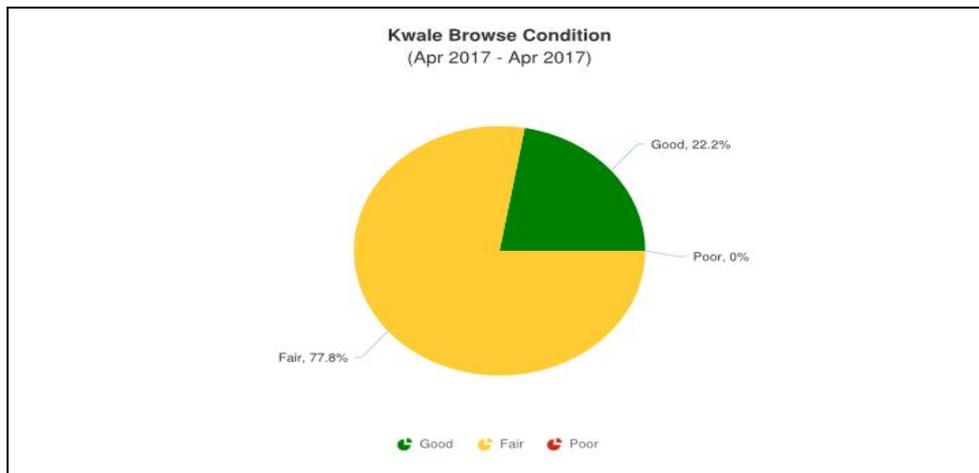


- Pasture condition was better in the mixed farming livelihood zone compared to the livestock farming one as shown in the graph below. A few areas in the former livelihood zone received slightly more rainfall than the latter hence the difference.
- The available pasture was likely to last approximately four months in the mixed farming livelihood zone and three months in the livestock farming one.
- However, this duration is likely to be lengthened if the rains continue since pasture will continue to be rejuvenated.

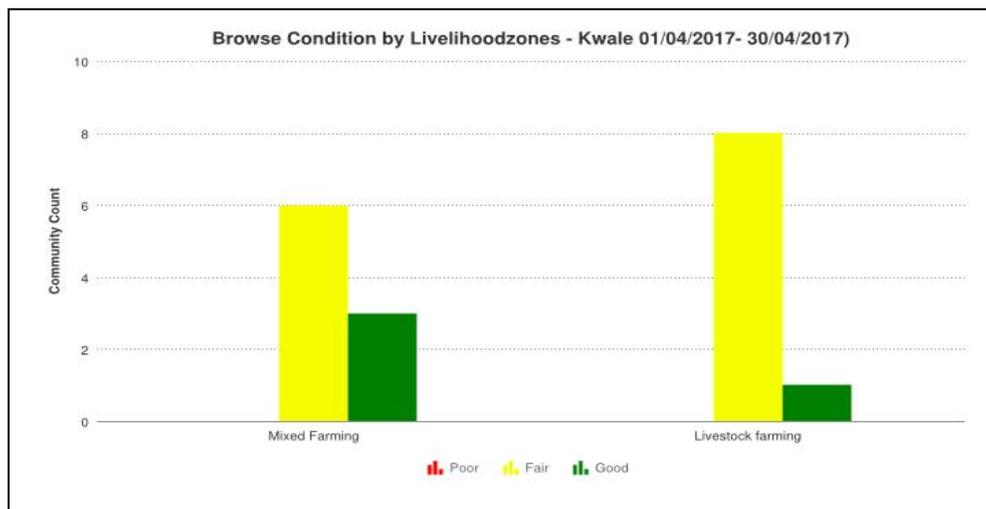


2.1.3 Browse

- There was a significant improvement in browse condition as approximately 77.8 percent of the households reported fair condition having increased significantly from 27.8 percent reported last month.
- Additionally, no households reported poor condition compared to 72.2 percent last month.
- The significant change was owed to the increased availability of browse owing to the rains that had been experienced in most parts of the county.
- The current browse condition is illustrated in the pie-chart below.



- The trend was similar at livelihood zone level where the condition ranged between fair and good.
- The condition was better in the mixed farming livelihood zone compared to the livestock farming one owing to the slightly higher rainfall in some areas in the former livelihood zone.
- The available browse was likely to last approximately six months in the mixed farming zone compared to four months in the livestock farming one although the on-going rains are likely to continue rejuvenating the browse.
- Therefore the duration the browse is likely to last is likely to be lengthened as a result.

