NATIONAL DROUGHT MANAGEMENT AUTHORITY

National Drought Early Warning Bulletin

February 2024

1. Drought Situation Overview

All the counties are categorized under the 'Normal' phase based on the range of environmental, production, access and utilization indicators monitored that fell within their usual ranges as result of good performance of the 2023 short rains season. The current Rift Valley Fever reported in the counties of Marsabit and Wajir counties is eminent risk to the affected and neighbouring counties. The just concluded

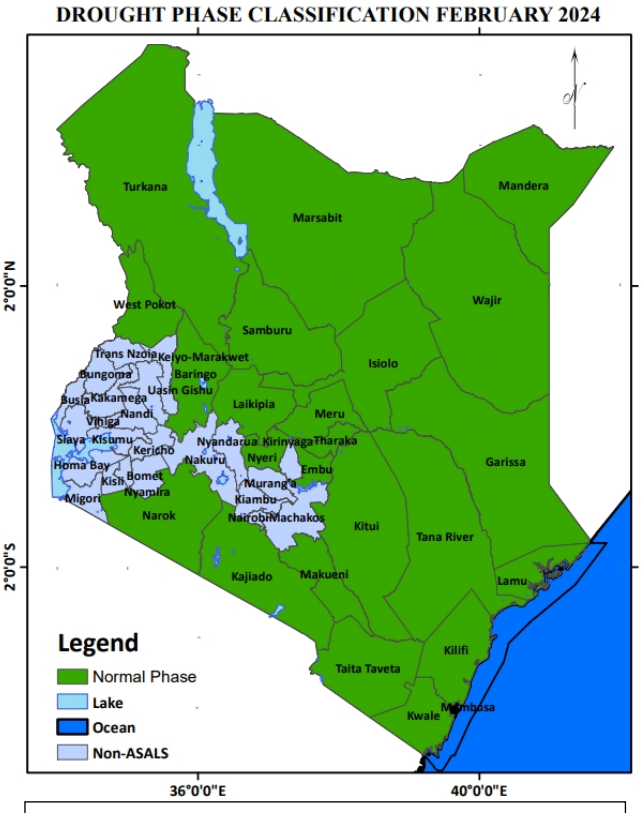

Fig 1: Drought Phase Classification, February

Short Rains Assessment (SRA) 2023, the number of people in need of humanitarian assistance stands at 2 million, Acute malnutrition has also been noted across the counties with 847,932 children aged 6 to 59 months and 124,359 pregnant and breastfeeding mothers are currently malnourished acutely in need of treatment. Figure 1.0 shows drought phase classification for the month of February 2024

1.1 Observed drought indicators

1.1.1 February 2024 Rainfall Performance

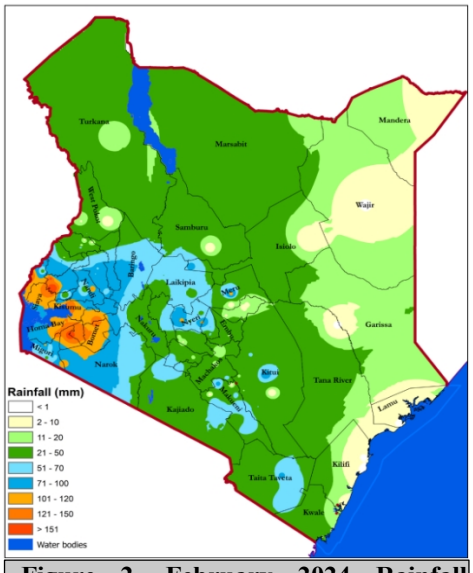

Figure 2. February 2024 Rainfall

The analysis of the February 2024 monthly rainfall performance indicates that several parts of the ASALs counties did not receive considerable amounts of rainfall. Pastoral North East counties including; Mandera, Wajir, Isiolo, Tana River, Garissa received high amounts of rainfall ranging between <1mm to 50mm. Pastoral North west counties including Turkana, Marsabit and Samburu received rainfall ranging between 11mm to 50mm. The South East Marginal Agriculture counties including; Tharaka Nithi, Embu, Kajiado, Meru, Makueni, Kitui counties received rainfall amounts ranging between 11mm to 70mm whereas Agro Pastoral cluster including

Kajiado, Laikipia, Narok, Baringo, Nyeri and West Pokot received considerable good rainfall amounts ranging between 11mm to 100mm. The Coast Marginal Agriculture counties including Kwale, Kilifi, and Lamu did received rainfall ranging between 2mm to 50mm as shown in figure 2.0.

