National Drought Management Authority

KAJIADO COUNTY
DROUGHT MONITORING AND EARLY WARNING JULY 2018

A Vision 2030 Flagship Project

JULY EW PHASE

Early Warning Phase Classification

LIVELIHOOD ZONE	EW PHASE	TRENDS
PASTORAL	NORMAL	STABLE
AGRO-PASTORAL	NORMAL	STABLE
MIXED FARMING	NORMAL	STABLE
COUNTY	NORMAL	STABLE

Drought Situation & EW Phase Classification

Biophysical Indicators

- ✓ Both surface and underground water sources are still holding water due to above normal March – May rainfall. However reduction is expected to start in the next one month
- ✓ Vegetation greenness was above the long term mean; pasture was good and is likely to remain so for the next two months.

Production Indicators

- ✓ Livestock body condition was good and stable for all species.
- ✓ Household daily milk production improved but below the long term average due to low livestock tropical unit.
- ✓ The yield for beans expected to be within the normal range while maize slightly below normal due to Fall army worm.

Access indicators

- ✓ The terms of trade was above the long term average and expected to remain stable for the next two months.
- ✓ Milk consumption improved though lower than long term mean due to low production.
- ✓ Return distance to water sources both for domestic and livestock use reduced lower than the long term averages.

Utilization Indicators

- ✓ Most of the households were consuming acceptable diet.
- ✓ The risk of malnutrition for under-fives was within the normal range for this time of the year.

Biophysical Indicators		Observed Value/Range	Normal Range/LTA
State of water		Adequate	Adequate
3-monthly VCI		89.32	>35
Forage condition		Good	Fair
Production Indicators		**Observed Value/Trend**	**Normal Range**
Cattle body condition		Good	Good
Household milk production per day		3.4 litres	5-6 litres
migration pattern		No migration	No migration
Access Indicators		**Observed Value**	**Long Term Average**
Terms of trade		78 kg of maize/goat	57 kg of maize/goat
Household milk Consumption per day		2.3 litres	3-4 litres
Distance to water source	Livestock	2.9 km	6.8 km
	Household	3.5 km	5 km
Utilization indicators		**Value**	**Long Term Average**
MUAC (% <135 mm)		10.6%	10.5%

▪ Short rains harvest ▪ Short dry spell ▪ Reduced milk yields ▪ Increased HH food stock	▪ Planting/Weeding ▪ Long rains ▪ High calving rate ▪ Milk yields increase	▪ Long rains harvest ▪ A long dry spell ▪ Land preparation ▪ Increased HH food stocks	▪ Short rains ▪ Planting/weeding

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

Seasonal Calendar

1.0 CLIMATIC CONDITIONS

1.1 Rainfall Performance

- Mainly cold and dry weather conditions prevailed in the county during the month of July. This is normal for the county (Figure 1).
- Some showers of about 0.4 mm in the first dekad and 0.2 mm in second dekad were received in Kajido North and South respectively.
- Overall, the above average March - May (MAM) 2018 rains has supported crop production and good regeneration of pasture and browse for livestock, this eased the effects of drought usually experienced in the first quarter of the year
- Good rainfall performance during the long rains positively affected a number of other sectors.

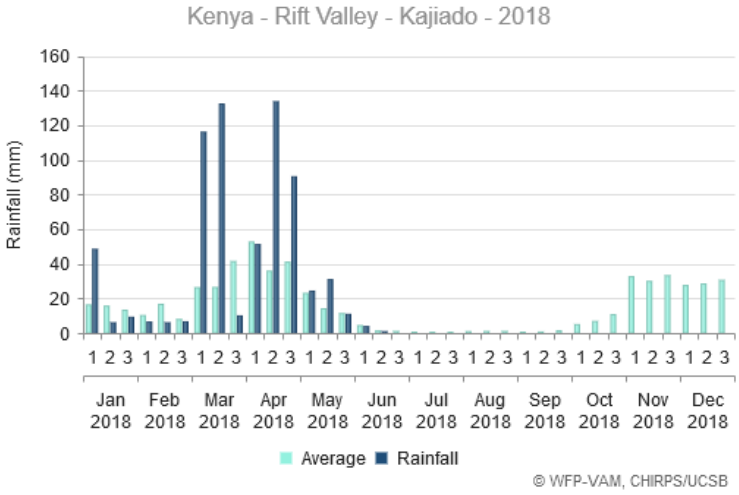

Figure 1*: Rainfall performance; July 2018*

2.0 IMPACTS ON VEGETATION AND WATER

2.1 Vegetation Condition

- The above average performance of the March - May (MAM) 2018 seasonal rainfall is evident as it has resulted to high vegetation regeneration with values that are above normal ranges at this particular time of the year (Figure 2).

