



NATIONAL DROUGHT MANAGEMENT AUTHORITY

National Drought Early Warning Bulletin

May 2021

Drought indicators

Rainfall

Onset of the long rains season was late as most ASAL counties did not receive rainfall from the second and third week of March when the March-April-May (MAM) season normally begins. During the month of April, depressed rainfall was experienced over most parts of the ASAL region with large areas in counties such as Turkana, Marsabit, Garissa, Tana river, Kilifi, Lamu, Laikipia and Nyeri (Kieni) receiving less than 50 percent of average amounts in April. Some parts of Mandera and Taita taveta received slightly above normal rains of between 75-100 percent of average amounts as shown in Figure 1. Spatio-temporal rainfall distribution was generally uneven and poor across the ASAL counties.

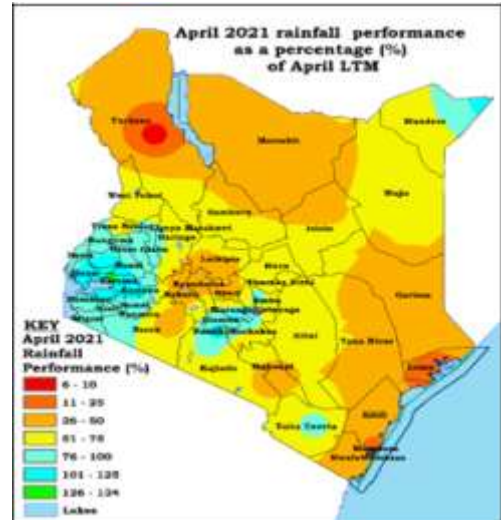


Figure Rainfall performance as percentage of normal.

Rainfall Forecast

According to Kenya Metrological Department (KMD), rainfall is expected to continue during the month of May 2021. Counties in North-western Region including Turkana, West Pokot and Samburu are likely to receive rainfall characterized with near to slightly above average rainfall. Occasional rainfall is likely to occur during the second half of the month. The expected total rainfall amounts are likely to be near the long-term average for the region. North-eastern Region including Mandera, Marsabit, Wajir, Garissa and Isiolo will receive Occasional rainfall that is expected at the beginning of May. The rainfall is however likely to reduce in the third to fourth week as the rainy season comes to cessation period. The expected rainfall amounts are likely to be near the long-term average for the month of May. South-eastern Lowlands (Kajiado, Kitui, Makeni, and Taita Taveta): Occasional rainfall is expected during the first half of the month. It is however expected to reduce in the third to fourth week as the rainy season ceases. The rainfall amounts are likely to be near to below the long-term average for the month of May. The Coastal Strip (Tana River, Kilifi, Lamu and Kwale): is expected to receive occasional rainfall in May. The expected rainfall amounts are likely to be below the long-term average. May marks the peak of the Long rains season in the Coastal Strip. Highlands East of the Rift Valley and Central Kenya (Nyeri, Meru, Embu, and Tharaka Nithi): Above average rainfall is expected during the first half of the month. However occasional dry spells are likely especially during the second half of the forecast period. The rainfall amounts are likely to be above the long-term average for the region.

