



NATIONAL DROUGHT MANAGEMENT AUTHORITY

National Drought Early Warning Bulletin

July 2020

KEY HIGHLIGHTS

- The good performance of the March-April-May (MAM) 2020 seasonal rainfall has resulted to high vegetation regeneration with all arid and semi-arid counties recording vegetation greenness values that are above normal ranges.
- Body condition of all species of livestock remained good across ASAL counties. The improvement in livestock body condition was attributed to availability of adequate pasture and browse and short trekking distances from grazing areas to water points. Consequently, livestock productivity especially milk production has increased in most ASAL areas.
- On-going harvesting of pulses, maize, millet and sorghum has replenished household food stocks in the marginal agricultural counties thereby improving food availability. In addition, during the month of June prices of cereals declined further while those of livestock remained above average which led to improved terms of trade for livestock keepers in nearly all the ASAL counties.
- However, ongoing locust invasion in Turkana, Marsabit and Samburu is projected to cause significant damage to forage and crops. Moreover, 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.
- 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 one county, worsening in five while 17 counties recorded a stable trend.

Drought phase classification, May 2020

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

1.0 Drought status

1.1 Drought indicators

Rainfall

A good number of ASAL counties like Garissa, Isiolo, Wajir, Marsabit, Tana River, Mandera, Taita Taveta and Kitui experienced generally dry conditions during the month of June. However, a few counties such as Baringo, West Pokot, Turkana, Laikipia, Kwale, Lamu, Kilifi and Samburu recorded substantial amounts of rainfall which were mostly above their long term average for the month of June. Overall for many ASAL areas, the above normal March-April-May (MAM) 2020 rains have supported regeneration of pasture and browse and has been favourable to crop production.

Vegetation condition

Figure 1 compares the vegetation condition index (VCI) in late June 2019 with that in late June 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 above normal ranges.

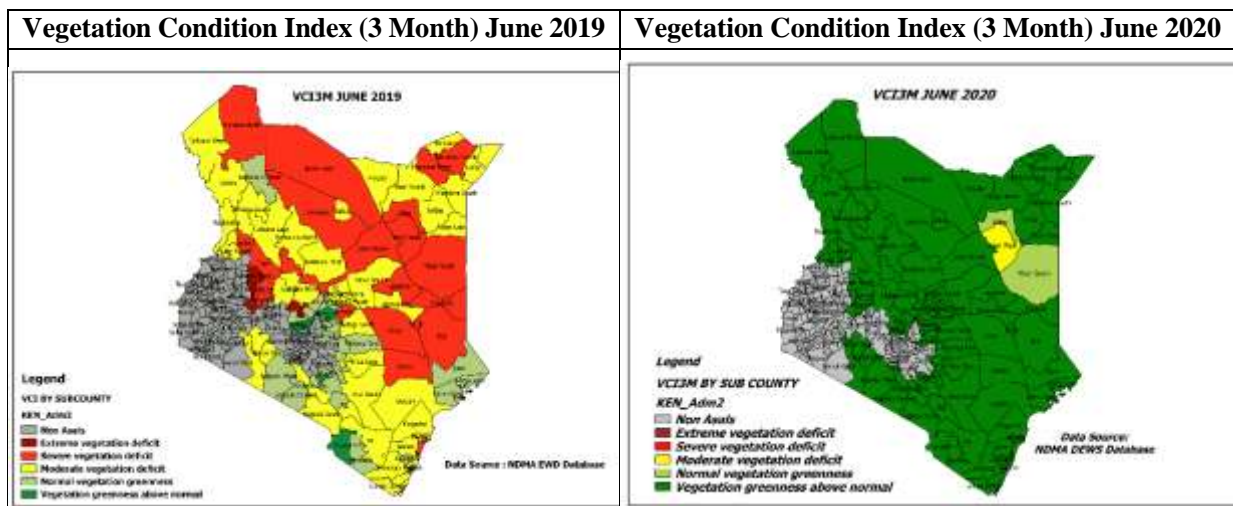


Figure 1: Comparison of Vegetation Condition Index (VCI), June 2019 and June 2020

Water sources

In almost all ASAL counties, majority of the open water sources such as water pans and dams have water and thus the water situation remained unchanged from what was reported in May 2020. As a result, average return distances to water for both households and livestock in most counties are stable and remained within seasonal ranges.

Livestock production

Livestock production indicators continued improving during the month of June. Body condition of all species of livestock remained good across ASAL counties. The improvement in livestock body condition was attributed to availability of adequate pasture and browse and short trekking distances from grazing areas to water points. In addition, livestock productivity especially milk production has increased in most ASAL areas.

Pasture and browse condition

Most counties reported good pasture and browse condition with few counties including Makueni, Mandera, Tana River, Meru, Turkana and Wajir classifying the current state of pasture and browse as being fair as shown in Table 2

Table 2.0: Pasture and browse condition, June 2020

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

Livestock body condition

As illustrated in Table 3, livestock body condition in all the 23 ASAL counties was noticeably good in comparison to previous years and similar time last year which was largely attributed to enhanced availability of forage and water.

Table 3.0: Livestock body condition, June 2020

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

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 June 2020 in 14 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, Kitui, Narok, Tana River and Embu average milk production per household was below normal. The below average milk production was attributed to a reduction in the proportion of lactating cattle and a drop in kidding in goats, increase in livestock disease incidences and a general reduction in livestock herd sizes.

Table 4.0: Milk production, June 2020

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

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 most ASAL areas the prevailing average price for cattle are above or close to the three-year mean price of cattle for the month of June. For instance, in West Pokot, Tharaka, Wajir, Tana River and Kajiado the current prices are above LTA by 36, 32, 30, 28 and 21 percent respectively which was associated to the improved body condition of cattle across ASAL areas. Table 5 shows the trends in cattle prices in June 2020.

Table 5.0: Cattle prices, June 2020

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

Goat prices

Table 6 summarizes the trend in goat prices in ASAL counties. During the month of June, goat prices in 21 ASAL counties were above average or close to LTA which was attributed to the good body condition of goats. In Samburu County, for example, the price of a medium-sized two-year old goat increased to Kshs 3875 from Kshs 3,570 recorded in May which was above the LTA price of Kshs 2,795 by 39 percent. Similarly, current average prices for goats in Wajir, Laikipia, Narok and Tana River were above LTA by 33, 25, 18 and 16 percent respectively.

However, goat prices in Makueni counties remained below the 2015-19 average due to closure of the main livestock markets as a result of measures placed to curb the spread of COVID-19.

Table 6.0: Goat prices, June 2020

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

Crop production

The general condition of crops in the ASAL counties such as Kitui, Makueni, Kwale, Embu (Mbeere), Tharaka, Meru North, Narok, and Nyeri (Kieni) is fairly good and households expect to realize a normal harvest. Currently, harvesting of beans, green grams, cowpeas, millet, sorghum maize and dolichos has started in most of the marginal agricultural areas.

Maize prices

In most of the ASAL counties, the current maize prices are below average with about 80 percent of the counties recording prices below or close to the 2015 - 19 LTA. In Tharaka, for example, the average price of a kilogramme of maize in June was Kshs 36 which is 18 percent lower than the three-year average price of Kshs 44. Likewise, average maize prices in Embu (Mbeere), Makueni, Meru (Meru North), and Kilifi were below LTA by 27, 20, 13 and 10 percent respectively. The below normal maize prices recorded in the marginal agricultural counties was as a result of abundant availability of the commodity due to start of harvesting in most areas. Table 7 shows the trends in maize prices in June 2020.

Table 7.0: Maize prices, June 2020

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

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 about 90 percent of the ASAL counties.

However, return distances to water sources for households have started to increase in a number of counties. For instance, in Kwale County, households had to walk an average of 4.4 km in June which is an increase of 63 percent compared to the distance recorded in the previous month of 2.7 km. In the same way, in Tharaka, average household return distances increased to 3 km in June from 2.8 km in May representing an increase of 7 percent. The observed increase in average distances to water points was attributed to the cessation of the long rains which occurred in May and the corresponding drying up of open water sources.

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

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

The trend in the distance trekked by livestock in search of water is illustrated Table 9. In all counties except in Kwale and Laikipia, access to water for livestock was better in June 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). This was attributed to the average to above average performance of the March to May rains which supported significant recharge of water sources as well as triggering substantial pasture and browse regeneration in most ASAL counties.

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

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

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 June 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 enhanced ToT was as a result of the good body condition of goats which translated to favourable market prices.

Table 10.0: Terms of trade, June 2020

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

Health and nutrition

Table 11 illustrates the trends in the prevalence of malnutrition as indicated by the mid-upper arm circumference (MUAC) in June 2020. Overall, the trend in most ASAL counties is improving or stable. In the pastoral counties, improvement in the nutrition status of children is attributed to milk availability while in the marginal agricultural areas the positive trend is associated better dietary diversity due to availability of green vegetables, pulses and cereals.

However, a worsening trend in the nutrition status of children was recorded in Isiolo, Narok and Kajiado. For example, in Narok County, the proportion of children under five years of age who are at risk of malnutrition rose to 6.6 percent in June from 5.5 percent in May. The increase was linked to limited access to health services since some of the caregivers stopped taking their children for routine health monitoring and treatment because of fear of COVID-19 while in Isiolo County the worsening situation was associated with rising cases of intestinal worms, increase in upper respiratory tract infections and diarrheal ailments among the under-fives.

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

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

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 phase with the trend improving in one county, worsening in five and remaining stable in 17 counties.

Table 11.0: Drought phase classification, June 2020

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

2.0 Projected food security situation

Following the above-average March to May long rains received in most of the ASAL areas, pasture and water availability for livestock has increased significantly. In the pastoral areas, the available forage and water is projected to last up to the next rains in October. The abundant rangeland resources are expected to result to increased livestock productivity, especially average to above-average livestock prices and near-average milk production.

In the marginal agricultural counties, it is expected that crop production will be average to above average hence the long rains crop harvest is likely to improve food security in most of the semi-arid counties by providing casual wage labour income earning opportunities and increasing household food availability during the period between July and September 2020.

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

- Enhance implementation of priority drought preparedness interventions
- Promote community based livestock disease surveillance and also intensify livestock disease control measures
- Continued advocacy for pasture conservation including deferred grazing management and participatory rangeland management
- Sensitize farmers on appropriate post-harvest management techniques in the marginal agricultural and agro-pastoral areas.
- Enhance awareness raising on COVID-19 and conduct campaigns on hygiene and other disease prevention and containment measures
- Upscale nutritional screening in areas with high prevalence of children at risk of malnutrition.
- Provision of water treatment chemicals for households getting water from open water sources.
- Continue monitoring and conduct control measure (both aerial and ground spraying operations) to suppress the spread of desert locust in affected counties such as Marsabit, Samburu and Turkana.

Annex 1.0: Vegetation Condition Index (VCI-3 month) as at 29th June 2020

ADMINISTRATIVE UNIT		VEGETATION GREENNESS		DROUGHT CATEGORIES/REMARKS		
COUNTY	Sub County	VCI-3 month as at 25 th May 2020	VCI-3 month as at 29 th June 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	81.89	87.93	Vegetation greenness remained above normal in all parts of the county attributed to the cumulative effects of the enhanced rainfall received during the MAM season. The county also received above average rainfall in June 2020		
	Central	84.87	86.57			
	Eldama	73.66	69.71			
	Mogotio	75.73	85.34			
	North	83.66	87.58			
	South	80.05	82.01			
	Tiaty	84.94	95.13			
MANDERA	County	67.93	83.38	Significant improvement especially for Mandera East which currently is in the above normal vegetation greenness band from normal vegetation greenness recorded in May		
	Banissa	59.59	80.18			
	M. East	48.59	68.71			
	Lafey	60.49	84.64			
	M. North	70.61	87.93			
	M. South	74.92	79.77			
	M. West	74.81	87.45			
TURKANA	County	101.84	85.05	Vegetation greenness above normal for the period across all sub counties		
	T. Central	109.17	93.37			
	T. East	75.82	87.62			
	T. Loima	116.93	103.10			
	T. North	95.46	63.80			
	T. South	114.95	107.04			
	T. West	110.35	84.65			
MARSABIT	County	64.72	64.30	All sub counties maintained vegetation greenness above normal		
	Laisaimis	66.68	69.38			
	Moyale	54.44	59.22			
	N. Horr	65.89	62.30			
	Saku	71.03	72.26			
WAJIR	County	52.56	54.53	The county is in the above normal vegetation greenness band. However, slight decline was observed in Eldas and Wajir South which currently are in the normal vegetation greenness class while Wajir West has deteriorated further to moderate vegetation deficit		
	W. East	60.63	68.36			
	W. Eldas	42.09	43.05			
	W. North	65.45	75.55			
	W. South	49.48	48.22			
	W. Tarbaj	61.25	68.86			
	W. West	39.63	32.06			

ADMINISTRATIVE UNIT		VEGETATION GREENNESS		DROUGHT CATEGORIES/REMARKS		
COUNTY	Sub County	VCI-3 month as at 25 th May 2020	VCI-3 month as at 29 th June 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	74.58	78.93	The entire county is in above normal vegetation greenness		
	S. East	69.34	71.98			
	S. North	78.89	85.39			
	S. West	81.14	85.03			
GARISSA	County	65.80	69.71	The vegetation greenness is in the above normal range for the period		
	Balambala	66.81	82.63			
	Daadab	54.76	63.51			
	Fafi	69.15	74.06			
	Ijara	75.80	69.47			
	Lagdera	57.21	56.96			
	Dujis	58.88	68.19			
ISIOLO	County	62.60	53.64	All sub counties maintained vegetation greenness above normal		
	I. North	61.01	51.43			
	I. South	65.03	57.01			
TANA RIVER	County	80.23	78.65	The county and its sub counties is in above normal vegetation greenness		
	Bura	66.22	79.54			
	Galole	83.22	77.19			
	Garsen	90.24	78.82			
KAJIADO	County	86.35	77.99	The entire county is in the above normal vegetation greenness band		
	K. Central	79.00	70.95			
	K. East	83.74	71.94			
	K. North	81.20	68.6			
	K. South	85.04	75.89			
	K. West	92.80	86.50			
LAIKIPIA	County	72.70	79.41	The vegetation greenness is in the above normal range for the period		
	L. East	78.01	79.93			
	L. North	72.65	80.31			
	L. West	70.24	77.96			
THARAKA NITHI	County	67.75	65.19	The county and its sub counties are in above normal vegetation greenness		
	Chulga	77.31	75.28			
	Maara	75.1	71.74			
	Tharaka	61.79	65.19			
WEST POKOT	County	85.48	82.92	Vegetation greenness above normal for the period across all sub counties		
	Kacheliba	81.69	81.54			
	Kapenguria	87.41	83.57			
	Pokot South	93.60	79.24			
	Sigor	85.96	87.09			

