NATIONAL DROUGHT MANAGEMENT AUTHORITY

National Drought Early Warning Bulletin

June 2021

Drought indicators

Rainfall Performance

The month of May 2021 marks the cessation of the Long-Rains over most parts of the country except for the western and Coastal regions according to Kenya Metrological Department. During the month of May 2021, most ASAL counties received over 70 percent of average rainfall except Wajir, Garissa, Kilifi, Lamu, Kwale, Taita taveta and Tana River that received between 25-50 percent of average amounts of rainfall during the month of May as shown in Figure 1. Spatio-temporal rainfall distribution was generally uneven and poor across the ASAL counties. Figure 1 indicates rainfall performance during the month of May as percentage of long term mean(LTM).

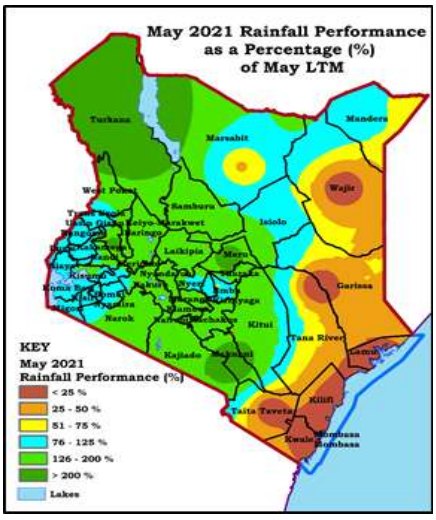


Figure 1.May Rainfall Performance

Rainfall Forecast

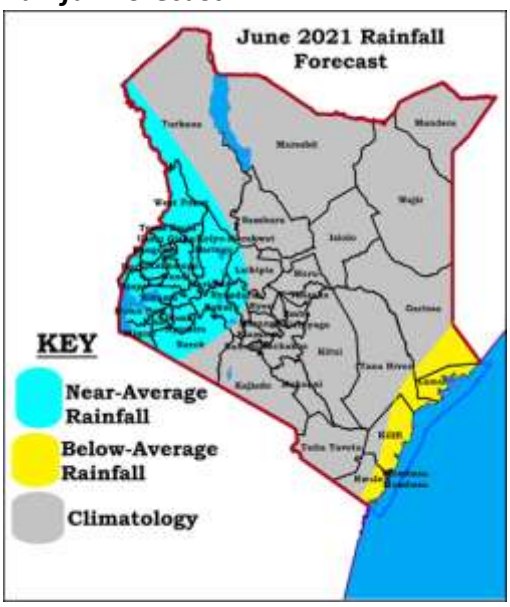


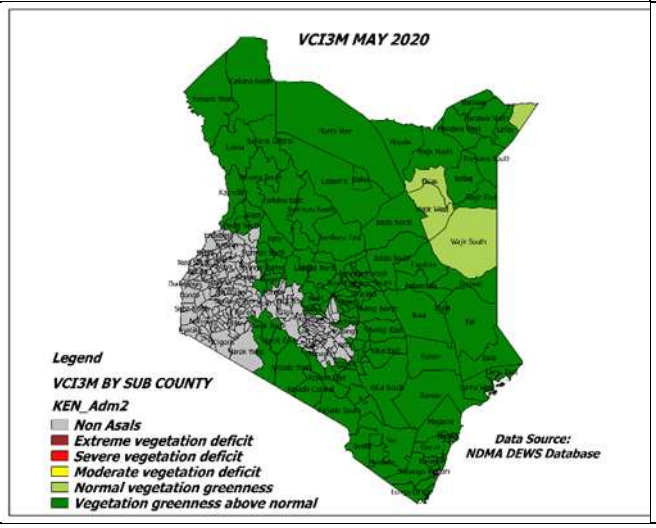
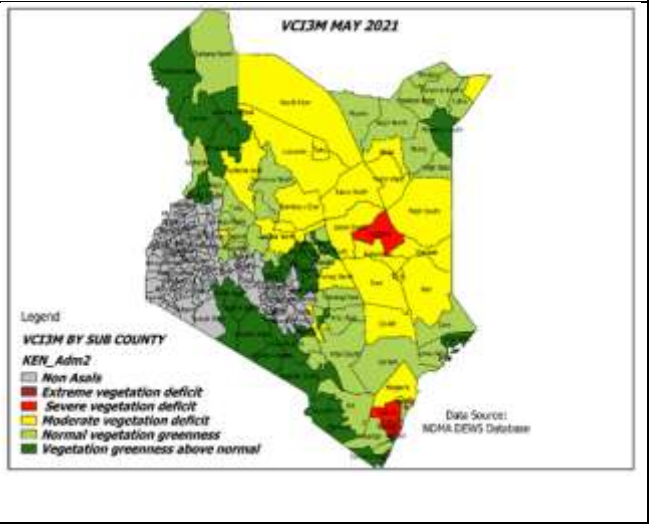
Figure 2.Rainfall forecast