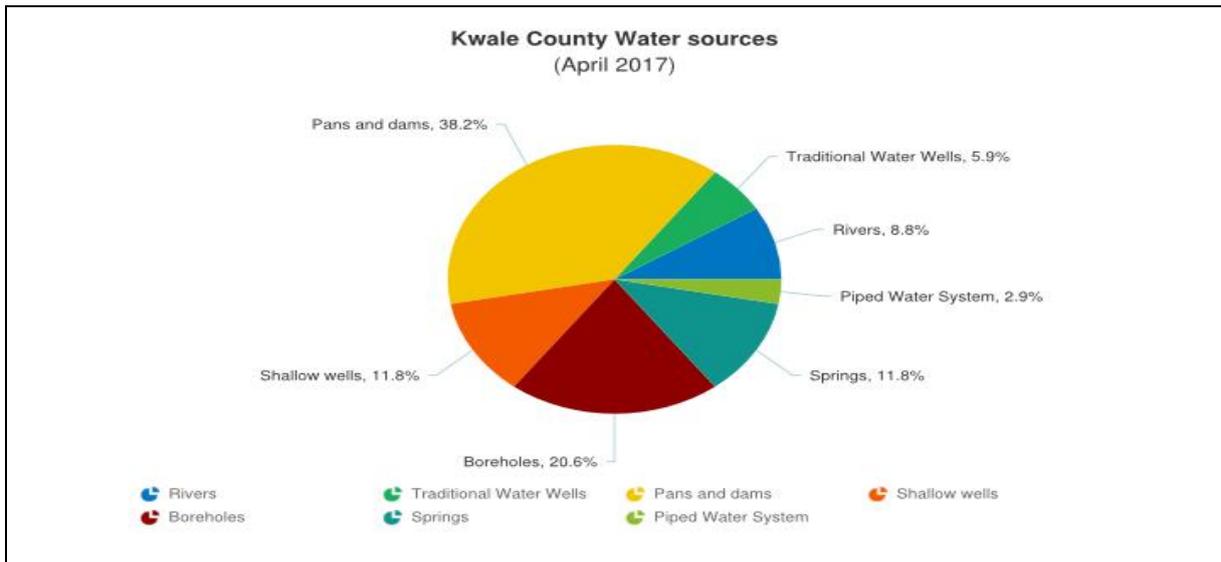


2.2 WATER RESOURCES

2.2.1 Sources

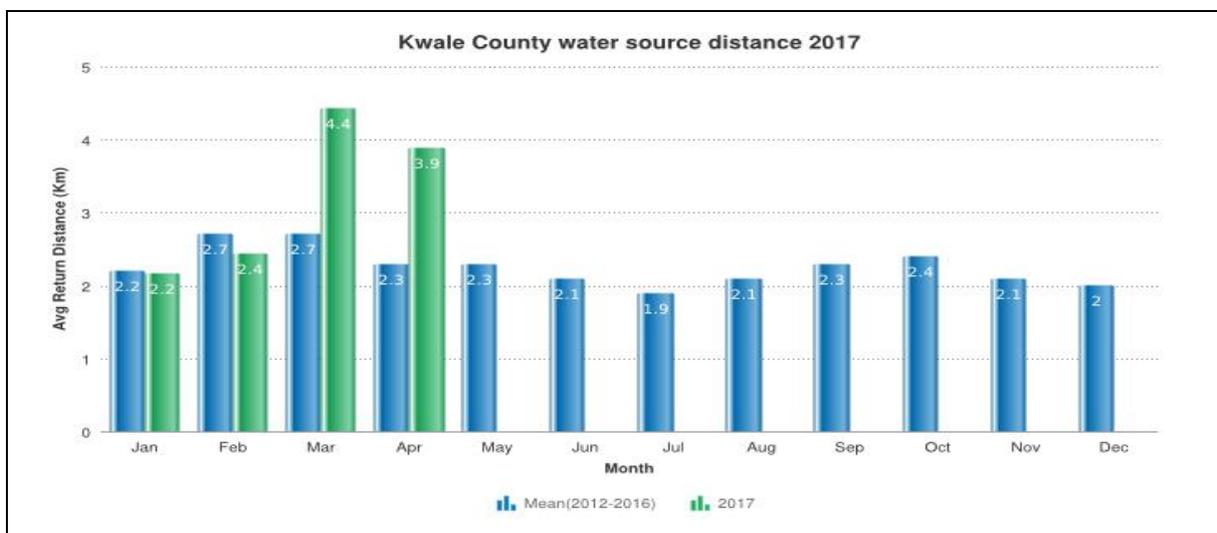
- The main water sources for the month are water pans and dams, shallow wells and boreholes similar to last month and are the normal sources of water at this time of the year. Other water sources currently in use include: traditional water wells, rivers, piped water system and springs as shown in the pie-chart below.
- The pans and dams, which are the major water sources in the livestock farming livelihood zone are between 70-80 percent full and likely to last for approximately three months which is normal for this time.

- The early warning phase classification for the state of water resources is three (3) indicating the inadequate stage as it still remains below normal for this time of the year. However, it is expected that the state will improve since the rains are still on-going.



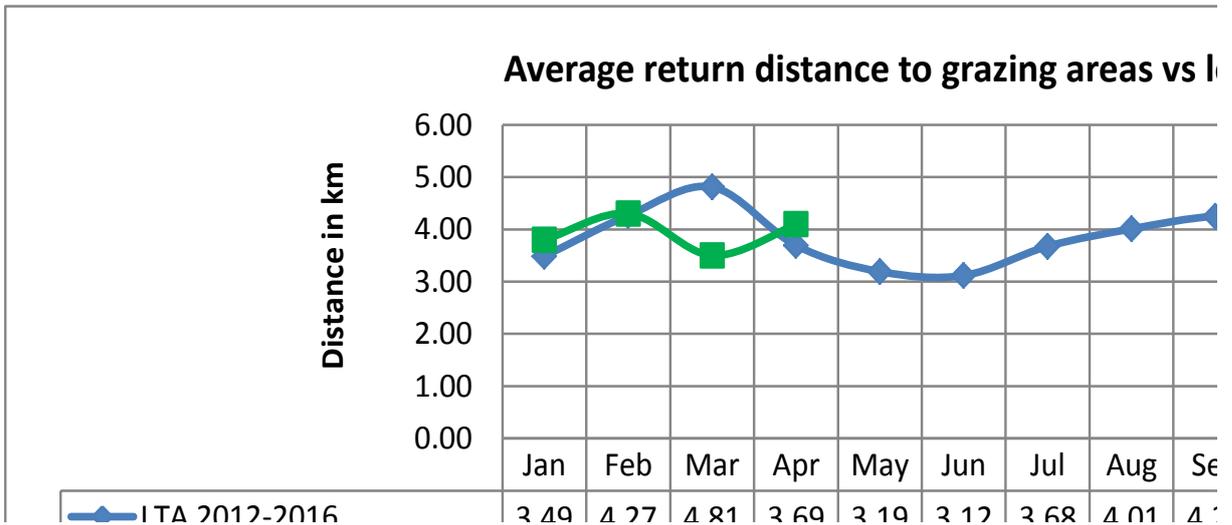
2.2.2 Household access and utilization

- The average trekking distance for households to access water was 3.9 km having decreased 11.4 percent margin compared to 4.4 km posted last month as shown in the graph below.
- The distances were much still longer than normal for this time of the year as was the case in March.



