NATIONAL DROUGHT MANAGEMENT AUTHORITY

National Drought Early Warning Bulletin

APRIL 2024

1.0 Drought Situation Overview

The onset of the Long Rains was timely across all Arid and Semi- Arid (ASAL) counties all through the third week of March to the first week of April. Subsequently, enhanced rainfall received throughout the month of April leading to extreme weather events in most ASALs counties. Enhanced rains were thus characterized by extreme wet conditions and floods in low laying zones in particular counties like Garissa, Tana River, Kitui, Marsabit, Isiolo, Samburu, Makueni, Kajiado. The floods had varied level of damage in these counties. The positive impacts included good water recharge, vegetation regeneration and good crop performance. Negative impacts included human and livestock deaths including destruction of homes, schools and infrastructure that disrupted markets function. Optimal livestock productivity as evidenced by the good body condition and increasing milk production levels driven by shorter trekking distances to water sources and grazing areas was noted in all the counties. Consequently, based on these range of indicators that fell within their usual seasonal ranges, all the counties were categorized under the 'Normal' drought phase. Despite the aforementioned impacts that continued to undermine the food security situation, response interventions by the Government and other stakeholders to a greater extent sufficed in mitigating the impacts of extreme weather variability.

Figure 1: Drought Phase Classification in April 2024

1.1 Observed Drought Indicators

1.1.1 April 2024 Rainfall Performance

Ordinarily the month of April marks the peak of the Long Rains season across all the ASAL counties except those within the coastal marginal agriculture cluster (CMA) whose rainfall peaks in May. Analysis of the rainfall performance throughout the reference period indicated that majority of the counties received near to above average rainfall (Figure 2). The Rains were characterized by moderate to severe storms in some counties. Generally, wet weather conditions were prevalent in most places with a few areas in Taita Taveta like Voi experiencing sunny conditions. Samburu, Isiolo, Wajir, Mandera, Meru, Tharaka Nithi and Baringo recorded rainfall that was 151-200 percent of the long-term mean (LTM) for April while rainfall experienced in Kitui, Makueni, Kajiado and Nyeri accounted for 201-300 percent of the rainfall normally received over the subject month. Extremely high amounts exceeding 300 percent of the April LTM were recorded in Turkana (Turkana Central, parts of Turkana South, North and Loima). Garissa, Lamu, Tana River and some parts of Marsabit received rainfall that represented 126-150 percent of the LTM with Kilifi, Kwale and Taita Taveta recording rainfall that was 76-125 percent of the LTM.

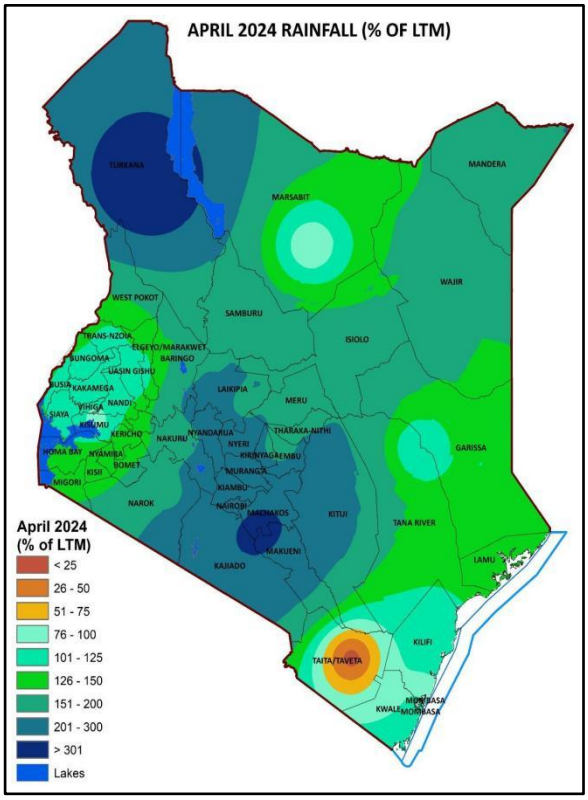

Figure 2: April 2024 Rainfall Performance
Source: Kenya Meteorological Department

1.1.2 May 2024 Rainfall Outlook

The outlook for May indicates that majority of the ASAL counties are likely to experience near average to above average rainfall (Figure 3). Equally, periodic storms are also likely to be experienced in some counties before the forecasted cessation over the third dekad of May. Above average rainfall is anticipated throughout the month in Baringo, West Pokot, Narok and the Western parts of Laikipia with the one forecasted for Turkana and Samburu being occasional.