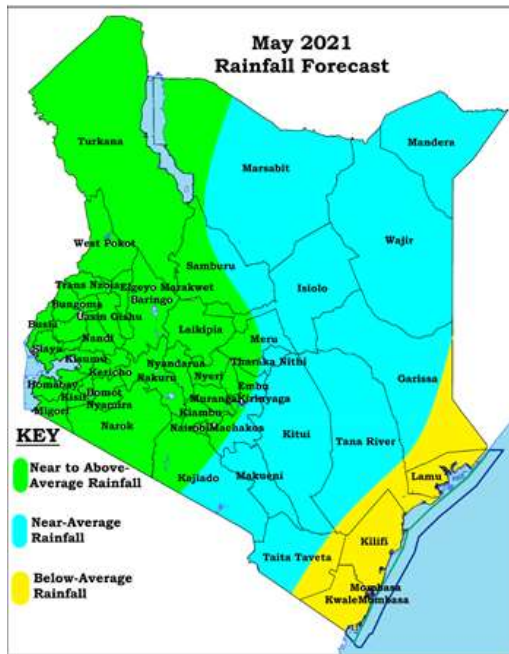


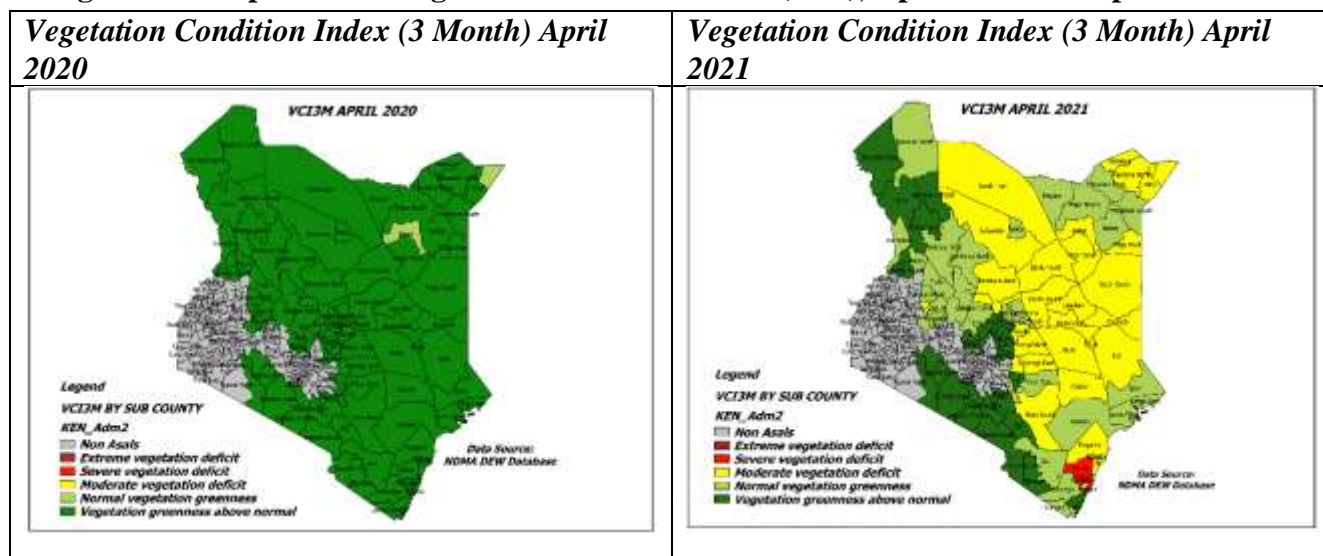
Figure 1. Rainfall forecast for May 2021

The rainfall is however likely to reduce in the third to fourth week as the rainy season comes to cessation period. The expected rainfall amounts are likely to be near the long-term average for the month of May. South-eastern Lowlands (Kajiado, Kitui, Makeni, and Taita Taveta): Occasional rainfall is expected during the first half of the month. It is however expected to reduce in the third to fourth week as the rainy season ceases. The rainfall amounts are likely to be near to below the long-term average for the month of May. The Coastal Strip (Tana River, Kilifi, Lamu and Kwale): is expected to receive occasional rainfall in May. The expected rainfall amounts are likely to be below the long-term average. May marks the peak of the Long rains season in the Coastal Strip. Highlands East of the Rift Valley and Central Kenya (Nyeri, Meru, Embu, and Tharaka Nithi): Above average rainfall is expected during the first half of the month. However occasional dry spells are likely especially during the second half of the forecast period. The rainfall amounts are likely to be above the long-term average for the region.

Vegetation condition

Figure 2 matches the vegetation condition index (VCI) in April 2020 with that in April 2021. When compared to similar period last year and the long-term average, the current condition of vegetation is considerably below that of April 2020.

Figure 2: Comparison of Vegetation Condition Index (VCI), April 2020 and April 2021



As at the end of April 2021 counties with the highest vegetation deficit were, Marsabit, Wajir, Garissa, Isiolo, and Kilifi. The five counties experienced moderate vegetation deficit implying that the VCI values recorded in April 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.

Vegetation Condition Index (VCI) status as at the end of April 2021 is summarized in Table 1. At sub county level, Ganze, Kaloleni and Kilifi south in Kilifi County recorded the lowest VCI values with the three sub counties currently falling in the severe deficit band which is attributed to the poor rains received in April 2021. Generally, the negative VCI trends observed in many ASAL areas point to poor regeneration of pasture and browse during the month of April.