According to Kenya Metrological Department (KMD), several parts of the country will be generally dry and sunny during the month of June 2021.Counties in Northwestern Region including Turkana, West Pokot and Samburu are likely to be sunny and dry with occasional rainfall expected from the third week of the month. The expected total rainfall is likely to be near the long-term average amounts for June. Counties in the Coastal strip including Tana River, Kilifi, Lamu and Kwale will likely receive occasional rainfall that is expected throughout the month. The expected total rainfall is likely to be below the long-term average amounts for June. The Highlands East of the Rift Valley counties including Nyeri, Meru, Embu and Tharaka Nithi are expected to experience occasional cool and cloudy (overcast skies) conditions with occasional light morning rains/drizzles. The expected rainfall amount are likely to be near the long term average for the month of June while the Northeastern Kenya counties including Mandera, Marsabit, Wajir, Garissa and Isiolo and Southeastern lowlands counties including Machakos, Makueni, Kitui, Taita Taveta and parts of Kajiado are likely to remain generally sunny and dry. Occasional cool and cloudy conditions are however likely to occur over some counties in southeastern Kenya especially those bordering the central highlands.

Vegetation condition

Figure 3 matches the vegetation condition index (VCI) in May 2020 with that in May 2021.When compared to similar period last year and the long-term average, the current condition of vegetation is considerably below that of May 2020.

Figure 3: Comparison of Vegetation Condition Index (VCI), May 2020 and May 2021

Vegetation Condition Index (3 Month) May 2020	***Vegetation Condition Index (3 Month) May 2021***
	

As at the end of May 2021, counties experiencing vegetation deficit as per vegetation condition index (VCI) included Marsabit, Garissa, Isiolo, Tana River, Samburu and Kilifi. The six counties experienced moderate vegetation deficit implying that the VCI values recorded in May 2021 were below normal which indicates that the rains received so far were inadequate and had not brought about vegetation regeneration to the usual ranges for the period in the six counties.

Vegetation Condition Index (VCI) status as at the end of May 2021 is summarized in Table 1. At sub county level, Rabai, Kilifi south (Kilifi County) and Lagdera (Garissa) recorded the lowest VCI values with the three sub counties currently falling in the extreme deficit band which is attributed to the poor rains received in May 2021 in those particular areas. Generally, the negative VCI trends point to poor regeneration of pasture and browse during the month of May 2021.

Table 1: Vegetation Condition Index (VCI), May 2021

Category	County	Sub Counties (No)
Severe vegetation deficit		**(3)** Lagdera (Garissa), Rabai and Kilifi South (Kilifi)
Moderate vegetation deficit	**(6)** Marsabit Isiolo Garissa Tana river Samburu Kilifi	**(22)** Marsabit (Laisaimis, Saku and North Horr), Wajir (W. South, W. Eldas and W. West), Samburu East, Garissa (Balambala, Dujis, Fafi and Daadab), Isiolo (I. North and I. South), Tana River (Bura, Galole and Garsen), Laikipia North, Kitui rural, Kilifi (Ganze, Kaloleni, Magarini and Malindi)
Normal vegetation greenness	**(7)** Baringo Kitui Kwale Laikipia Lamu Mandera Wajir	**(41)** Baringo (B. North, Eldama ravine, Mogotio, B. South, B. North and Tiaty), Mandera (Banissa, M. East, Lafey, M. North, M. South and M. West), Turkana (T. East and T. North), Marsabit (Moyale), Wajir (W. East, W. North, W. Tarbaj), Samburu (S. South and S. West), Garissa (Ijara), Laikipia (L. East, L. west), Tharaka Nithi (Tharaka), West Pokot (Kacheliba, Sigor), Kitui (K. East, K. South, K. West, Mwingi Central, Mwingi North , Mwingi West), Makueni (Kibwezi West, Makueni), Meru (Igembe North, Tigania East), Kilifi North, Kwale (Kinango, Matuga), Lamu west and Voi.
Vegetation greenness above normal	**(10)** Kajiado Makueni Narok Taita taveta Embu Nyeri (Kieni) Meru (North) Turkana West Pokot Tharaka Nithi	**(47)** Turkana (T. Central, T. South, T. West and Loima), Kajiado (K. Central, K. East, K. North, K. South, K. West) Tharaka Nithi (Chulga and Maara), West Pokot (Kapenguria, Pokot South), Embu (Manyatta, Mbeere North, Mbeere South and Runyenjes), Kitui Central, Makueni (Kaiti, Kibwezi East, Kilome and Mbooni), Meru (Buuri, Central Imenti, Igembe Central, Igembe South, North Imenti, South Imenti and Tigania West), Nyeri (Kieni, Mathira, Mukurweini, Nyeri town, Othaya and Tetu), Kwale (Lungalunga, Msambweni), Lamu East, Taita Taveta (Mwatate, Taveta and Wundanyi), Narok (N. East, N. West, N. North, N. South, Kilgoris and Emurua Dikirr)

