

National Drought Management Authority
(Nyeri) COUNTY
DROUGHT EARLY WARNING BULLETIN FOR FEBRUARY 2019



A Vision 2030 Flagship Project



FEBRUARY 2019 EWS PHASE

Drought Status: ALERT



Maandalizi ya mapema

Drought Situation & EW Phase Classification

Biophysical Indicators

- The month of February was dry. Offseason showers were received in some pockets of upper zones bordering the mountain.
- Pasture conditions were poor in low attitude zones and fair in high attitude areas.
- Access to water had deteriorated during the month compared to the previous month. Some of the water sources have dried up. Water rationing has intensified.

Socio Economic Indicators (Impact Indicators)

Production Indicators

- Land preparation was on-going in readiness for the March-April-May rainy season.
- Livestock body condition ranged from poor to fair for all species.
- Milk production dropped from 5.2 litres in January to 4.7 litres in February.

Access indicators

- Milk consumption decreased from 1.5 litres in January to 1.4 litres in February.
- Distances to water sources has increased from 1.5 Km in January to 1.9 Km in February

Utilization Indicators

- 0.5 percent of the under-fives monitored during the month of February were severely malnourished.
- Coping strategy Index was above the normal threshold.

Early Warning (EW) Phase Classification

Livelihood Zone	Phase	Trend
Mixed Farming	Alert	Worsening
Agro pastoral	Alert	Worsening
County	Alert	Worsening
Biophysical Indicators	Value	Normal Range/Value
Rainfall (% of Normal)	40%	80%-120%
VCI-3Month	54.64	35-50
Forage	poor	fair
Production indicators	Value	Normal
Crop Condition (specify crop)	poor	Fair
Livestock Body Condition	Poor-fair	Fair
Milk Production	4.7 litres	5.2 litres
Livestock Migration Pattern	In migration	No Migration
Access Indicators	Value	Normal
Milk Consumption	1.4	1.5
Distance to water sources	1.9	2.5
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	0	0.8
Coping Strategy Index (CSI)	5.15	<5.0

<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.

- Dry weather condition continued being experienced in both sub counties. However offseason rains were received for an average of two to four days in some pockets in upper zones. The areas that recorded rains were Gakawa and Thegu river ward and some pocket of Mwiyo Endarasha ward. Even in these areas the rains were poorly distributed in time and space. Lower regions received negligible amounts of light showers which did not have any impact on pasture production.
- Figure 1 shows the regions overall rainfall performance during the month under review, indicating it was below normal. In the first and second dekad the county received 1.6mm and 2.8mm compared to long term averages of 4.6mm and 6.3mm.

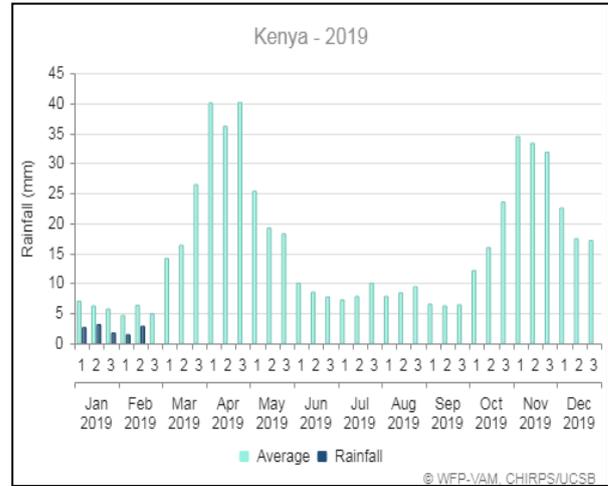


Figure 1(a): Presentation of the rainfall trend 2018

2.0 IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

- The vegetation greenness had declined during the month under review compared to the previous month. However the condition was within the long term average but lower compared to the same period last month. The month VCI stood at 57.18 in January compared to 54.45 in February as shown in figure 2 below.