2.2.3 Livestock access

- The average trekking distance from the grazing areas to the main water sources for livestock was 4.1 km which was an increase of 17 percent from an average of 3.5 km reported the previous month. The distance was normal for this time of the year.
- The trend in the distance walked is provided in the graph below.

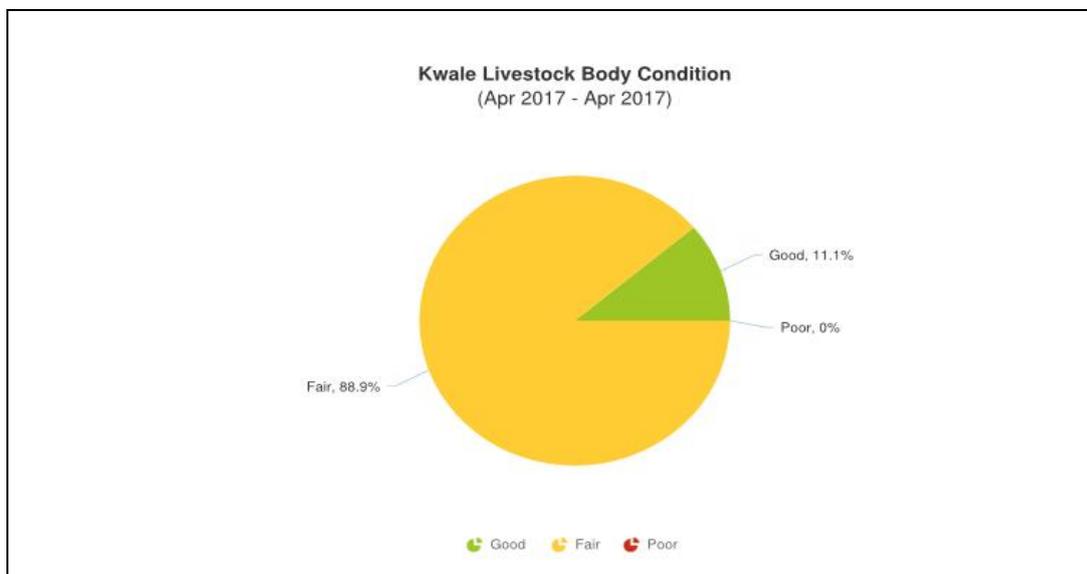


3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- No household reported poor livestock body condition this month which was an improvement from last month which had all households sampled reporting it.
- The majority of households (88.9 percent) reported fair body condition with the rest reporting good condition as shown in the pie-chart below.

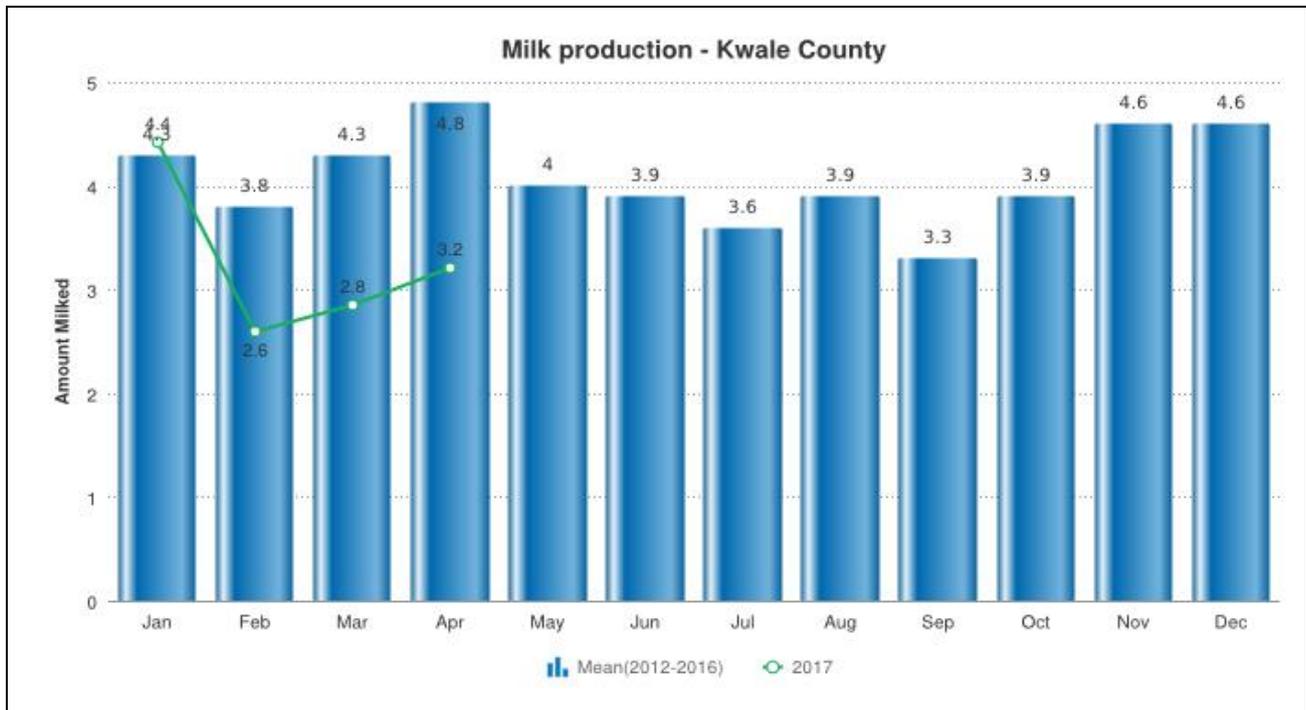


3.1.2 Livestock Diseases

- Foot and Mouth Disease (FMD) was reported in the livestock farming livelihood zone.

