



NATIONAL DROUGHT MANAGEMENT AUTHORITY

National Drought Early Warning Bulletin

JUNE 2022

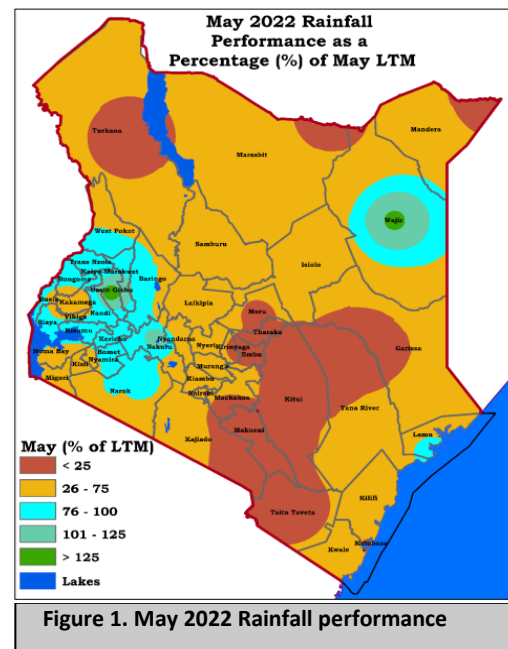
Overview

The drought situation continued to worsen in **nineteen (19)** of the 23 ASAL counties. This is attributed to the poor performance of the 2021 short rains coupled with previous two failed consecutive seasons and early cessation of the 2022 long rains season. The number of people in need of assistance has increased from **3.5 million** in May to **4.1 million** in June 2022. **Six (6)** counties namely Laikipia, Mandera, Marsabit, Wajir, Isiolo and Samburu are in **Alarm** drought phase while **thirteen (13)** counties including Kilifi, Turkana, West-Pokot, Kwale, Meru (North), Embu (Mbeere), Garissa, Kajiado, Kitui, Nyeri (Kieni), Taita-Taveta, Tharaka-Nithi and Tana-River are in **Alert** drought phase. The remaining **four (4)** counties including Baringo, Lamu, Narok and Makueni are in **Normal** drought phase. Acute malnutrition has also been noted across the counties with 942,000 cases of children aged 6-59 months acutely malnourished and 134,000 cases of pregnant or lactating women acutely malnourished in need of treatment.

Drought indicators

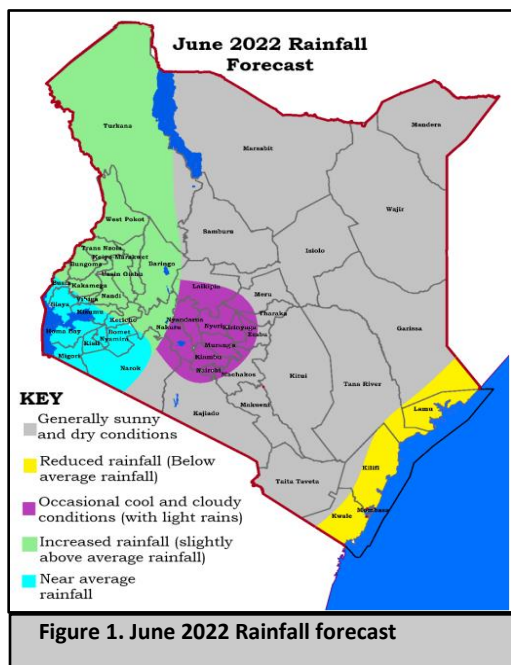
Rainfall Performance

The month of May marked the cessation of the “Long Rains” season over most parts of the Country. In May 2022, several parts of the country experienced dry weather conditions except over the Highlands West of the Rift Valley, Lake Victoria Basin, Central and South Rift Valley, Coastal region, and a few areas over Northeast and the Highlands East of the Rift Valley that experienced occasional rainfall. Analysis of May 2022 monthly rainfall from 1st to 29th indicates that most parts of the country experienced below-average rainfall except Wajir which experienced above-average rainfall at 129% for two days. Narok and Lamu experienced near average rainfall at 89.4% and 84.4% respectively. All the other stations recorded less than



75% of their May LTM (average) rainfall. The rainfall was characterized by isolated storms over parts of the country. On 1st May, Diff station in Wajir, Sericho in Isiolo and Kaibos in West Pokot recorded 68.0mm, 64.0mm, and 50.1mm respectively.

Rainfall Forecast for June 2022



The forecast indicates that several parts of the country will be generally dry and sunny during the month of June 2022. However, near to above-average rainfall is expected over parts of the Highlands West of the Rift Valley and Central Rift Valley, while the Lake Victoria Basin and South Rift Valley is likely to receive near average rainfall. The Coastal strip is likely to experience near-average rainfall tending to below-average (depressed) rainfall. Mandera, Marsabit, Wajir, Garissa and Isiolo) and Southeastern lowlands (Machakos, Makueni, Kitui, Taita Taveta and parts of Kajiado) are

likely to remain generally sunny and dry. However, high terrain areas in some counties in southeastern Kenya are likely to have chilly and foggy conditions on occasion.

Vegetation condition

Figure 3 compares the vegetation condition index (VCI) in May 2021 with that in May 2022. Generally, when compared to similar period last year and the long-term average, the current condition of vegetation deteriorating.