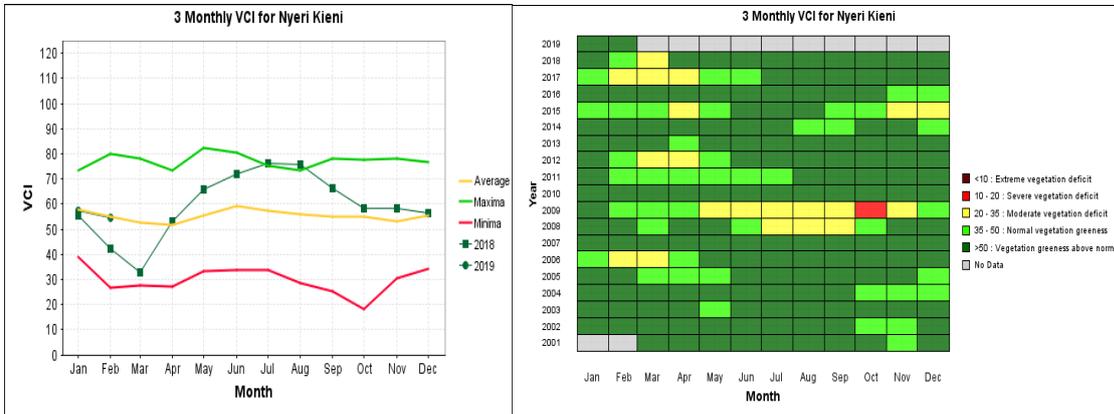


Figure 2 (a)

Figure 2(b)

2.1.2 Pasture

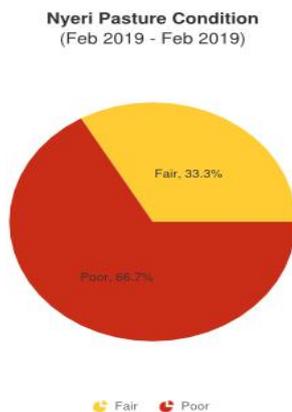


Figure 3 (a): Nyeri county pasture condition

- During the month under review, pasture condition was greatly affected due to the harsh weather that prevailed for the better part of the month.
- Both natural and improved pastures continued to deteriorate both in quality and quantity as compared to the previous month of January. The situation has further been worsened by the frequent frost attacks and in migration of livestock from the neighbouring counties. The worst hit areas are lower zones in agro pastoral livelihood zones that registered poor pasture conditions.
- However, in upper regions in mixed farming livelihood zones that have continued to receive offseason rains, pasture quality and quantity was fair. The areas include Githungo in Thegu ward and Gakawa ward. As compared to a normal year the current situation is below normal. Pasture conditions as shown in figure 3(a).

2.1.3 Browse

- The browse quality and quantity has deteriorated in the month of February compared to the previous month. This is attributed to the dry weather conditions, frequent frost attacks and immigrant herds.

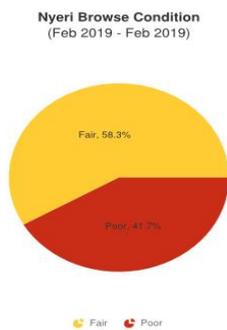


Figure 3 (b): Nyeri county browse condition

- Poor and fair browse conditions were reported in lower zones in both agro pastoral livelihood zones and mixed farming livelihood zones. The worst hit area is Thungari in Thegu river ward and Mugunda ward. As compared to a normal year the current situation is below normal.
- Available browse was expected to last for one month in agro pastoral livelihood zones and one

and a half months in mixed farming livelihood zones.

2.2 WATER RESOURCE

2.2.1 Sources

- Access to water had deteriorated during the month under review compared to the previous month. This attributed to the hot and dry weather conditions experienced in the month of February.
- The main sources of water during the month of February were rivers at 46.2 percent, pans and dams at 19.2 and springs at 34.6 percent compared to the previous month where households relied on rivers at 48 percent, pans and dams at 44 percent and Traditional river wells at 8 percent.
- Rivers are flowing below normal levels while some of them have dried up. Some of the rivers that have dried up include Kamariki river, Nairobi river and Thegu river. Most of the open water sources have dried up while those with some water are 10 percent full.
- Water rationing has intensified in Kieni with households receiving water twice in a week. The areas that are adversely affected are Kabati in Endarasha/Mwiyogo ward, Thungari in Thegu river ward and Burguret in Gakawa ward and the whole of Mugunda ward that are reported to be receiving water once per week.

