NATIONAL DROUGHT MANAGEMENT AUTHORITY

National Drought Early Warning Bulletin

NOVEMBER 2022

1. Drought situation overview

The drought situation continued to deteriorate in **twenty-one (21)** of the 23 ASAL counties. This is attributed to the four failed consecutive seasons and late onset and poorly distributed 2022 short rains season. The number of people in need of food assistance stands at 4.35 million currently, and the impacts of the anticipated short rains 2022 is expected to lead to increase or decrease of these numbers. Fourteen **(14)** counties namely; Laikipia, Marsabit, Garissa, Isiolo, Kilifi, Kwale, Samburu, Tana River, Tharaka Nithi, Turkana, Wajir, Kitui, Kajiado and Mandera are classified under **Alarm** drought phase, seven **(7)** counties including Embu, Narok, Taita Taveta, Makueni, Meru, Nyeri and Lamu are in the **Alert** drought phase. The remaining two **(2)** counties including Baringo and West Pokot 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. *Figure 1.0 shows drought phase classification.*

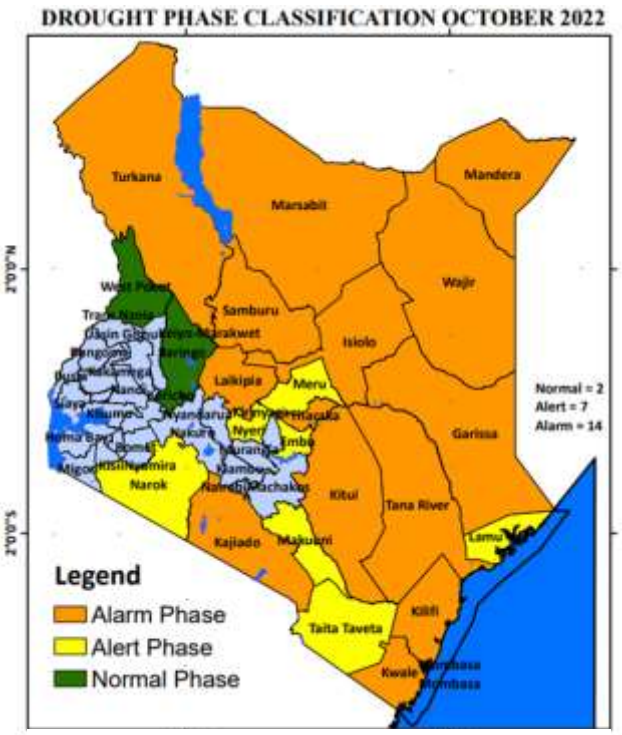


Figure 1.0: Drought Phase Classification

1.1 Drought observed indicators

1.1.1 October Rainfall Performance

Analysis of the October 2022 monthly rainfall indicates that several parts of the ASALs counties experienced depressed rainfall. The Pastoral North West (PNW) clusters received 50% of the October long term mean (LTM). The Pastoral North East (PNE) counties including; Mandera, Wajir, Isiolo, Tana River and parts of Garissa received less than 25% of the October LTM. The South East Marginal Agriculture (SEMA) counties; Tharaka Nithi, Embu, Kajiado, Meru, Makueni and Kitui counties also received very minimal rainfall with Kajiado and Taita Taveta counties receiving less than 5%. The Coast Marginal Agriculture (CMA) counties; Kwale, Kilifi and Lamu counties received little rains. Lamu County received moderate rainfall between 51 – 75 %. Some parts of Agro-Pastoral (AGP) cluster; Baringo and West Pokot received off season September-November (SON) rainfall between 76% to 100% of the October LTM, with some areas especially Pokot south receiving 101 – 110 LTM of the October rainfall.