Livestock production

In nearly all the counties, livestock production related indicators are currently fair compared to normal period. The condition is as result of slight improvement in pasture availability, both in terms of quantity and quality coupled with decrease in distances covered by livestock in search of pasture and water due to current fair water recharge.

Pasture and browse condition

The state of pasture and browse in most of the arid and semi-arid counties was generally in fair to good conditions except in Isiolo, Lamu, Kilifi, Wajir and Garissa that reported poor pasture condition as shown in Table 2.The current pasture and browse condition has slightly improved as compared to the previous month due to the fair amount of rainfall received during the month of May 2020.

Table 2.0: Pasture and browse condition, May 2021

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

Livestock body condition

The current livestock body condition is on improving trend as compared to previous month due to improvement in pasture and browse quantity and quality. Overall, the current body condition of most livestock is below normal in comparison to similar periods during a normal year. Consequently, most counties except Garissa and Marsabit reported livestock body condition as fair to good as shown in Table 3.

Table 3.0: Livestock body condition, May 2021

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

Milk production

Milk production is stable as compared to the previous month however Fourteen (14) counties including;Baringo,Garissa,kajiado,kilifi,Kitui,Kwale,Laikipia,Marsabit,Meru,Nyeri,Tharaka Nithi, Turkana, Isiolo and Wajir have milk production below LTA while six(6) counties including Embu, Lamu, Makueni, Mandera, Samburu and Tana River recorded milk production above LTA.

The below normal milk production is attributed to poor rainfall performance for the 2021 long rains season. 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 2021

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

Cattle prices

In majority of the county's cattle prices are stable and above LTA owing mainly to the fact that the state of cattle body condition has improved as compared to the previous month as illustrated in Table 5.The prevailing price is higher than the three-year average price of cattle for the month of May in about 65 percent of the ASAL counties. Mandera and Turkana counties recorded cattle price decrease by 23 and 19 percent respectively as compared to the average mean as shown in Table 4.

Table 5.0: Cattle prices, May 2021

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

Goat prices

Table 6 summarizes the trends in goat prices in ASAL counties. During the month of May , goat prices in majority of the ASAL counties were mostly above average or close to LTA except in Wajir and Nyeri counties.The goat prices have slightly increased as compared to the previous month due to improving livestock body condition.

Table 6.0: Goat prices, May 2021

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

Crop production

- March to May (MAM) long rains season were on-going across the marginal agricultural areas during the month of May and most crops planted are tussling/knee high stage with poor condition due to moisture stress as result of depressed rains. Kilifi and Kitui counties have reported poor crop condition.The late onset of the MAM rainfall season is likely to impact negatively on agricultural activities in most semi-arid counties. Consequently, farmers have been advised to plant fast-maturing crops and drought tolerant crops in areas expected to receive below-average rainfall.

Maize prices

In most counties the price of maize remained stable in May as compared to the previous month. As demonstrated in Table 7, the current maize prices are largely favourable with 12 counties recording prices that are below or close LTA however the prices of maize are increasing and thus require close monitoring.Garissa,Nyeri,Taita taveta,Wajir and Isiolo have maize prices above LTA.

Table 7.0: Maize prices, May 2021

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

Access to water for households

In comparison to the long term average, 18 counties distances to water for households is currently above the LTA .In comparison with the previous month, there is slight improvement in reduction of distance to household water source.The slight improvement in the average distances to water points for households was occasioned by the rains received during the month of May 2021 however the delayed short rains onset of the MAM season 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 2021.