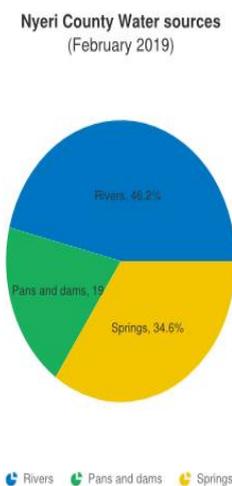


Figure 4: Nyeri county water sources

2.2.2 Household access and Utilization

- Distances from the household to water sources increased by 26.7 percent from 1.5 Km in January to 1.9 Km in February. This could be attributed to drying up of water sources near homesteads coupled with lack of rains
- In agro pastoral livelihood zones distances increased by 47 percent from 1.9 Km to 2.5 Km respectively.
- Registered distances were the same as compared to the 2014-2018 long term averages of 1.9 Km as shown in figure 5 below.

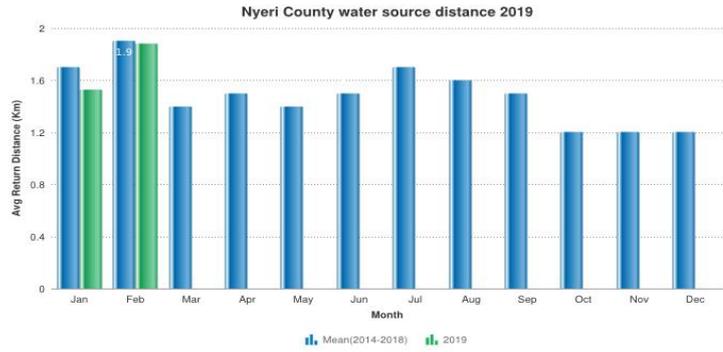


Figure 5: Presentation of average return distances to

2.2.3 Livestock access

- Average distances from grazing field to watering points increased by 16.7 percent from 1.8 Km in January to 2.1 Km in February. Compared to 2014-2018 long term average of 2.7 Km,

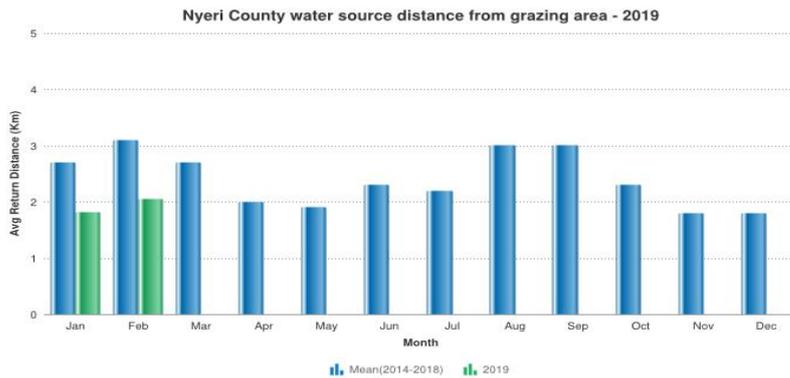


Figure 6: presentation of average grazing distances to water sources

- reported distances were lower by 32 percent as shown in figure 6.
- Current watering frequency for animals is twice daily which was normal in Kieni at this time of the year.

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- The livestock body conditions are fair in mixed farming livelihood zones and fair to poor in the agro pastoral livelihood zones. The body conditions have deteriorated compared to the previous month attributed to increase in distances in search of pasture and water and the poor pasture conditions.
- Farmers are currently using the crop residue from the failed crop season to feed their animals though the quality is equally wanting. The current body conditions are worse as compared to normal and a similar period last year.

3.1.2 Livestock Diseases

- Cases of Foot and Mouth Disease were reported in Mureru and Burguret in Kieni East sub counties. Disease surveillance is on-going.

3.1.3 Milk Production

- Milk production decreased slightly by 9.6 percent from 5.2 litres in January to 4.7 litres in February. The decrease was noted across all livelihood zones due to increased distances in search of pasture and poor pasture conditions.
- The month's production was lower by 16 percent compared to the 2014-2018 long term average of 5.6 litres as shown in figure 7.