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

Category	County	Sub Counties (No)
Severe vegetation deficit		Ganze, Kaloleni and Kilifi South (Kilifi) (2)
Moderate vegetation deficit	Kilifi Wajir Garissa Isiolo	(32) Mogotio(Baringo) Banissa, East, Lafey&North (Mandera),Laisaimis & N. Horr(Marsabit) East,Eldas,South & West(Wajir) East(Samburu) Balambala, Daadab, Fafi, Lagdera & Dujis (Garissa) North & South(Isiolo) Bura & Galoleni (Tana River)

	Mandera Marsabit Tana River	Mwingi central, Mingi North, Mwingi West & South (Kitui) Magarini, Malindi, Kilifi-North & Rabai (Kilifi)
Normal vegetation greenness	Baringo Tharaka Nithi Turkana West Pokot Laikipia Kwale Lamu Samburu	(30) Central Elda maravine, South, North & Tiaty (Baringo) South, West (Mandera) East & North (Turkana) Moyale & Saku (Marsabit) North & Tarbaj (Wajir) North & South (Samburu) Ijara (Garissa) Garsaen (Tana River) East, North & West (Laikipia) Tharaka (Tharaka Nithi) Kacheliba & Sigor (West Pokot) East & Rural (Kitui) Igembe Central, Igembe North Igembe South, Tigania East & Tigania West (Meru) Kinango & Lungalunga (Kwale) East & West (Lamu) Voi (T. Taveta)
Vegetation greenness above normal	Nyeri Meru North Taita Taveta Narok Makueni Embu Nyeri (Kieni) Kajiado.	(49) Central, Loima, South & West (Turkana) Central, East, North, South & West (Kajiado) Chulga & Maara (Tharaka Nithi) Kapenguria & Pokot south (West pokot) Manyatta, Mbeere south & Runyenjes (Embu) Central (Kitui) Kaiti, Kibwezi East, Kibwezi West Kilome, Makueni & Mbooni (Makueni) Buuri, Central Imenti, North Imenti & South Imenti (Meru) Kieni, Mathira, Mukurweini, Town, Othaya & Tetu (Nyeri) Matuga, Msambweni (Kwale) Mwatate & Taveta (Taita Taveta) East, Emurua Dikirr, Kilgoris, North, South & West (Narok)

Livestock production

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

Pasture and browse condition

The state of pasture and browse in most of the arid and semi-arid counties was generally in fair and poor conditions as shown in Table 1. The current pasture and browse condition were attributed to the little amount of rainfall received in the 2020 October to December short rain season which did not support satisfactory regeneration of pasture and browse. The delayed onset of this year's March-April-May long rains and depressed rains received so far is another factor for the poor pasture and browse condition.

Table 1.0: Pasture and browse condition, April 2021

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

Livestock body condition

The current livestock body condition is stable compared to last month due to the long trekking distances in search of pasture and water coupled with reduction 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 reported livestock body condition as poor and fair as shown in Table 2.

Table 2.0: Livestock body condition, April 2021

<i>Cattle</i>			<i>Goats</i>		
<i>Poor</i>	<i>Fair</i>	<i>Good</i>	<i>Poor</i>	<i>Fair</i>	<i>Good</i>
Kilifi Mandera Wajir Turkana	Baringo Garissa Isiolo Kitui Kwale Laikipia Lamu Makueni Marsabit	Embu Kajiado Taita Taveta Tharaka Nithi	Garissa Kilifi Wajir Turkana	Baringo Isiolo Kitui Kwale Laikipia Lamu Makueni Mandera Marsabit	Embu Kajiado Taita Taveta Tharaka Nithi

	Narok Samburu Tana-River West-Pokot Nyeri (Kieni)			Narok Nyeri (Kieni) Samburu Tana-River West-Pokot	
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Milk production

In comparison to the long-term average; current milk production in six counties is above LTA while in eight counties which includes: Baringo, Kajiado, Isiolo, Kilifi, Laikipia, Nyeri and Tharaka Nithi the current amount is below LTA. The below normal milk production is attributed to water scarcity and inadequate forage. Milk production trends in the 23 ASAL counties is presented in table 3.0.

Table 3.0: Milk production, April 2021

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

Cattle prices

In majority of the county's cattle prices are stable or worsening owing mainly to the fact that the state of cattle body condition is on a downward trend as illustrated in Table 4. However, in spite of the recorded stability in cattle price during the period under review, the prevailing price is higher than the three-year average price of cattle for the month of April in about 65 percent of the ASAL counties. Mandera and Marsabit cattle prices decreased by 27 and 5 percent as compared to the average mean as shown in Table 4.

