

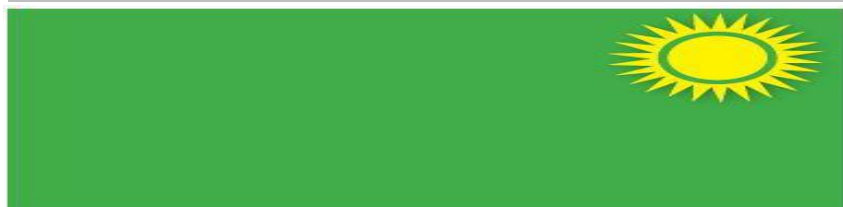
National Drought Management Authority (Nyeri) COUNTY DROUGHT EARLY WARNING BULLETIN FOR JUNE 2018



A Vision 2030 Flagship Project



JUNE 2018 EW PHASE



Early Warning (EW) Phase Classification

Livelihood Zone	Phase	Trend
Mixed Farming	Normal	Stable
Agro pastoral	Normal	Stable
County	Normal	Stable
Biophysical Indicators	Value	Normal Range/Value
Rainfall (% of Normal)	70.7%	80-120
VCI-3Month	71.75	35-50
Forage condition	Good	Fair
Production indicators	Value	Normal
Crop Condition (specify crop)	Good	Fair
Livestock Body Condition	Good	Fair
Milk Production	6.4 litres	5.2 litres
Livestock Migration Pattern	None	Normal
Access Indicators	Value	Normal
Terms of Trade (ToT)	110.1	83.2
Milk Consumption	1.8	1.5
Return distance to water sources	0.7	2.7
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	0	1.4
Coping Strategy Index (CSI)	4.59	<5.0

Drought Situation & EW Phase Classification

Biophysical Indicators

- Offseason showers were received in high attitude areas for an average of seven Days. Kieni plains were relatively dry during the month under review.
- The vegetation greenness was above normal in all the livelihood zones
- Access to water in Kieni was good as rivers were flowing at normal levels. Water holding structures were 70 percent full.

Socio Economic Indicators (Impact Indicators)

Production Indicators

- Crops at the farms were of good condition. Harvesting of beans in some localised areas was ongoing.
- Livestock body condition was good for all species.
- Milk production was above normal threshold.
- No livestock in or out migration was reported.

Access indicators

- Terms of trade were not favourable for livestock keepers.
- Milk consumption was within normal ranges.
- Distances to water sources were below the long-term averages.

Utilization Indicators

- No cases of children below the age of five years at risk of malnutrition were reported during the month under review.
- Coping strategy Index of 4.59 was report which was within normal range.

<ul style="list-style-type: none"> ▪ Short rains harvests ▪ Short dry spell ▪ Reduced milk yields ▪ Increased HH 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 HH 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

1.0 CLIMATIC CONDITIONS

1.1 RAINFALL PERFORMANCE

- In the month of June, high altitude areas received off season showers while the lower zones registered minimal showers. The off season showers were received for an average of seven days. Temporal distribution was however poor across livelihood zones.

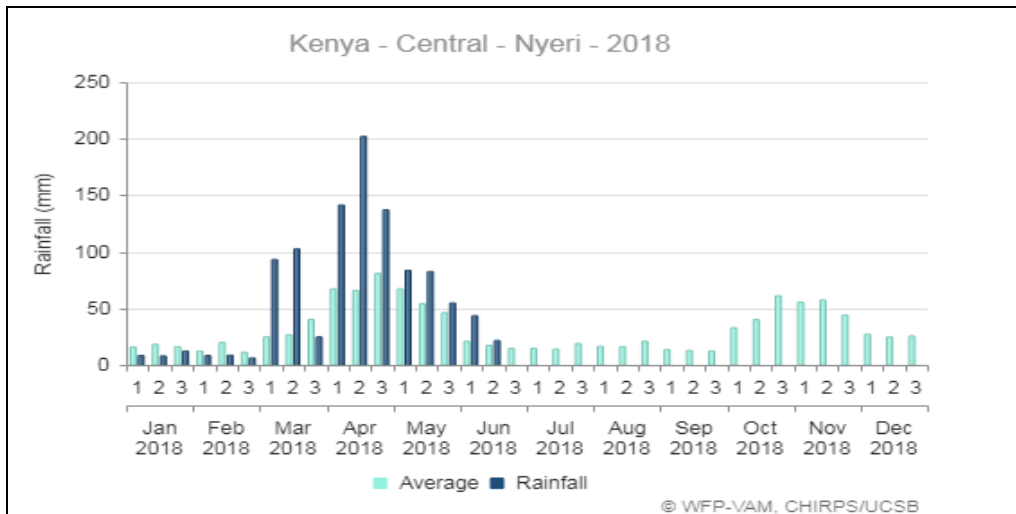


Figure 1: Presentation of the rainfall performance for June 2018

1.2 AMOUNT OF RAINFALL AND SPATIAL DISTRIBUTION

- Nyeri County received 43.4mm and 21.5mm in the first and second dekad compared to the long term average of 20.8mm and 17.2mm as seen in figure 1 above.
- The amount of precipitation received accounted for 70.7 percent of normal rains. Spatial distribution was poor across all the livelihood zones.

2.0 IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

- The vegetation condition in Kieni has improved tremendously following MAM rains onset. The region has registered above average vegetation cover as a result. The three month vegetation greenness stood at 71.75 as shown in figure 2 (a) and 2 (b)