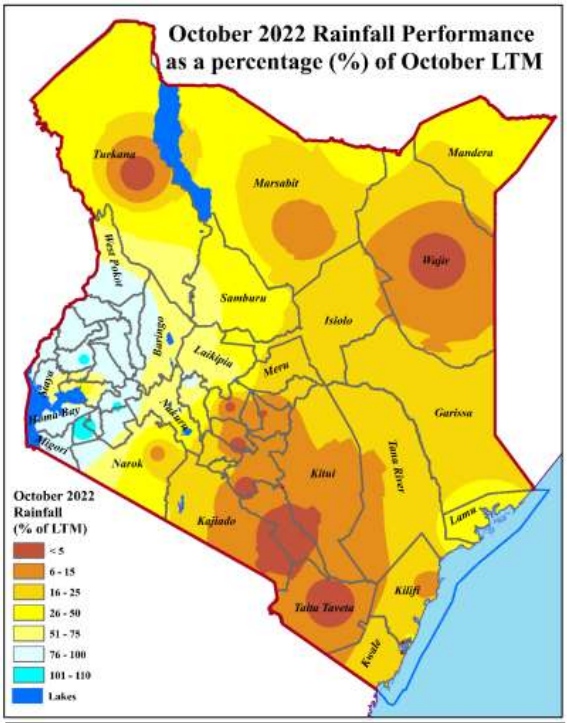


Figure 2.0. October 2022 Rainfall Performance

Figure 2.0. Shows rainfall performance.

1.1.2 Rainfall outlook for November.

The rainfall outlook for the month of November is illustrated in figure 2. Most ASAL counties in the following clusters; PNE, SEMA, AGP and CMA livelihood zones including; Marsabit, Samburu, Isiolo, Wajir, Mandera, Garissa, Meru, Kitui, Tana River, Lamu, Kilifi, Kwale, Taita Taveta, Makueni, Tharaka Nithi, Embu and Kajiado are forecasted to receive **increased probability of depressed rainfall.** Parts of PNW, SEMA and AGP including; Turkana, Samburu, Laikipia, Nyeri, Embu, Kajiado, West Pokot, Baringo and Narok are forecasted to recieve **depressed** rainfall during the month of November. Other spots in arid and semi-arid counties are likely to experience typically very dry conditions. These includes; parts of Kitui and Tana River, central parts of Isiolo County and parts of Kilifi and Taita-Taveta counties. Figure 3.0. Shows rainfall forecast for November 2022.

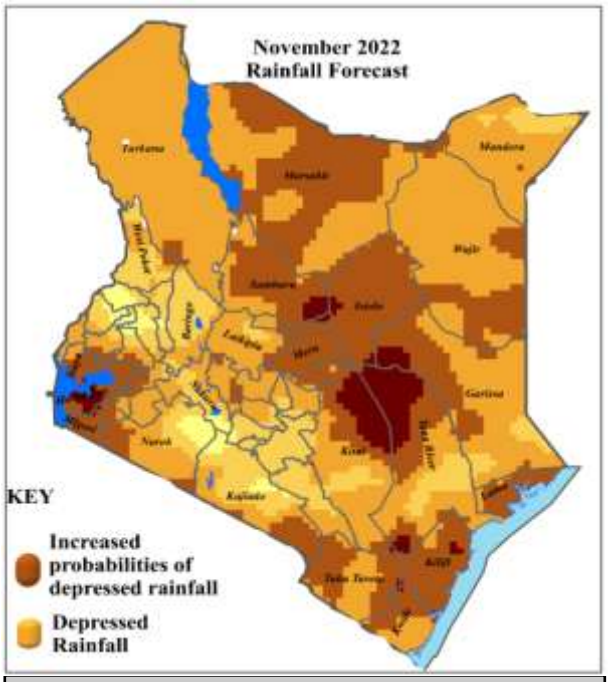


Figure 3. November 2022 Rainfall forecast

1.2 Vegetation condition

Figure 3 considers the vegetation condition index (VCI) in October 2021 and October 2022. Generally, the vegetation condition in 2021 was better than that of 2022 same period.