Table 4.0: Cattle prices, April 2021

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

	Laikipia Lamu Makueni Narok Samburu Tana River Tharaka Nithi Wajir West-Pokot			Taita Taveta Tana River Wajir	West-Pokot Turkana	
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Goat prices

Table 5 summarizes the trends in goat prices in ASAL counties. During the month of April, goat prices in majority of the ASAL counties were mostly above average or close to LTA except in counties such as Marsabit, Baringo and Mandera that were below the three-year average price which was attributed to the deterioration in body condition of the goats owing to poor pasture and browse.

Table 5.0: Goat prices, April 2021

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

Crop production

March to May (MAM) long rains season are on-going across the marginal agricultural areas and most crops planted are at germination stage in poor condition due to moisture stress as result of depressed rains. 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 April as compared to the previous month. As demonstrated in Table 6, the current maize prices are largely favourable with 16 counties recording prices that are below or close LTA.

Table 6.0: Maize prices, April 2021

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

Access to water for households

Average distances to water for households slightly reduced in April in more counties as compared to the previous month. For instance, household distances improved in 14 counties while five counties recorded long trekking distances as compared to normal. Counties like Turkana and Isiolo recorded slight improvement as compared to previous month however the distances are still above long-term average.

The slight improvement in the average distances to water points for households was occasioned by the light showers received during the month of April 2020 however the delayed short rains onset of the MAM season is the reason behind the long trekking distances. The trend in distances walked by households to access water is provided in Table 7.

Table 7.0: Distance from households to main water sources, April 2021.

<i>Indicator</i>	<i>Current status</i>			<i>Trend</i>		
	<i>Above LTA</i>	<i>At LTA</i>	<i>Below LTA</i>	<i>Improving</i>	<i>Stable</i>	<i>Worsening</i>

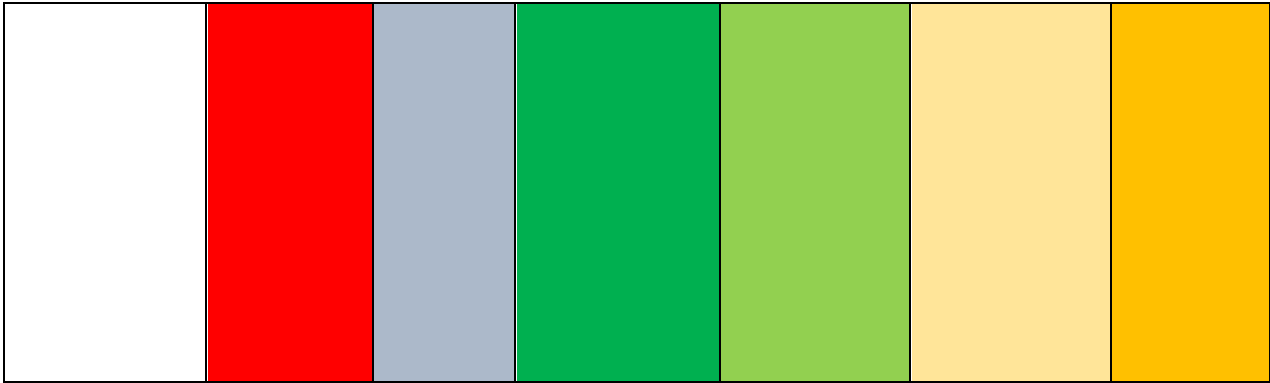
<i>Distance from households to main water sources</i>	Turkana Embu Isiolo Kajiado Laikipia Nyeri Samburu Baringo Garissa Kwale Marsabit Tharaka-Nithi Wajir West-Pokot	Kilifi Mandera Narok Tana River Taita- Taveta	Kitui Lamu Tana River Tharaka Nithi Makueni	Embu Garissa Isiolo Kitui Kwale Makueni Mandera Nyeri Samburu Taita Taveta Tana River Tharaka Nithi Wajir	Kilifi Narok West-Pokot Turkana	Baringo Kajiado Laikipia Lamu Marsabit Tharaka- Nithi
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Access to water for livestock

The trend in the distance walked by livestock in search of water is presented in Table 8. Compared with the previous month, the current trekking distance to water source from grazing areas slightly improved in all counties except in Kajiado and Laikipia. In addition, access to water for livestock in 14 counties was above long-term average attributed to the poor performance of the short rains of October, November, December (OND) and depressed rains received during the month of April 2021 as shown in Table 8.0.