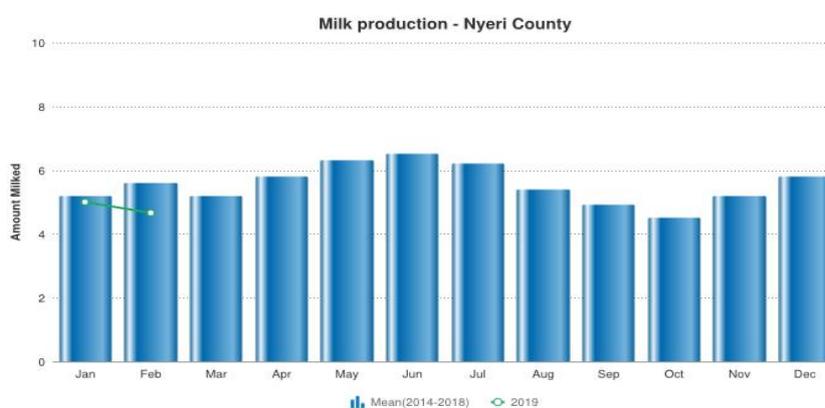


Figure 7: Presentation of average milk production for the region

3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of food Crops

- Harvesting of beans and potatoes is on on-going although in small scale. Farms are currently clearing their farms in readiness to the March-April-May (MAM) rains.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Cattle Prices

No sales were reported during the month under review.

4.1.2 Sheep prices

□ Sheep prices dropped by 32 percent to sell at Ksh 3,000 in February from Ksh 4,400 in January. Drop in prices could be attributed to poor livestock body conditions coupled with a decrease in demand due to households low purchasing power.

□ The registered prices were lower by 19 percent compared to the 2016-2018 short term averages of Ksh 3,700 as shown in figure 8.

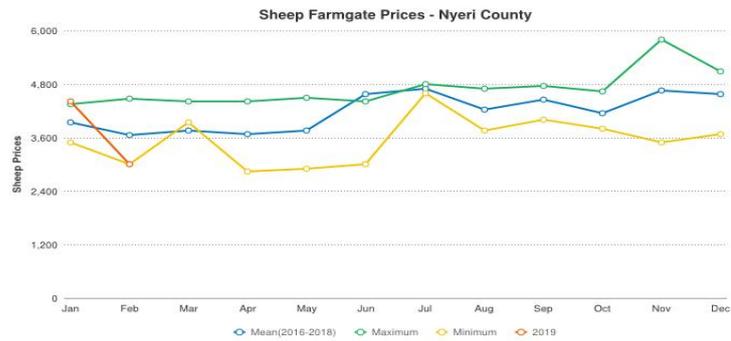


Figure 8: presentation of the average sheep prices

4.2 CROP PRICES

4.2.1 Maize

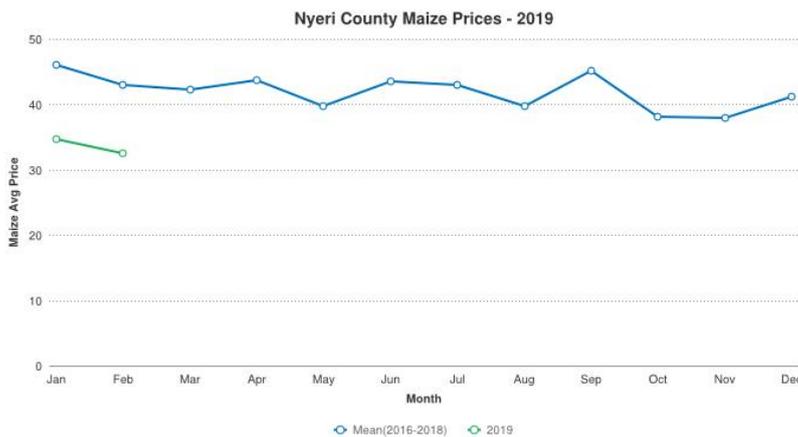


Figure 9: Outlines average price trends of maize

2016-2018 short term averages of Ksh 43, current price were lower by 18.6 percent as shown in figure 9 below.

4.2.2 Beans

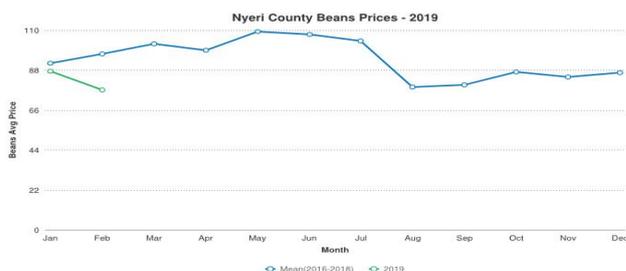


Figure 10: Outlines average price trends of in figure 10.