3.1.3 Milk Production

- Cows were the main producers of milk in April similar to March.
- Milk production increased slightly to 3.2 litres from 2.8 litres posted last month.
- The production was 33 percent lower than normal which averaged 4.8 litres in the 2012-2016 long-term average.



3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and condition of food crops

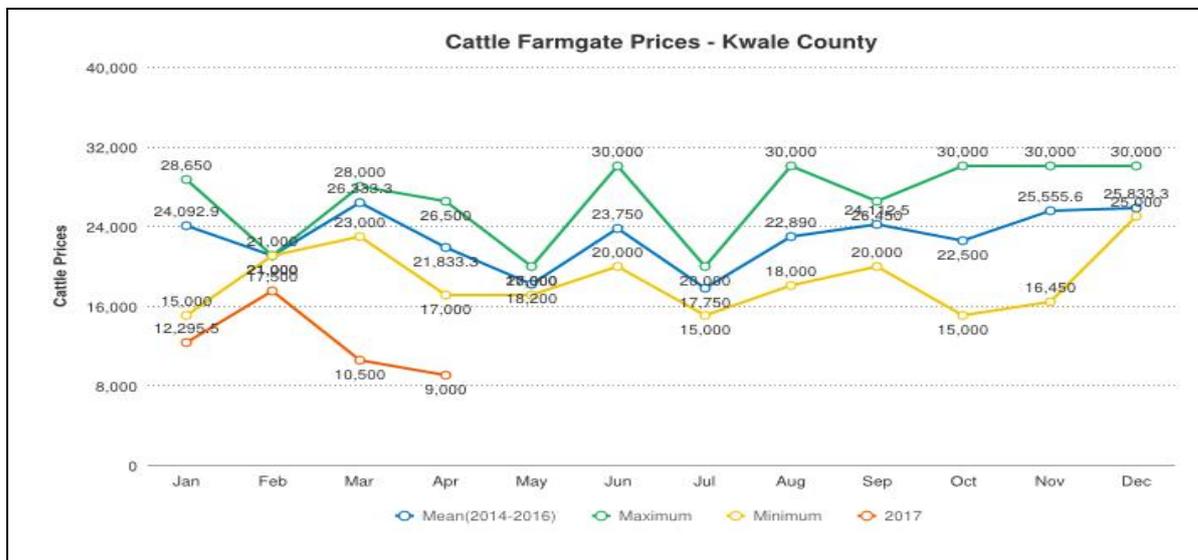
- Most farm-families who had planted as soon as it began raining in late March are currently engaged in the first phase of weeding.
- The on-farm crops for these households were currently at the knee-high stage and were generally in good condition.
- An army-worm invasion had been reported by the Ministry of Agriculture across the county.
- However, only approximately 70 acres had been affected and most farmers had not begun planting since the rains had not yet begun in most parts of the county.
- The impact of the invasion was therefore minimal although the department was on the look-out for a possible resurgence of the same.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

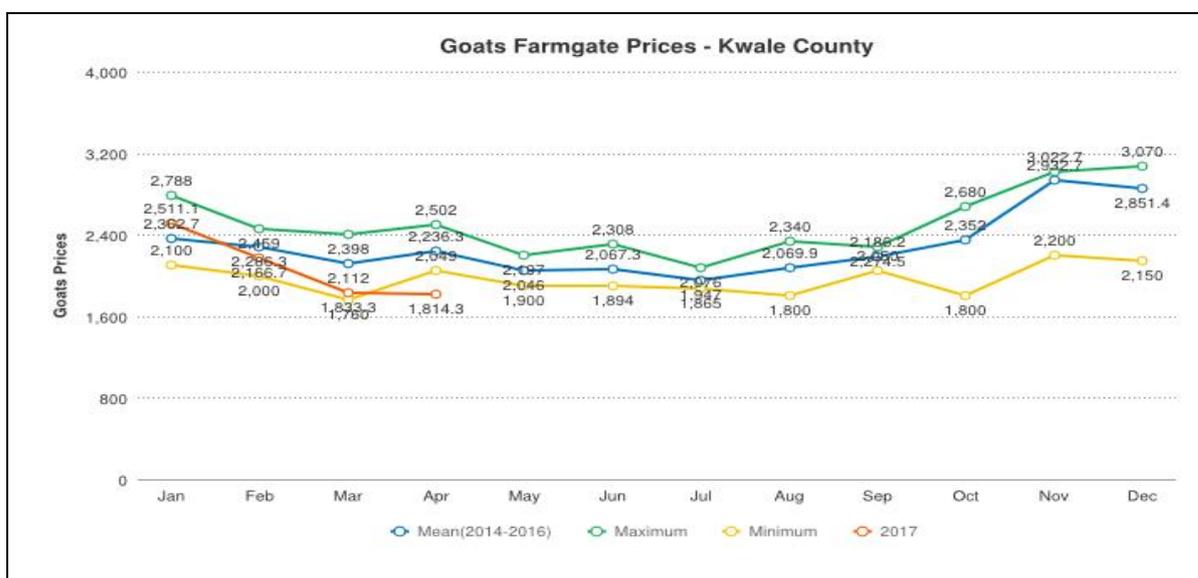
4.1.1 Cattle Prices

- The average selling price of a three-year old bull decreased by 14.3 percent from Kshs. 10,500 in March to Kshs 9,000 this month as shown in the graph provided below.
- The current trading price was lower than the least price ever recorded for the month at farm-gate level and was 59 percent of the normal price of Kshs 21,833.3 in the 2014-2016 LTA.