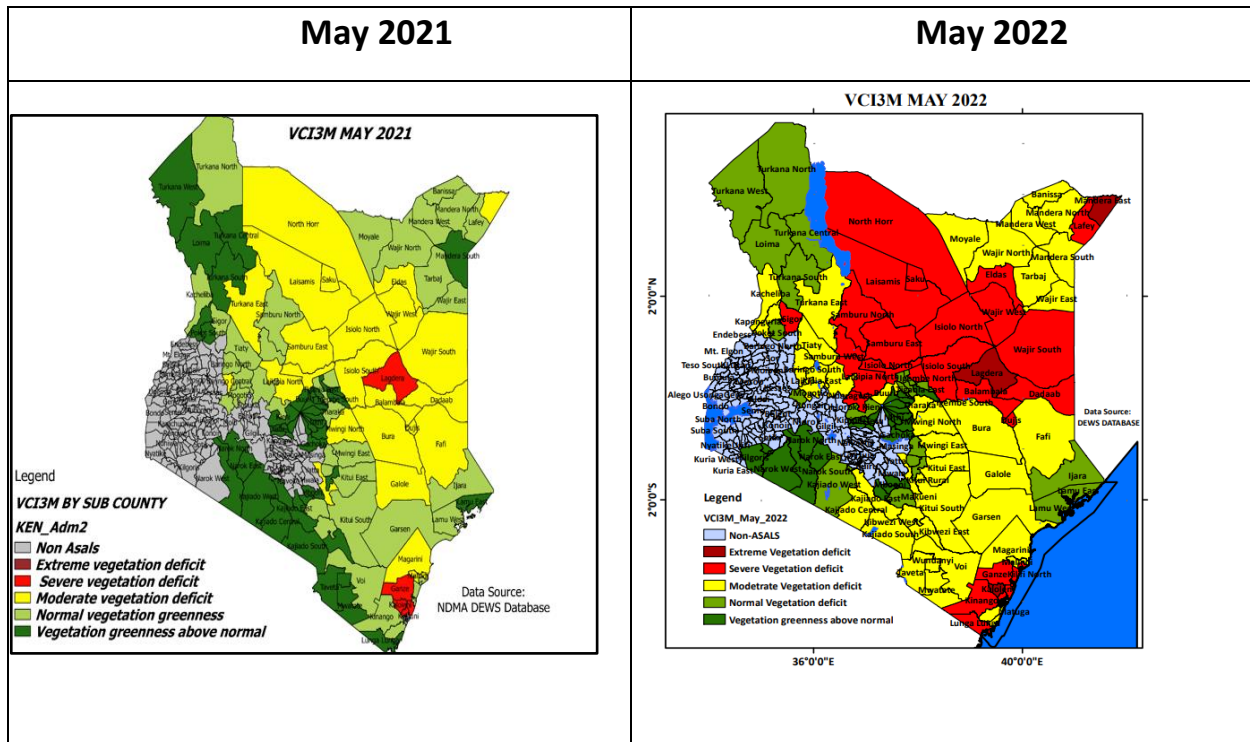


Figure 3: Maps comparing Vegetation Condition (VCI)

The month of May 2022 showed deterioration in vegetation condition across the Arid and Semi-Arid Counties (ASAL) as compared to the previous month of April 2022. The deterioration is associated with the poor performance of the long rains of 2022. The following **3 sub counties**; Garissa (Lagdera), Kilifi (Kaloleni) and Mandera (Mandera East) are in **Extreme vegetation deficit band** hence in need of humanitarian assistance. The following **Seven counties (7)**; Isiolo, Kilifi, Kwale, Laikipia, Marsabit, Samburu and Wajir are in **Severe vegetation deficit**. The following **eight (8) counties** including; Baringo, Garissa, Kajiado, Kitui, Mandera, Taita Taveta, Tana-River and West Pokot are in **Moderate vegetation deficit** hence close monitoring and activation of response plans. The following **Five (5) counties** including; Lamu, Makueni, Meru, Tharaka-Nithi and Turkana recorded **Normal** vegetation greenness. The following **three (3) counties** including; Embu, Nyeri and Narok recorded **Above normal vegetation** greenness. The current vegetation condition is worse as compared to the same period the previous year, May 2021 as shown in (Figure 3). A summary of the vegetation condition across ASAL counties as at end of April 2022 is provided in Annex 1. The situation for each county disaggregated by sub-county is provided in Table 1.

Table 1: Vegetation Condition Index (VCI), May 2022

| Category | County | Sub Counties (No) |
|--|--|---|
| Extreme | | (3) Garissa (Lagdera), Kilifi (Kaloleni), Mandera (Mandera-East) |
| Severe vegetation deficit | (7) Isiolo Kilifi Kwale Laikipia Marsabit Samburu Wajir | (25) Garissa (Balambala, Daadab, Township), Isiolo (Isiolo-North, Isiolo-South), Kilifi (Ganze, Kilifi-North, Rabai, Kilifi-South), Kwale (Kinango, Lungalunga), Laikipia (Laikipia-North, Laikipia-West), Marsabit (Lafey, Laisamis, North Horr, Saku), Meru (Igembe-North), Samburu (Samburu-East, Samburu-North, Samburu-West), Wajir (Eldas, Wajir-South, Wajir-West), West Pokot (Sigor) |
| Moderate vegetation deficit | (8) Baringo Garissa Kajiado Kitui Mandera Taita Taveta Tana River West Pokot | (41) Baringo(Baringo Central, Baringo North, Baringo South, Tiaty, Mogotio), Garissa (Fafi), Kajiado (Kajiado Central, Kajiado East Kajiado South), Kilifi (Magarini, Malindi),Kitui(Kitui East, Mwingi Central, Mwingi North, Kitui Rural, Kitui South), Kwale (Matuga, Msambweni), Laikipia(Laikipia-East), Makueni (Kibwezi-East, Kibwezi-West), Mandera (Banissa, Mandera-North, Mandera-South, Mandera-West), Marsabit (Moyale), Meru (Buuri), Taita Taveta (Mwatate, Taveta, Voi., Wundanyi),Tana River(Bura, Galole, Garsen), Tharaka Nithi (Tharaka), Turkana (Turkana-East), Wajir (Wajir-East, Wajir-North,Tarbaj), West Pokot (Kacheliba, Kapenguria) |
| Normal vegetation greenness | (5) Lamu Makueni Meru Tharaka-Nithi Turkana | (20) Baringo (Eldama Ravine), Garissa (Ijara), Kajiado (Kajiado-North, Kajiado-West), Kitui (Kitui-Central, Mwingi-West, Kitui-West), Lamu (Lamu-East, Lamu-West), Makueni (Makueni), Meru (Igembe-Central, Tigania-East, Tigania-West), Nyeri (Kieni), Turkana (Turkana-Central, Loima, Turkana-North, Turkana-South, Turkana-West), West Pokot (West Pokot-South) |
| Vegetation greenness Above normal | (3) Embu Narok Nyeri | (24) Embu (Manyatta, Mbeere-North, Mbeere-South, Runyenjes), Makueni (Kaiti, Kilome, Mbooni), Meru (Central Imenti, Igembe-South, North-Imenti, South Imenti), Narok (Narok-East, Emurua Dikirr, Kilgoris, Narok-North, Narok-South, Narok-West), Nyeri (Mathira, Mukurweini, Othaya, Tetu, Township), Tharaka Nithi (Chuka, Maara) |

Livestock production

Pasture and browse condition

The state of pasture and browse in most of the arid and semi-arid counties was generally in fair to poor conditions as shown in Table 2. The current pasture and browse condition are below normal as compared to normal years with slight

improvement recorded as compared to the previous month due to minimal showers of rains received during the May onset which led to little regeneration of pasture and browse. The condition would not last for long due to high concentration of livestock in the grazing areas.

Table 2.0: Pasture and browse condition, May 2022

| <i>Pasture condition</i> | | | <i>Browse condition</i> | | |
|--------------------------|---------------|-------------|-------------------------|---------------|-------------|
| <i>Poor</i> | <i>Fair</i> | <i>Good</i> | <i>Poor</i> | <i>Fair</i> | <i>Good</i> |
| Garissa | Baringo | Lamu | Isiolo | Baringo | Lamu |
| Isiolo | Embu | | Mandera | Embu | Makueni |
| Laikipia | Kajiado | | Marsabit | Garissa | |
| Mandera | Kilifi | | Nyeri | Kajiado | |
| Marsabit | Kitui | | Wajir | Kilifi | |
| Nyeri | Kwale | | | Kitui | |
| Wajir | Makueni | | | Kwale | |
| | Meru | | | Laikipia | |
| | Narok | | | Meru | |
| | Samburu | | | Narok | |
| | Taita Taveta | | | Samburu | |
| | Tana River | | | Taita Taveta | |
| | Tharaka Nithi | | | Tana River | |
| | Turkana | | | Tharaka Nithi | |
| | West Pokot | | | Turkana | |
| | | | | West Pokot | |

Livestock body condition

The current livestock body condition displayed no major improvement as compared to previous month. Generally, the current body condition of most livestock is below normal in comparison to similar periods during a normal year. Consequently, most counties reported livestock body condition as fair to poor

conditions with exception of Makueni which reported good body condition while three counties (Kajiado, Lamu and West Pokot) reported good body conditions for the goat species as shown in Table 3. The fair to poor condition is as result of the poor performance of the 2021 short rains season and the minimal down pours of the MAM long rains season resulting to little or no regeneration of pasture and browse that has direct impact on livestock body condition.