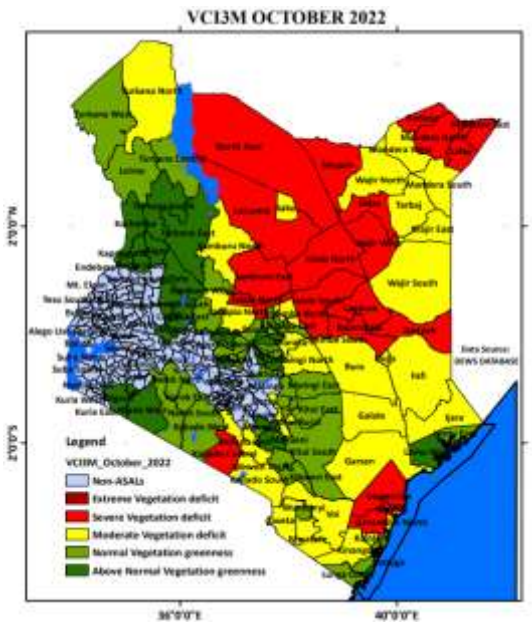
October 2021	October 2022
	

Figure 3: Maps comparing Vegetation Condition (VCI) October 2021/2022

The month of October 2022 indicated a slight improvement in vegetation condition in some parts of the ASALs. The slight improvement is associated with off-season showers of September October November (SON) season mostly in the western parts of Kenya, Turkana, Baringo and West Pokot counties stretching all the way to Narok and Kajiado counties. **None** of the county/sub county was in **Extreme** vegetation deficit. The following four **counties (4)**; Isiolo, Mandera, Kilifi and Marsabit are in **Severe** vegetation deficit. The following **eight (8**) counties including; Wajir, Samburu, Garissa, Tana River, Kajiado, Laikipia, Kwale and Taita Taveta are in **Moderate** vegetation deficit hence close monitoring and contingency planning. The following **seven** (7) counties including; Turkana, Tharaka Nithi, Kitui, Makueni, Meru, Nyeri and Lamu recorded **Normal** vegetation greenness. The following four (4) counties including; Baringo, West Pokot, Embu and Narok recorded Above normal vegetation greenness. The current vegetation condition in October 2022 is worse as compared to the same period in October 2021 as shown in

(Figure 2). A summary of the vegetation condition across ASAL counties as at end of October 2022 is provided in Figure 1. The situation for each county disaggregated by sub-county is provided in Table1.

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

Category	County	Sub Counties (No)
Extreme		
Severe vegetation deficit	**(4)** Isiolo, Mandera, Kilifi, Marsabit	(18) Wajir (West, Eldas), Samburu (East), Marsabit (Laisamis, Moyale, North Horr), Mandera (Lafey, North, Banissa), Kilifi (Magarini, Malindi, Ganze), Kajiado (Central), Isiolo (North, South), Garissa (Lagdera, Daadab, Balambala)
Moderate vegetation deficit	**(7)** Wajir, Samburu, Garissa, Tana River, Kajiado, Kwale, Taita Taveta	(31) Garissa (Township, Ijara, Fafi), Kajiado (East, South), Kilifi (Kaloleni, North), Kitui (Rural, West, Mwingi North), Kwale (Kinango), Laikipia (North) Makueni (Kilome), Mandera (West, South) Marsabit (Saku), Meru (Igembe Central, Igembe North), Nyeri (Town), Samburu (North), Taita Taveta (Mwatate, Taveta, Voi) Tana River (Bura, Galole, Garsen), Tharaka Nithi (Tharaka) Turkana (North), Wajir (Tarbaj, North, South)
Normal vegetation greenness	**(8)** Turkana, Laikipia Tharaka Nithi, Kitui, Makueni, Meru, Nyeri, Lamu	(36) Embu (Mbeere South), Kajiado (North, West), Kilifi (South, Rabai), Kitui (Kitui Central, Kitui East, Kitui South, Mwingi Central, Mwingi West), Kwale (Lunga Lunga, Matuga) Laikipia (East), Lamu (East), Makueni (Kaiti, Kibwezi East, Kibwezi West) Meru (Central Imenti, Igembe South, North Imenti, Tigania East, Tigania West), Nyeri (Kieni, Mathira, Mukurweini) Samburu (West) Taita Taveta (Wundanyi) Tharaka Nithi (Chuka, Maara), Turkana (Loima, Central, West) Wajir (East), Narok (East, North, South)
Vegetation greenness Above normal	**(4)** Baringo, West Pokot, Embu, Narok	(24) Baringo (Central, North, South, Eldama ravine, Mogotio, Tiaty) Embu (Runyenjes) Kwale (Msambweni), Laikipia (West), Lamu (West), Makueni (Makueni, Mbooni) Meru (Central Imenti, South Imenti), Nyeri (Othaya, Tetu), Turkana (South, East), West Pokot (Kacheliba, Kapenguria, Pokot South, Sigor) Narok (Emurua Dikirr, Narok West)