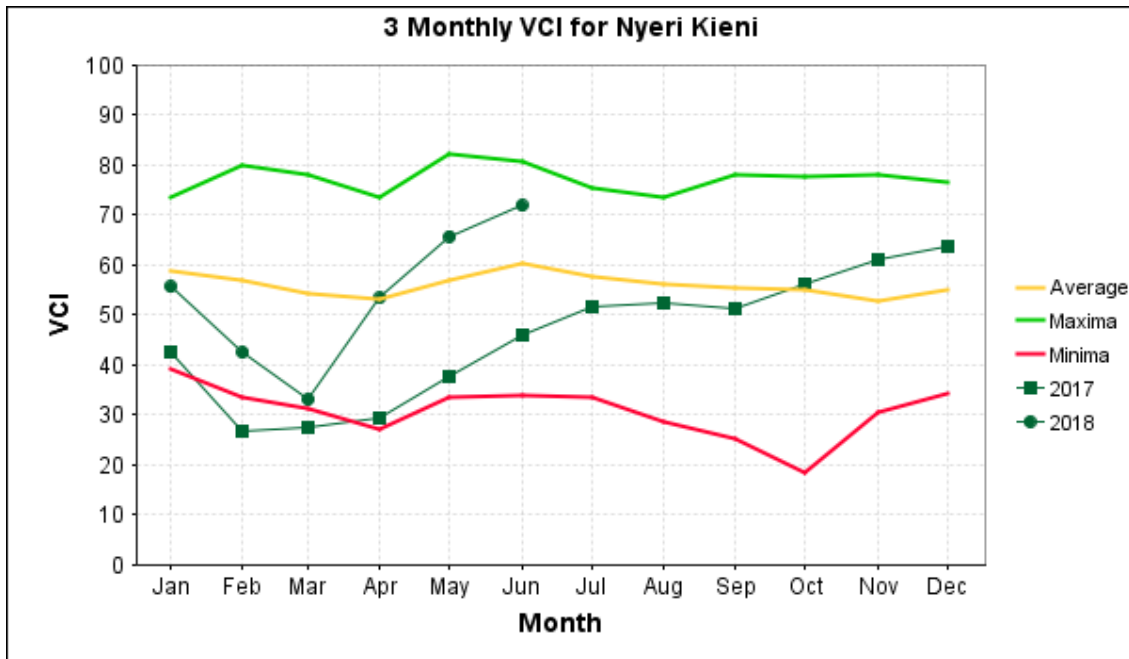


Figure 2(a): Vegetation Condition Index (VCI) - 2018

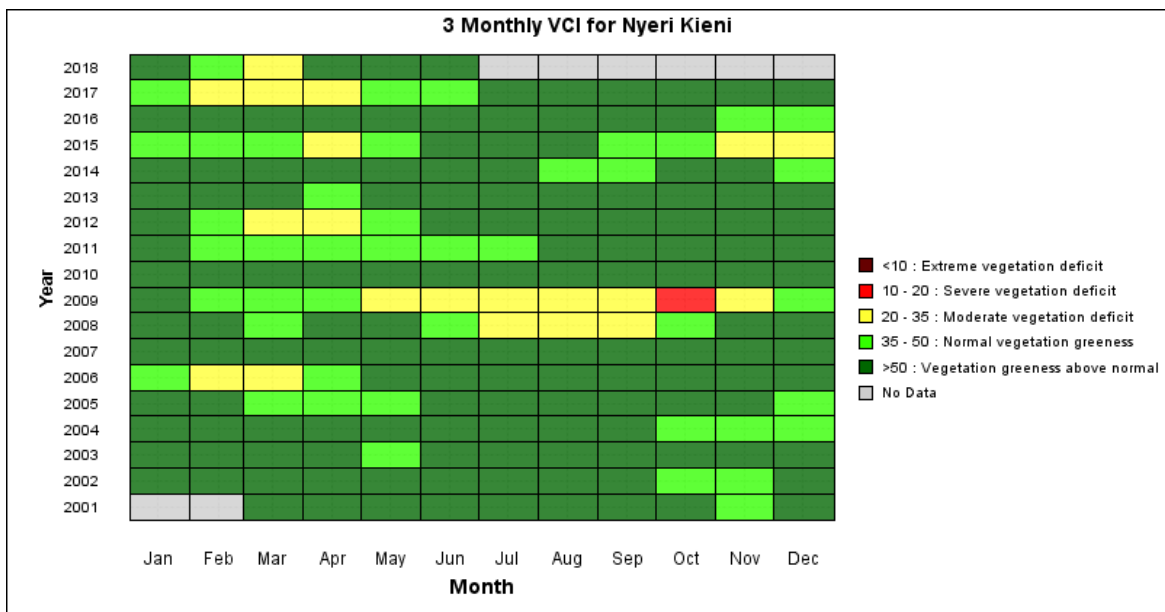


Figure 2(b): 3 monthly VCI for Nyeri County.

2.1.2 Pasture

- The pasture condition was good across all the livelihood zones, attributed to the good performance of the MAM rains. Regeneration was faster in mixed farming livelihood zones as compared to agro pastoral livelihood zones where rate of depletion was high before the onset of the MAM rains.
- Available pasture is adequate to meet the needs of local herds far beyond short rainy season. Compared to a normal year the situation is above normal in both livelihood zones.

- The pie-chart below represents the current pasture condition.

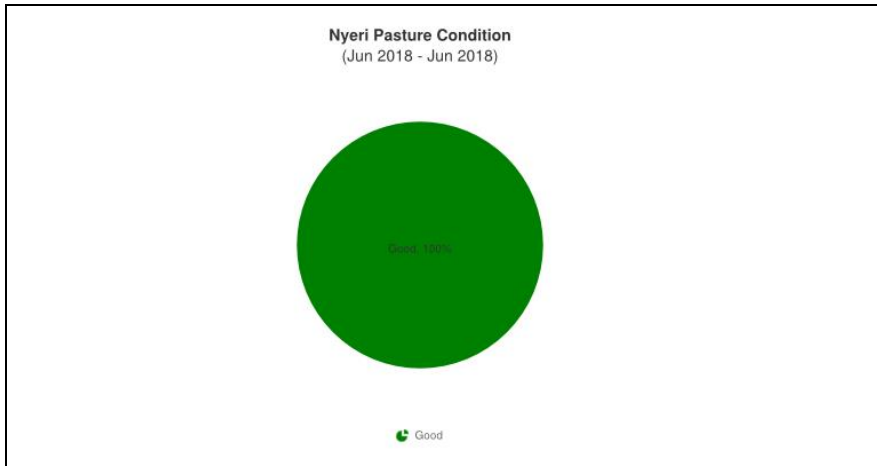


Figure 3: Nyeri county pasture condition

2.1.3 Browse

- The browse quality and quantity was good across livelihood zones. Current conditions are above normal compared to a normal year. Available browse can also sustain browsers beyond the short rainy season of October-November-December.
- The pie-chart below illustrates the current browse condition