Table 8.0: Distance from livestock grazing area to main water sources, April 2021

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



Terms of trade

Table 9 shows the trends in terms of trade (ToT) between the relative price of goats and maize in ASAL counties. In all but three counties ToT values are above the long-term average (LTA). The TOT is stable as compared to the previous month for instance, in Kajiado, Narok, Tana River ,Embu, Wajir, Narok and Isiolo ,the current ToT are higher than the 2016 - 2020 average for March by 46, 40, 34, 35 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 Kwale, Nyeri and Mandera counties where the current ToT were lower than the long-term average for March by 19, 17, and 6 percent respectively. The poor terms of trade in the three counties were due to decrease in the goat 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 9.0: Terms of trade, April 2021

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

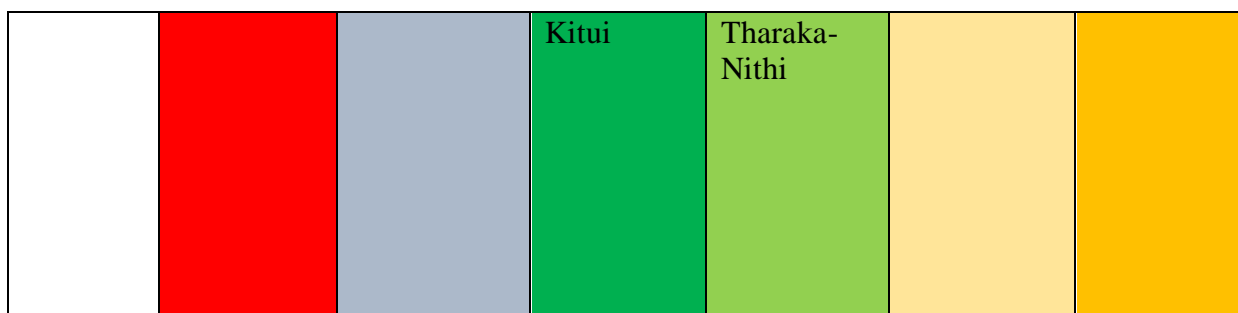
	Nithi Wajir West- Pokot					
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Health and nutrition

Table 10 shows the trend in the proportion of children at risk of malnutrition across the ASAL counties. The situation in 6 ASAL counties namely; Isiolo, Kajiado, Kilifi, Marsabit, Meru and Nyeri is stable while the following (9) counties, Embu, Kitui, Kwale, Laikipia, Lamu, Makueni, Mandera, Taita Taveta and Tharaka-Nithi are improving as compared to the previous month however 5 counties including Garissa, Mandera, Embu, Lamu and Taita taveta MUAC trend is above the long term average. The observed above long term negative trend in malnutrition was attributed to reduced milk consumption owing to decrease in milk production, livestock migration, fewer number of integrated health outreaches delivering essential nutrition services and reduced household purchasing power due to the unfavorable ToT which impacted on food access resulting to inadequate dietary intake.

Table 10.0: Children at risk of malnutrition (MUAC), April 2021

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



1.2 Drought phase classification

Table 11 sums up the trends in drought phase classification as at end of April 2021. On the basis of the range of indicators monitored above, three (3) counties; Mandera, Marsabit and Turkana are in the alarm drought phase, while ten (10) counties namely Garissa, Kilifi, Lamu, Tana River, Baringo, Isiolo, Kitui, Samburu, Laikipia and Wajir are in alert drought stage. During the month under review, six (6) counties reported a worsening trend with nine (9) counties recording a stable trend. The prevailing drought situation is mainly attributed to the delayed onset of the March to May long rains.

Table 11.0: Drought phase classification, April 2021

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

3 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.