Table 3.0: Livestock body condition, May 2022

| <i>Cattle</i> | | | <i>Goats</i> | | |
|---------------|---------------|-------------|--------------|---------------|-------------|
| <i>Poor</i> | <i>Fair</i> | <i>Good</i> | <i>Poor</i> | <i>Fair</i> | <i>Good</i> |
| Baringo | Embu | Makueni | Baringo | Embu | Kajiado |
| Garissa | Kajiado | | Isiolo | Garissa | Lamu |
| Isiolo | Kilifi | | Mandera | Kilifi | Makueni |
| Laikipia | Kitui | | Marsabit | Kitui | West Pokot |
| Mandera | Kwale | | | Kwale | |
| Marsabit | Lamu | | | Laikipia | |
| Nyeri | Meru North | | | Meru North | |
| Samburu | Narok | | | Narok | |
| Wajir | Taita taveta | | | Nyeri | |
| | Tana River | | | Samburu | |
| | Tharaka Nithi | | | Taita taveta | |
| | Turkana | | | Tana River | |
| | West Pokot | | | Tharaka Nithi | |
| | | | | Turkana | |
| | | | | Wajir | |

Milk production

Milk production was on a stable trend as compared to the previous month in most of the counties. The below normal milk production is attributed to the poor rainfall performance for the previous OND rains season, the late onset and minimal showers during this month of May and persistent dry spell being experienced

across the ASAL region. The current milk production status is below average as compared to normal year. Milk production trends in the 23 ASAL counties is presented in table 4.0.

Table 4.0: Milk production, May 2022

| <i>Indicator</i> | <i>Current status</i> | | | <i>Trend</i> | | |
|------------------------|-----------------------|---------------|------------------|------------------|---------------|------------------|
| | <i>Above LTA</i> | <i>At LTA</i> | <i>Below LTA</i> | <i>Improving</i> | <i>Stable</i> | <i>Worsening</i> |
| Milk Production | Garissa | Narok | Baringo | Baringo | Makueni | Garissa |
| | Makueni | Tana River | Embu | Embu | Narok | Isiolo |
| | Tharaka Nithi | | Isiolo | Kajiado | Samburu | Kilifi |
| | | | Kajiado | Kitui | Turkana | Kwale |
| | | | Kilifi | Lamu | Mandera | Marsabit |
| | | | Kitui | Nyeri | | Meru |
| | | | Kwale | Tana River | | Taita Taveta |
| | | | Laikipia | Wajir | | Tharaka Nithi |
| | | | Lamu | West Pokot | | |
| | | | Mandera | | | |
| | | | Marsabit | | | |
| | | | Meru | | | |
| | | | Nyeri | | | |
| | | | Samburu | | | |
| | | | Taita Taveta | | | |
| | | | Turkana | | | |
| | | | Wajir | | | |
| | | | West Pokot | | | |

Cattle prices

In majority of the counties, cattle prices in the month of May remained stable compared to the previous month owing mainly to the poor body condition as illustrated in Table 5. The current cattle prices are below normal in most of the counties in comparison to similar periods during a normal year. However; Embu,

Kajiado, Kitui, Lamu, Makueni, Meru, Narok, Tana-River, Tharaka Nithi and West-Pokot reported above normal LTA due to increased demand of livestock market as compared to low supply. Eight counties reported an improving trend in prices whereas five counties reported a worsening trend as illustrated in Table 5.

Table 5.0: Cattle prices, May 2022

| <i>Indicator</i> | <i>Current status</i> | | | <i>Trend</i> | | |
|-----------------------------|---|------------------------------|--|---|---|---|
| | <i>Above LTA</i> | <i>At LTA</i> | <i>Below LTA</i> | <i>Improving</i> | <i>Stable</i> | <i>Worsening</i> |
| <i>Cattle Prices</i> | Embu Kajiado Kitui Lamu Makueni Meru Narok Tana River Tharaka Nithi West Pokot | Baringo Garissa Isiolo | Kilifi Kwale Laikipia Mandera Marsabit Nyeri Samburu Taita Taveta Turkana Wajir | Baringo Kitui Kwale Mandera Marsabit Tharaka Nithi Turkana Wajir | Garissa Kajiado Kilifi Makueni Nyeri Samburu Taita Taveta Tana River West Pokot | Embu Isiolo Lamu Meru Narok Laikipia |

Goat prices

Goat prices in majority of the ASAL counties were above LTA. The trend was however stable and improving owing to low number of goats available for sell in the market except for Embu, Makueni, Meru, Narok counties which reported a worsening trend.

Table 6.0: Goat prices, April 2022

| Indicator | Current status | | | Trend | | |
|-------------|----------------|--------------|-----------|---------------|--------------|-----------|
| | Above LTA | At LTA | Below LTA | Improving | Stable | Worsening |
| Goat Prices | Embu | Isiolo | Baringo | Garissa | Baringo | Embu |
| | Kajiado | Taita Taveta | Garissa | Kwale | Isiolo | Makueni |
| | Kilifi | West Pokot | Mandera | Laikipia | Kajiado | Meru |
| | Kitui | | Marsabit | Mandera | Kilifi | Narok |
| | Kwale | | Nyeri | Marsabit | Kitui | |
| | Laikipia | | Samburu | Tana River | Lamu | |
| | Lamu | | Turkana | Tharaka Nithi | Nyeri | |
| | Makueni | | Wajir | Turkana | Samburu | |
| | Meru | | | Wajir | Taita Taveta | |
| | Narok | | | | West Pokot | |
| | Tana River | | | | | |
| | Tharaka Nithi | | | | | |

Livestock Mortality

Drought conditions have persisted in ASAL counties following failed multiple successive rain seasons. Parts of some counties including Garissa, Wajir, Marsabit, Isiolo and Mandera have had at least 3 failed rain seasons. This has led to conditions of severe to vegetation deficit coupled with challenged access to water. These have led to increased trekking distances to water points and grazing sites for livestock leading to worsening livestock body condition scores and leading to mortality attributable to drought effects. The livestock mortalities reported in Samburu, Mandera, Isiolo, Lamu, Marsabit and Garissa. There is need to purposely support both commercial and emergency livestock offtake across the ASALs in the face of an elevated level of risk following the failed MAM 2022 season and the forecast poor OND 2022 season prospects.