1.3 Livestock production

1.3.1 Pasture and browse condition

The state of pasture and browse in most of the arid and semi-arid counties remained poor as shown in Table 2. The current pasture and browse condition are below normal as compared to

normal years with no improvement realized when compared to the previous month. The current pasture and browse condition would not last for long due to high concentration of livestock in the grazing areas. Pasture and browse deteriorated to Fair condition in West Pokot, Lamu and Baringo which were in good state during the last month.

Table 2.0: Pasture and browse condition, October 2022

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

1.3.2 Livestock body condition

The current livestock body condition displayed poor and fair conditions in most of the arid and semi-arid counties. Generally, the current body condition of most livestock is below normal in comparison to similar periods during a normal year. Consequently, 65 percent of counties reported poor livestock body condition for cattle while 56 percent of counties reported poor livestock body condition for goats as shown in Table 3

Table 3.0: Livestock body condition, October 2022

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

1.3.3 Milk production

Milk production during the month under review was on a decreasing trend as compared to the previous month of September in most of the counties. Only Narok County recorded an improving trend. Persistent dry spell period being experienced across the ASAL region led to poor pasture condition hence low milk production. The current milk production status is below average as compared to normal year in 20 of the 23 counties. Makueni and West Pokot counties recorded above LTA. Milk production trends in the 23 ASAL counties is presented in table 4.0.

Table 4.0: Milk production, October 2022

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

NB: Turkana had zero readings

1.3.4 Cattle prices

69 percent of the counties recorded cattle prices below normal with 11 counties reporting worsening trend. The current cattle prices are below normal in most of the counties in comparison to similar periods during a normal year. However; Garissa, Tana River, Kwale and Lamu counties reported above normal LTA but with decreasing trend due to deteriorating pasture and browse conditions. The following counties including; Isiolo, Kilifi, Kitui, Kwale, Narok, Taita Taveta, Tana River, Kajiado, Laikipia, Makueni and Marsabit reported a worsening trend as illustrated in Table 5.

Table 5.0: Cattle prices, October 2022

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

1.3.5 Goat Prices

Goat prices in all the ASAL counties were below LTA with 56 percent of counties recording below LTA goat prices with a stable and worsening trend except for Lamu which recorded an improvement trend. Consequently, 10 counties are depicting worsening trend due to the deteriorating pasture and browse conditions.

Table 6.0: Goat Prices, October 2022

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

1.4 Crop production

CMA counties: In Kilifi County, few farmers were still harvesting maize, green grams and cowpeas during the month under review. In some areas, in Kwale County, harvesting of the seasonal crops was complete with harvests having been realized only in the mixed farming livelihood zone while the livestock farming livelihood zone posted nil harvests.

SEMA counties: In Kitui County, land preparation had started in few farms in anticipation of the 2022 short rains. In addition to rain-fed cropping, farmers along main rivers (Athi, Tana, Tiva and Thua) had horticultural crops that were at various stages of development. In Makueni county, the farms were clear and farmers were busy preparing them in anticipation of the October-November-December short rains season. In addition to rain-fed cropping, farmers along main rivers (Athi, Kikuo, Kaiti and Thwake) had horticultural crops that were at various stages of development. In Tharaka Nithi county, on-farm activities during the month of September were land preparation in readiness for the short rain seasonal onset.

1.4.1 Maize prices

In West pokot, the price of maize was at a worsening trend in the month under review while in the remaining counties 16 were at Stable and 6 recorded improving trend as compared to the previous month. as demonstrated in Table 7. The current maize prices are above LTA.