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

Access to water for livestock

The trend in the distance walked 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 stable and improving across the counties. In addition, access to water for livestock in 14 counties was above long- term average attributed to the poor performance of the March April May (MAM) long rains season as shown in Table 9.0.

Table 9.0: Distance from livestock grazing area to main water sources, May 2021

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

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 all counties except Nyeri(kieni), ToT values are above the long-term average (LTA). The TOT is stable as compared to the previous month for instance, in Kajiado, Garissa, Kilifi, Tana River, the current ToT are higher than the 2016 - 2020 average for May by 56, 40, 52, 36 percent respectively. The relatively favorable situation for livestock keepers in these ASAL counties was attributed to high goat prices while maize prices has remained fairly stable.

On the other hand, terms of trade were unfavorable in Nyeri(Kieni) county where the current ToT was lower than the long-term average for May by 33 percent attributed to decrease in the sheep prices as a result of a downward shift in the body condition of goats, increase in volumes of livestock offered for sale and also a general increase in maize prices.

Table 10.0: Terms of trade, May 2021

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

Health and nutrition

Table 11 shows the trend in the proportion of children at risk of malnutrition (MUAC) across the ASAL counties. As compared to the previous month,the trend of MUAC has remained stable and on improving trend however the following counties namely; Mandera,Tana River,Marsabit Turkana and have MUAC above long term average.The observed above long term negative trend in malnutrition of the five counties was attributed to reduced milk consumption owing to decrease in milk production and fewer number of integrated health outreaches delivering essential nutrition services.

Table 11.0: Children at risk of malnutrition (MUAC), May 2021

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

Drought phase classification

Table 12 sums up the trends in drought phase classification as at end of May 2021 On the basis of the range of indicators monitored above, Eleven (11) counties; Marsabit, Mandera, Garissa, Wajir, Kilifi, Tana River, Lamu, Samburu, Kitui ,Isiolo and Laikipia are in the alert drought phase and thus twelve(12) counties including; Nyeri, West Pokot, Baringo, Embu, Kajiado, Kwale, Meru, Narok, Taita Taveta, Tharaka Nithi, Turkana and Makueni are in Normal drought phase. During the month under review, Four (4) counties reported improving trend, Twelve (12) counties recorded stable trend while seven (7) counties reported a worsening trend. The slight improvement is as result of the rains received during the month of May 2021

Table 12.0: Drought phase classification, May 2021

Drought status	*Trend*		
	Improving	*Stable*	*Worsening*
Normal	Nyeri West Pokot	Baringo Embu Kajiado Kwale Meru Narok Taita Taveta	Makueni

		Tharaka Nithi Turkana	
Alert	Lamu Mandera	Laikipia Marsabit Wajir	Garissa Kilifi Kitui Samburu Tana River Isiolo
Alarm			
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.

Water sector

- Support water trucking interventions.
- Rehabilitation and maintenance of water facilities.
- Provision of fuel subsidies to motorized boreholes
- 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).

Education sector

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

Peace and security sector

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

Coordination

- Support County Steering Groups (CSGs) to effectively coordinate drought response activities.

Table 13: Vegetation Condition Index (VCI-3 month) as at 30th May 2021

ADMINISTRATIVE UNIT		VEGETATION GREENNESS		DROUGHT CATEGORIES/REMARKS
COUNTY	**Sub County**	**VCI-3 month as at 28th Apr 2021**	**VCI-3 month as at 30th May 2021**	
BARINGO	**County**	40.09	45.9	The entire county and its sub counties recorded normal vegetation greenness in the month of May. This is attributed the ongoing MAM rainfall. Interestingly, Mogotio subcounty has improved from Moderate vegetation deficit to Normal vegetation greenness.
	Central	40.81	43.91	
	Eldama	43.51	49.44	
	Mogotio	34.9	38.31	
	North	36.17	49.57	
	South	41.17	46.43	
	Tiaty	41.17	46.0	
MANDERA	**County**	34.28	49.57	The county and its sub counties are in Normal vegetation greenness in the month of May. There was absolute improvement in the entire county form Severe vegetation deficit to Normal vegetation greenness due to ongoing MAM rainfall.
	Banissa	29.89	49.93	
	M East	23.1	35.55	
	Lafey	29.26	42.47	
	M North	32.93	52.16	
	M South	42.67	53.05	
	M West	36.88	52.96	
TURKANA	**County**	49.23	51.82	The county is in improvement in VCI for the county and four of its sub counties having recorded Above Normal vegetation greenness in the month of May. Turkana North and East recorded Normal vegetation greenness.
	T Central	67.75	57.36	
	T. East	37.97	38.79	
	T. Loima	60.58	61.91	
	T. North	36.1	41.86	
	T. South	55.79	58.83	
	T. West	56.96	62.52	
MARSABIT	**County**	33.75	32.57	The county and two of its sub counties remained at moderate vegetation deficit band. Moyale and Saku sub-counties were stable at normal vegetation greenness. This is due to small warm humid micro-climate within Saku hills and MAM seasonal onset in Moyale.
	Laisaimis	31	25.01	
	Moyale	37.68	48.59	