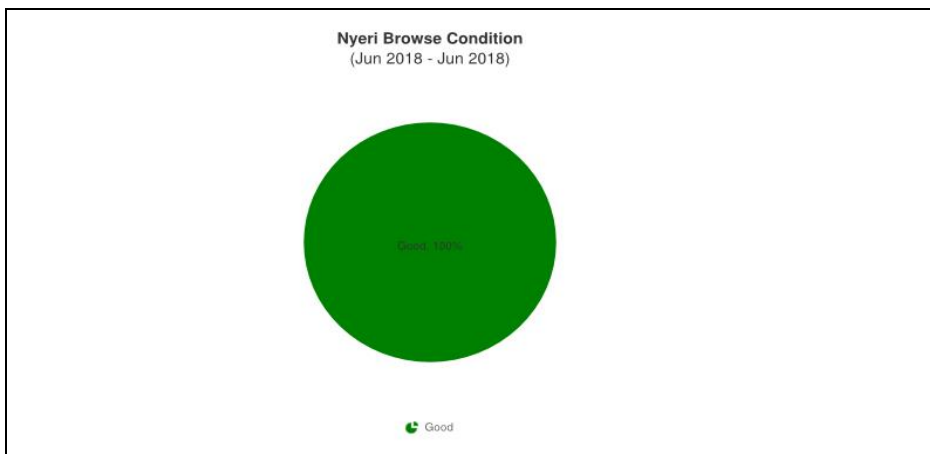


Figure 4: Nyeri county browse condition

2.2 WATER RESOURCE

2.2.1 Sources

- Access to water was good across the livelihood zones. Majority of the households relied on rivers for their water needs at 68.8%, followed by pans and dams at 18.8 % and traditional river wells at 12.5%.
- Rivers were flowing at normal levels while water holding structures were 70 percent full.

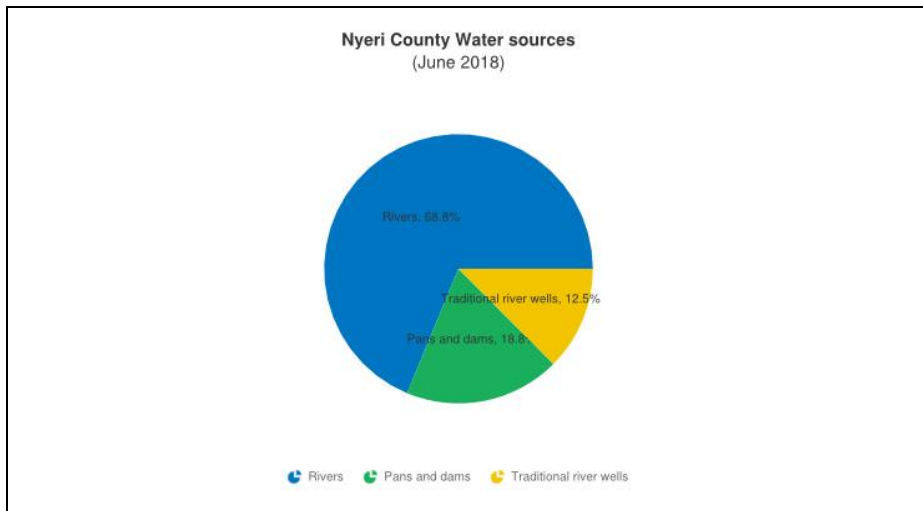


Figure 5: Nyeri county water sources

2.2.2 Household access and Utilization

- Distances from households to water sources slightly increased by 8 percent from 0.4 km in May to 0.6 Km in June. Registered rise in distances can be attributed to cessation of the MAM rains in mid May and insignificant off season showeres registered during the month under review. Compared to 2013-2017 mean averages of 1.5 Km, the distances covered in June were lower by 60 percent as indicated in figure 6.

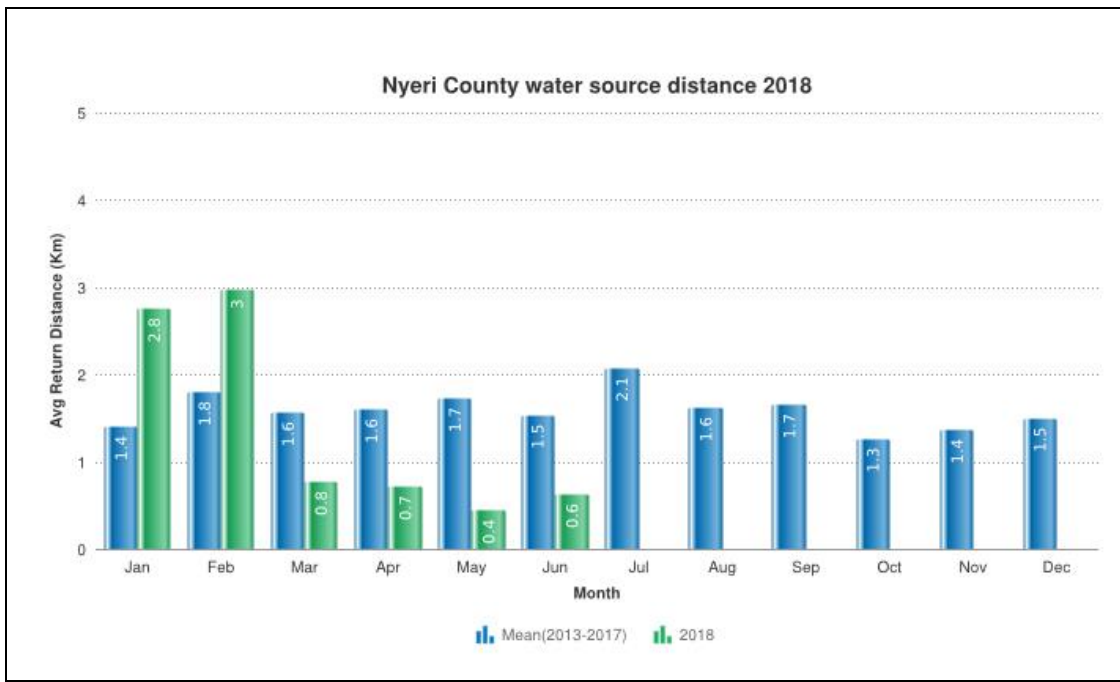


Figure 6: presentation of average return distances to water

2.2.3 Livestock access

- Average distances from grazing field to watering points increased by 16.6 percent from 0.6 km in may to 0.7 Km in June . Reported distances were lower by 74 percent as compared to 2013-2017 mean average of 2.7 Km as indicated in figure 7.