Table 7.0: Maize prices, October 2022

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

1.5 WATER ACCESS

1.5.1 Access to water for households

Distances to water for households in 17 counties is currently above the LTA. In comparison with the previous month, there is a general increasing trend in distance to household from water source. Arid counties distances to household water access ranged between 2.6 kilometers (km) and 7.7 km with West Pokot recording lowest and Kitui recording highest distances to household water access. Counties including; Baringo, Makueni, Narok and West Pokot showed an improving trend. 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, October 2022

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

1.5.2 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 above the LTA and on a worsening trend except for Baringo, Kajiado, Kilifi, Laikipia, Narok, Samburu and West Pokot counties which are at improving trend due to the little showers received in the respective counties. The average trekking distance for Arid counties ranged between 6.7 km and 40 kilometers(km) with Baringo recording lowest distances and Marsabit highest while the average trekking distance for semi-arid counties ranged between 3.7 km to 8.3 km with Narok recording the lowest and Kitui highest. Table 9.0. shows the trend of distances for livestock grazing area to water main source.

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

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

1.6 Terms of trade

Table 10 shows the trends in terms of trade (ToT) between the relative prices of goats and maize in ASAL counties. In most counties, ToT values are below the long-term average (LTA) displaying worsening conditions in most counties.

Table 10.0: Terms of Trade, October 2022

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

Health and nutrition

Table 11 shows the trend in the proportion of children at risk of malnutrition (MUAC) across the ASAL counties. Garissa, Kitui, Kwale, Makueni, Samburu, Turkana, West-Pokot recorded MUAC below the long-term average. This is mostly attributed to the continued reduced milk consumption at household level due to a decrease in milk production, as well as poor dietary diversity, poor child feeding practices, and reduced food intake at household level. The counties of Kwale, Samburu, Kitui, Garissa, Turkana, Kwale, Makueni, Garissa and West Pokot recorded an improvement in trend in the month under review.

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

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

2.0. Drought phase classification

Table 12 sums up the trends in drought phase classification as at the end of October 2022. Based on the range of indicators monitored above, **seven (7)** counties including Embu, Narok, Taita Taveta, Makueni, Meru, Nyeri and Lamu are in the Alert drought phase, while **two (2)** counties including Baringo and West Pokot remain in the Normal drought phase. **Fourteen (14)** counties namely; Laikipia, Marsabit, Garissa, Isiolo, Kilifi, Kwale, Samburu, Tana River, Tharaka Nithi, Turkana, Wajir, Kitui, Kajiado and Mandera are in Alarm drought phase.

During the month under review, **two (2)** counties reported an improving trend, **two (2)** counties recorded a stable trend, while **nineteen (19)** counties reported a worsening trend.

Table 12.0: Drought phase classification, October 2022

Drought status	*Trend*		
	Improving	*Stable*	*Worsening/Deteriorating*
Normal		West Pokot	Baringo
Alert	Embu,		Narok, Taita Taveta, Makueni, Meru, Nyeri, Lamu,
Alarm	Laikipia	Marsabit	Garissa, Isiolo, Kilifi, Kwale, Samburu, Tana River, Tharaka Nithi, Turkana, Wajir, Kitui, Kajiado, Mandera,
Emergency	None	None	None
Recovery			

3.0. Recommendations

3.1 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.

3.2 Livestock sector

- Provision of livestock feeds and supplements.
- Support on livestock commercial and slaughter in situ'
- Treatment and vaccination against emerging livestock diseases.

3.2 Water sector

- Scale up water trucking interventions to communities and institutions.
- Rehabilitation and maintenance of water facilities.
- Provision of fuel subsidies to motorized boreholes.
- Procurement and distribution of water storage tanks.

3.3 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).

3.4 Education sector

- Enhance hygiene promotion in learning institutions.
- Provision of food to subsidize school fees in boarding secondary schools.

3.5 Peace and security sector

- Facilitating intra/inter communities peace dialogues and resource use agreements.
- Coordination of peace and security activities in conflict prone counties.

3.6 Coordination

- Support County Steering Groups (CSGs) and Sector Technical working groups to effectively coordinate drought response activities.