4.1.2 Goat Prices

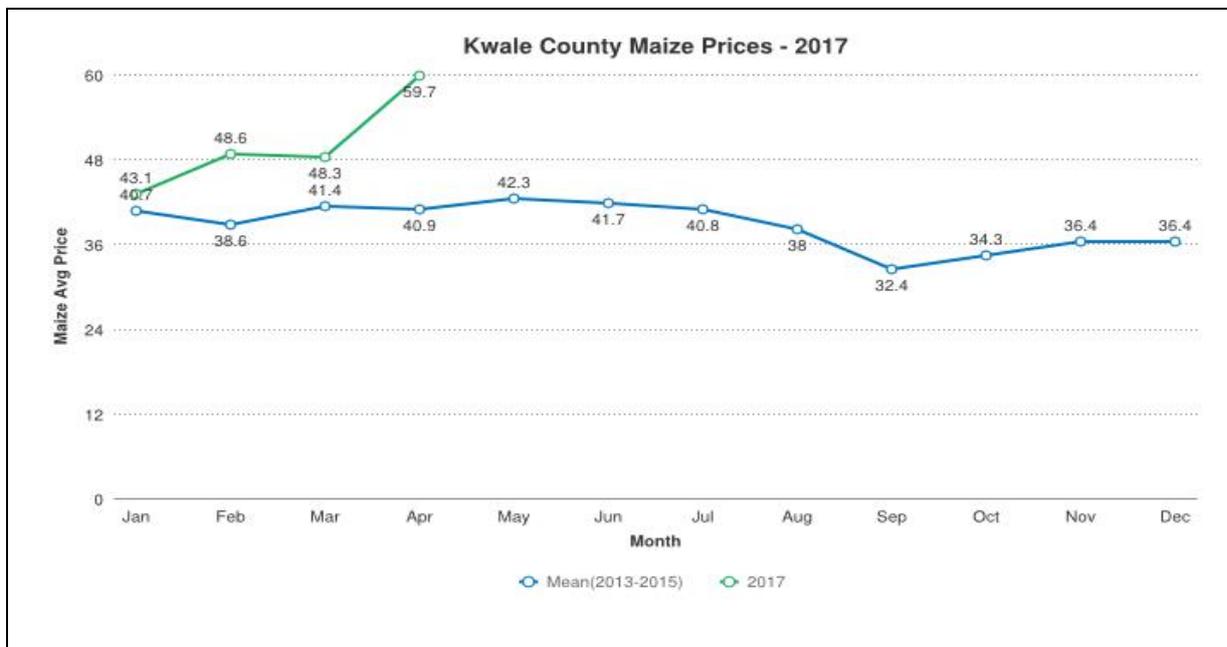
- The average trading price of a medium-sized three-year old buck remained similar to last month as it was recorded as Kshs. 1,814.3 compared to Kshs. 1,833.3 in March.
- The trends in goat prices have been provided in the graph below.
- The current trading price for a goat was the lowest ever recorded at farm-gate level and was also 19 percent lower than the expected price of Kshs. 2236.3 expected in the 2014-2016 LTA.