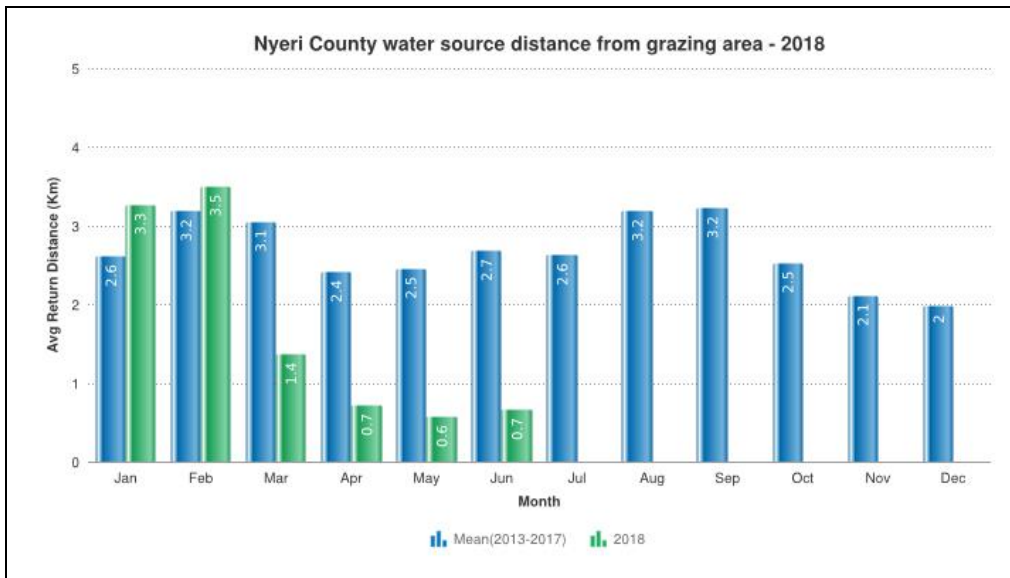


Figure 7: presentation of average grazing distances to water

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- Livestock body condition was good for all species in both mixed farming and agro pastoral livelihood zones. Satisfactory body condition can be attributed to availability of adequate pastures. Compared to similar period normally, current body conditions are impressive.

3.1.2 Livestock Diseases

- Confirmed cases of lumpy skin disease were reported in Naromoru/Kiamathanga ward and Thegu river ward in Kieni East Sub County. Vaccinations against the disease are ongoing.

3.1.3 Milk Production

- Milk production increased by 12.3% from 5.7 litres in May to 6.4 litres in June. Increase in production could be attributed to improved livestock body condition due to availability of pasture.
- Compared to the 2013-2017 mean averages of 5.2 litres the month's production was higher by 23% as indicated in figure 8.

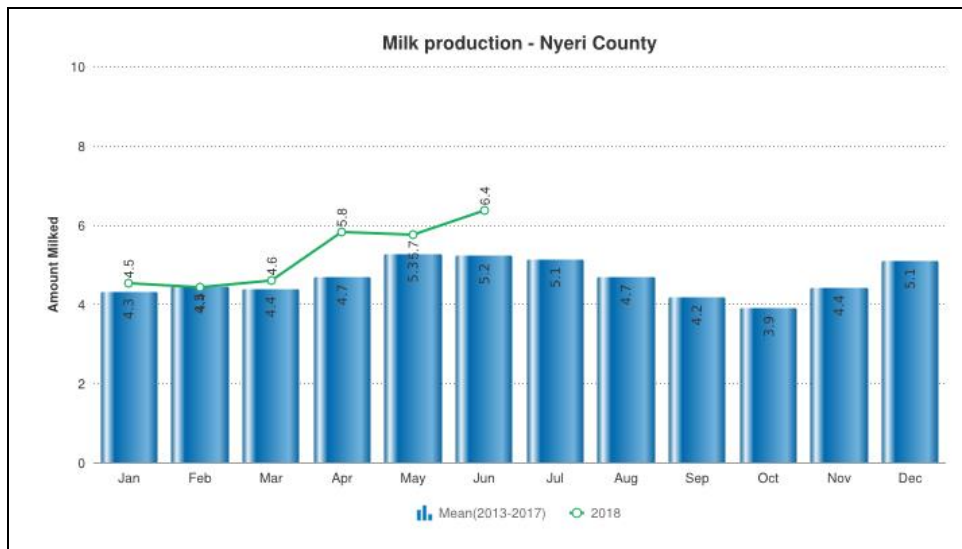


Figure 8: Presentation of average milk production for the region

3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of food Crops

- Due to good MAM rains performance, most crops at the farms were in good condition. Maize was at flowering to milk stage. However, beans were affected by the high amounts of precipitation received coupled with high incidences of blights. Expected production for beans dropped to 30 percent of season projection. Beans currently in the farms have been affected by soft rot. Performance of potatoes was also affected by the high precipitation received during the season.
- Some households were harvesting beans while still green. Also despite ongoing wet conditions in the forest, harvesting of potatoes is ongoing in the plantation establishment livelihood system (PELIS).

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Cattle Prices

- Cattle prices dropped by nine percent to retail for Ksh 23,500 in June from Ksh 25,833 in May. Drop in cattle prices could be attributes to market forces of demand and supply.
- The month's prices were higher by 19 percent compared to the 2015-2017 mean averages of Ksh 29,000 as indicated in figure 9.