ANNEXES

Table 1: Vegetation Condition Index (VCI-3 month) as at 30th October 2022

ADMINISTRATIVE UNIT		VEGETATION GREENNESS		DROUGHT CATEGORIES/REMARKS
COUNTY	**Sub County**	**VCI-3 month as at 25th Sept 2022**	**VCI-3 month as at 30th Oct 2022**	
BARINGO	**County**	63.98	72.67	The entire county and five of its sub-counties recorded Above Normal vegetation greenness which showed slight improvement when compared with the previous month of September.
	Central	66.68	76.34	
	Eldama	68.42	71.57	
	Mogotio	60.84	68.6	
	North	65.93	74.99	
	South	61.82	72.23	
	Tiaty	63.59	72.79	
MANDERA	**County**	28.02	18.54	The county recorded worsened to severe vegetation deficit from moderate vegetation condition during the last month of September. Mandera South and Mandera West were stable at moderate vegetation deficit
	Banissa	29.18	16.34	
	M East	16.19	11.24	
	Lafey	22.76	13.55	
	M North	27.51	18.93	
	M South	34.46	21.95	
	M West	28.64	22.31	
TURKANA	**County**	41.54	44.32	The county recorded a stability in vegetation greenness but remained at normal vegetation condition during the month of October. Turkana East improved to above normal vegetation greenness.
	T Central	40.4	46	
	T. East	46.91	52.39	
	T. Loima	34.69	42.08	
	T. North	31	32.84	
	T. South	53.19	57.73	
	T. West	50.65	47.45	
MARSABIT	**County**	13.52	15.61	The county remained stable at severe vegetation condition during the month of October. Saku improved to moderate vegetation greenness.
	Laisaimis	14.85	15.79	
	Moyale	13.9	16.08	
	N. Horr	13.94	15.14	
	Saku	17.93	20.23	
WAJIR	**County**	27.91	22.81	The County remained stable at moderate vegetation greenness. Wajir east and Tarbaj sub counties worsened to moderate vegetation deficit from normal vegetation greenness
	W East	38.21	26.07	
	W. Eldas	17.2	15.91	
	W. North	30.69	28.24	
	W. South	27.33	22.22	
	W. Tarbaj	40.75	28.93	
	W West	15.74	14.97	

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

ADMINISTRATIVE UNIT		VEGETATION GREENNESS		DROUGHT CATEGORIES/REMARKS
COUNTY	**Sub County**	**VCI-3 month as at 25th Sept 2022**	**VCI-3 month as at 30th Oct 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

SAMBURU	**County**	21.46	23.22	The county was stable at moderate vegetation deficit compared to last month of September. Samburu west was stable at normal vegetation greenness.
	S East	12.5	10.59	
	S. North	27.9	30.71	
	S. West	35.88	49.11	
GARISSA	**County**	27.14	23.98	The county remained stable at moderate vegetation deficit during the month under review. Ijara worsened to moderate vegetation deficit.
	Balambala	16.24	17.46	
	Daadab	22.36	18.42	
	Fafi	30.88	26.79	
	Ijara	41.69	34.04	
	Lagdera	12.35	14.67	
	Dujis	26.82	27.07	
ISIOLO	**County**	13.58	13.98	The county and all its sub-counties recorded severe vegetation deficit during the month of October. This was stable when compared to last month.
	I. North	12.3	12.7	
	I. South	15.54	15.93	
TANA RIVER	**County**	31.17	31.29	The county and all one of its sub counties recorded moderate vegetation deficit during the month of October.
	Bura	32.01	29.32	
	Galole	29.09	30.74	
	Garsen	31.76	33.32	
KAJIADO	**County**	27.5	32.54	The county recorded moderate vegetation deficit. Kajiado central maintained at severe vegetation deficit during the month of October.
	K. Central	18.35	19.58	
	K. East	23.77	29.98	
	K. North	27.55	41.84	
	K. South	24	29.76	
	K. West	37.12	42.99	
LAIKIPIA	**County**	27.32	37.63	The County recorded moderate vegetation deficit which was a stability. Laikipia West improved to above normal vegetation greenness from at normal vegetation greenness while Laikipia North improved to moderate vegetation deficit.
	L. East	24.22	37.53	
	L. North	18.1	25.7	
	L. West	46.07	60.03	
THARAKA NITHI	**County**	38.38	37.56	The county recorded normal vegetation greenness during the month under review which was a stable trend as compared to the previous month of September.
	Chuka	41.68	46.28	
	Maara	47.94	49.42	
	Tharaka	34.09	30.48	
WEST POKOT	**County**	59.31	64.25	The County and all of its sub-counties recorded above normal vegetation greenness during the month under review which was an stable when compared with the previous month of September.
	Kacheliba	57.8	61.81	
	Kapenguria	67.98	73.79	
	Pokot South	68.63	75	
	Sigor	49.21	54.3	