4.2 CROP PRICES

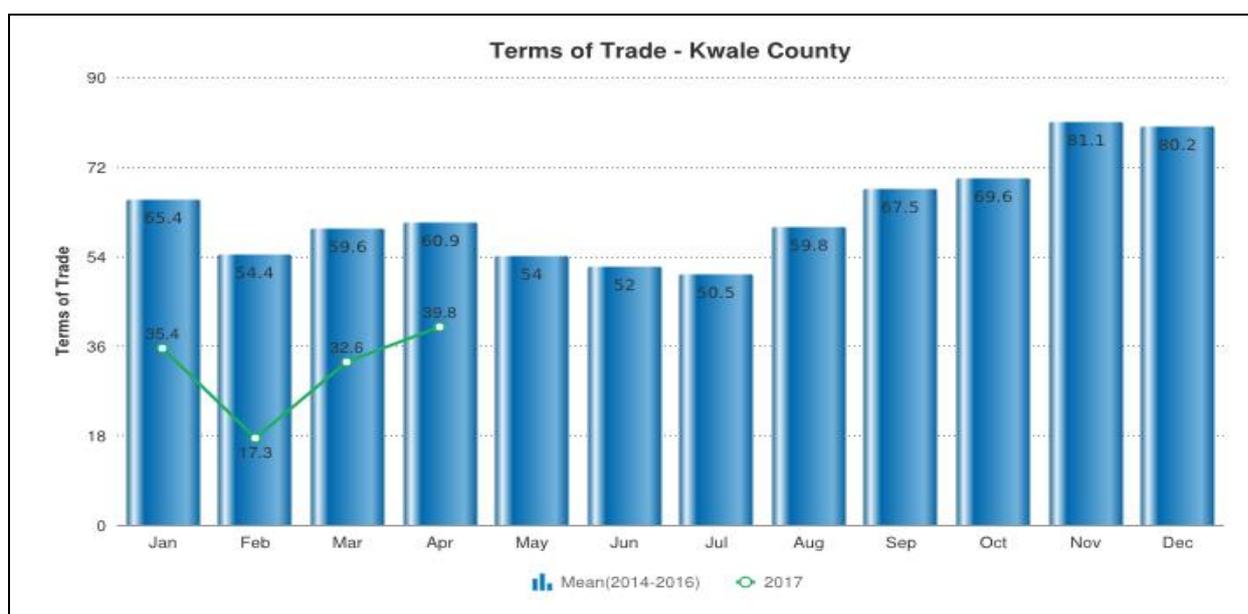
4.2.1 Maize

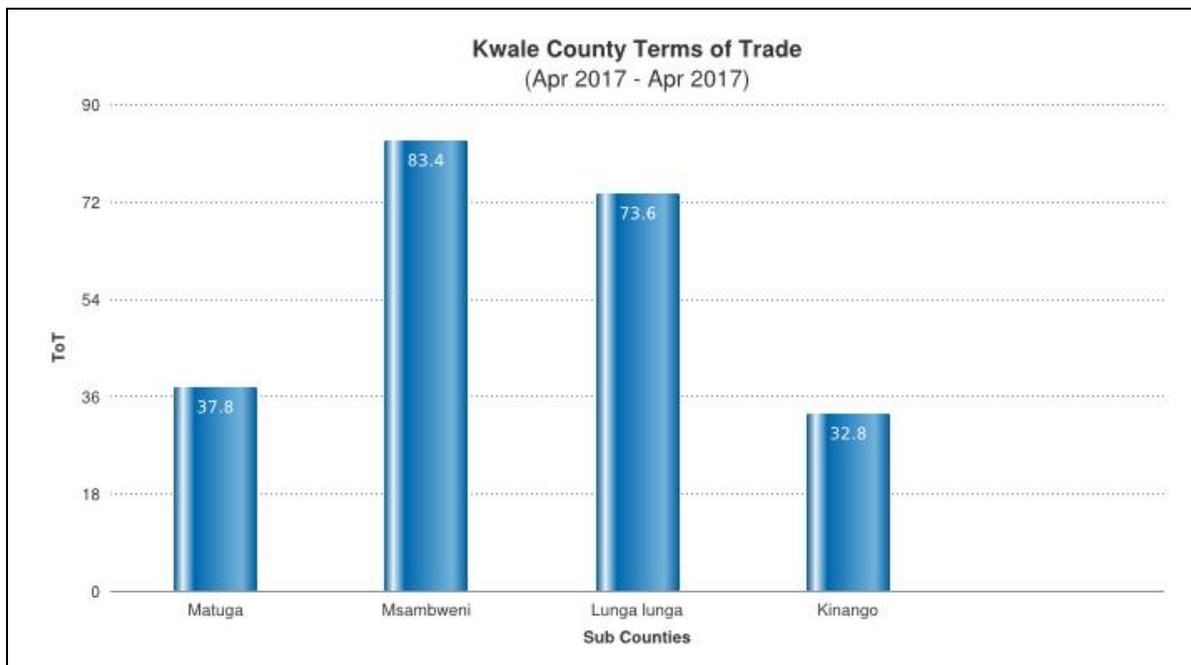
- The average price of a kilogram of maize increased by a 23.6 percent margin from Kshs. 48.3 in March to Kshs. 59.7 as shown in the graph below.
- The prices were 46 percent higher than the 2013-2015 LTA price of Kshs 40.9.



4.3 TERMS OF TRADE (CASUAL LABOUR VERSUS MAIZE PRICES)

- Households' income from casual labour could presently purchase an average of 39.8 kilograms of maize compared to 32.6 kilograms in March, which was indicative of improved purchasing power.
- The increased terms of trade were attributed to increased availability of casual labour triggered by the increase in on-farm activities with the onset of the rains.
- However, the terms of trade were still 34.6 percent lower than the expected 60.9 kilograms in the 2014-2016 LTA.
- The trends in terms of trade in the county and a snap-shot at sub-county level are illustrated in the figures below.