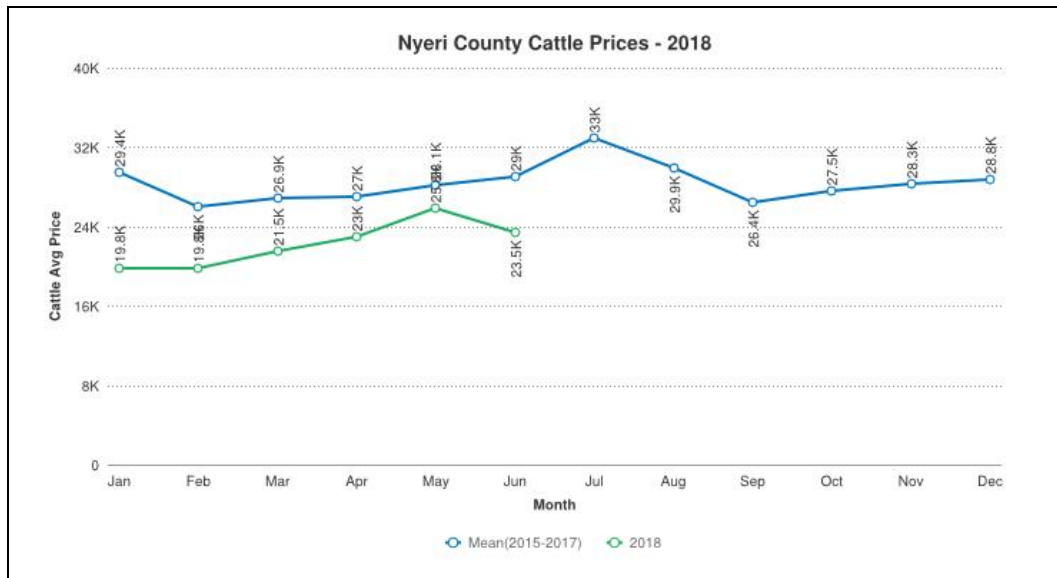


Figure 9: Presentation of average cattle prices

4.1.2 Sheep prices

- Sheep prices also decreased by two percent to retail for Ksh 4,400 in June from Ksh 4,500 in May. Compared to the 2015-2017 mean averages of Ksh 3,900 reported prices were higher by 15.4 percent as indicated in figure 10.

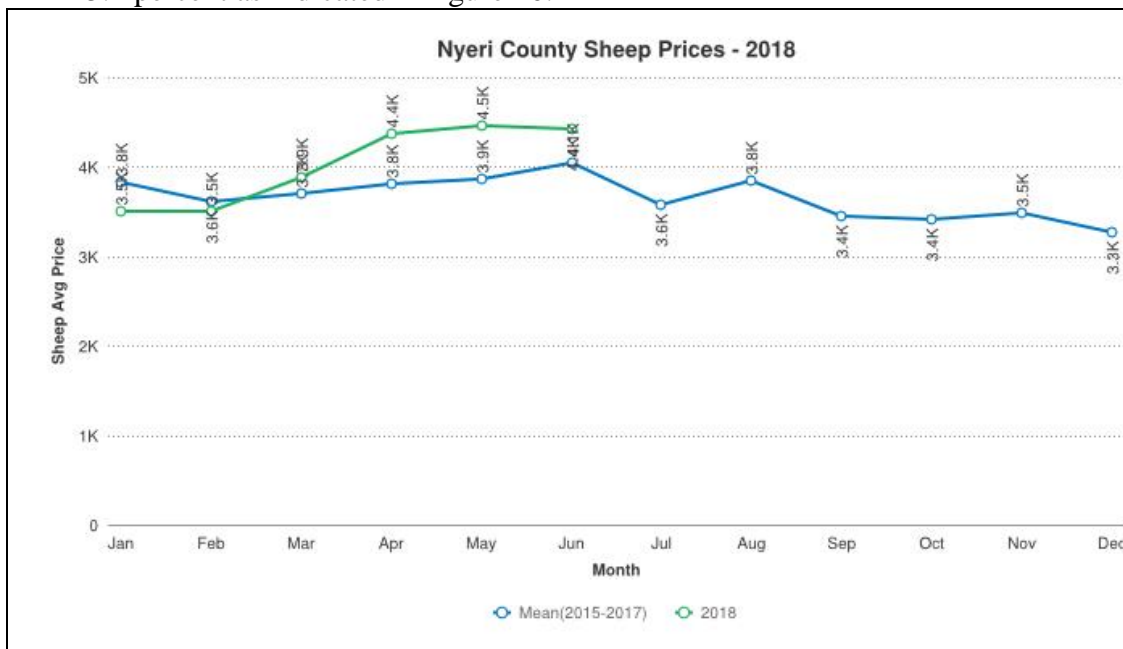


Figure 10: Presentation of average sheep prices

4.2 CROP PRICES

4.2.1 Maize

- Maize prices were relatively stable during the month under review. A kilo of maize retailed for Ksh 36 same as was reported last month. The stability in maize prices could be attributed to availability of maize from neighbouring counties.
- Kiawara market reported the highest maize price of Ksh 39 a kilo while Naromoru recorded the lowest price at Ksh 34. Compared to the 2015-2017 mean averages of Ksh 45, the month's price was below mean average by 20 percent as shown in figure 11 below.

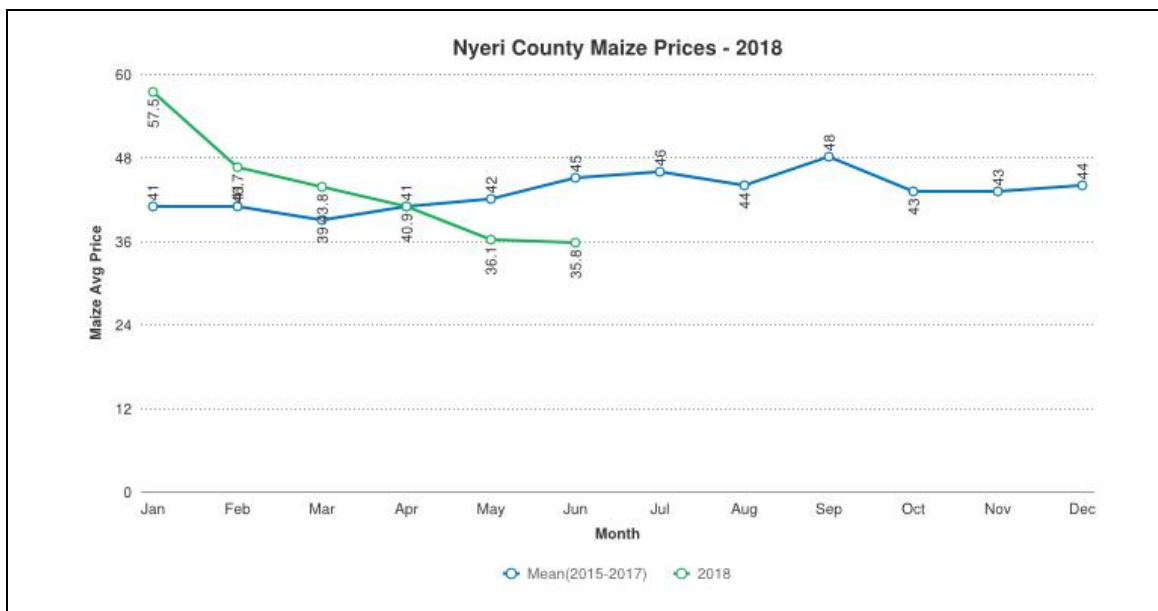


Figure 11: Outlines average price trends for maize

4.2.3 Beans

- Beans prices decreased by 6 percent to retail for Ksh 78.80 in June from Ksh 83.50 in May. Drop in beans prices could be attributed to harvesting that was ongoing in some pockets. Compared to the 2015-2017 mean averages of Ksh 87.7 the month's price was lower by 4.5 percent as shown in figure 12 below.