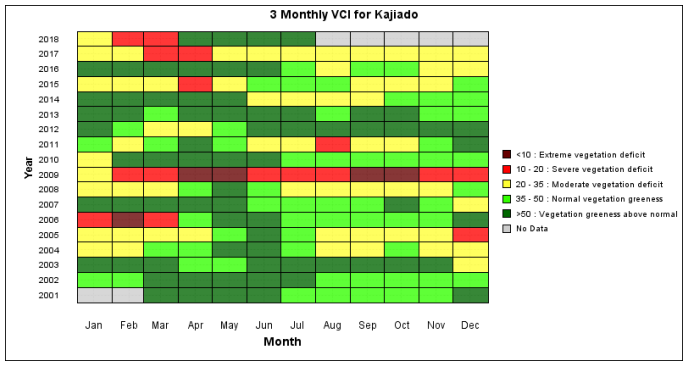

Figure 2: *3-monthly VCI Matrix; Kajiado, 2001 - 2018*

- The average VCI for July was 89.32 indication of above normal vegetation greenness for the county. All the sub-counties maintained above normal vegetation greenness and were expected to remain so for the next one month. However, if no rains are received slight reduction in vegetation condition is expected in the coming month.

2.2 Pasture and Browse Condition

- Pasture and browse condition was good across all livelihood zones both in terms of quality and quantity compared to the long term during the same time.
- The current low tropical livestock units as a result of the substantial number of livestock deaths during the 2015/2018 dry period has also contributed to reduced pressure on pasture.
- The current available pasture is expected to last at least for two months, however, if no rains are received deterioration in pasture quantity and quality is expected in mid second month.

2.3 Water Sources

- Water availability and accessibility was good above seasonal ranges for this period of the year.
- Most of the open water sources such as water pans and dams are still holding water after above average performance of the March-May rainfall season, thus the water situation remained stable and unchanged from what was reported in June 2018.

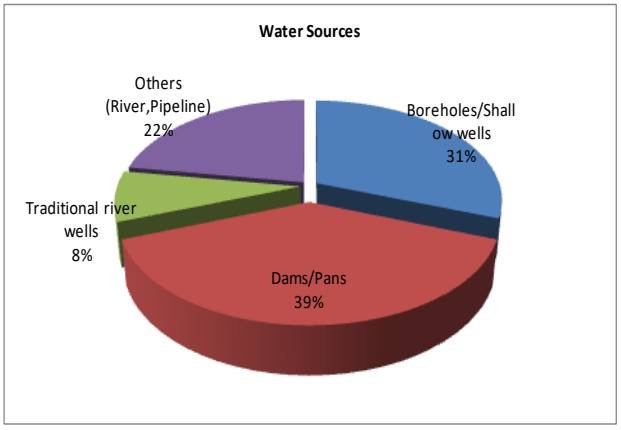

Figure 3: *Water sources; Kajiado, July 2018*

- Dams / Pans were the dominant water sources for livestock consumption (39%) while boreholes / shallow wells were the dominant sources for households (31%). Other sources

of water included Traditional river wells, pipeline and permanent rivers (Figure 3) above.

- The current water situation is above normal; however surface water especially pans have began deteriorating in quality.

2.4 Households Water Access and Utilization

- There is no significant change in distance from the household to the water points since May.

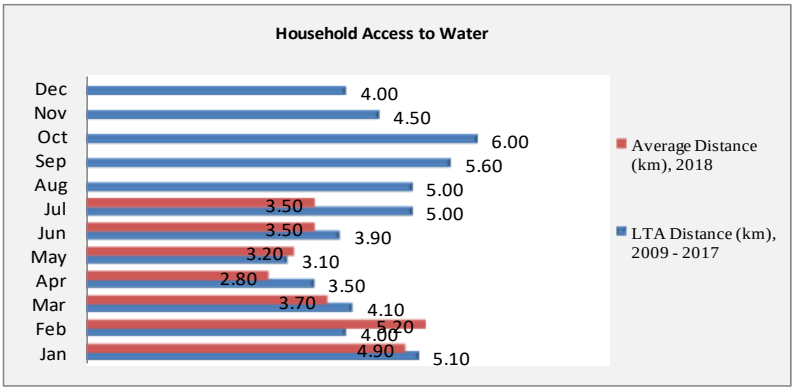

Figure 4: *Average household return distance to water sources; July 2018*

- The county average distance from household to the water source was 3.5 km in July same as previous month (Figure 4).
- The current distance is shorter than the long term average for the same period of the year.
- These distances varied slightly from one livelihood to the other with agro pastoral and mixed farming having the shortest distances of about 2 km to less than 1 km respectively.