ADMINISTRATIVE UNIT		VEGETATION GREENNESS		DROUGHT CATEGORIES/REMARKS
COUNTY	**Sub County**	**VCI-3 month as at 25th Sept 2022**	**VCI-3 month as at 30th Oct 2022**	
EMBU	**County**	36.17	50.65	The county and all its sub-counties recorded normal vegetation greenness except Mbeere South which recorded normal vegetation greenness.
	Manyatta	35.85	52.94	
	Mbeere North	38.91	52.19	
	Mbeere South	32.93	46.84	
	Runyenjes	42.55	58.95	
KITUI	**County**	35.04	37.97	The county recorded normal vegetation greenness which was stable when compared to the previous month of September. Generally, there was improvement in vegetation greenness across the sub counties.
	Kitui Central	24.82	35.77	
	Kitui East	34.36	37.04	
	Mwingi Central	35.32	37.9	
	Mwingi North	29.87	30.31	
	Mwingi West	40.81	49.24	
	Kitui Rural	30.31	33.41	
	Kitui South	37.78	40.08	
	Kitui West	32.17	41.33	
MAKUENI	**County**	39.95	43.51	The county recorded normal vegetation greenness during the month under review which was a stable trend as compared to September.
	Kaiti	40.65	49.14	
	Kibwezi East	32.73	35.62	
	Kibwezi West	36.51	38.62	
	Kilome	25.98	34.94	
	Makueni	55.49	57.65	
	Mbooni	51.19	55.01	
MERU	**County**	38.13	39.11	The county recorded normal vegetation a stability in vegetation greenness during the month of October.
	Buuri	34.19	38.84	
	Central Imenti	56.8	53.65	
	Igembe Central	34.9	33.26	
	Igembe North	19.69	21.35	
	Igembe South	45	41.82	
	North Imenti	43.78	47.13	
	South Imenti	65.19	63.63	
	Tigania East	34.95	37.36	

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

ADMINISTRATIVE UNIT		VEGETATION GREENNESS		DROUGHT CATEGORIES/REMARKS
COUNTY	**Sub County**	**VCI-3 month as at 25th Sept 2022**	**VCI-3 month as at 30th Oct 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

	Tigania West	33.09	35.86	
NYERI	**County**	38.94	46.65	The county and three of its sub counties noted a stability at normal vegetation greenness. Mathira improved from moderate vegetation deficit to normal vegetation greenness.
	Kieni	42.17	44.44	
	Mathira	27.15	45.88	
	Mukurweini	38.54	44.96	
	Othaya	43.93	59.03	
	Tetu	45.12	54.59	
	Township	11.91	32.31	
KILIFI	**County**	25.45	18.21	The vegetation condition in the county worsened to severe vegetation deficit during the month of October from moderate vegetation deficit.
	Ganze	18.85	12.15	
	Kaloleni	33.93	22.87	
	Magarini	23.47	17.92	
	Malindi	26.7	14.86	
	Kilifi-North	38.7	26.07	
	Rabai	50.22	36.33	
	Kilifi-South	52.97	40.29	
KWALE	**County**	36.8	30.07	The county recorded worsening trend in vegetation greenness to moderate vegetation greenness from normal vegetation greenness during the month of October.
	Kinango	27.62	20.98	
	Lungalunga	52.24	42.06	
	Matuga	45.46	41.65	
	Msambweni	49.73	51.44	
LAMU	**County**	61.93	49.71	The County and one of its sub-counties recorded normal vegetation greenness which was a worsening trend when compared to the previous month of September.
	Lamu East	58.22	43.79	
	Lamu West	64.08	53.14	
TAITA TAVETA	**County**	27.5	27.65	The county and all its sub-counties recorded moderate vegetation deficit which was stable when compared to the previous month of September. Wundanyi subcounty improved to normal vegetation greenness.
	Mwatate	24.26	21.25	
	Taveta	27.96	30.13	
	Voi	27.72	27.76	
	Wundanyi	33.57	35.83	
NAROK	**County**	41.46	53	There an improvement in vegetation cover in the county to above normal vegetation greenness during the month of October.
	Narok-East	33.46	37.57	
	Emurua Dikirr	65.18	78.88	
	Kilgoris	52.98	69.62	
	Narok-North	39.72	37.97	
	Narok-South	31.83	40.68	
	Narok-West	47.59	68.62	