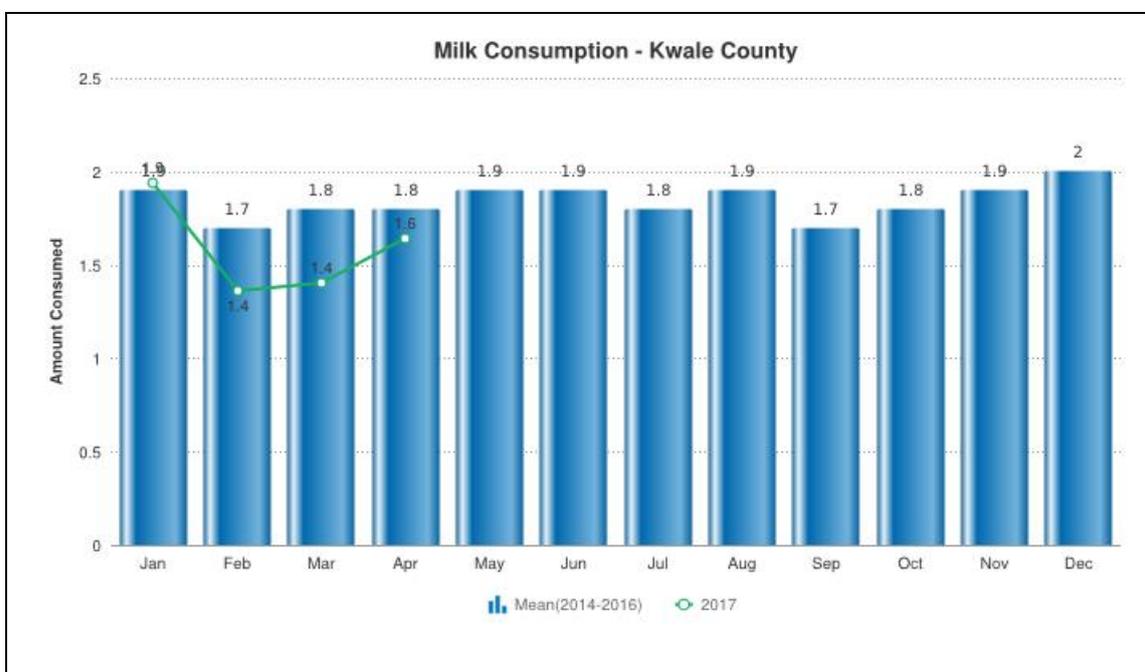




5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

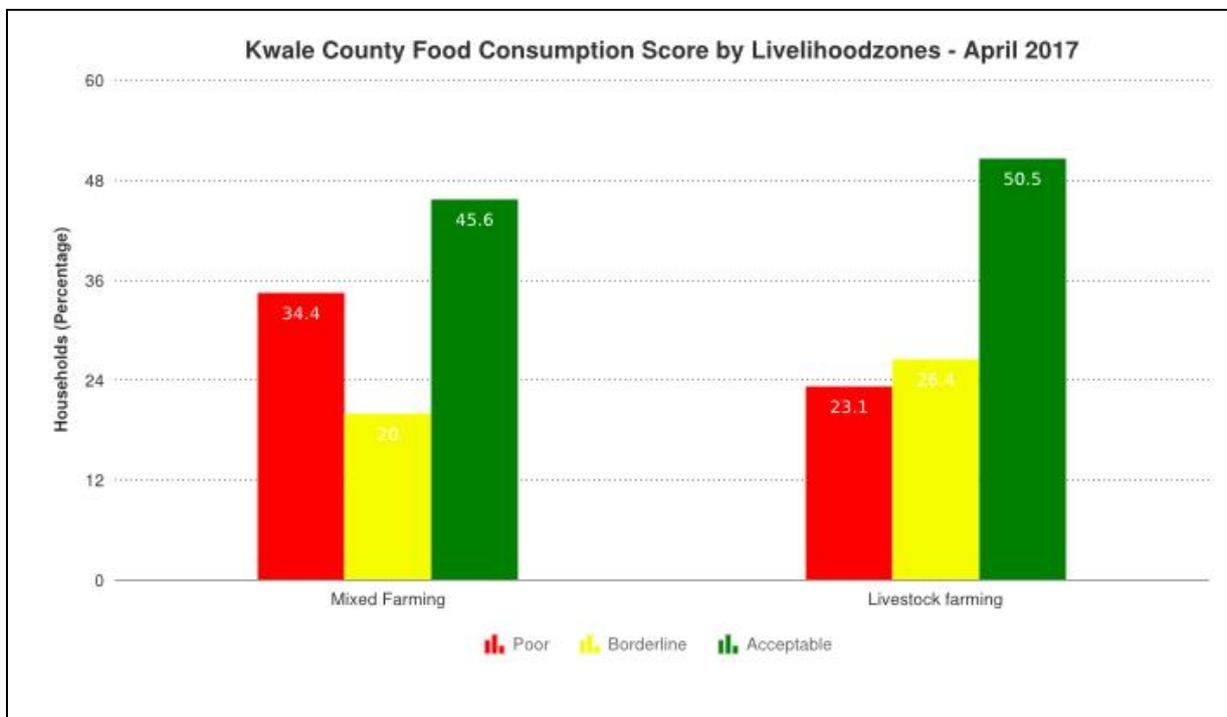
- Milk consumption at household level was recorded at an average of 1.6 litres similar to last month's 1.4 litres as shown in the graph below.
- The recorded consumption this month was 11.1 percent lower than the recorded 1.8 litres in the 2014-2016 LTA.



5.2 FOOD CONSUMPTION SCORE

- There was no significant difference in food consumption this month compared to March as the proportion of households with a poor food consumption score remained stable at 28.8 percent compared to 29.25 percent recorded in March.

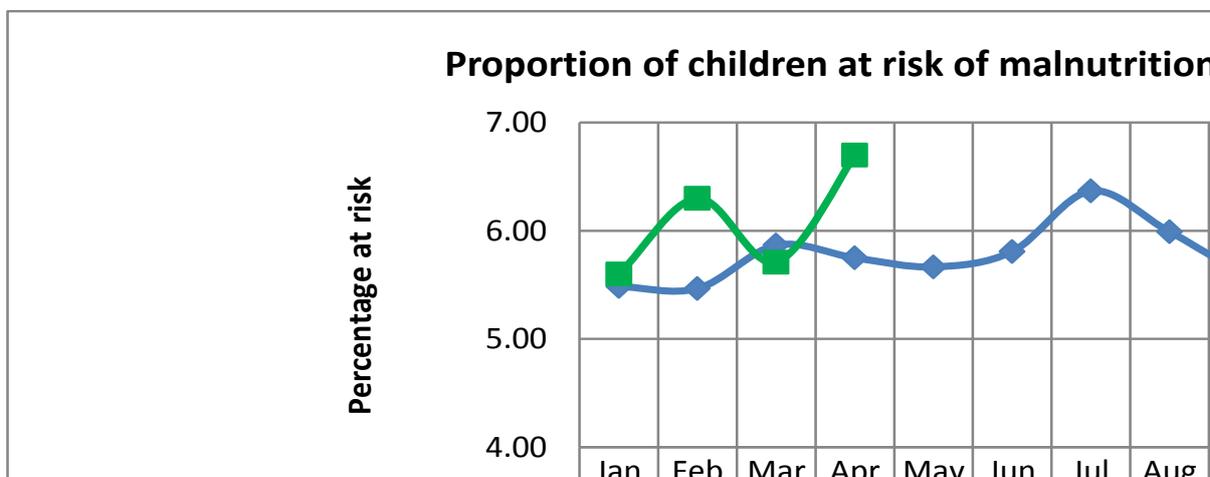
- A similar trend was observed in those households that had borderline food consumption as it averaged 23.2 percent compared to 22 percent last month.
- Additionally, approximately 48 percent of the households had acceptable food consumption score similar to 50 percent recorded last month.
- The implication was that at least half of the population was consuming at least a staple and vegetables on a daily basis complemented by a frequent consumption of pulses and oil.
- The food consumption score at livelihood zone level is provided in the graph below.