2.5 Livestock Access to Water

- The average distance covered by livestock from grazing areas to main water sources in the month of July remained stable at 2.9 km from 2.8 km in June with no livelihood variations (Figure 5).

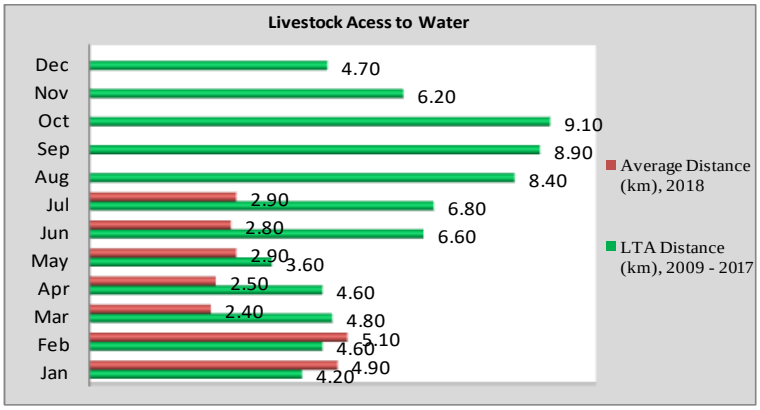

Figure 5: *Average return distance from grazing fields to water sources; July 2018*

- The distance was below the long term average at this time of the year
- Livestock continues to be watered on a daily basis with minimal waiting time due to the good performance of March–May rainfall.
- However, water quantity and quality in the pans is expected to deteriorate further in the next month and hence incidence of water borne diseases could be reported.
- Distances might also increase slightly as water quality in some pans particularly Kamkuru and Ewuaso could be rendered unfit for consumption if no rains are received through to the next month.

3.0 PRODUCTION INDICATORS

3.1 Livestock Body Condition

- Body condition of all species of livestock continued to improve compared with the previous month, all livestock species are very good smooth with fat over back and tail head body conditions.
- This has led to improvement in livestock production indicators especially milk and livestock prices during the month of July. The improvement is attributed to the availability of pasture, browse and short distances from grazing areas to water sources.
- Livestock body condition was expected to remain good for the next three months as pasture, browse and water was adequately available for them.

3.2 Livestock Diseases

- No major livestock disease outbreak was reported except suspected cases of Foot and Mouth Disease (FMD), Contagious Caprine Pleuropneumonia(CCPP), Lumpy Skin disease (LSD), Contagious Bovine Pleuropneumoia (CBPP) and Blue Tongue in Mile 46, Ewuaso and Magadi.

3.3 Livestock Mortalities

- There were no reports of unusual livestock mortalities during the month of July.

3.4 Livestock Migration

- Livestock were not expected to migrate outside the county at least within the next two months.

3.5 Milk Production

- Livestock productivity continued to improve across the county in July compared to June. In July, the average household milk production was 3.4 litres compared to June at 3 litres.
- The current milk production however is 33% below the long term mean. This is attributed to low calving and kidding coupled with low tropical livestock unit. Pastoralist lost more than half of their livestock during the 2015/2018 drought.

3.6 Rain-fed Crop Production

- Harvesting of beans is completed with the yield projected to be normal for the season.
- Harvesting of maize is currently ongoing, green maize was available from local farms and at markets. The yield was projected to be slightly below normal due to the Fall Army Warm invasion.

4.0 MARKET PERFORMANCE

4.1 Livestock Marketing

- All the livestock markets namely Shompole, Kiserian, Ilbisil, Kimana and Rombo were in normal operation in the month of July.