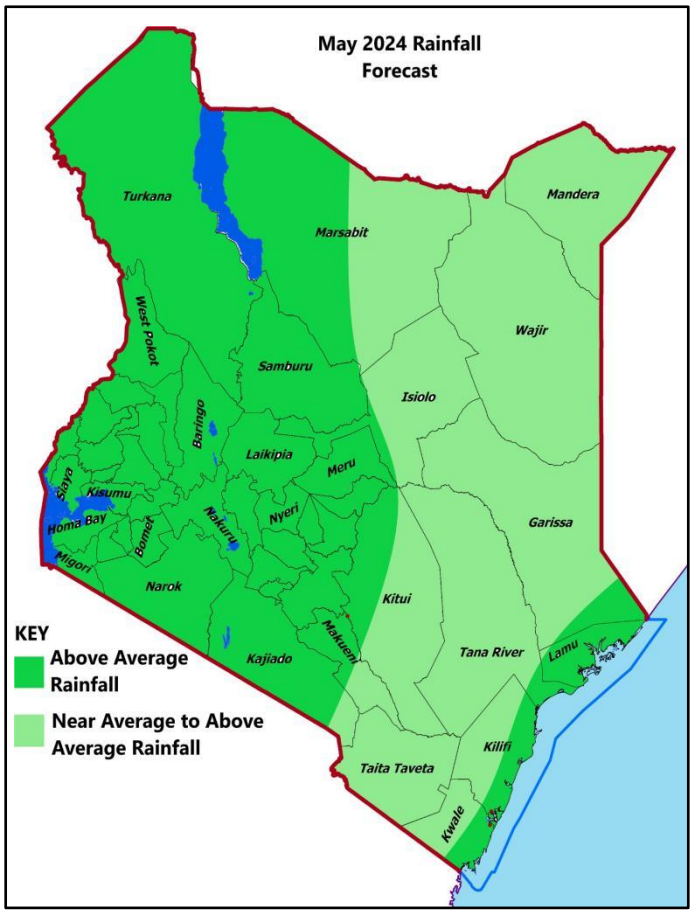

Figure 3: May 2024 Rainfall Forecast
Source: Kenya Meteorological Department

Intense rainfall is expected across the first dekad with progression throughout the month in Nyeri, Embu, Meru, Tharaka Nithi and Eastern parts of Laikipia. Rainfall in these areas is forecasted to be above average with intermittent storms likely. With respect to the Pastoral North East cluster; near to average rainfall is expected over the reference period. The aforementioned scenario will be most likely for Marsabit county.

Near to above average rainfall punctuated with sporadic storms is anticipated in counties within the South Eastern Marginal Agriculture cluster (Makueni and Kitui) and the same will most likely be replicated in Tana River, Taita Taveta and Kajiado. Total amounts of rainfall expected in counties falling within the coastal marginal agriculture cluster (Kilifi, Kwale and Lamu) are likely to be near to above average with M a y signifying the peak of the Long Rains season for these areas.

1.2 Vegetation condition

Favorable vegetation condition was observed across all the ASAL counties over the subject month under review with significant improvement being noted since the previous review as soundly affirmed by the VCI-3month (Figure 4). Throughout the month of April, vegetation greenness remained above the normal vegetation greenness threshold as measured by the VCI-3month depicting the prevalent very good conditions. The observed vegetation condition could purely be attributed to the previous good Short Rains season coupled with the enhanced rainfall received since the timely onset of the Long Rains across majority of the counties resulting to massive vegetation regeneration. Consequently, dense canopies were thus evident over most areas whose robust health was further aided by below average land surface temperatures. Notably, all counties and their respective sub counties recorded above normal vegetation greenness over the period under review.