1.1.2 March 2024 rainfall outlook

Rainfall outlook for the month of March 2024 is illustrated in figure 3. Generally, Pastoral North East livelihood zone region (Isiolo, Mandera, Wajir, Tana River and Garissa; South East Marginal Agriculture including; Kitui, Makueni, Embu and Tharaka Nithi. Agro-Pastoral livelihood zones including; Kajiado, Narok, Nyeri, Laikipia; The coastal marginal agriculture counties includes; Taita Taveta, Kilifi, Lamu and Kwale counties; Pastoral North West (Turkana, Samburu and Marsabit) counties are all forecasted to receive above average rainfall.

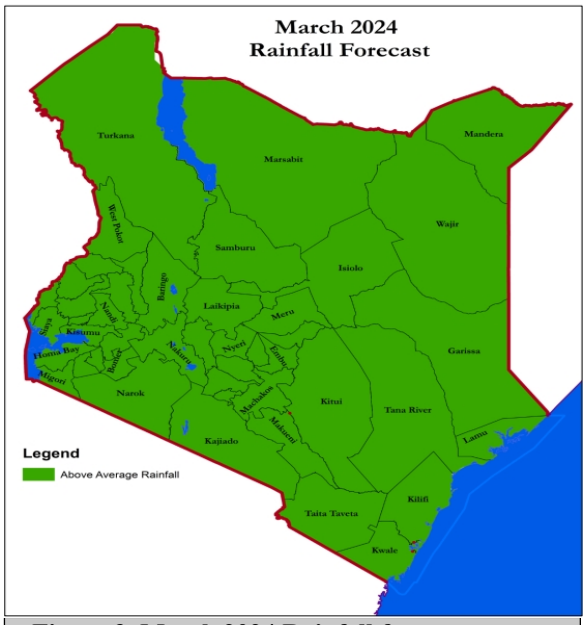

Figure 3. March 2024 Rainfall forecast

1.2 Vegetation condition

Generally, the vegetation condition in the month of February showed slight decline from the previous month of January which is normal during this period. Turkana and West Pokot Counties are depicting slight greenness deterioration thus requiring monitoring.