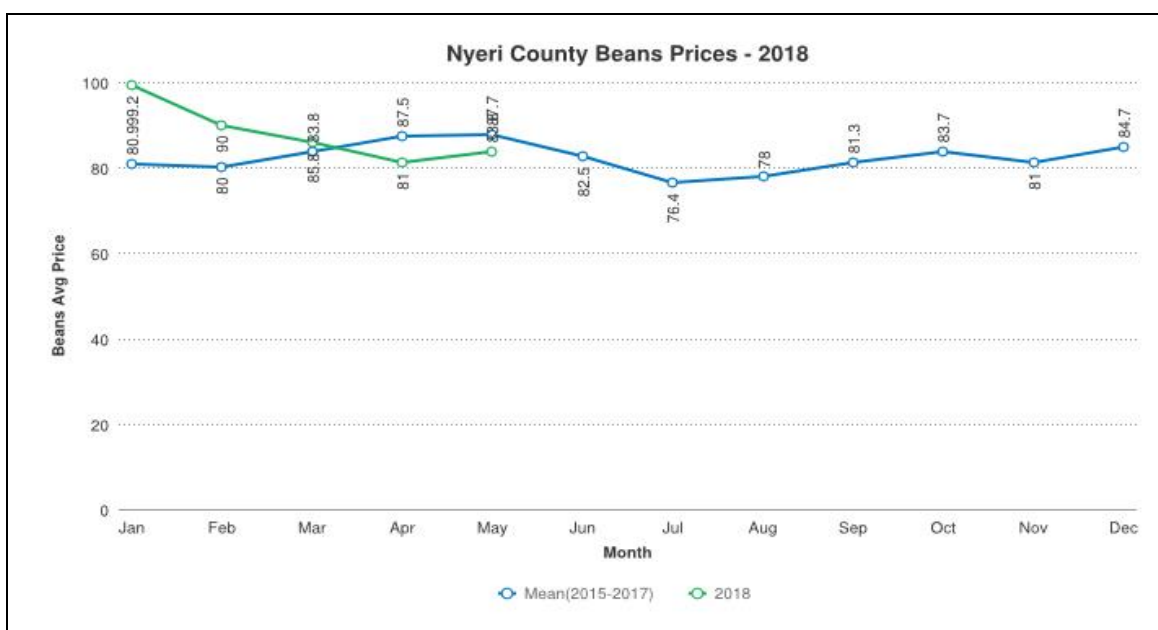


Figure 12: Outlines average price trends for beans

4.3 Livestock Price Ratio/Terms of Trade

- The Terms of Trade Ratio (TOT) for the month of June dropped by 19 percent to stand at 110 in June from 135 in May. This is an indication that households could purchase less kilograms of maize from a sale of a kilogram of meat.
- The month's Terms of Trade Ratio (TOT) was higher compared to the long term average of 83.2 as shown in figure 13 below. This means that the household purchasing power for the month was higher compared to the mean average.

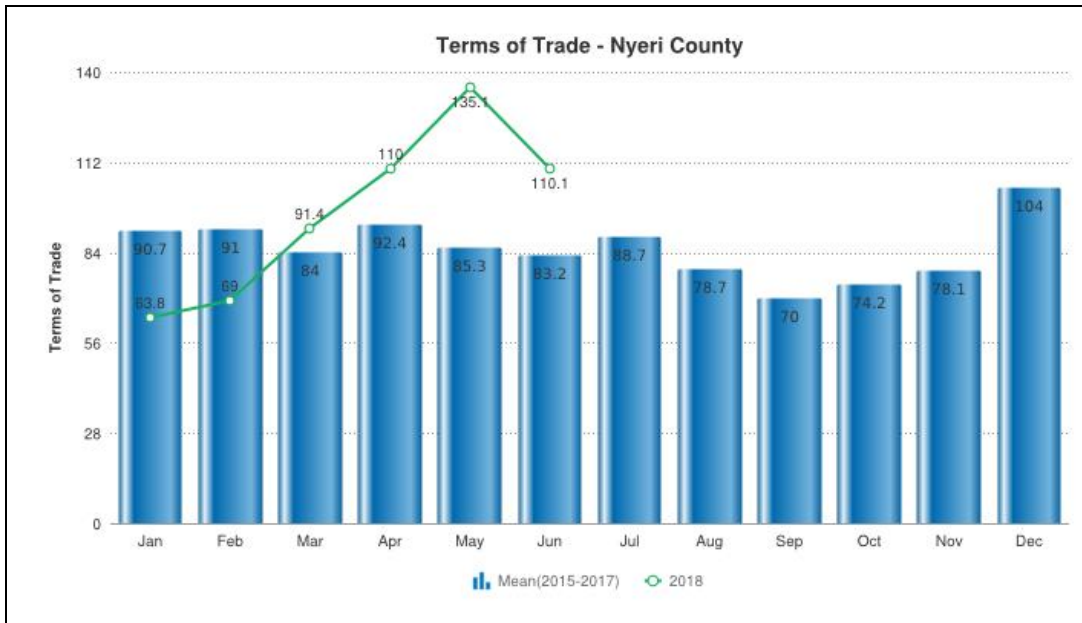


Figure 13: Outlines terms of trade

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

- Milk consumption at the household increased by 12.5 percent from 1.6 litres in May to 1.8 litres in June. Increase in consumption could be attributed to increase in milk production at the household level. As a result, milk supply to the market increased pushing prices downwards.
- Compared to the 2013-2015 short term average of 1.5 litres the month's consumption was above normal by 6.7 percent as shown in figure 14 below.