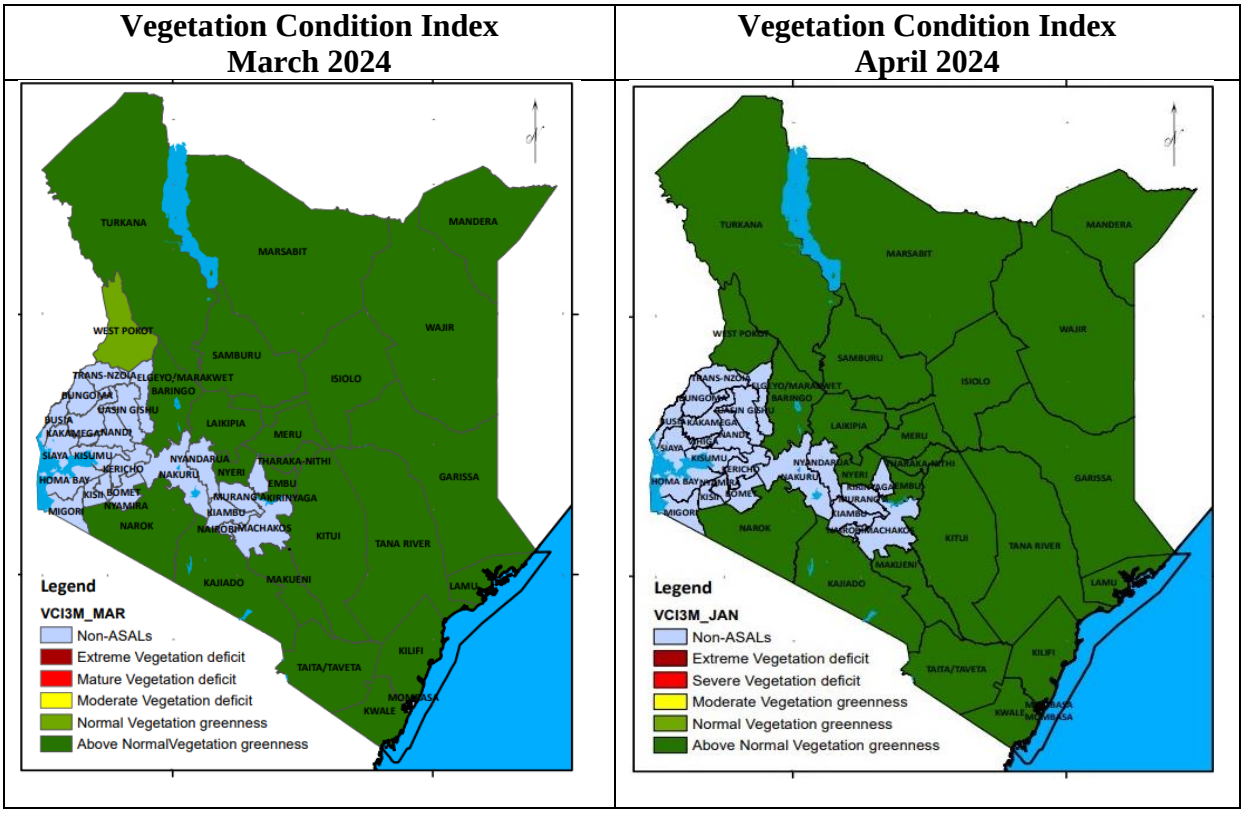

Figure 4: Maps Illustrating Vegetation Condition Improvement from March to April 2024

Table 1: Vegetation Condition Index (VCI), April 2024

Category	County	Sub Counties (No)
Extreme	(0)	(0)
Severe Vegetation Deficit	(0)	(0)
Moderate Vegetation Deficit	(0)	(0)
Normal Vegetation Greenness	(0)	(6) Baringo (Mogotio, Baringo South, Tiaty), Laikipia (Laikipia West), Turkana (Turkana East), West Pokot (Kacheliba)
Above-normal Vegetation Greenness	(23) Baringo, Mandera Wajir, Marsabit, Garissa, Embu, Kitui, Makueni, Meru, Nyeri, Kilifi, Kwale, Lamu, Narok, Isiolo, Turkana, Garissa, Tana River, Kajiado, Samburu, Taita Taveta, Laikipia	(107) Baringo (Central, North, Eldama Ravine), Mandera (South, North, East, Lafey, Banisa and West), Wajir (Tarbaj, North, South, West, Eldas and East), Marsabit (North Horr, Saku, Laisamis, Moyale), Garissa (Ijara, Lagdera, Fafi, Balambala, Township, Daadab), Embu (Manyatta, Mbeere North, South and Runyenjes), Kitui (Central, East, Rural, South, West, Mwingi Central, Mwingi North, Mwingi West) Makueni (Kaiti, Kibwezi West, Kilome, Makueni, Mbooni, Kibwezi East), Meru (Buuri, Central-Imenti, Igembe Central, Igembe North, Igembe South, North Imenti, South Imenti, Tigania East, Tigania West), Nyeri (Kieni, Mathira, Mukurweini, Nyeri Town, Othaya, Tetu), Kilifi (Kilifi North, Kilifi South, Malindi, Rabai, Ganze, Kaloleni, Magarini), Kwale (Kinango, Lunga Lunga, Matuga, Msambweni), Lamu (Lamu East, Lamu West), Narok (West, South, Emurua Dikirr, Kilgoris, East, North), West Pokot (Pokot South, Kapenguria, Sigor), Tharaka Nithi (Chuka, Maara, Tharaka), Turkana (Central, West, Loima, South, North), Isiolo (North, South), Tana River (Galole, Garsen, Bura), Kajiado (Central, East, South, North, West), Samburu (East, North, West), Taita Taveta (Voi, Mwatate, Taveta, Wundanyi), Laikipia (East, North)