4.1.1 Cattle Prices

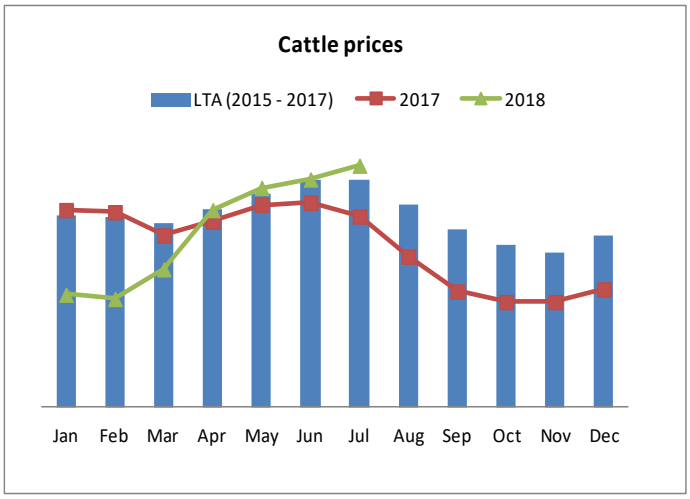

Figure 6: *Trends in cattle price; July 2018*

- The price of an average 3 year old bull improved steadily from Ksh.13,100 in March to Ksh.22,910 in July due to continuous improvement in body condition (Figure 6).
- The improvements were attributed to adequate pasture, browse and short trekking distances to water points.
- Lower price of Ksh.19,167 were observed in Ewuaso (Pastoral West) while higher prices of Ksh.26,000 were observed in Isinya (Agro-pastoral East).The current prices are 6.3% above the long term average for similar period.
- Prices of cattle were expected to stabilize for the next two months.

4.1.2 Goats Prices

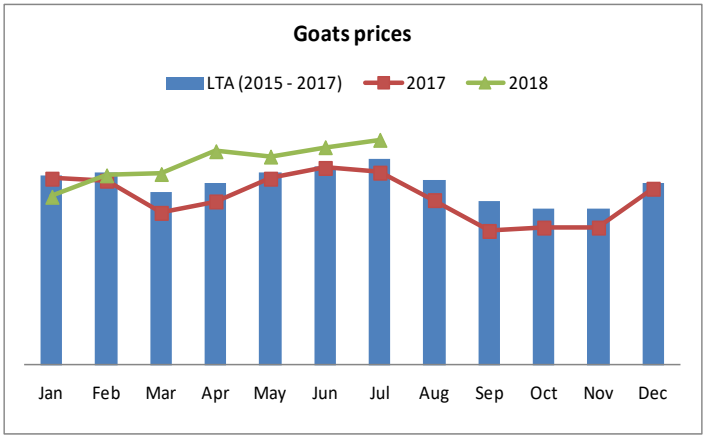

Figure 7: *Trends in goat price; July 2018*

- The average price of a mature goat improved from Ksh.3,250 in June to Ksh.3,364 in July. The July price was 9.2% above the long term average price (Figure 7).
- In Ewuaso lower price of Ksh.2,867 was observed while Isinya reported higher prices of Ksh.3,533. The prices of goats were likely to remain stable for a month owing to available browse and water.
- However, increased demand for school fees may push their prices slightly higher for the next two months as school open.

4.2 Prices of Cereals and Legumes

4.2.1 Maize Prices

- The average maize price per kilogram for the month of July was Kshs.43 a decline from Ksh.45 observed in June (Figure 8).
- The average retail price of maize ranged from Ksh.35 per kilogram in Mixed farming areas of Loitoktok and Rombo where harvesting was ongoing to Ksh.50 per kilogram in Ewuaso (Pastoral West).
- The average price of maize is expected to stabilize below the long term average due to the ongoing harvest of the crop within and outside the county.

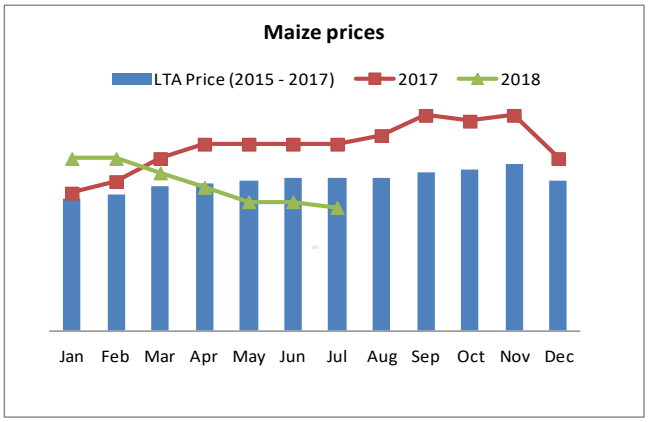

Figure 8: *Average prices of Maize; July 2018*

4.2.2 Beans Prices

- The average price of beans slightly declined from Ksh.80 per kilogram in June to Ksh.77 in July (Figure 9). This decline was associated with the just concluded harvesting especially in parts of Loitokitok which has eased the demand for the crop.
- There were also supplies of the legume from the neighbouring Tanzania
- The retail price of beans ranged from Ksh.30 per kilogram in Mixed farming to Ksh.87 per kilogram in Pastoral areas.
- The current average price is 22% below the long term average and was likely to stabilize at that price for the next one month.