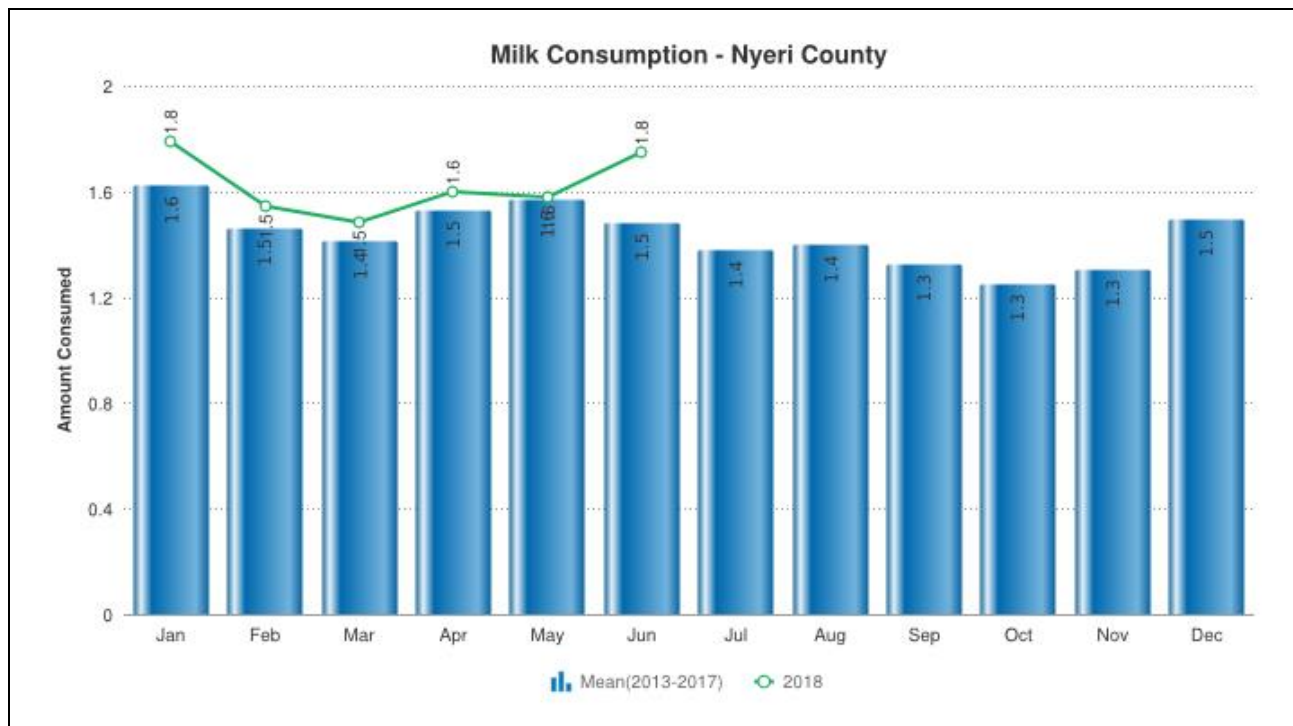


Figure 14: Outlines milk consumption for the county

5.2 FOOD CONSUMPTION SCORE

- The proportion of households with borderline and acceptable food consumption score in the sampled population were 34 percent and 66 percent respectively.
- 93.3 percent of the household in Kieni West had an acceptable consumption score compare to 38.3 percent in Kieni East. This is an indication that households in Kieni West had a higher dietary diversity and consumption frequency.
- Households with acceptable consumption score in Kieni East dropped when compared to last month.

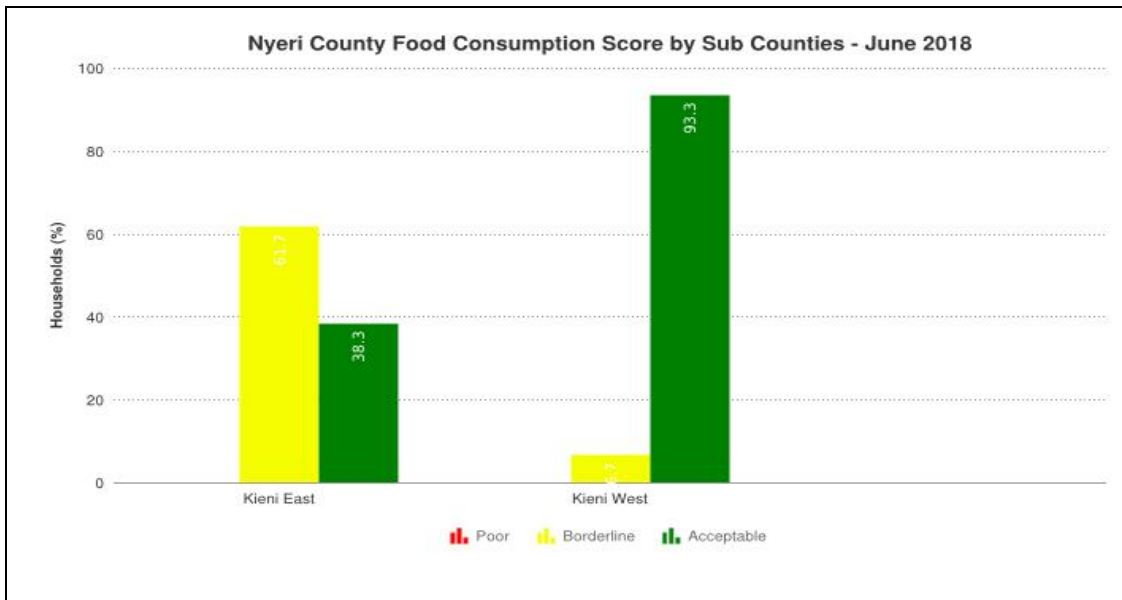


Figure 15: Outlines milk consumption for the county

5.3 HEALTH AND NUTRITION STATUS

5.3.1 Nutrition Status

- The proportion of children below the age of five years at risk of malnutrition remained at nil percent as registered last month as illustrated in figure 16 below.
- Lack of malnutrition cases in Kieni can be attributed to availability of milk for consumption at the household level and an improved dietary diversification.