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

	N. Horr	34.15	32.79	
	Saku	36.44	32.01	
WAJIR	**County**	30.97	36.66	The county improved to Normal vegetation greenness in the month of May from the previous month of April.
	W East	33.46	40.39	
	W. Eldas	26.08	32.13	
	W. North	42.99	49.81	
	W. South	27.9	30.5	
	W. Tarbaj	36.17	45.5	
	W West	21.38	29.86	
SAMBURU	**County**	36.21	33.83	The county remained stable at Normal vegetation greenness in the month under review when compared to last month of April. Samburu East remained in Moderate vegetation deficit band.
	S East	27.91	27.57	
	S. North	43.82	38.93	
	S. West	43.79	41.81	
ADMINISTRATIVE UNIT				**DROUGHT CATEGORIES/REMARKS**
COUNTY	**Sub County**	**VCI-3 month as at 28th Apr 2021**	**VCI-3 month as at 30th May 2021**	
GARISSA	**County**	29.29	32.02	The county and its Sub counties remained in Moderate vegetation deficit band with Ijara sub county maintaining Normal vegetation greenness band. However, Lagdera subcounty deteriorated to severe vegetation deficit.
	Balambala	22.73	23.56	
	Daadab	25.25	28.78	
	Fafi	29.61	33.41	
	Ijara	42.25	49.93	
	Lagdera	21.71	15.89	
	Dujis	23.9	24.98	
ISIOLO	**County**	23.45	22.67	Stability in the vegetation greenness condition with entire county and its sub-counties falling in the moderate vegetation deficit in the month of May.
	I. North	24.72	24.45	
	I. South	21.52	20.00	
TANA RIVER	**County**	32.1	29.94	The county and its sub counties remained at Moderate vegetation condition in the month of May. Garsen worsened Moderate vegetation condition.
	Bura	25.02	28.89	

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

	Galole	31.92	24.34	
	Garsen	38.22	34.33	
KAJIADO	**County**	70.95	63.43	Stability noted across the county with all sub counties remaining at above normal vegetation greenness conditions in the month of May.
	K. Central	73.43	62.17	
	K. East	67.64	62.59	
	K. North	67.45	61.66	
	K. South	65.2	57.22	
	K. West	75.72	69.58	
LAIKIPIA	**County**	38.69	36.48	The county remained stable at normal vegetation greenness with Laikipia North declining from Normal vegetation greenness to moderate vegetation deficit in April to month of May.
	L. East	41.6	45.03	
	L. North	36.5	32.31	
	L. West	41.4	40.16	
THARAKA NITHI	**County**	47.49	57.05	The county is in Above normal vegetation greenness in the month under review. The situation is stable when compared to the previous month of April. Tharaka subcounty remained at normal vegetation greenness.
	Chulga	66.65	66.97	
	Maara	72.58	69.81	
	Tharaka	32.25	49.31	
WEST POKOT	**County**	43	50.93	The vegetation greenness deteriorated for both the county and its sub counties recording normal condition compared to the previous above normal. Pokot South improved from normal vegetation greenness to above normal vegetation greenness.
	Kacheliba	36.6	44.2	
	Kapenguria	51.73	58.28	
	Pokot South	51.11	64.22	
	Sigor	42.47	49.11	
EMBU	**County**	65.05	64.33	The county and its sub-counties remained stable during the month of April across all the sub-counties with vegetation greenness above normal in all parts of the county.
	Manyatta	79.61	64.57	
	Mbeere North	58.06	65.56	
	Mbeere South	60.2	61.9	
	Runyenjes	82.66	70.42	
ADMINISTRATIVE UNIT				