□ Maize prices decreased by 5.7 percent to retail at Ksh 32 in February from Ksh 35 January 2019. Decrease in prices can be attributed to flooding of the commodity from other counties e.g. Nyandarua and Uasin Gishu. Compared to the

□ During the month under review, prices decreased by 12 percent to retail at Ksh 77 in February from Ksh 87.50 in January. Prices were relatively stable attributed to imports from neighboring counties of Tharaka Nithi and Meru counties.

□ The month's price was lower by 20 percent compared to the 2016-2018 short term average of Ksh 97 as shown

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

- Milk consumption decreased by 6.7 percent from 1.5 litres in January to 1.4 litres in February. The decrease was noted across all livelihood zones; this is due to low milk production which has been hampered by pasture conditions deteriorating.
- The month's milk consumption was lower by 6.7 percent, compared to the 2014-2018 long term average of 1.5 litres as shown in figure 11.

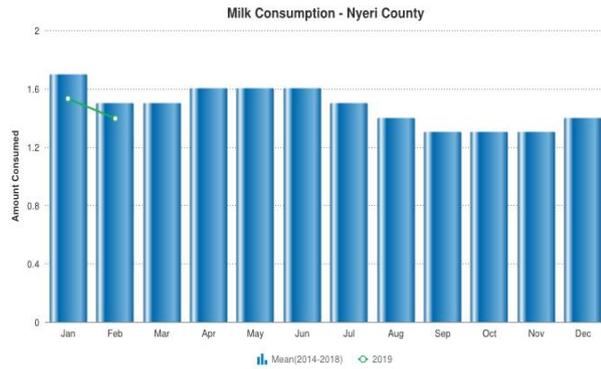


Figure 11: Outline milk consumption

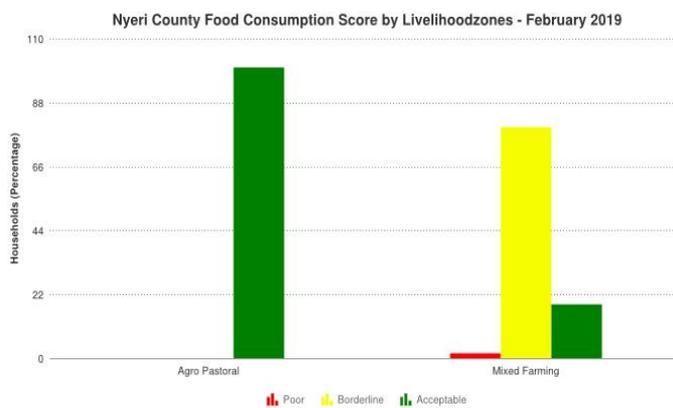


Figure 12: Food consumption Score for Nyeri

consumption score. There were variances in food consumption patterns at the livelihood zones with 100 percent of the households in agro pastoral livelihood zones registering acceptable food consumption levels compared to 18.6 percent in mixed farming livelihood zones as shown in figure 15 indicating that households in agro pastoral livelihood zones had a better dietary diversity and consumption frequency.

- Due to Low milk production, zero food stocks, failure of seasonal crops and unavailability of indigenous green, household are likely to experience constrains in dietary diversity and consumption frequency.

5.3 HEALTH AND NUTRITION STATUS

5.3.1 Nutrition Status

- Nutrition status of children below the age of five increased from Nil cases reported to 0.5 percent. Increase could be attributed to drop in milk consumption and exhaustion of food stock at the household level. The cases reorted were severely malnourished as shown in figure 13 below.

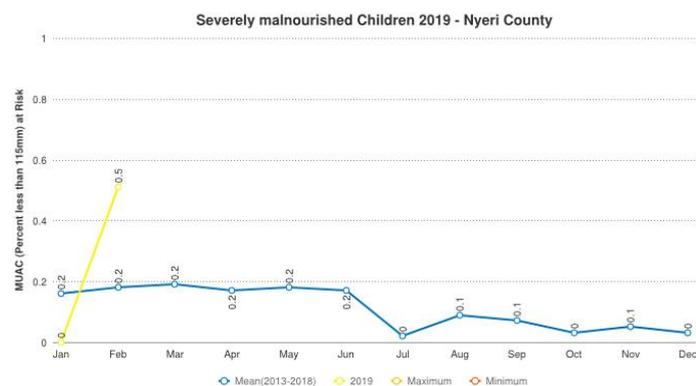


Figure 13: presentation of malnutrition status of children below five years.