1.3 Livestock production

1.3.1 Pasture and browse condition

The condition of forage was generally good across the counties during the period under review. (Table 2). The above average rainfall received in April following the attainment of the onset over the third dekad of March to first dekad of April coupled with below average land surface temperature promoted massive regeneration of forage.

Table 2.0: Pasture and Browse Condition, April 2024

Pasture			Browse		
Poor	**Fair**	**Good**	**Poor**	**Fair**	**Good**
		Kajiado, Kilifi, Lamu Kitui, Laikipia, Meru Makueni, Marsabit Narok, Samburu Baringo, Garissa Mandera, Wajir Taita Taveta, Embu Kwale, Isiolo, Nyeri, Turkana, West Pokot Tana River Tharaka Nithi			Kajiado, Kilifi Kitui, Laikipia, Wajir Lamu, Makueni Marsabit, Samburu, Narok, Baringo Garissa, Mandera Taita Taveta, Meru Tana River, Embu Kwale, Isiolo, Nyeri, Turkana West Pokot Tharaka Nithi

1.3.2 Livestock body condition

Significant improvement in the body condition for all livestock species was observed in all the counties ranging from fair to good (Table 3). Among the drivers of the observed body condition included: availability of quality palatable forage in desirable quantities along the normal grazing zones within household vicinity coupled with considerably reduced trekking distance to water sources. Comparatively, the observed livestock body throughout the month of April was normal to above normal compared to this time of the year.

Table 3.0: Livestock Body Condition, April 2024

Cattle			Goats/Sheep		
Poor	**Fair**	**Good**	**Poor**	**Fair**	**Good**
	Lamu Turkana West Pokot Tana River Tharaka Nithi	Kajiado, Kilifi, Kitui, Makueni Meru, Samburu Narok, Baringo Mandera, Wajir Taita Taveta Kwale, Marsabit Embu, Garissa Laikipia, Nyeri, Isiolo		Lamu Turkana	Kajiado, Kilifi, Kitui Makueni, Meru, Narok Samburu, West Pokot Baringo, Mandera Taita Taveta, Wajir Tana River, Kwale Tharaka Nithi, Isiolo Marsabit, Embu, Nyeri, Garissa, Laikipia

1.3.3 Milk production

Increase in milk production was reported in 57 percent of the counties with the remaining 43 percent reporting a stable trend. The increase is attributable to high rates of kidding and lamping in small stock and calving in cattle plus improved livestock body condition due to stable forage regime and low morbidity rates. (Table 4). The production level over the reference period was above the usual seasonal range in approximately 61 percent of the counties and at par with the normal level in about 39 percent of the counties. Samburu and Embu recorded the lowest production of 0.5 and 0.8 litres among the Arid and Semi-Arid counties in that sequence. Noteworthy, mortalities witnessed over the previous seasons as a result of drought and floods still had a bearing in the production levels witnessed over the current season.

Table 4.0: Milk production, April 2024

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

1.3.4. Livestock diseases

Suspected cases of foot and mouth disease (FMD) was reported in Huhoini (Igwamiti ward, Laikipia West sub county), Siana and Nkareta wards in Narok West and Narok North sub counties and Lelan in Pokot South sub county in West Pokot county. Equally, lumpy skin disease (LSD) was reported in Riachu, Mwiyogo and Malee in Tigithi ward,of Laikipia East sub county. Alarming occurrences of camel abortions were reported in Maalimin and Dujis locations within Lagdera sub county of Garissa county and some parts of Mandera while reports of cattle deaths continue emerging from Nanighi in Garissa county and the cause is yet to be established.. Rift Valley Fever (RVF) continue to be controlled inin Marsabit county with cases of tsetse flies among the large stock being noted in the plains of North Horr.

1.3.5 Cattle prices

Improving to a stable trend in the market price of cattle was reported in estimated 82 percent of the ASAL counties across April (Table 5). However, decline in price was recorded in Turkana, Samburu, Narok and Tharaka Nithi attributable to market surplus as a result of the livestock being within the homesteads and therefore readily disposed coupled with destruction of access roads by floods thus limiting market access for competitive prices. On the other hand, the positive trend reported in majority of the areas was due to the improved cattle body condition. The prevailing cattle market price was above the usual seasonal price in all counties except in Taita Taveta whose reported price was at par with the long-term average. Above average cattle price was as a consequence of the continuous improvement in the body condition of the species driven by better rangeland conditions since the previous short rains season.