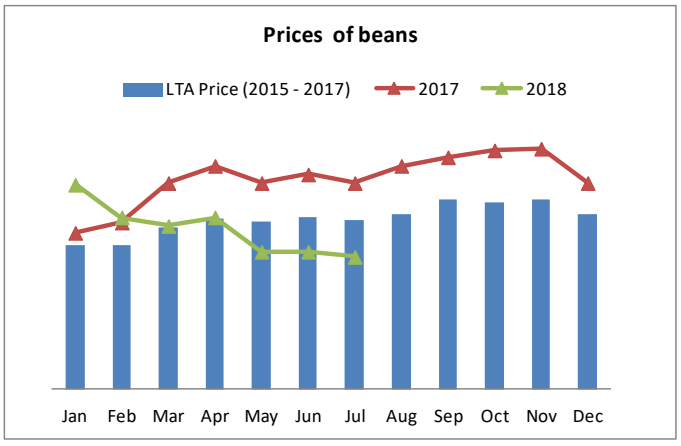

Figure 9: *Average prices of Beans; July 2018*

4.3 Prices of Milk

- The improvement in livestock productivity has resulted into a corresponding reduction in prices. In July, a litre of milk retailed at Ksh.45 compared to Ksh.50 in the month of June.

4.4 Terms of Trade

- Terms of trade (ToT) improved from 72 in the month of June to 78 in July. The increase is attributed to the continuous increase in the price of goats as maize prices decrease (Figure 10).

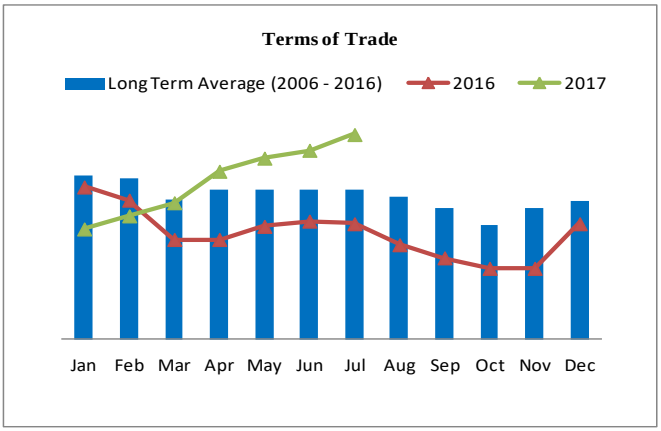

Figure 10: *Trends in ToT; July 2018*

- The current ToT was 37% higher than the long term average at 57 kilogram of maize per goat.
- TOT was likely to stabilize above the long term average for the next two months.

5.0 FOOD CONSUMPTION AND NUTRITION STATUS AND DISEASE

5.1 Milk Consumption

- The average household milk consumption continued to improve in July at 2.3 litres up from 1.9 litres during the previous month. This consumption was still below long tern mean (3.5 litres) for this time of the year
- Though livestock productive indicators have improved, milk production / consumption were below long term average due to low tropical livestock unit. Pastoralist lost more than half of their livestock during the 2015/2018 drought

5.2 Food Consumption Score

- Majority of the households in all the sub –counties were consuming acceptable diet (Figure 11).
- Dietary intake will probably improve further given that the crop yields within the county and the neighbouring counties were expected to be normal or near normal for the current long rains season.
- About 7.0% of households in pastoral west especially Ewuaso were consuming poor diet (Figure 11). Milk production and consumption in the sub-county was very low in addition to poor roads hindering accessibility hence higher food prices.