COUNTY	Sub County	VCI-3 month as at 28th Apr 2021	VCI-3 month as at 30th May 2021	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**	34.29	39.49	The county and most of its sub counties improved to normal vegetation greenness condition from moderate vegetation deficit in the previous month of April.		
	Kitui Central	54.01	51.04			
	Kitui East	37.42	42.87			
	Mwingi Central	33.1	38.22			
	Mwingi North	24.82	36.51			
	Mwingi West	24.82	44.04			
	Kitui Rural	37.76	30.43			
	Kitui South	32.51	38.6			
	Kitui West	64.71	42.68			
MAKUENI	**County**	59.42	51.44	The county and its sub counties recorded above normal vegetation greenness conditions. The situation is stable when the current and previous month of April and current month of May are compared.		
	Kaiti	73.55	71.55			
	Kibwezi East	73.55	51.4			
	Kibwezi West	73.55	42.32			
	Kilome	68.47	68.13			
	Makueni	52.94	43.85			
	Mbooni	62.73	60.63			
MERU	**County**	53.8	56.62	The vegetation greenness is above normal across the county and its Sub-counties except for Igembe central, Igembe south Tigania East and Igembe North which recorded normal vegetation greenness.		
	Buuri	61.61	57.08			
	Central Imenti	66.82	65.95			
	Igembe Central	43.31	57.91			
	Igembe North	35.39	37.73			
	Igembe South	46.67	66.37			
	North Imenti	67.68	70.22			

	South Imenti	78.71	72.3	
	Tigania East	48.48	46.76	
	Tigania West	48.48	57.84	
NYERI	**County**	74.98	68.99	The county and its sub counties remained stable recording above normal vegetation greenness just like the previous month of April.
	Kieni	68.12	63.64	
	Mathira	75.48	68.72	
	Mukurweini	87.55	75.43	
	Town	84.46	78.56	
	Othaya	87.2	81.71	
	Tetu	83.49	74.77	
KILIFI	**County**	27.05	27.2	Constancy in vegetation condition noted across the county and most of its sub counties recording moderate vegetation deficit Ganze and Kaloleni improved from severe vegetation deficit to moderate vegetation deficit. However, Rabai and Kilifi south sub-counties worsened.
	Ganze	17.55	21.49	
	Kaloleni	19.84	21.55	
	Magarini	31.73	29.89	
	Malindi	28.56	28.85	
	Kilifi-North	32.61	40.11	
	Rabai	25.81	17.21	
	Kilifi-South	17.24	10.86	
KWALE	**County**	43.08	42.55	Normal vegetation greenness noted across the entire county which is an improvement when the month under review is compared to the previous month of April.
	Kinango	36.67	37.17	
	Lungalunga	36.67	53.4	
	Matuga	53.92	43.63	
	Msambweni	55.43	51.81	
LAMU	**County**	42.21	45.31	The entire county remained in normal vegetation greenness. Lamu east is in above normal vegetation greenness.
	Lamu East	42.21	51.19	
	Lamu West	40.82	41.91	

ADMINISTRATIVE UNIT		**VEGETATION GREENNESS**		**DROUGHT CATEGORIES/REMARKS**
COUNTY	**Sub County**	**VCI-3 month as at 28th**	**VCI-3 month as at 30th**	

Colour	VCI values (3-month)	Drought Category
	≥50	Vegetation greenness above

		Apr 2021	May 2021			
						normal
					>=35 - <50	Normal vegetation greenness
					>=20 - <35	Moderate vegetation deficit
					>=10 - <20	Severe vegetation deficit
					<10	Extreme vegetation deficit
TAITA TAVETA	**County**	52.06	50.42	Stability in the vegetation condition greenness above normal in the county together with its all-sub-counties. Voi subcounty remains in normal vegetation greenness.		
	Mwatate	60.29	61.12			
	Taveta	56.86	58.76			
	Voi	46.48	42.31			
	Wundanyi	65.83	67.91			
NAROK	**County**	72.41	67.3	The county and its sub-counties remained stable in above normal vegetation greenness band. The attributing factor could be the timely onset of the long rains of MAM in the 3rd dekad of March which has been evenly distributed in both space and time		
	Narok-East	65.99	64.52			
	Emurua Dikirr	80.12	70.98			
	Kilgoris	75.33	64.15			
	Narok-North	61.22	61.21			
	Narok-South	73.38	71.71			
	Narok-West	77.83	68.68			

Annex 2.0 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 indicator 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 5). Identifying the correct drought phase helps to guide the most appropriate response for that stage in the drought cycle.

Table 11.0: 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	Nutrition Coping strategies

Figure 4.0: Drought Phase Classification