The livestock mortalities reported in Samburu (16.90%), Mandera (11.30%), Isiolo (8.01%), Lamu (7.63%), Marsabit (7.4%) and Garissa (6.8%).

The reported livestock mortalities for Wajir County (5.33%) are likely to increase as the drought situation assumes a worsening trend. Kajiado, Embu, Kwale, Kitui,

Makueni, Narok, Taita Taveta and Tharaka Nithi did not report any livestock mortalities attributable to drought related.

The counties of Kilifi, West Pokot, Turkana, Laikipia, Meru, Tana River, Baringo, Nyeri and Meru reported livestock mortalities within county herds ranging from 0.01% in Baringo to 1.5% in Kilifi. In Meru and Nyeri, most mortalities are from immigrant livestock from Isiolo, Marsabit and Wajir Counties.

The reported mortalities as updated by the counties as at the end of May 2022 are presented in the following table;

Table: Reported Drought Related Livestock Mortalities

| N o. | County | Cattle Mortality | | | Sheep/Goat Mortality | | | Camel Mortality | | | Overall Rate (%) |
|------|------------|------------------|--------------|----------|----------------------|--------------|----------|------------------|--------------|----------|------------------|
| | | Population (No.) | Deaths (No.) | Rate (%) | Population (No.) | Deaths (No.) | Rate (%) | Population (No.) | Deaths (No.) | Rate (%) | |
| 1. | Samburu | 369,399 | 152,561 | 41.30 | 1,477,906 | 112,501 | 7.61 | 54,063 | 967 | 1.79 | 16.90 |
| 2. | Mandera | 863,625 | 138,213 | 16.0 | 4,579,722 | 558,752 | 12.2 | 1,016,790 | 32,520 | 3.1 | 11.30 |
| 3. | Isiolo | 274,055 | 19,000 | 6.9 | 2,209,532 | 24,800 | 1.1 | 307,011 | 30 | 0.01 | 8.01 |
| 4. | Lamu | 105,054 | 8,900 | 8.4 | 66,420 | 4,200 | 6.3 | 0 | 0 | 0 | 7.63 |
| 5. | Marsabit | 509,227 | 33,105 | 6.5 | 4,569,647 | 580,300 | 12.7 | 791,029 | 23,700 | 3.0 | 7.4 |
| 6. | Garissa | 1,322,540 | 264,508 | 2.0 | 4,002,922 | 120,100 | 3.0 | 450,000 | 9,000 | 2.0 | 6.8 |
| 7. | Wajir | 893,040 | 114,785 | 12.85 | 5,422,324 | 102,780 | 1.89 | 1,184,083 | 13,389 | 1.13 | 5.33 |
| 8. | Kilifi | 210,513 | 9,500 | 4.5 | 244,242 | 0 | 0 | 37,564 | 0 | 0 | 1.5 |
| 9. | Nyeri | 66,000 | 33 | 0.05 | 180,000 | 90 | 0.05 | 0 | 123 | 0.05 | 0.05 |
| | Nyeri* | 6,000 | 300 | 3.0 | 4,000 | 120 | 3.0 | 0 | 420 | 3.0 | 3.0 |
| 10. | West Pokot | 593,032 | 4,621 | 1 | 1,214,285 | 924 | 0.08 | 10,500 | 0 | 0 | 0.3 |
| 11. | Turkana | 3,143,442 | 1,332 | 0.04 | 13,559,892 | 29,589 | 0.22 | 949,649 | 185 | 0.02 | 0.17 |
| 12. | Laikipia | 68,800 | 4,500 | 0.07 | 211,920 | 9,800 | 0.05 | 0 | 0 | 0 | <0.1 |
| 13. | Meru North | 291,156 | 72 | 0.02 | 369,429 | 15 | 0 | 4,026 | 0 | 0 | <0.1 |
| 14. | Tana River | 475,398 | 20,825 | 0.04 | 1,097,208 | 33,450 | 0.03 | 67,950 | 546 | 0.01 | 0.03 |
| 15. | Baringo | 518,982 | 29 | 0 | 1,500,453 | 88 | 0 | 13,451 | 0 | 0 | 0.01 |
| 16. | Kajiado | 786,082 | 0 | 0 | 2,425,957 | 0 | 0 | 2,550 | 0 | 0 | 0 |

| | | | | | | | | | | | |
|---------------|------------------|------------------------|----------------|------------------|------------------------|-----------------------|-------------|-----------------------|--------------------|-------------|-------------|
| 17. | Embu | 151739 | 0 | 0 | 280938 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18. | Kwale | 243,862 | 0 | 0 | 456,221 | 0 | 0 | 0 | 0 | 0 | 0 |
| 19. | Kitui | 324,351 | 0 | 0 | 1,476,390 | 0 | 0 | 0 | 0 | 0 | 0 |
| 20. | Makueni | 251, 385 | 0 | 0 | 982,888 | 0 | 0 | 0 | 0 | 0 | 0 |
| 21. | Narok | 1,488,91 1 | 0 | 0 | 3,619,387 | 0 | 0 | 0 | 0 | 0 | 0 |
| 22. | Taita Taveta | 144,700 | 0 | 0 | 232,300 | 0 | 0 | 2,480 | 0 | 0 | 0 |
| 23. | Tharaka Nithi | 162,984 | 0 | 0 | 297,634 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTALS | | 13,012,8 92 | 772,284 | 5.9 3 | 50,481,61 7 | 1,577,50 9 | 3.12 | 4,891,14 6 | 80,8 80 | 1.65 | 3.55 |

NB:

- **Nyeri *** data on immigrant herds present in the county.
- A zero means there was no reportage and not necessarily absence of mortalities

Crop production

In the Coast Marginal Agricultural (CMA) counties, the crop condition is poor with most counties reporting withering of crops, with the surviving ones at podding and tussling stage. In the South East Marginal Agriculture (SEMA) counties there are different outputs but majorly its plant growth at knee high stage. In Kwale and Lamu planting and weeding is ongoing same as in Tharaka Nithi. In both SEMA and CMA, season failure has been experienced with less area planted and the lands abandoned or left open for grazing, this is attributed by stressed moisture in May and poor performance of the 2022 long rains season couple with late onset and early cessation and failure of the previous season.

Maize prices

In all counties, the price of maize was at a stable or worsening trend in April as compared to the previous month, these is as a result of the dry spell experienced in the countries from last year failure of OND rain seasons and the late onset of MAM rain seasons as demonstrated in Table 7, the current maize prices are above

LTA and on increasing trend as compared to the previous month due to depletion of stocks that has resulted to increase in maize prices.