Table 5.0: Cattle prices, April 2024

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

1.3.6 Goat Prices

Save for Turkana, Samburu, Taita Taveta and Tharaka Nithi that reported a negative trend in the price of goat attributed to over supply to markets driven by increased food needs at the household level over the April holiday and damage of road and market infrastructure,however the trend remained stable and improving across the ASAL counties(Table 6). Price positivity in the aforementioned counties was driven by improved goat body condition, low market volumes and high demand for utilization during the festive period. The prevailing market price of goat across all the counties was above the normal prices for the period and that could be attributed to sustained improvement in the body condition. Based on the current demand-supply dynamics and the hoarding practices by pastoralists as a result of the good rangeland conditions; the price is projected to remain above the seasonal ranges for at least two months.

Table 6.0: Goat prices, April 2024

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

1.4 Crop production

Agricultural activities entailing food and horticultural crops production usually take place in the Agro-pastoral, Coastal Marginal Agriculture, South East Marginal Agriculture clusters. However, within the other clusters, a notable proportion of households practice crop production along the

riverine areas of River Tana, Daua, Turkwel among others. The summary table below illustrates the situation across the ASAL counties.

Table 7.0: Current status of crop production

Cluster	Counties	Current state of crop production
PNE	**Tana River**	The enhanced rainfall had resulted to flooding in the county with significant proportion of the cropland remaining submerged in water hence reducing the area under crop production. Irrigated crops in the major irrigation schemes were at various vegetative growth stages.
SEMA	**Kitui**	Main crops (millet, cowpeas, green grams, sorghum, and maize) planted earlier in the season were at weeding stage and generally in good condition.
	Makueni	Crops were at germination to knee high stage and in good condition. However, crops in parts of Kibwezi East and Kibwezi West sub counties were experiencing moisture stress following poor distribution of rains in the area. Infestation of invasive weeds was also hindering farming activities especially in Marginal Mixed Farming livelihood zone.
	Meru	Leaching in the low-lying areas had led to stunting of maize and yellowing of beans.. Poor crop performance was being experienced in parts of Tigania with the beans and maize being at the vegetative stage.
Agro-pastoral	**Baringo**	Flooding of farms was reported in Sandai, Barwessa, Kabutiei and Kapluk locations. Acreage under crop production was anticipated to reduce further due to the expected further flooding.
	Laikipia	Maize was at germination stage to knee high, beans at germination stage to four leaf stage and potatoes at germination stage to tuber initiation stage. High cost of farm inputs at the stockist and high cost of casual labour were major constraints to optimal production.
	Narok	Crops in the Mixed Farming Livelihood Zone were at knee high stage with the condition of maize and beans being fair to good. The ongoing

		flooding had led to extreme loses especially along the irrigation schemes. About 60-80 percent of the crop is submerged with roughly 20-50 percent being washed away in these areas.

1.4.1 Maize prices

Generally, the price of maize was stable and on reducing trend as result of good harvest from the previous short rains season.. Factors promoting price decline ranged from injection of more supplies to local markets by traders that were sourcing from markets adjacent to the respective counties, bumper harvests following a good short rains season, decline in fuel pump prices hence reduced transportation costs to appreciation of the Kenyan Shilling however destruction of roads by floods had some slight impact on markets due to limited access. .

Table 8.0: Maize prices, April 2024

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

1.5 WATER ACCESS

1.5.1 Access to water for households

The distance to household water sources remained stable and on improving trend across the counties . The decline in trekking distance could be attributed to improved water availability in facilities adjacent to households following the significant recharge that took place. Currently, the

distance averages 4.7 kilometres compared to 5.5 kilometres previously among the Arid counties. Mandera county reported the longest distance of 8.2 kilometres while Isiolo recorded the shortest distance of 1.7 kilometres. In relation to the semi-arid counties, the distance currently averages 2.7 kilometres compared to 3.8 kilometres across March. The longest distance of 5.6 kilometres among the semi-arid counties was recorded in Lamu while the shortest of 1.1 kilometres was reported in Kilifi. The prevailing trekking distance in 70 percent of the counties was below the usual seasonal range and at par with the long-term average in four counties as illustrated in table 9. On the other hand, lower than normal trekking distance was boosted by sustained recharge of water facilities from the previous short rains season into the current long rains season.