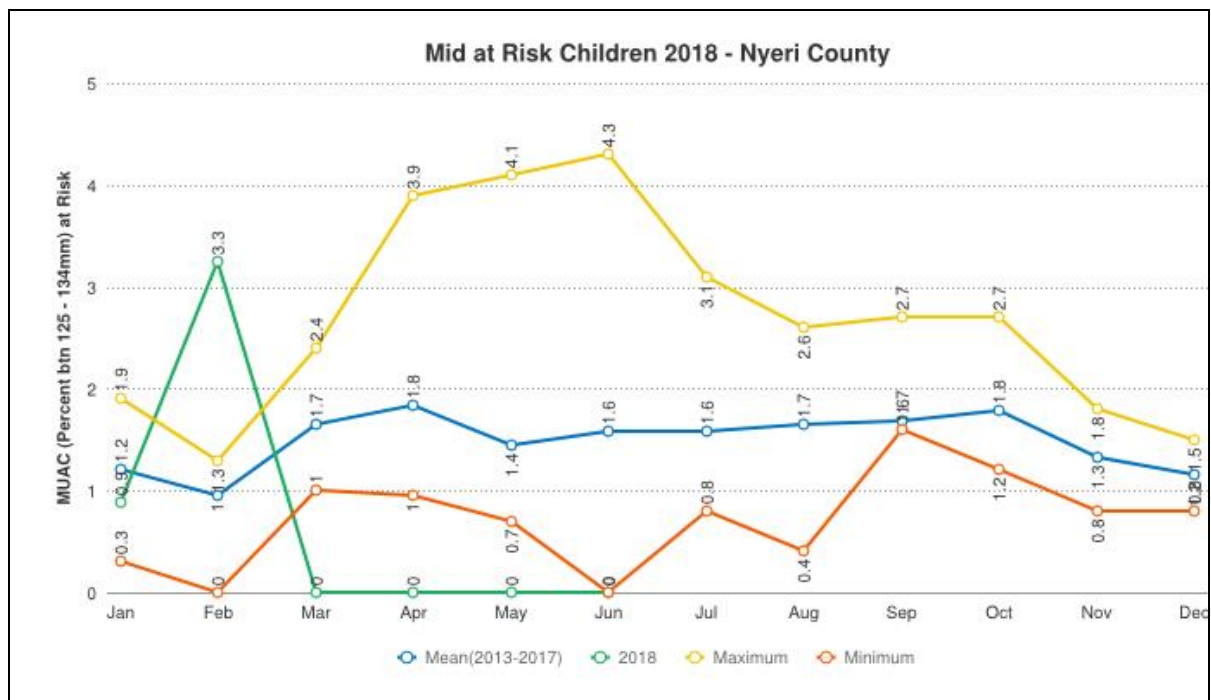


Figure 16: Presentation of nutrition status of children below five years

5.4 COPING STRATEGIES

- The month's mean Coping Strategy Index (CSI) in Kieni was 4.59 in June depicting a more stable trend in comparison with last month's index of 4.34.
- The mean CSI in agro pastoral livelihood zone stood at 5.3 and was higher than that of mixed farming livelihood zone that stood at 3.9 as shown in figure 17 below. An indicator that

households in agro pastoral livelihood zones were applying severe coping mechanisms more frequently compared to those in mixed farming livelihood zones.

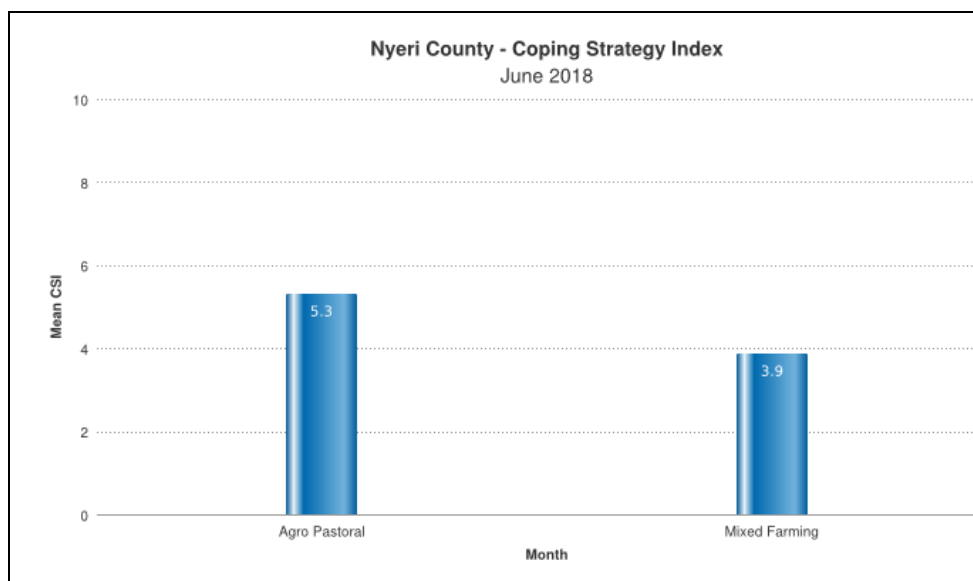


Figure 17: outlines the mean Coping Strategy Index

6. CURRENT INTERVENTION MEASURES

6.1 NON-FOOD INTERVENTIONS

- Distribution of relief seeds to farmers by the national government.
- Excavation of water pans in Kieni East by the national government.
- The following interventions were undertaken by County Government of Nyeri during the month under review:
 - Livelihood diversification – support of farmers groups with breeding stock for pigs, improved local chicken, fruit trees (macadamia and avocado) and modern bee keeping starter kits.
 - Provision of farmers groups with improved pasture seeds.
 - Provision of pesticides to farmers for controlling fall army worm.
 - Pest and disease surveillance- pathology tests on potatoes.
 - Linkage of potato farmers to marketers.
- Provision of subsidised agricultural lime to farmers for soil improvement.

6.2 FOOD AID - NOTE THE FOLLOWING

- Provision of relief food to vulnerable households in Naromoru and Thegu ward in Kieni East Sub County by the national government. The following was distributed during the month under review -: 200 bags of maize, 100 bags of beans and 100 bags of rice.

7.0 EMERGING ISSUES.

7.3 FOOD SECURITY PROGNOSIS

- The food security situation is projected to remain relatively stable attributed to the effects of above average March to May rains and the ongoing long rains harvest. The forage situation is expected to last to the next rains in October. Water sources are expected to last for the next three months. This will likely support livestock production with a likelihood of livestock prices and milk production remaining relatively stable for the next three months.
- The long rains crop harvests will improve food security in Kieni by providing likely above-average casual wage labour income-earning opportunities and increasing household food availability through late August to early September. The Malnutrition especially for children below the age of five will remain low as household dietary diversity and food consumption is likely to improve.

8. RECOMMENDATIONS

- Continued livestock diseases surveillance and Deworming. (Livestock Department).
- Continued pest surveillance. (Department of Agriculture)
- Water borne diseases surveillance. (Departments of health and water).
- Repair of destroyed of water intakes and pipeline. (NDMA and Water department).
- De silting of pans and dams. (NDMA and Water department).