Table 7.0: Maize prices, May 2022

| <i>Indicator</i> | <i>Current status</i> | | | <i>Trend</i> | | |
|---------------------|---|------------------------|------------------|------------------|--|---|
| | <i>Above LTA</i> | <i>At/close to LTA</i> | <i>Below LTA</i> | <i>Improving</i> | <i>Stable</i> | <i>Worsening</i> |
| Maize Prices | Baringo Garissa Embu Isiolo Kajiado Kilifi Kitui Kwale Laikipia Makueni Mandera Marsabit Meru Narok Nyeri Samburu Taita-Taveta Tana River Tharaka Nithi Turkana Wajir West Pokot | Lamu | | | Garissa Kajiado Lamu Mandera Nyeri Tharaka Nithi Wajir | Baringo Embu Isiolo Kilifi Kitui Kwale Laikipia Makueni Marsabit Meru Narok Samburu Taita Taveta Tana River Turkana West Pokot |

WATER ACCESS

Access to water for households

In comparison to the long-term average, 17 counties distances to water for households is currently above the LTA. In comparison with the previous month, there is decrease and increase in distance to household water source. The poor rainfall performance of long rains is the reason behind the above LTA trekking distances. The trend in distances walked by households to access water is provided in Table 8.

Table 8.0: Distance from households to main water sources, May 2022

| <i>Indicator</i> | <i>Current status</i> | | | <i>Trend</i> | | |
|---|-----------------------|---------------|------------------|------------------|---------------|------------------|
| | <i>Above LTA</i> | <i>At LTA</i> | <i>Below LTA</i> | <i>Improving</i> | <i>Stable</i> | <i>Worsening</i> |
| <i>Distance from households to main water sources</i> | Embu | Kitui | Baringo | Baringo | Kilifi | Embu |
| | Garissa | Samburu | Tharaka Nithi | Kitui | Meru | Garissa |
| | Isiolo | Turkana | | Kwale | | Isiolo |
| | Kajiado | | | Lamu | | Kajiado |
| | Kilifi | | | Mandera | | Makueni |
| | Kwale | | | Narok | | Marsabit |
| | Lamu | | | Samburu | | Nyeri |
| | Makueni | | | Turkana | | Taita Taveta |
| | Mandera | | | Wajir | | Tana River |
| | Marsabit | | | West Pokot | | Tharaka Nithi |
| | Meru | | | | | |
| | Narok | | | | | |
| | Nyeri | | | | | |
| | Taita Taveta | | | | | |
| | Tana River | | | | | |
| | Wajir | | | | | |
| | West Pokot | | | | | |

Access to water for livestock

The trend in the distance trekked by livestock in search of water is presented in Table 9. Compared with the previous month, the current trekking distance to water source from grazing areas is worsening across most of the counties. 82 percent of counties livestock trekking distance to water point is above LTA in ASALs with most counties being at worsening trend as shown in table 9.0.

Table 9.0: Distance from livestock grazing area to main water sources, May 2022

| <i>Indicator</i> | <i>Current status</i> | | | <i>Trend</i> | | |
|---|-----------------------|---------------|------------------|------------------|---------------|------------------|
| | <i>Above LTA</i> | <i>At LTA</i> | <i>Below LTA</i> | <i>Improving</i> | <i>Stable</i> | <i>Worsening</i> |
| <i>Distance from livestock grazing area to main water sources</i> | Embu | Wajir | Baringo | Baringo | Isiolo | Embu |
| | Garissa | | Lamu | Kwale | Kitui | Garissa |
| | Isiolo | | Tharaka Nithi | Lamu | Marsabit | Kajiado |
| | Kajiado | | Mandera | Meru | Kilifi | |
| | Kilifi | | Narok | Tana River | Makueni | |
| | Kitui | | Turkana | Tharaka | Nyeri | |
| | Kwale | | West Pokot | Nithi | Samburu | |
| | Makueni | | | Wajir | Taita Taveta | |
| | Mandera | | | | | |
| | Marsabit | | | | | |
| | Meru | | | | | |
| | Narok | | | | | |
| | Nyeri | | | | | |
| | Samburu | | | | | |
| | Taita Taveta | | | | | |
| | Tana River | | | | | |
| | Turkana | | | | | |
| | West Pokot | | | | | |

Terms of trade

Table 10 shows the trends in terms of trade (ToT) between the relative price of goats and maize in ASAL counties. In most counties, ToT values are below the long-term average (LTA). The TOT is at a worsening trend as it is displaying worsening

conditions in most counties. The worsening trend is as a result of stable goat prices while maize prices has increased and thus lowering the purchasing power among pastoralists.

Table 10.0: Terms of trade, May 2022

| <i>Indicator</i> | <i>Current status</i> | | | <i>Trend</i> | | |
|-----------------------------|-----------------------|----------------------|--|---|--------------------------|--|
| | <i>Above LTA</i> | <i>At LTA</i> | <i>Below LTA</i> | <i>Improving</i> | <i>Stable</i> | <i>Worsening</i> |
| <i>Terms of trade (ToT)</i> | Kajiado Lamu | Kilifi Tana River | Baringo Embu Garissa Isiolo Kitui Kwale Makueni Mandera Marsabit Meru Narok Nyeri Samburu Taita Taveta Tharaka Nithi Turkana Wajir West Pokot | Garissa Mandera Marsabit Wajir | Lamu Nyeri Turkana | Baringo Embu Isiolo Kajiado Kilifi Kitui Kwale Makueni Meru Narok Samburu Taita Taveta Tana River Tharaka Nithi West Pokot |

Health and nutrition

Table 11 shows the trend in the proportion of children at risk of malnutrition (MUAC) across the ASAL counties. The trend of MUAC has either improved or deteriorated in a number of counties as compared to the previous month, with most counties recording a stable trend. Baringo, Kajiado, Kitui, Mandera, Marsabit,

Samburu, Tana River, Tharaka Nithi and Wajir have MUAC above long-term average. The observed above long-term negative trend in malnutrition of the nine counties was mostly attributed to the continued reduced milk consumption at household level due to decrease in milk production as well as poor dietary diversity, poor child feeding practices and reduced food intake at household level. Kajiado, Makueni, Meru, Tana River, Tharaka-Nithi and Turkana counties reported worsening trend as shown in table 11.0 that requires close monitoring. Garissa, Mandera, Meru, Narok, Nyeri, Samburu and Wajir counties recorded an improvement in trend in the month under review.

Table 11.0: Children at risk of malnutrition (MUAC), May 2022

| <i>Indicator</i> | <i>Current status</i> | | | <i>Trend</i> | | |
|------------------|-----------------------|------------------------|------------------|------------------|---------------|------------------|
| | <i>Above LTA</i> | <i>At LTA</i> | <i>Below LTA</i> | <i>Improving</i> | <i>Stable</i> | <i>Worsening</i> |
| MUAC | Baringo | Kilifi Taita Taveta | Embu | Garissa | Baringo | Kajiado |
| | Kajiado | | Garissa | Mandera | Embu | Makueni |
| | Kitui | | Isiolo | Meru | Garissa | Tana River |
| | Mandera | | Kwale | Narok | Isiolo | Tharaka- |
| | Marsabit | | Lamu | Nyeri | Kilifi | Nithi |
| | Samburu | | Makueni | Samburu | Kitui | Turkana |
| | Tana River | | Meru | Wajir | Kwale | |
| | Tharaka Nithi | | Narok | | Lamu | |
| | Wajir | | Nyeri | | Marsabit | |
| | Turkana | | Taita-Taveta | | | |
| | West-Pokot | | West Pokot | | | |

Drought phase classification

Table 12 sums up the trends in drought phase classification as at end of May 2022. On the basis of the range of indicators monitored above, thirteen (13) counties; Embu, Garissa, Kilifi, Kitui, Kajiado, Kwale, Tana River, Taita-Taveta, Meru-North,

Nyeri (Kieni), Turkana, Tharaka-Nithi and West-Pokot are in the alert drought phase while four (4) counties; Baringo, Lamu, Narok and Makueni are in the normal drought phase, whereas six (6) counties; Isiolo, Laikipia, Mandera, Marsabit, Samburu and Wajir are at an alarm phase. During the month under review, five (5) counties reported an improving trend, Six (6) counties recorded stable trend while twelve (12) counties reported a worsening trend.