Table 9.0: Distance from Households to Main Water Sources, April 2024

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

1.5.2 Access to water for livestock

Livestock trekking distances from grazing areas to water sources remained stable across ASAL counties, showing a positive trend due to enhanced long rains. In arid counties, Mandera reported the longest trekking distance at 9.2 kilometers whereas Tana River County having the shortest at 2.0 kilometers. In semi-arid counties, trekking distances ranged from 2.0 kilometers to 6.5 kilometers, with Lamu reporting the longest and Tharaka Nithi the shortest distances. The improved livestock access to water sources is attributed to the successful performance of the current long rains in 2024.

Table 10.0: Distance from Livestock Grazing area to Main Water Sources, April 2024

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

1.6 Terms of trade

Terms of trade were stable and favorable across ASAL counties. Improved terms of trade is as result of stablising livestock prices against the reducing maize prices as result of good harvest from the previous season.. T

Table 11.0: Terms of Trade, April 2024

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

1.7. Health and nutrition

Improvement in the nutrition situation was noted across the ASAL counties (Table 12). Among the notable drivers cited for the observed positive trend included: improved access to milk for consumption and stabilized food security situation at the household level and improved hygiene and sanitation practices. Nutrition situation deteriorated in West Pokot and Mandera as a consequence of non-food related drivers such as increased morbidity rates for diarrhea, malaria and other water borne diseases and poor childcare practices. Overall, the reported malnutrition rates remained below the normal ranges in approximately 65 percent of the ASAL counties but outside the usual ranges in roughly 35 percent of the counties. The positive situation could be attributed to the general improvement in food security across most ASAL counties due to improved crop and livestock productivity.

Table 12.0: Children at risk of malnutrition (MUAC), April 2024

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

2.0 Drought phase classification

Based on the range of early warning indicators monitored through the drought early warning system, all the 23 ASAL counties were classified to be at the 'Normal' phase with a stable to improving trend as shown in table 13.

Table 13.0: Drought phase classification, April 2024

Drought status	Trend		
	Improving	Stable	Worsening/ Deteriorating
Normal	Isiolo, Samburu, Tharaka Nithi, Turkana	Baringo, Embu, Garissa, Kajiado, Kilifi, Kitui, Kwale, Laikipia, Lamu, Makueni, Mandera, Marsabit, Meru, Narok, Nyeri, Taita Taveta, Tana River, Wajir, West Pokot	
Alert			
Alarm			
Emergency			
Recovery			

3.0 Recommendations

Table 14: Priority Recommended Interventions

No.	Sector	Intervention
1.	**Food and safety nets**	Food assistance to households displaced by floods and scaling up shock responsive cash transfers targeting the population categorized under IPC phase 3++ as a consequence of losing livelihoods during the historic prolonged drought across the ASAL counties.
2.	**Coordination**	Support to County Steering Groups (CSGs) to effectively coordinate floods response activities and implementation of resilience strengthening initiatives through convening regular meetings, monitoring and reporting.
3.	**Livestock sector**	Conduct restocking exercise targeting areas that reported high mortality rates and vaccination drives against diseases associated with wet conditions such as Rift Valley Fever. Improving access to extension services

4.	**Water sector**	Rehabilitation and maintenance of water facilities; Provision of water treatment tabs; and Procurement and distribution of water storage tanks for roof water harvesting.
5.	**Peace and security sector**	Facilitating intra/inter-community peace dialogues and resource-use agreements; Coordination of peace and security activities in conflict prone counties.
6.	**Education sector**	Rehabilitation of infrastructure destroyed by floods while promoting hygiene and sanitation practices in learning institutions.
7.	**Health and nutrition sector**	Promotion of hygiene and sanitation activities within high risk communities and managing malnutrition through supply of essential nutrition commodities (Ready-to-Use Therapeutic Food – RUTF and Ready-to-Use Supplementary Food-RUSF).