Annex 1.0: Vegetation Condition Index (VCI-3 month) as at 27th April 2021

ADMINISTRATIVE UNIT		VEGETATION GREENNESS		DROUGHT CATEGORIES/REMARKS		
COUNTY	Sub County	VCI-3 month as at 28 th Mar 2021	VCI-3 month as at 27 th Apr 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
BARINGO	County	42.00	40.09	The entire county and its sub counties recorded normal vegetation greenness in the month of April. This is attributed to some light showers from the MAM rainfall season onset. However, Mogotio sub county has moderate vegetation deficit.		
	Central	45.08	40.81			
	Eldama	44.04	43.51			
	Mogotio	35.66	34.9			
	North	39.58	36.17			
	South	39.51	41.17			
	Tiaty	44.72	41.17			
MANDER A	County	23.87	34.28	The county and its sub counties are in moderate deficit in the month of April. Notably, Mandera south and Mandera West have Normal vegetation greenness. The onset of MAM rainfall is already experienced in the two sub-counties.		
	Banissa	21.08	29.89			
	M East	20.34	23.1			
	Lafey	21.13	29.26			
	M North	23.89	32.93			
	M South	28.86	42.67			
	M West	23.61	36.88			
TURKAN A	County	52.8	49.23	The county is in stability in VCI for the county and four of its sub counties having recorded Above Normal vegetation greenness in the month of April. Turkana North and East recorded Normal vegetation greenness.		
	T Central	74.84	67.75			
	T. East	40.69	37.97			
	T. Loima	65.62	60.58			
	T. North	40.66	36.1			
	T. South	55.47	55.79			
	T. West	59.45	56.96			
MARSABI T	County	31.72	33.75	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		
	Laisaimis	32.26	31			
	Moyale	25.38	37.68			
	N. Horr	32.39	34.15			

	Saku	43.32	36.44	warm humid micro-climate within Saku hills and MAM seasonal onset in Moyale.		
WAJIR	County	24.86	30.97	The county remained in Moderate vegetation deficit with Wajir Eldas and Wajir West improving from Severe vegetation deficit to Moderate vegetation deficit. Wajir north and Wajir Tarbaj improved from Moderate to Normal vegetation deficit.		
	W East	26.1	33.46			
	W. Eldas	16.47	26.08			
	W. North	31.18	42.99			
	W. South	26.85	27.9			
	W. Tarbaj	26.17	36.17			
	W West	15.58	21.38			
SAMBURU	County	36.34	36.21	The county remained stable at Normal vegetation greenness in the month under review when compared to last month of March. Samburu East remained in Moderate vegetation deficit band.		
	S East	27.87	27.91			
	S. North	44.53	43.82			
	S. West	42.58	43.79			
ADMINISTRATIVE UNIT		DROUGHT CATEGORIES/REMARKS				
COUNTY	Sub County	VCI-3 month as at 28th Mar 2021	VCI-3 month as at 27th Apr 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
GARISSA	County	28.27	29.29	The county and its Sub counties remained in Moderate vegetation deficit band with Ijara sub county maintaining Normal vegetation greenness band. However, Ijara subcounty showed improvement in its VCI index within its band.		
	Balambala	23.19	22.73			
	Daadab	24.8	25.25			
	Fafi	29.56	29.61			
	Ijara	36.7	42.25			
	Lagdera	22.52	21.71			
	Dujis	21.77	23.9			
ISILOLO	County	23.45	23.45	Stability in the vegetation greenness condition with entire county and its sub-counties falling in the moderate vegetation deficit in the month of April.		
	I. North	23.25	24.72			
	I. South	23.76	21.52			
TANA RIVER	County	33.28	32.1	The county and its sub counties remained at Moderate vegetation condition in the month of April. Garsen remained at Normal vegetation greenness.		
	Bura	25.41	25.02			
	Galole	33.19	31.92			
	Garsen	40.01	38.22			

KAJIADO	County	68.25	70.95	Stability noted across the county with all sub counties remaining at above normal vegetation greenness conditions in the month of April. Kajiado county according to Kenya Met rainfall onset predictions received its onset rains on time, 3 rd dekad of March.
	K. Central	69.8	73.43	
	K. East	68.6	67.64	
	K. North	68.4	67.45	
	K. South	64.47	65.2	
LAIKIPIA	County	38.8	38.69	The county remained stable at normal vegetation greenness with Laikipia East improving from moderate vegetation deficit in March to Normal vegetation greenness in the month of April.
	L. East	34.76	41.6	
	L. North	39.39	36.5	
	L. West	39.65	41.4	
THARAK A NITHI	County	50.01	47.49	The county is in normal vegetation greenness in the month under review. The situation is stable when compared to the previous month of March. Tharaka subcounty remained at normal vegetation greenness.
	Chulga	68.33	66.65	
	Maara	72.56	72.58	
	Tharaka	35.91	32.25	
WEST POKOT	County	42.85	43	The vegetation greenness stabilized 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, while Kapenguria remained in above normal vegetation greenness
	Kacheliba	38.24	36.6	
	Kapenguria	51.68	51.73	
	Pokot South	46.25	51.11	
	Sigor	41.78	42.47	
EMBU	County	68.82	65.05	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	81.9	79.61	
	Mbeere North	59.32	58.06	
	Mbeere South	66.41	60.2	
	Runyenjes	84.68	82.66	