Table 12.0: Drought phase classification, May 2022

| <i>Drought status</i> | <i>Trend</i> | | |
|-----------------------|---------------------------------|------------------------------|--|
| | <i>Improving</i> | <i>Stable</i> | <i>Worsening</i> |
| Normal | Baringo Lamu | Narok | Makueni |
| Alert | Kilifi Turkana West-Pokot | Kwale Meru – North | Embu (Mbeere) Garissa Kajiado Kitui Nyeri (Kieni) Taita-Taveta Tharaka-Nithi Tana-River |
| Alarm | | Mandera Marsabit Wajir | Isiolo Laikipia Samburu |
| Recovery | | | |

Recommendations

Food and safety nets

- Provision of food assistance and scaling up of cash transfers targeting households which are currently food insecure as a result of the prevailing drought stress.

Livestock sector

- Provision of livestock feeds and supplements.
- Treatment and vaccination against emerging livestock diseases.
- Support for commercial and emergency livestock offtake

Water sector

- Support water trucking interventions.
- Rehabilitation and maintenance of water facilities.
- Provision of fuel subsidies to motorized boreholes.
- Provision of fast-moving spare parts for strategic high convergence water facilities.
- Procurement and distribution of water storage tanks.

Health and nutrition sector

- Support on hygiene and sanitation promotions.
- Provisions for severe acute malnutrition - Ready to Use Therapeutic Food (RUTF).
- Supplies for moderate acute malnutrition - Ready to Use Supplementary Food (RUSF).
- Support establishment of stabilization centres for acute malnutrition cases
- Support for mass screening and integrated health outreaches
- Support for food safety monitoring

Education sector

- Enhance hygiene promotion in learning institutions.
- Provision of food to subsidize school fees in boarding secondary schools.
- Water trucking to schools for drinking, hygiene and preparation of meals.






Peace and security sector

- Facilitating intra/inter communities peace dialogues and resource use agreements.
- Coordination of peace and security activities in conflict prone counties.
- Support for cross-border dialogues for access to drought survival resources.

Coordination

- Support County Steering Groups (CSGs) to effectively coordinate drought response activities.
- Support for internal sectoral drought risk management coordination.

Table 13: Vegetation Condition Index (VCI-3 month) as at 30th May 2022

| ADMINISTRATIVE UNIT | | VEGETATION GREENNESS | | DROUGHT CATEGORIES/REMARKS | | |
|---------------------|---------------|---|---|---|----------------------|-----------------------------------|
| COUNTY | Sub County | VCI-3 month as at 24 th April 2022 | VCI-3 month as at 30 th May 2022 | Colour | VCI values (3-month) | Drought Category |
| | | | |  | ≥50 | Vegetation greenness above normal |
| | | | |  | >=35 - <50 | Normal vegetation greenness |
| | | | |  | >=20 - <35 | Moderate vegetation deficit |
| | | | |  | >=10 - <20 | Severe vegetation deficit |
| | | | |  | <10 | Extreme vegetation deficit |
| BARINGO | County | 20.18 | 33.01 | The entire county and five of its sub-counties recorded moderate vegetation deficit which was stable when compared with the previous month. Eldama improved from moderate to normal vegetation greenness. | | |
| | Central | 17.26 | 30.16 | | | |
| | Eldama | 32.51 | 40.06 | | | |
| | Mogotio | 13.12 | 27.18 | | | |
| | North | 21.2 | 29.39 | | | |
| | South | 22.1 | 34.33 | | | |
| | Tiaty | 18.86 | 34.4 | | | |
| MANDERA | County | 17.01 | 23.91 | The county recorded moderate vegetation condition which is an improvement from the previous month whereas Mandera East | | |
| | Banissa | 18.93 | 30.94 | | | |
| | M East | 9.11 | 9.77 | | | |

| | | | | | | |
|----------------------------|-------------------|---|---|--|-----------------------------|-----------------------------------|
| | Lafey | 12.39 | 16.52 | displayed extreme vegetation deficit which is stable as compared to the previous month. | | |
| | M North | 16.84 | 26.72 | | | |
| | M South | 19.87 | 25.64 | | | |
| | M West | 19.1 | 24.94 | | | |
| TURKANA | County | 40.7 | 38.64 | The county recorded a decline in vegetation greenness but still remained at normal vegetation condition during the month of May. | | |
| | T Central | 76.66 | 49.7 | | | |
| | T. East | 28.16 | 26.37 | | | |
| | T. Loima | 64.02 | 42.41 | | | |
| | T. North | 26.99 | 36.58 | | | |
| | T. South | 50.16 | 36.83 | | | |
| | T. West | 33.52 | 44.75 | | | |
| MARSABIT | County | 18.87 | 15.4 | The county remained stable at severe vegetation condition during the month of May. | | |
| | Laisaimis | 11.92 | 11.97 | | | |
| | Moyale | 21.49 | 22.54 | | | |
| | N. Horr | 21.86 | 15.54 | | | |
| | Saku | 23.46 | 15.13 | | | |
| WAJIR | County | 14.76 | 18.62 | The County and all of its sub counties recorded severe and moderate vegetation deficit during the month under review with majority remaining stable. | | |
| | W East | 13.14 | 23.64 | | | |
| | W. Eldas | 15.19 | 16.95 | | | |
| | W. North | 20.83 | 25.38 | | | |
| | W. South | 12.72 | 14.46 | | | |
| | W. Tarbaj | 15.75 | 25.18 | | | |
| | W West | 12.27 | 13.63 | | | |
| SAMBURU | County | 11.73 | 14.15 | The county and all of its sub-counties recorded severe vegetation deficit during the month under review. | | |
| | S East | 8.55 | 10.96 | | | |
| | S. North | 14.55 | 16.86 | | | |
| | S. West | 14.95 | 17.84 | | | |
| ADMINISTRATIVE UNIT | | | | | | |
| COUNTY | Sub County | VCI-3 month as at 24th April 2022 | VCI-3 month as at 30th May 2022 | Colour | VCI values (3-month) | Drought Category |
| | | | | | ≥50 | Vegetation greenness above normal |
| | | | | | >=35 - <50 | Normal vegetation greenness |
| | | | | | >=20 - <35 | Moderate vegetation deficit |
| | | | | | >=10 - <20 | Severe vegetation deficit |
| | | | | | <10 | Extreme vegetation deficit |
| GARISSA | County | 31.18 | 27.31 | The county remained stable at moderate vegetation deficit during the month under review. | | |
| | Balambala | 20.98 | 10.69 | | | |
| | Daadab | 20.08 | 19.46 | | | |
| | Fafi | 35.88 | 33.65 | | | |
| | Ijara | 51.73 | 47.83 | | | |
| | Lagdera | 12.3 | 6.92 | | | |
| | Dujis | 36.96 | 18.07 | | | |
| ISIOLO | County | 17.11 | 11.57 | The county and all its sub-counties recorded severe vegetation deficit during the month under review. Isiolo South deteriorated to severe | | |
| | I. North | 13.99 | 11.17 | | | |