Table 15: Vegetation Condition Index (VCI-3 month) as at 30th April, 2024

County	**Sub County**	**VCI-3 month as at 31st Mar 2024**	**VCI-3 month as at 30th April 2024**	**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	52.17	50.68	Vegetation greenness remained above normal across three Sub counties while Mogotio, Tiaty and Baringo South recorded normal vegetation greenness just like the previous month.		
	Central	76.35	70.16			
	North	57.05	52.05			
	South	45.15	43.01			
	Ravine	79	78.2			
	Mogotio	41.61	40.92			
	Tiaty	46.57	42.53			
Mandera	County	87.45	77.13			
	Lafey	89.3	74.69			

	North	85.68	74.66	Similar to the previous month, vegetation greenness remained above normal across all the Sub counties.
	Banissa	65.85	52.15	
	West	81.42	79.13	
	South	107.51	99.17	
	East	81	67.2	
Turkana	County	57.27	68.48	All the Sub counties recorded above normal vegetation greenness except Turkana East whose vegetation condition was within the normal band just like the previous month.
	East	37.39	41.88	
	South	51.16	54.7	
	Loima	70.39	75.66	
	Central	55.7	62.91	
	West	70.85	78.14	
	North	54.73	67.32	
Marsabit	County	73.77	72.44	Similar to the previous month, vegetation greenness remained above normal across all the Sub counties.
	Laisamis	89.18	77.27	
	Moyale	77.46	73.17	
	North Horr	62.34	61.79	
	Saku	106.88	87.15	
Wajir	County	86.77	78.3	Stability in the condition of vegetation was observed over April with the vegetation greenness being above normal across the respective Sub counties.
	Tarbaj	90.03	82.69	
	North	96.31	89.58	
	South	76.1	76.82	
	West	98.17	77.64	
	Eldas	89.42	76.5	
	East	89.64	80.25	
Samburu	County	74.55	75.74	All the Sub counties reported above normal vegetation greenness with a slight shift in the VCI-3month values from those recorded previously across the County.
	East	76.88	76.03	
	North	78.08	81.07	
	West	52.52	51.63	
Garissa	County	79.6	76.09	Stability in the condition of vegetation was witnessed in April with the vegetation greenness being above normal across all sub counties.
	Balambala	76.42	71.39	
	Township	81.69	74.42	
	Ijara	91.79	91.85	
	Fafi	78.76	75.07	
	Lagdera	84.58	79.61	
	Dadaab	65.29	62.69	
Isiolo	County	92.63	78.12	Similar to the previous month, vegetation greenness remained above normal across all the Sub counties.
	North	98.9	85.73	
	South	83.05	75.18	
Tana River	County	68.79	70.07	

	Bura	71.87	67.15	Notable improvement in the condition of vegetation was witnessed in April with the vegetation greenness being above normal.
	Galole	59.43	65.19	
	Garsen	72.03	75.16	
Kajiado	County	88.12	85.87	The county reported above normal vegetation greenness with a significant improvement being witnessed in Kajiado North.
	Central	89.13	81.08	
	East	87.46	79.90	
	North	87.1	95.47	
	South	82.43	74.63	
	West	92.48	87.71	
Embu	County	76.54	77.36	Similar to the previous month, vegetation greenness remained above normal across all the Sub counties.
	Manyatta	84.41	90.32	
	Mbeere North	74.43	75.22	
	Mbeere South	72.07	72.66	
	Runyenjes	89.26	93.45	
Kitui	County	64.36	65.82	Above normal vegetation greenness was observed across all the Sub counties.
	Central	81.69	83.2	
	East	61.61	60.15	
	Rural	78.1	76.8	
	South	67.05	68.09	
	West	73.54	69.17	
	Mwingi Central	56.62	55.77	
	Mwingi North	57.42	53.54	
	Mwingi West	76.54	71.62	
Makueni	County	85.85	81.31	Similar to the previous month, vegetation greenness remained above normal across all the Sub counties. Significant regeneration was witnessed in Kaiti.
	Kaiti	93.96	97.18	
	Kibwezi East	88.49	75.12	
	Kibwezi West	79.99	76.18	
	Kilome	90.26	91.53	
	Makueni	83.15	80.79	
	Mbooni	89.33	87.47	
Meru	County	82.12	78.28	Similar to the previous month, vegetation greenness remained above normal across all the Sub counties.
	Buuri	85.6	86.54	
	Central-Imenti	79.26	80.68	
	Igembe Central	79.63	75.57	
	Igembe North	90.98	85.16	
	Igembe South	70.63	74.49	
	North Imenti	78.45	79.18	
	South Imenti	88.87	95.4	
	Tigania East	74.48	75.42	
	Tigania West	83.75	80.69	
Nyeri	County	81.67	88.57	