5.3 HEALTH AND NUTRITION STATUS

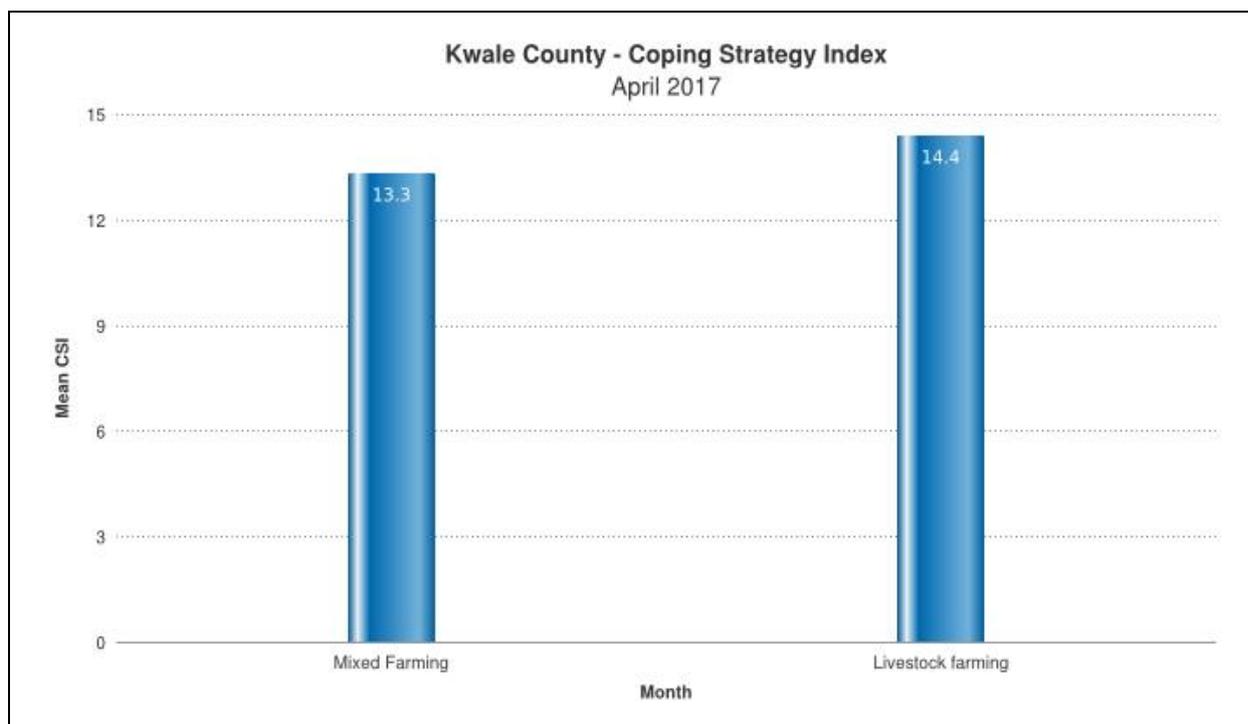
5.3.1 Nutrition Status

- The proportion of children at risk of malnutrition increased by 17.3 percent from 5.71 percent in March to 6.7 percent in April.
- The current percentage of children at risk was higher than normal compared to the 2012-2016 LTA.



5.4 COPING STRATEGIES

- The mean CSI (coping strategy index) for the county reduced slightly to 13.9 in April from 16.4 in March.
- The implication was that households were employing fewer consumption-based coping strategies less frequently.
- The decrease was also noted at livelihood zone as it decreased from 16.8 in March to 13.3 in April in the mixed farming livelihood zone and from 15.9 to 14.4 in the livestock farming livelihood zone.
- The indices at livelihood zone level are illustrated below.



- The most commonly employed consumption-based coping mechanisms this month included reliance on less preferred/expensive food, reduction of the portion and/or number of meals and credit purchases similar to last months.

6. CURRENT INTERVENTION MEASURES

6.1 NON-FOOD INTERVENTIONS

- NDMA through the drought contingency funds undertook livestock assessment in all wards in Kinango and Vanga and Mwereni wards in Lunga Lunga to target beneficiaries for livestock feeds distribution/establishment of livestock feeding centres. The centres selected were in Kasemeni, Mwavumbo, Mwereni, Kinango and McKinnon Road wards where 1,000 core breeding herds were targeted.
- Food and Agriculture Organization funded Samaritan's Purse to distribute the following livestock feeds in Puma, Ndavaya and Samburu/Chengoni wards in Kinango sub-county and Mwereni ward in Lunga Lunga sub-county:
 - 300 bags of range cubes
 - 2,400 blocks of Urea Molasses Mineral Blocks (UMMB)

- The preparation for the unconditional cash transfer by government through WFP and KRCS dubbed 'Chakula Kwa Jamii' was done during the month and set to kick off in mid-May.
- The ministry of agriculture under-took the control of army worms that had invaded 70 acres in the county. It also delivered materials for irrigation infrastructure to 15 identified micro-irrigation sites across the county.

7. EMERGING ISSUES

7.1 Insecurity/Conflict/Human Displacement

- There have been no cases of insecurity, conflict or human displacement during this reporting month.

7.2 Migration

- No migration was reported this month.

7.3 FOOD SECURITY PROGNOSIS

Although the rains are yet to have any significant impact on the forage availability, it is expected that rejuvenation will occur soon. The rains will also increase the volumes of the available open water sources and also recharge ground water improving water availability and accessibility both for livestock and domestic use. Livestock production will therefore likely continue on an increasing trend and products such as milk will increase, boosting household incomes and diversifying diets at household level resulting in improved nutritional status. Income from casual labour is also on the increase due to increasing availability of on-farm labour which will counteract high prices of maize, the county's staple. Therefore, although food consumption gaps are likely to remain, they will reduce as even the poor households can access food from stores from this income. Most households are therefore likely to reduce any consumption-based coping strategies currently being employed. The food security situation is therefore likely to remain slightly unstable, but will stabilize once the impacts of the rains begin being felt.

8. RECOMMENDATIONS

- Continue the distribution of livestock feeds since pasture is yet to be fully rejuvenated.
- Continuation of the provision of fuel subsidy to Sapu and Mwangoni boreholes and upscaling of the intervention in the three boreholes in Kibuyuni in Mwambalazi, Kigombero Primary School in Pongwe Kikoneni and Mwamtsefu in Mwereni ward all in the livestock farming livelihood zone.
- Up-scaling of the beneficiaries of unconditional cash transfer to curb the current food insecurity situation.
- Close monitoring of the re-invasion of army worms across the whole county since most farm-families had crops on their farms.