| | | | | | | |
|----------------------------|-------------------|---|---|--|-----------------------------|-----------------------------------|
| | I. South | 21.88 | 12.17 | vegetation deficit. | | |
| TANA RIVER | County | 34.8 | 24.19 | The county and all its sub-counties recorded moderate vegetation deficit. Garsen sub-county deteriorated from normal to moderate vegetation deficit. | | |
| | Bura | 29.17 | 20.02 | | | |
| | Galole | 34.37 | 22.11 | | | |
| | Garsen | 39.85 | 29.03 | | | |
| KAJIADO | County | 36.52 | 33.08 | The County and three of its sub-county recorded moderate vegetation deficit. Kajiado North and West remained stable at normal vegetation condition | | |
| | K. Central | 36.88 | 30.86 | | | |
| | K. East | 35.3 | 31.06 | | | |
| | K. North | 44.06 | 43.65 | | | |
| | K. South | 36.34 | 20.47 | | | |
| | K. West | 45.64 | 45.17 | | | |
| LAIKIPIA | County | 12.46 | 14.28 | The County recorded severe vegetation deficit with a stable trend. Laikipia East was at moderate vegetation deficit and Laikipia North and West is at severe vegetation deficit as of this month. | | |
| | L. East | 23.48 | 23.04 | | | |
| | L. North | 9.44 | 10.29 | | | |
| | L. West | 12.79 | 17.54 | | | |
| THARAKA NITHI | County | 44.03 | 42.07 | The county recorded normal vegetation greenness during the month under review which was a stable trend as compared to the previous month of April. | | |
| | Chuka | 57.76 | 51.2 | | | |
| | Maara | 62.83 | 57.21 | | | |
| | Tharaka | 32.85 | 33.8 | | | |
| WEST POKOT | County | 25.46 | 28.47 | The County and three of its sub-counties recorded moderate vegetation deficit during the month under review which was stable when compared with the previous month of April. Pokot South remained at normal vegetation greenness. Sigor still remained at severe vegetation deficit. | | |
| | Kacheliba | 26.61 | 28.38 | | | |
| | Kapenguria | 26.89 | 32.59 | | | |
| | Pokot South | 35.49 | 39.41 | | | |
| | Sigor | 16.62 | 18.69 | | | |
| EMBU | County | 53.51 | 57.44 | The county and all its sub-counties recorded above normal vegetation greenness during the month under review which a stable trend. | | |
| | Manyatta | 67.43 | 61.62 | | | |
| | Mbeere North | 52.17 | 60.54 | | | |
| | Mbeere South | 47.26 | 54.31 | | | |
| | Runyenjes | 64.14 | 57.38 | | | |
| ADMINISTRATIVE UNIT | | | | | | |
| COUNTY | Sub County | VCI-3 month as at 24th April 2022 | VCI-3 month as at 30th May 2022 | Colour | VCI values (3-month) | Drought Category |
| | | | | | ≥50 | Vegetation greenness above normal |
| | | | | | >=35 - <50 | Normal vegetation greenness |
| | | | | | >=20 - <35 | Moderate vegetation deficit |
| | | | | | >=10 - <20 | Severe vegetation deficit |
| | | | | | <10 | Extreme vegetation deficit |
| KITUI | County | 32.92 | 27.82 | The county recorded moderate vegetation deficit during the month of May with all of its sub-counties displaying a deteriorating and stable trend as compared to the previous month of April. The situation of VCI in May has really worsened in the county with a huge margin. | | |
| | Kitui Central | 43.93 | 35.98 | | | |
| | Kitui East | 33.69 | 25.59 | | | |
| | Mwingi | 34.01 | 28.74 | | | |

| | | | | |
|----------------|----------------|-------|--------|---|
| | Central | | | |
| | Mwingi North | 36.8 | 34.75 | |
| | Mwingi West | 48.27 | 47.19 | |
| | Kitui Rural | 35.26 | 32.15 | |
| | Kitui South | 28.39 | 22.42 | |
| | Kitui West | 36.82 | 36.43 | |
| MAKUENI | County | 43.48 | 41.79 | The county recorded normal vegetation greenness during the month under review which was a stable trend as compared to April. Kibwezi East and West deteriorated to moderate vegetation deficit. |
| | Kaiti | 69.97 | 71.76 | |
| | Kibwezi East | 37.58 | 30.9 | |
| | Kibwezi West | 37.9 | 33.41 | |
| | Kilome | 56.02 | 50.28 | |
| | Makueni | 39.33 | 46.31 | |
| | Mbooni | 54.18 | 58.55 | |
| MERU | County | 41.24 | 38.87 | The county and three of its sub-counties recorded normal vegetation greenness while 4 recorded above normal vegetation greenness during the month of May with Igembe North recording severe vegetation deficit portraying a worsening trend for the county during this month under review. Buuri deteriorated from normal to moderate vegetation deficit during the month under review. |
| | Buuri | 39.98 | 34.11 | |
| | Central Imenti | 57.32 | 57.51 | |
| | Igembe Central | 36.17 | 37.08 | |
| | Igembe North | 24.45 | 17.22 | |
| | Igembe South | 44.37 | 51.57 | |
| | North Imenti | 49.44 | 50.8 | |
| | South Imenti | 63.71 | 59.72 | |
| | Tigania East | 38.46 | 35.9 | |
| | Tigania West | 40.13 | 36 | |
| NYERI | County | 55.86 | 53.68 | The county and all its sub counties remained stable at above normal vegetation greenness except Kieni which recorded normal vegetation greenness. Mukurweini improved from normal to above normal vegetation greenness. |
| | Kieni | 51.21 | 45.06 | |
| | Mathira | 60.07 | 60.91 | |
| | Mukurweini | 46.43 | 65.84 | |
| | Town | 52.54 | 69.52 | |
| | Othaya | 71.36 | 65.69 | |
| | Tetu | 65.94 | 57.78 | |
| KILIFI | County | 24.49 | 17.53 | The vegetation condition in the county and four of its sub-counties was at severe vegetation deficit during the month under review. Rabai and Kilifi South improved from extreme vegetation deficit to severe vegetation deficit. Kaloleni deteriorated from severe to extreme vegetation deficit. Magarini and Malindi remained stable at moderate vegetation deficit. |
| | Ganze | 19.68 | 11.49 | |
| | Kaloleni | 10.07 | 9.65 | |
| | Magarini | 31.77 | 21.56 | |
| | Malindi | 23.51 | 20.54 | |
| | Kilifi-North | 14.1 | 12.61 | |
| | Rabai | 3.85 | 12.71 | |
| | Kilifi-South | 8.35 | 14.48 | |
| KWALE | County | 18.55 | 17.15 | The county and all of its sub-counties recorded stability in vegetation condition during the month under review which was a worsening trend. The county recorded a severe vegetation deficit. |
| | Kinango | 18.33 | 13.12 | |
| | Lungalunga | 15.51 | 17.2 | |
| | Matuga | 23.29 | 30..54 | |
| | Msambweni | 23.67 | 30.76 | |