January 2024	February 2024

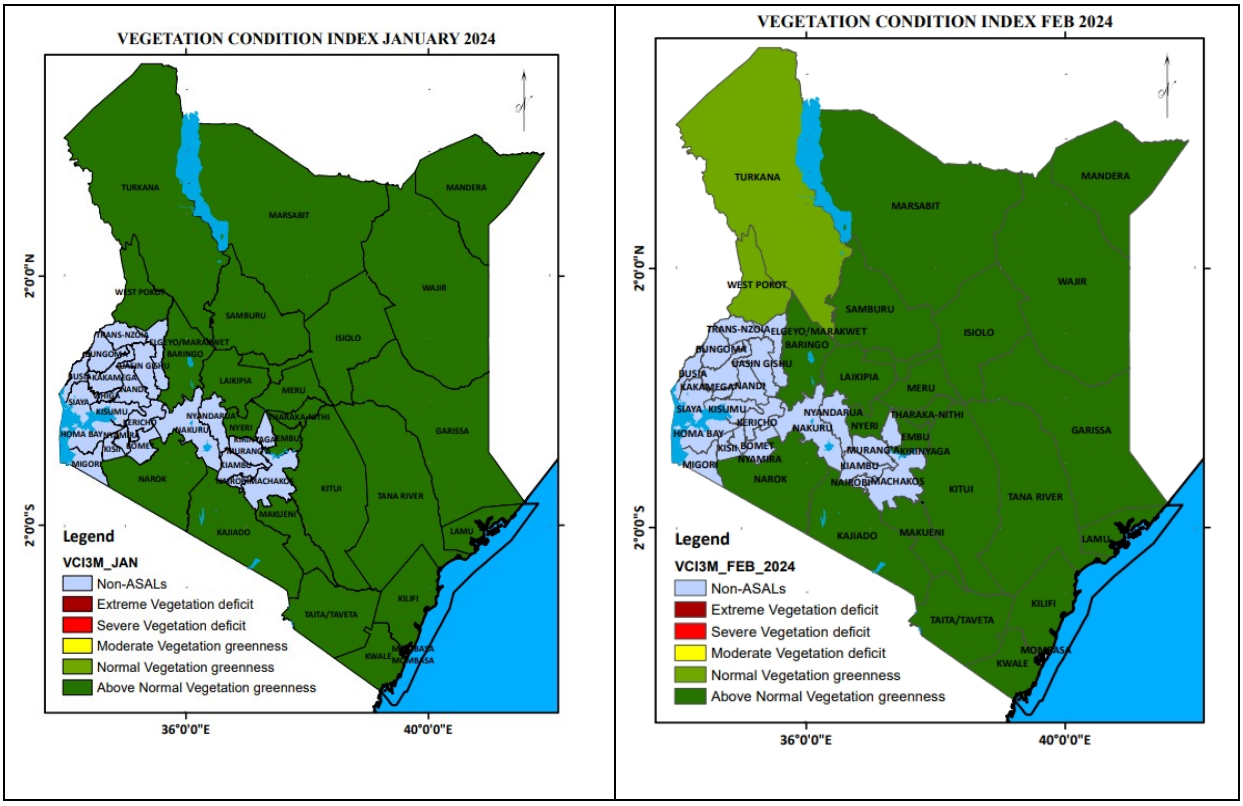

Figure 3: Vegetation Conditions (VCIs) for January and February 2024

The month of February 2024 indicated stability in vegetation condition across the Arid and Semi-Arid Counties (ASAL) when compared to the previous month of January 2024. However, two counties showed declining trend. Stability is due to the compounded impacts of OND short rains seasons which was linked to El Nino condition. None of the counties recorded either extreme or severe or moderate vegetation deficit. Two (2) counties of; Turkana and West Pokot recorded Normal vegetation greenness. The following twenty-one (21) counties including; Samburu, Laikipia, Kajiado, Kitui, Tana River, Garissa Kilifi, Baringo, Narok, Nyeri, Makueni, Embu, Tharaka Nithi, Meru, Isiolo, Marsabit, Wajir, Mandera, Taita Taveta, Lamu and Kwale recorded Above normal vegetation greenness. A summary of the vegetation condition across ASAL counties as at end of February 2024 is provided in Table 1. The situation for each county disaggregated by sub-county is provided in Table1.

Table 1: Vegetation Condition Index (VCI), February 2024

Category	County	Sub Counties (No)
Extreme	**(0)**	**(0)**

Severe vegetation deficit	**(0)**	**(0)**
Moderate vegetation deficit	**(0)**	**(0)**
Normal vegetation greenness	**(2)** Turkana, West Pokot	**(7)** Baringo (Mogotio), Turkana (East, Central, North), West Pokot (Kacheliba, Kapenguria, Sigor)
Above normal Vegetation greenness	**(21)** Baringo, Embu, Garissa, Isiolo, Kajiado, Kilifi, Kitui, Kwale, Laikipia, Lamu, Makueni, Mandera, Marsabit, Meru, Nyeri, Samburu, Taita Taveta, Tana River, Tharaka Nithi, Wajir, Narok	**(106)** Embu (Manyatta, Mbeere North, Mbeere South, Runyenjes), Kajiado (Central, East, North, South, West), Kilifi (Ganze, Kaloleni, North, South, Magarini, Malindi, Rabai), Kitui (Central, East, Rural, South, West, Mwingi Central, Mwingi North, Mwingi West), Kwale (Kinango, Lunga Lunga, Matuga, Msambweni), Laikipia (East, North, West), Lamu (East, West), Makueni, (Kaiti, Kibwezi East, Kibwezi West, Kilome, Makueni, Mbooni), Meru (Buuri, Central Imenti, Igembe Central, Igembe North, Igembe South, North Imenti, South Imenti, Tigania East, Tigania West) Nyeri (Kieni, Mathira, Mukurweini, Nyeri Town, Othaya, Tetu), Taita Taveta (Mwatate, Taveta, Voi, Wundanyi),Tharaka Natha (Chuka/Igamba ng'ombe, Maara, Tharaka), West Pokot(Pokot South), Narok (Emurua Dikirr, Kilgoris, East, North, South, West), Mandera (Lafey, North, Banissa, West, South, East), Marsabit (Laisamis, Moyale, North Horr, Saku), Samburu:(East, North, West),Tana River (Bura, Galole, