



NATIONAL DROUGHT MANAGEMENT AUTHORITY

National Drought Early Warning Bulletin

June 2020

KEY HIGHLIGHTS

- Early onset of the March-April-May (MAM) 2020 seasonal rainfall coupled with the good rainfall performance during the months of April and May has impacted positively on both crop and livestock production in most ASAL counties.
- In all ASAL areas, livestock body condition has improved significantly as a result of availability of pasture and water which has led to increased milk availability and household income from higher livestock prices.
- In most of the marginal agricultural counties, crops are in fairly good condition and in some of the areas like Embu (Mbeere), harvesting of the early planted maize, beans, pigeon peas, cow peas and green grams has started.
- However, the heavy rainfall experienced during the March to May period also provided favourable conditions for breeding and multiplication of desert locusts in some of the arid and semi-arid areas, particularly in Turkana, Marsabit, Samburu, and Isiolo counties.
- Overall, the above-average rains recorded since March has enhanced the environmental indicators across the ASAL region and as a result all the 23 ASAL counties are currently classified in the normal drought stage with the trend improving in two counties and remaining stable in 19 counties.

Drought phase classification, May 2020

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

1.0. Drought status

1.1 Drought indicators

Rainfall

During the month of May, various ASAL areas received substantial amounts of rainfall. In most ASAL counties the cumulative amount of rainfall received in May 2020 was near to above-average. For instance, in Baringo, Kilifi, Marsabit, Kitui, Tana River, Kajiado, West Pokot and Turkana the rainfall exceeded 75 percent of the long term mean for May. The above-average rains experienced since March have benefited crop development and pasture regeneration. However, the heavy rainfall has also provided favourable conditions for the further breeding and multiplication of desert locusts in some of the arid and semi-arid areas, particularly in Turkana, Marsabit, Samburu, and Isiolo counties.

Vegetation condition

Figure 1 compares the vegetation condition index (VCI) in late May 2019 with that in late May 2020. The good performance of the March-April-May (MAM) 2020 seasonal rainfall is evident as it has resulted to high vegetation regeneration with all arid and semi-arid counties recording vegetation greenness values that are within normal to above normal ranges.

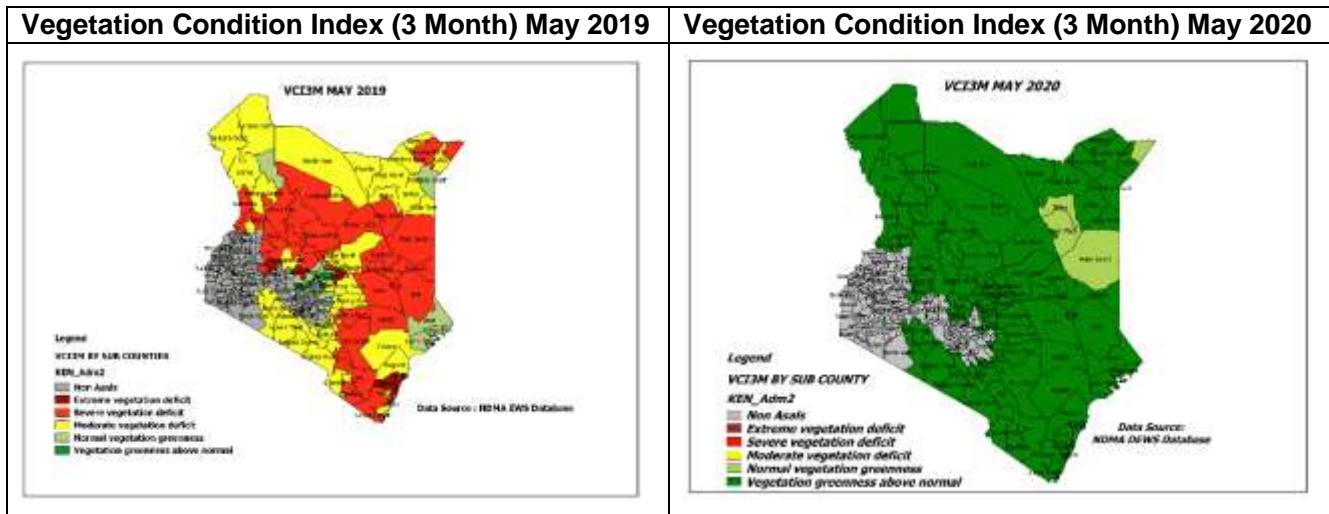


Figure 1: Comparison of Vegetation Condition Index (VCI), May 2019 and May 2020

Water sources

The rainfall has been sufficient to recharge most of the open water sources, improving the quantity and quality of water and reducing distances and waiting time. In general, the water situation in May across all the ASAL areas was considerably better compared to the one normally witnessed during the month of May in recent years. For example, in Turkana County, by end of May more than 75 percent of the open water sources in all the three livelihood zones were at full capacity, while most pans and dams in Baringo were at 80 to 90 percent of their full capacity. In Kitui County, majority of surface water sources are past 60 percent of their capacity and are likely to retain water for 3 to 4 months.

Livestock production

The rains have positively impacted on the pasture and browse condition. This has reduced distances covered between water points and grazing fields which has resulted to improvement in overall livestock productivity which translates to enhanced milk and meat production.

Pasture and browse condition

Pasture and browse condition continued to improve in May which was attributed to the cumulative effect of the above normal rains that promoted substantial pasture and browse growth and regeneration. All counties reported the current state of pasture and browse as being good as presented in Table 2.

Table 2.0: Pasture and browse condition, May 2020

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

Livestock body condition

As illustrated in Table 3, livestock body condition remained good in all the 23 ASAL counties which is largely attributed to the increased availability of forage and water.

Table 3.0: Livestock body condition, May 2020

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

Milk production

Milk production situation in the 23 ASAL counties is presented in Table 4. In comparison to the long term mean, average milk production per household in May 2020 in 16 counties was above or close to LTA which was attributed to increased availability of water, pasture and browse.

However, in seven counties: Marsabit, Turkana, Samburu, Kajiado, Kitui, Tana River and Kwale average milk production per household was below normal. The below average milk production was attributed to a drop in calving rates, increase in livestock disease incidences and a general reduction in livestock herd sizes.

Table 4.0: Milk production, May 2020

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

Cattle prices

In all the 23 ASAL counties cattle prices are improving or have remained stable owing mainly to the fact that the state of cattle body condition is on an upward trend. In addition, across the 23 ASAL counties the prevailing average price for cattle are above or close to the three-year mean price of cattle for the month of May. For instance, in Kilifi, Mandera, West Pokot, Isiolo, Wajir, Narok and Marsabit the current prices are above LTA by 52, 46, 40, 34, 31, 29 and 26 percent respectively which was associated to the improved body condition of cattle across ASAL areas. Table 5 shows the trends in cattle prices in May 2020.

Table 5.0: Cattle prices, May 2020

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

Goat prices

Table 6 summarizes the trend in goat prices in ASAL counties. During the month of May, goat prices in 21 ASAL counties were above average or close to LTA which was attributed to the good body condition of goats. In West Pokot County, for example, the price of a medium-sized two-year old buck increased to Kshs 4,237 from Kshs 4110 recorded in April which was above the LTA price of Kshs 2,877 by 47 percent. Similarly, current average prices for goats in Garissa, Samburu and Turkana were above LTA by 37, 31 and 25 percent respectively.

However, goat prices in Marsabit and Makueni counties decreased and were below the 2015-19 average due to closure of markets as a result of measures placed to curb the spread of COVID-19.

Table 6.0: Goat prices, May 2020

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

Crop production

In marginal agricultural areas, the main crops under cultivation are maize, beans, green grams, cow peas, pigeon peas, millet, and sorghum. Majority of the crops are in fair condition and were at flowering stage of growth. On the other hand, in some areas such as Embu (Mbeere), harvesting of the early planted maize, beans, pigeon peas, cow peas and green grams has started.

Maize prices

Table 7 displays the trends in maize prices in May 2020. In about 20 out of the 23 ASAL counties, the price of maize fell or remained stable in May. At the same time, the current maize prices are largely below average with over 80 percent of the counties recording prices below or close to the 2015 - 19 LTA. In Embu County, the decrease in maize price was attributed to harvest of various crops including maize, green grams, cowpeas and pigeon peas which had thereby led to replenishing of household stocks. In Makueni, below normal maize prices was as a result of the bumper harvest from the previous season which had continued to ensure a steady supply of the commodity in the local markets.

Table 7.0: Maize prices, May 2020

Indicator	Current status			Trend		
	Above LTA	At LTA	Below LTA	Improving	Stable	Worsening

Maize Prices	Garissa Mandera Tana River	Marsabit Samburu Baringo Kajiado Kwale Wajir Lamu Meru	Makueni Turkana Isiolo Kilifi Tharaka Nithi Taita Taveta West Pokot Laikipia	Embu Kitui Narok Nyeri	Tana River West Pokot Makueni Turkana Kwale Meru Embu	Samburu Mandera Laikipia Kajiado Isiolo Taita Taveta Marsabit	Garissa Narok Baringo Lamu Nyeri	Kilifi Tharaka Wajir Kitui
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Access to water

The trend in distances walked by households to access water is provided in Table 8. Return distances to water for households have remained below normal in close to 90 percent of the ASAL counties. The reduction in the average distances to water points for households was occasioned by the increase in water availability as most open water sources were recharged by the rains received since the start of the long rains season in March.

Table 8.0: Distance from households to main water sources, May 2020

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

In all counties except in Lamu, access to water for livestock was better in May compared with normal times as animals had to walk shorter distances compared with the usual distances recorded in the 2015 - 2019 long term average (LTA). The trend in the distance trekked by livestock in search of water is illustrated Table 9.

Table 9.0: Distance from livestock grazing areas to main water sources, May 2020

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

Terms of trade

In all ASAL counties, the current terms of trade (ToT) are above the long term average for the month implying a favourable situation for livestock producers as demonstrated in Table 10. Furthermore in 18 ASAL counties, the terms of trade were stable or improved in May 2020. An indication that households could obtain more kilogrammes of maize from the sale of a goat than they did during the previous month. The largest improvements were in Embu (Mbeere), Meru (Meru North), Tharaka Nithi (Tharaka) and Garissa, where terms of trade appreciated by 44, 19, 15 and 5 percent respectively. The improvement in ToT recorded in ASAL areas during the month under review is generally a reflection of rising goat prices.

Table 10.0: Terms of trade, May 2020

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

Health and nutrition

The bulletins monitor the proportion of children under five at risk of malnutrition, determined by a mid-upper arm circumference (MUAC) measurement (Table 11). The nutrition status of children in most counties improved this month with 20 counties now on a stable or improving trend. This improvement was attributed to higher milk consumption in pastoral counties and improved dietary diversity due to availability of green vegetables and pulses in the marginal agricultural counties.

However, in Kajiado, Samburu and Tana River malnutrition prevalence rates were above LTA. In Samburu County, for instance, the proportion of children at risk of malnutrition has maintained upward trend since March 2020. The increase in malnutrition cases was attributed low access to health services due to fear of transmission of COVID-19 and hence mothers and caregivers are not taking their children for routine services. Current rate of children at risk of malnutrition in Samburu stands at 26.2 percent which indicates that majority of children are at risk for acute malnutrition.

Table 11.0: Children at risk of malnutrition (MUAC), May 2020

Indicator	Current status			Trend		
	Above LTA	At LTA	Below LTA	Improving	Stable	Worsening

MUAC	Kajiado Samburu Tana River		Laikipia Marsabit Baringo Makueni Garissa Mandera Tharaka Taita Taveta Embu (Mbeere)	Kilifi Kwale Narok Isiolo Kitui Meru Lamu Nyeri	Kajiado Garissa Embu Isiolo Kilifi Kitui Lamu Makueni Kwale	Baringo Laikipia Mandera Marsabit Meru Narok Nyeri Samburu Taita Taveta Tana River Tharaka	
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1.2 Drought phase classification

Table 11 shows the trend in drought status in the 23 ASAL counties. The months of January to February were one of the wettest period in the ASAL region which together with the above-average rains recorded since March has enhanced the environmental indicators and as a result all counties are currently classified in the normal drought stage with the trend improving in two counties and remaining stable in 19 counties.

Table 11.0: Drought phase classification, May 2020

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

2.0 Projected food security situation

In most ASAL areas, pasture and browse quantity and quality is projected to remain in good condition over the next one month which is likely to support enhanced livestock productivity including increase in milk production and improved body condition of livestock.

The prevailing good livestock body condition and stable maize prices are likely to maintain the current above average livestock-to-cereals terms of trade during the month of June. In addition, increased milk production is expected to result in improved nutritional status of children.

However, ongoing locust invasion in Turkana, Marsabit and Samburu is projected to cause significant damage to forage and crops. Also, the disruption of market operations due to the COVID 19 pandemic is likely to negatively affect food supply and livestock prices which might lead to the deterioration of the food security situation in most ASAL counties.

3.0 Recommendations

Food and Safety Net

- Provision of food and cash transfers to food insecure population targeting vulnerable members of the community affected by recent drought and floods including households which have been severely affected by increasing food prices, reduction in income or loss of jobs. as a result of measures put in place to control the spread of the COVID-19 pandemic.

Health and Nutrition

- Conduct awareness campaigns on COVID-19 and support hygiene education promotion including installation of hand washing facilities in public spaces.
- Provision of face masks, hand sanitizers and soap to vulnerable members of the community.

Agriculture

- Provision of certified seeds and other farm inputs.
- Upscale ground and aerial spraying to control desert locust infestation and spread.

Livestock/Veterinary

- Enhance disease control measures including livestock vaccination.
- Support pasture establishment and conservation as well as stockpiling of county strategic hay reserves.

Water

- Promote rain water harvesting.
- Community sensitization on treatment of drinking water as most households are accessing water from unprotected sources.

Annex 1.0: Vegetation Condition Index (VCI-3 month) as at 25th May 2020

ADMINISTRATIVE UNIT		VEGETATION GREENNESS		DROUGHT CATEGORIES/REMARKS		
County	Sub County	VCI-3 month as at 27 th April 2020	VCI-3 month as at 25 th May 2020	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	85.07	81.89	Following the good rains received in March, April and May, current vegetation greenness in all sub-counties is above normal.		
	Central	90.68	84.87			
	Eldama	79.69	73.66			
	Mogotio	80.9	75.73			
	North	89.25	83.66			
	South	85.83	80.05			
	Tiaty	84.68	84.94			
MANDERA	County	66.83	67.93	Only Mandera East sub-county is in the normal vegetation greenness class while all other sub-counties recorded above normal vegetation greenness.		
	Banissa	53.54	59.59			
	M. East	46.8	48.59			
	Lafey	55.12	60.49			
	M. North	68.57	70.61			
	M. South	82.52	74.92			
	M. West	72.39	74.81			
TURKANA	County	117.33	101.84	As a result of the above normal rains received during the MAM rainy season, vegetation greenness is above normal across the county.		
	T. Central	119.13	109.17			
	T. East	70.38	75.82			
	T. Loima	136.92	116.93			
	T. North	120.08	95.46			
	T. South	118.85	114.95			
	T. West	134.84	110.35			
MARSABIT	County	70.51	64.72	Vegetation greenness above normal for the period across all sub counties.		
	Laisamis	76.21	66.68			
	Moyale	57.89	54.44			
	N. Horr	69.82	65.89			
	Saku	82.9	71.03			
WAJIR	County	58.83	52.56	The county is in the above normal vegetation greenness band. However, slight decline was noted in Wajir Eldas which currently has normal vegetation greenness.		
	W. East	66.44	60.63			
	W. Eldas	49.22	42.09			
	W. North	72.1	65.45			
	W. South	53.46	49.48			
	W. Tarbaj	64.03	61.25			
W. West	55.31	39.63				

ADMINISTRATIVE UNIT		VEGETATION GREENNESS		DROUGHT CATEGORIES/REMARKS		
COUNTY	Sub County	VCI-3 month as at 27 th April 2020	VCI-3 month as at 25 th May 2020	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	77.19	74.58	The vegetation greenness is in the above normal range for the period.		
	S. East	70.01	69.34			
	S. North	83.45	78.89			
	S. West	84.93	81.14			
GARISSA	County	68.44	65.80	The county and its sub counties is in above normal vegetation greenness.		
	Balambala	61.71	66.81			
	Daadab	52.48	54.76			
	Fafi	73.03	69.15			
	Ijara	85.62	75.80			
	Lagdera	59.29	57.21			
	Dujjis	56.3	58.88			
ISIOLO	County	64.03	62.60	The vegetation greenness is in the above normal range for the period.		
	I. North	64.46	61.01			
	I. South	63.37	65.03			
TANA RIVER	County	87.85	80.23	The vegetation greenness is above normal across the county.		
	Bura	68.03	66.22			
	Galole	96.83	83.22			
	Garsen	99.05	90.24			
KAJIADO	County	96.98	86.35	The vegetation greenness is in the above normal range for the period.		
	K. Central	91.35	79.00			
	K. East	94.6	83.74			
	K. North	88.73	81.20			
	K. South	94.11	85.04			
	K. West	103.7	92.80			
LAIKIPIA	County	77.27	72.70	The vegetation greenness is above normal across the county.		
	L. East	82.55	78.01			
	L. North	79.13	72.65			
	L. West	71.25	70.24			
THARAKA NITHI	County	80.09	67.75	The county and its sub counties is in above normal vegetation greenness.		
	Chulga	89.35	77.31			
	Maara	86.05	75.10			
	Tharaka	74.69	61.79			
WEST POKOT	County	96.36	85.48	The vegetation greenness is above normal across the county.		
	Kacheliba	94.58	81.69			
	Kapenguria	101.71	87.41			
	Pokot South	102.96	93.60			
	Sigor	91.17	85.96			