| | | | | | | |
|----------------------------|-------------------|---|---|--|-----------------------------|-----------------------------------|
| LAMU | County | 51.17 | 44.1 | The County and its sub-counties recorded normal vegetation greenness. Lamu West declined from above normal to normal vegetation greenness. | | |
| | Lamu East | 49.86 | 45.93 | | | |
| | Lamu West | 51.92 | 43.05 | | | |
| ADMINISTRATIVE UNIT | | | | | | |
| COUNTY | Sub County | VCI-3 month as at 24th April 2022 | VCI-3 month as at 30th May 2022 | Colour | VCI values (3-month) | Drought Category |
| | | | |  | ≥50 | Vegetation greenness above normal |
| | | | |  | >=35 - <50 | Normal vegetation greenness |
| | | | |  | >=20 - <35 | Moderate vegetation deficit |
| | | | |  | >=10 - <20 | Severe vegetation deficit |
| | | | |  | <10 | Extreme vegetation deficit |
| TAITA TAVETA | County | 36.4 | 23.95 | The County recorded moderate vegetation deficit which was a decline as compared to the previous month of April. | | |
| | Mwatate | 50.68 | 27.32 | | | |
| | Taveta | 35.86 | 28.53 | | | |
| | Voi | 32.23 | 20.61 | | | |
| | Wundanyi | 39.42 | 29.15 | | | |
| NAROK | County | 67.25 | 60.23 | There was stability in vegetation cover as the county and all of its sub-counties recorded Above normal vegetation greenness. | | |
| | Narok-East | 55.45 | 57.47 | | | |
| | Emurua Dikirr | 71.79 | 67.34 | | | |
| | Kilgoris | 73.39 | 61.53 | | | |
| | Narok-North | 51.19 | 50.72 | | | |
| | Narok-South | 71.59 | 64.32 | | | |
| | Narok-West | 72.81 | 61.3 | | | |

Table 14.0: Indicators monitored by the drought early warning system

| Type of indicator | Examples of indicators monitored | Types of impact |
|-------------------|--|---|
| Biophysical | Rainfall data Vegetation condition State of water sources | Environmental |
| Production | Livestock body condition Milk production Livestock migration Livestock mortality Crop production | Livestock production Crop production |
| Access | Terms of trade (meat/maize) | Markets |

| | | |
|-------------|---|--------------------------------|
| | Milk consumption Distances to water | Access to food and water |
| Utilization | MUAC (Mid-Upper Arm Circumference) Coping strategies Food consumption score | Nutrition Coping strategies |

Summary of the drought early warning system

Each month, field monitors collect data in a number of sentinel sites across 23 arid and semi-arid counties. This is then complemented by information from other sources, particularly satellite data. For all indicators, the current value is compared with the long-term average for the time of year in order to establish whether it falls within seasonal norms.

Four types of indicators are monitored, capturing different kinds of impact (Table 12). The combined analysis from all four indicator groups then determines the particular drought phase: normal, alert, alarm, emergency or recovery (Figure 4). Identifying the correct drought phase helps to guide the most appropriate response for that stage in the drought cycle.

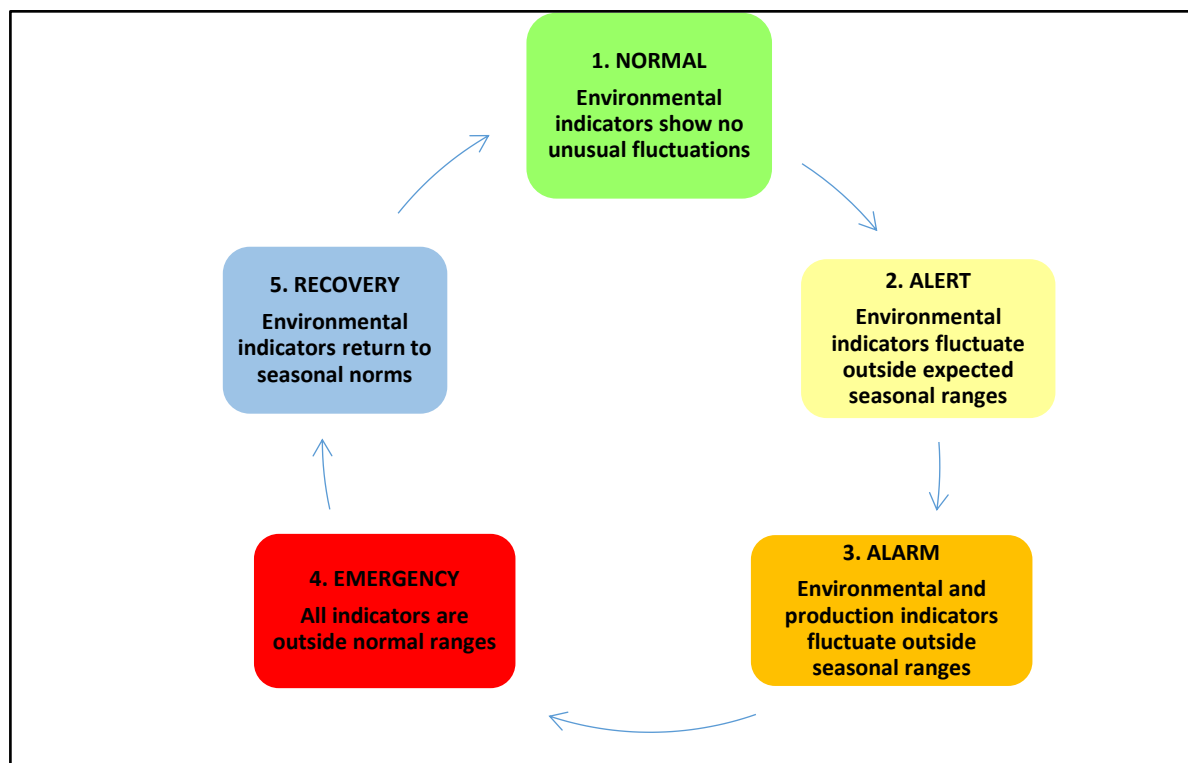


Figure 4.0: Drought Phase Classification