ADMINISTRATIVE UNIT					
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COUNTY	Sub County	VCI-3 month as at 28th Mar 2021	VCI-3 month as at 27th Apr 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	41.59	34.29	The county and most of its sub counties deteriorated to moderate vegetation deficit from normal vegetation greenness condition. These sub-counties include; Mwingi North, Mwingi Central, Mwingi West and Kitui South recorded moderate deficit.. Kitui East and Kitui Rural remained at normal vegetation deficit while Kitui central was stable at above normal vegetation condition.
	Kitui Central	62.32	54.01	
	Kitui East	44.71	37.42	
	Mwingi Central	39.76	33.1	
	Mwingi North	28.1	24.82	
	Mwingi West	59.16	24.82	
	Kitui Rural	48.08	37.76	
	Kitui South	40.05	32.51	
	Kitui West	64.71	51.02	
MAKUENI	County	70.39	59.42	The county and its sub counties recorded above normal vegetation greenness conditions. The situation is stable when the current and previous month of March are compared.
	Kaiti	81.45	73.55	
	Kibwezi East	70.11	73.55	
	Kibwezi West	71.43	73.55	
	Kilome	73.02	68.47	
	Makueni	61.82	52.94	
	Mbooni	75.49	62.73	
MERU	County	52.78	53.8	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	60.64	61.61	
	Central Imenti	63.2	66.82	
	Igembe Central	43.4	43.31	
	Igembe North	38.79	35.39	
	Igembe South	42.35	46.67	
	North Imenti	60.29	67.68	
	South Imenti	76.63	78.71	
	Tigania East	46.35	48.48	
	Tigania West	57.24	48.48	
	NYERI	County	71.21	
Kieni		61.56	68.12	
Mathira		78.47	75.48	

	Mukurweini	84.3	87.55			
	Town	86.18	84.46			
	Othaya	86.47	87.2			
	Tetu	83.49	83.49			
KILIFI	County	31.2	27.05	Deterioration in vegetation condition noted across the county and most of its sub counties recording moderate vegetation deficit Ganze, Kaloleni and Kilifi South are in severe vegetation deficit category during the month under review.		
	Ganze	26.03	17.55			
	Kaloleni	27.69	19.84			
	Magarini	33.52	31.73			
	Malindi	31.19	28.56			
	Kilifi-North	37.54	32.61			
	Rabai	32.7	25.81			
	Kilifi-South	23.04	17.24			
KWALE	County	51.29	43.08	Normal vegetation greenness noted across the entire county which is decline when the month under review is compared to the previous month of March. Matuga and Msambweni sub counties remained at above normal vegetation greenness.		
	Kinango	45.9	36.67			
	Lungalunga	54.78	36.67			
	Matuga	64.76	53.92			
	Msambweni	64.34	55.43			
LAMU	County	37.22	42.21	The entire county remained in normal vegetation greenness.		
	Lamu East	34.72	42.21			
	Lamu West	38.66	40.82			
ADMINISTRATIVE UNIT		VEGETATION GREENNESS		DROUGHT CATEGORIES/REMARKS		
COUNTY	Sub County	VCI-3 month as at 28th Mar 2021	VCI-3 month as at 27th Apr 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
TAITA TAVETA	County	58.03	52.06			
	Mwatate	63.5	60.29			

	Taveta	58.36	56.86	Stability in the vegetation condition greenness above normal in the county together with its all-sub-counties. Voi subcounty remains in normal vegetation greenness.
	Voi	55.12	46.48	
	Wundanyi	71.94	65.83	
NAROK	County	71.51	72.41	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 3 rd dekad of March which has been evenly distributed in both space and time
	Narok-East	60.99	65.99	
	Emurua Dikirr	82.44	80.12	
	Kilgoris	77.78	75.33	
	Narok-North	59.17	61.22	
	Narok-South	69.43	73.38	
	Narok-West	80.2	77.83	

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 3.0: Drought Phase Classification