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) 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 several 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 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.

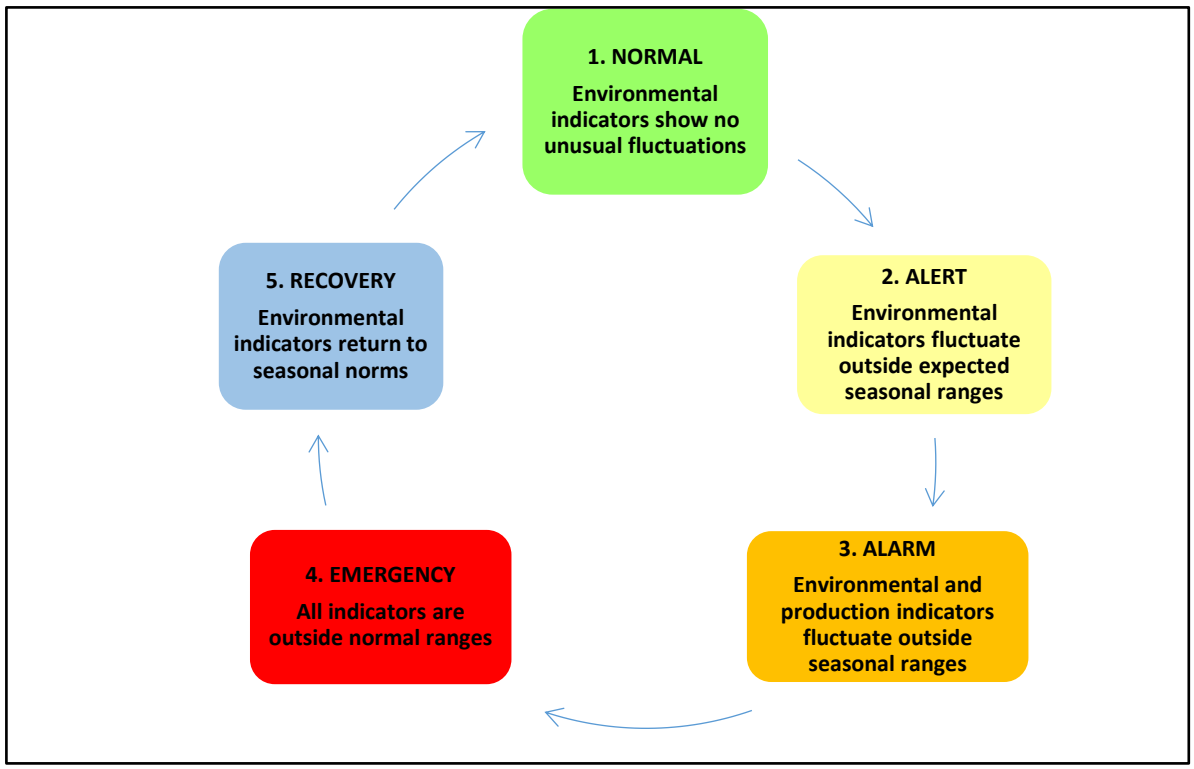


Figure 4.0: Drought Phase Classification