ADMINISTRATIVE UNIT		VEGETATION GREENNESS		DROUGHT CATEGORIES/REMARKS		
COUNTY	Sub County	VCI-3 month as at 25 th May 2020	VCI-3 month as at 29 th June 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	83.27	75.52	All sub counties maintained vegetation greenness above normal		
	Manyatta	80.13	77.99			
	Mbeere North	82.56	74.16			
	Mbeere South	85.45	74.59			
	Runyenjes	80.31	79.27			
KITUI	County	87.54	84.27	The vegetation greenness is in the above normal range for the period		
	Kitui Central	87.17	84.65			
	Kitui East	89.93	88.77			
	Mwingi Central	84.17	85.05			
	Mwingi North	73.20	71.03			
	Mwingi West	93.55	89.08			
	Kitui Rural	93.61	88.24			
	Kitui South	92.24	86.55			
	Kitui West	89.50	86.82			
MAKUENI	County	89.91	81.63	Enhanced vegetation condition across all the sub counties with vegetation greenness above normal in all parts of the county		
	Kaiti	93.78	86.36			
	Kibwezi East	88.93	77.38			
	Kibwezi West	90.59	77.57			
	Kilome	89.69	78.77			
	Makueni	86.05	85.61			
	Mbooni	95.41	94.39			
MERU	County	79.05	73.15	The vegetation greenness is above normal across the county		
	Buuri	81.32	70.56			
	Central Imenti	81.59	70.25			
	Igembe Central	78.94	80.73			
	Igembe North	75.34	71.51			
	Igembe South	73.68	79.03			
	North Imenti	83.19	71.40			
	South Imenti	81.17	75.56			
	Tigania East	75.79	66.97			
Tigania West	89.03	73.97				

ADMINISTRATIVE UNIT		VEGETATION GREENNESS		DROUGHT CATEGORIES/REMARKS		
COUNTY	Sub County	VCI-3 month as at 25 th May 2020	VCI-3 month as at 29 th June 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	81.05	77.65	Vegetation greenness above normal in all parts of the county		
	Kieni	79.34	76.80			
	Mathira	78.99	78.20			
	Mukurweini	99.36	89.79			
	Town	91.35	84.71			
	Othaya	77.78	73.85			
	Tetu	81.55	75.62			
KILIFI	County	76.28	71.87	The county and its sub counties is in above normal vegetation greenness.		
	Ganze	89.34	81.43			
	Kaloleni	83.13	74.52			
	Magarini	71.93	68.80			
	Malindi	67.53	68.48			
	Kilifi-North	61.17	62.08			
	Rabai	88.94	78.25			
	Kilifi-South	78.12	70.04			
KWALE	County	86.79	72.11	The vegetation greenness is in the above normal range for the period		
	Kinango	90.87	74.06			
	Lungalunga	86.23	73.97			
	Matuga	75.85	65.20			
	Msambweni	68.67	57.46			
LAMU	County	85.36	80.47	The county and its sub counties is in above normal vegetation greenness		
	Lamu East	84.61	78.43			
	Lamu West	85.80	81.65			
TAITA TAVETA	County	95.94	83.85	Enhanced vegetation condition across all the sub counties with vegetation greenness above normal in all parts of the county		
	Mwatate	96.26	90.80			
	Taveta	92.63	83.68			
	Voi	96.66	80.48			
	Wundanyi	102.60	100.51			
NAROK	County	84.92	73.83	The vegetation greenness is above normal across the county		
	Narok-East	89.99	77.20			
	Emurua Dikirr	69.73	59.95			
	Kilgoris	74.97	64.25			
	Narok-North	83.39	71.93			
	Narok-South	85.27	74.38			
	Narok-West	88.88	78.24			

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