5.2 FOOD CONSUMPTION SCORE

- The food consumption score for Kieni deteriorated during the month of February compared to the previous month. Proportion of household at borderline and acceptable food consumption score was 40.17 percent and 58.97 percent compared to 38 percent and 59.5 percent in the previous month.
- During the month of February only one house had a poor

5.4 COPING STRATEGIES

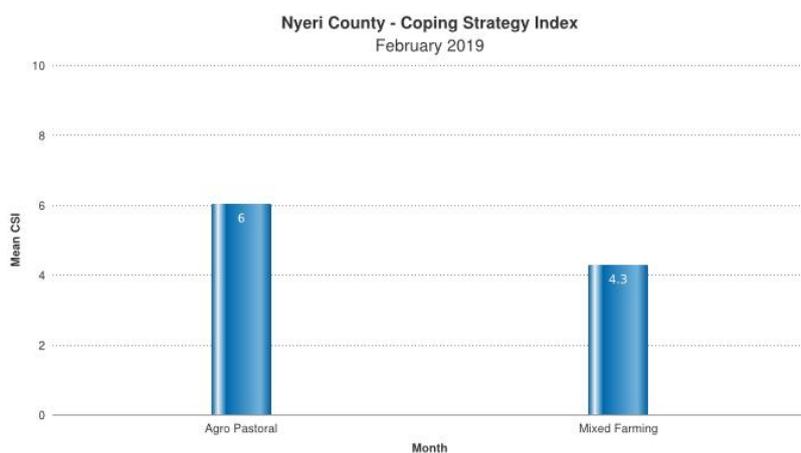


Figure 14: outlines the mean coping strategy

by 25.7 percent from 4.10 in January to 5.15 in February.

- Agro pastoral farming livelihood zones registered a higher coping strategy index by 39.5 percent from 4.3 to 6 while in Mixed farming increased by 10.3 percent from 3.9 to 4.3 livelihood zones as indicated in figure 17 above.

- Due to the decrease in agricultural activities and labour opportunities, income at the household has decreased. Majority of the households have also exhausted food stock.
- This has forced most of the household to apply coping mechanism more frequently during the month under review compared the previous month. The mean coping strategy increased

6.0 CURRENT INTERVENTION MEASURES

6.1 NON-FOOD INTERVENTIONS

- There were no non-food interventions during the month under review.

6.2 FOOD AID

- There were no food interventions during the month under review.

7.0 EMERGING ISSUES.

7.1 FOOD SECURITY PROGNOSIS

- During the just concluded food security assessment conducted by the Kenya food security steering group and National Drought Management Authority, Kieni was classified under the stressed phase (IPC II). The situation is expected to deteriorate further if the current situation persists.

7.2. LIVESTOCK AND MIGRATION.

- There has been in migration of livestock from the neighbouring counties, about 3000 animals have already migrated into Kieni East Sub County through Gakawa, Solio into Naromoru, Thegu and in Kieni West Lamuria area. More herds are expected to continue to streaming in.

8. RECOMMENDATIONS

- Activation of sectoral working groups to prepare for response plans (Action: NDMA)
- Rehabilitation of strategic water points and desiltation of pans and dams in preparation of MAM rainfall (Action: CGN)
- Encourage surface water harvesting (Action: CGN)
- Provision of supplementary feeds for livestock (Action: CGN)
- Activation of peace committees in anticipation of likely conflict arising from scarce of resources (Action: NDMA)
- Provision of relief food to needy households (Action: Department of special programmes)
- Undertake a rapid assessment (Action: NDMA)
- Support with livestock drought pellets. (Action: NDMA)
- Provision of water treatment tablets (aqua tabs) (Action: CGN NDMA NIB stakeholders).
- Supply of water using tankers for domestic and livestock at strategic points for incoming pastoralist for temporary use. (Action: CGN NDMA NIB stakeholders).
- Up scaling on Preventive Vaccination against FMD, CCPP and NCD in livestock (Action: NDMA, DALF/County government).