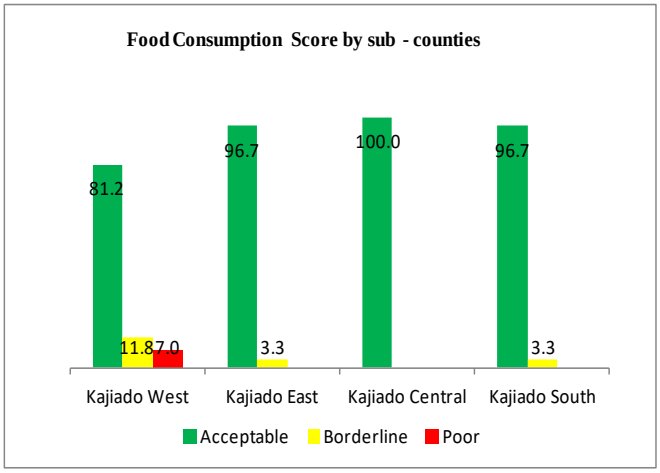

Figure 11: *Food consumption score; July 2018*

5.3 Coping Strategies

- The common coping strategies employed by households across the livelihood zones in July remained reliance on less expensive food.
- The average coping strategy index was 5.46 indicating that minimal coping mechanism are being used as food is easily accessible. Agro-pastoral zones coping strategy index was 3.2 while pastoral recorded 6.6 coping strategy index.

5.4 Nutrition Status of Children aged 6-59 Months

- Nutritional status of children aged 6 – 59 months continued to improve in July recording 10.6% from 11.4% during the previous month (Figure 12).
- This is attributed to milk availability in pastoral areas while in the mixed farming and agro-pastoral agricultural areas the trend is associated with better dietary diversity due to increased food stock at household level. Pulses and legumes were easily available at home and market due to the ongoing harvest.

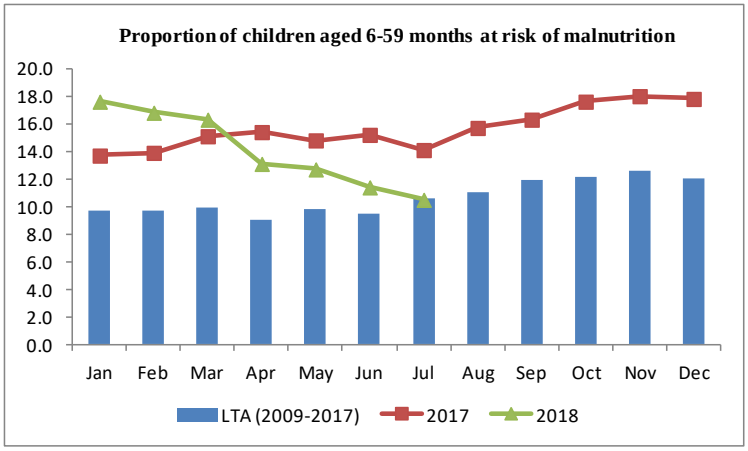

Figure 12*: Risk of malnutrition for children aged 6-59 months; July 2018*

- The current risk of malnutrition compared favourably with the long term average 10.5% for similar period of the year.
- The availability of food stuffs was likely to further reduce the risk of malnutrition in the next one month.

5.5 Human Diseases

- Several incidences of fever and Malaria were reported among the under-fives children. Cholera incidence reported from Meto in June had been confirmed by department of public health and situation arrested.

6.0 FOOD SECURITY PROGNOSIS, CURRENT INTERVENTIONS AND RECOMMENDATIONS

6.1 Food Security Prognosis

- The above average performance of March - May rainfall resulted into significant availability of pasture, browse and water for livestock projected to last up to the next rains season.
- Consequently, livestock productivity has continued to improve hence expected above average stability in livestock prices. However, milk production will remain below long term due to substantial reduction in livestock tropical unit resulting from the 2015/2017 drought spell.
- In the mixed farming and agro-pastoral areas, it is expected that crop production will be average to near average hence the long rains crop harvest is likely to improve food security at least until next planting season in October.
- The projected good harvest will result in lower food prices at market this coupled with improved terms of trade, dietary diversity is expected to be stable even in pastoral areas and hence improved nutritional status of under five children.
- The county was therefore likely to remain food secure for the next three to five months.

6.2 On going Interventions

- Development of wards contingency plans and updating the county contingency plan; *by National Drought Management Authority.*
- Human and livestock disease surveillance; *by county government*.
- Routine extension services; *by the relevant departments.*

6.3 Recommendations for Action

- Vaccination campaign against Contagious Caprine Pleuropneumonia(CCPP), Contagious Bovine Pleuropneumoia (CBPP) and Blue. *Action by County Government (Veterinary services) in collaboration with National Drought Management Authority and partners.*
- Sensitize farmers on appropriate post – harvest management techniques in the mixed and agro - pastoral agricultural areas.
- Training of communities on various value addition and alternative livelihoods. *Action by National Drought Management Authority and other partners.*
- Repair of infrastructure including roads and boreholes that were damaged by the heavy rains. *Action by County Government.*