ADMINISTRATIVE UNIT		VEGETATION GREENNESS		DROUGHT CATEGORIES/REMARKS		
County	Sub County	VCI-3 month as at 27 th April 2020	VCI-3 month as at 25 th May 2020	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
EMBU	County	94.92	83.27	Enhanced vegetation condition across all the sub counties with vegetation greenness above normal in all parts of the county.		
	Manyatta	92.39	80.13			
	Mbeere North	93.57	82.56			
	Mbeere South	97.50	85.45			
	Runyenjes	91.15	80.31			
KITUI	County	94.70	87.54	The vegetation greenness is in the above normal range for the period.		
	Kitui Central	98.2	87.17			
	Kitui East	98.27	89.93			
	Mwingi Central	88.63	84.17			
	Mwingi North	76.87	73.20			
	Mwingi West	100.67	93.55			
	Kitui Rural	103.79	93.61			
	Kitui South	100.27	92.24			
	Kitui West	101.24	89.50			
MAKUENI	County	99.46	89.91	The county and its sub counties is in above normal vegetation greenness.		
	Kaiti	103.38	93.78			
	Kibwezi East	95.86	88.93			
	Kibwezi West	99.87	90.59			
	Kilome	105.12	89.69			
	Makueni	98.23	86.05			
	Mbooni	102.59	95.41			
MERU	County	85.35	79.05	The vegetation greenness is above normal across the county.		
	Buuri	92.3	81.32			
	Central Imenti	86.55	81.59			
	Igembe Central	82.13	78.94			
	Igembe North	80.13	75.34			
	Igembe South	75.26	73.68			
	North Imenti	90.26	83.19			
	South Imenti	85.82	81.17			
	Tigania East	82.68	75.79			
Tigania West	99.46	89.03				

ADMINISTRATIVE UNIT		VEGETATION GREENNESS		DROUGHT CATEGORIES/REMARKS		
County	Sub County	VCI-3 month as at 27 th April 2020	VCI-3 month as at 25 th May 2020	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
NYERI	County	86.66	81.05	Vegetation greenness above normal in all parts of the county.		
	Kieni	83.79	79.34			
	Mathira	79.97	78.99			
	Mukurweini	106.72	99.36			
	Town	98.41	91.35			
	Othaya	90.37	77.78			
	Tetu	90.50	81.55			
KILIFI	County	86.20	76.28	The county and its sub counties is in above normal vegetation greenness.		
	Ganze	95.66	89.34			
	Kaloleni	100.39	83.13			
	Magarini	80.38	71.93			
	Malindi	83.46	67.53			
	Kilifi-North	82.41	61.17			
	Rabai	99.48	88.94			
	Kilifi-South	95.55	78.12			
KWALE	County	101.81	86.79	The vegetation greenness is in the above normal range for the period.		
	Kinango	105.45	90.87			
	Lungalunga	97.30	86.23			
	Matuga	96.54	75.85			
	Msambweni	93.58	68.67			
LAMU	County	89.19	85.36	The county and its sub counties is in above normal vegetation greenness.		
	Lamu East	88.89	84.61			
	Lamu West	89.36	85.8			
TAITA TAVETA	County	107.94	95.94	The vegetation greenness is above normal across the county.		
	Mwatate	107.36	96.26			
	Taveta	103.13	92.63			
	Voi	109.76	96.66			
	Wundanyi	112.32	102.6			
NAROK	County	91.78	84.92	Enhanced vegetation condition across all the sub counties with vegetation greenness above normal in all parts of the county.		
	Narok-East	97.00	89.99			
	Emurua Dikirr	83.02	69.73			
	Kilgoris	85.70	74.97			
	Narok-North	84.99	83.39			
	Narok-South	94.33	85.27			
	Narok-West	94.09	88.88			

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 2). Identifying the correct drought phase helps to guide the most appropriate response for that stage in the drought cycle.

Table 12.0: 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
Utilisation	Mid-Upper Arm Circumference (MUAC) Coping strategies	Nutrition Coping strategies

Figure 2.0: Drought Phase Classification