	Kieni	78.74	83.61	Similar to the previous month, vegetation greenness remained above normal across all the Sub counties.
	Mathira	76.7	85.93	
	Mukurweini	89.47	92.14	
	Nyeri Town	91.9	82.75	
	Othaya	89.2	94.36	
	Tetu	86.95	90.26	
Kilifi	County	70.53	71.39	Above normal vegetation greenness was observed across all the Sub counties.
	Ganze	66.22	72.27	
	Kaloleni	68.79	65.07	
	Kilifi North	71.22	70.55	
	Kilifi South	60.73	58.18	
	Magarini	72.75	71.22	
	Malindi	72.15	77.65	
	Rabai	76.41	76.94	
Kwale	County	83.72	82.93	Similar to the previous month, vegetation greenness remained above normal across all the Sub counties.
	Kinango	83.3	81.46	
	Lunga Lunga	85.51	84.68	
	Matuga	84.35	82.39	
	Msambweni	78.37	75.84	
Lamu	County	101.23	102.72	Similar to the previous month, vegetation greenness remained above normal across all the Sub counties.
	Lamu East	107.48	109.23	
	Lamu West	97.61	99.19	
Taita Taveta	County	85.87	82.51	Similar to the previous month, vegetation greenness remained above normal across all the Sub counties. Regeneration in Voi was fair due to the low amount of rainfall received.
	Mwatate	90.62	86.36	
	Taveta	98.9	92.4	
	Voi	77.57	78.49	
	Wundanyi	102.79	97.82	
Narok	County	87.95	88.6	Above normal vegetation greenness was observed across all the Sub counties.
	Emurua Dikirr	95.74	91.88	
	Kilgoris	82.7	79.05	
	Narok East	88.33	82.56	
	Narok North	75.04	76.92	
	Narok South	92.41	96.18	
	Narok West	92.2	86.83	
West Pokot	County	48.86	51.49	Similar to the previous month, vegetation greenness remained above normal in the Mixed Farming Livelihood Zones of Pokot South and West while Pokot North and Central reported normal vegetation greenness just like the previous month.
	Kacheliba	39.98	46.3	
	Kapenguria	50.15	53.61	
	Pokot South	72.95	77.12	
	Sigor	49.7	53.28	
Tharaka Nithi	County	67.27	63.11	
	Chuka	81.19	78.36	

	Maara	83.13	87.22	Similar to the previous month, vegetation greenness remained above normal across all the Sub counties.
	Tharaka	56.95	51.98	
Laikipia	County	61.36	56.33	Above normal vegetation greenness was observed across all the Sub counties.
	Laikipia East	69.29	68.14	
	Laikipia North	64.21	61.76	
	Laikipia West	52.2	42.79	

Table 16.0: 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 condition	Livestock production Crop production
Access	Terms of trade (goat/maize) Milk consumption Distances to water	Markets 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 16). The combined analysis from all four indicator groups then determines the particular drought phase: Normal, Alert, Alarm, Emergency or Recovery (Figure 5). Identifying the correct drought phase helps to guide the most appropriate response for that stage in the drought cycle.

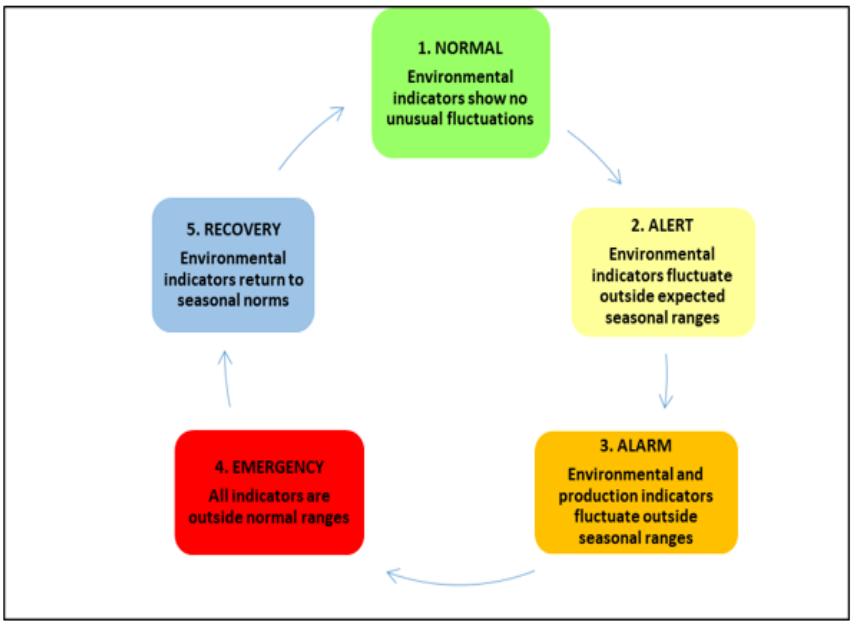

Figure 5: Drought Cycle for Phase Classification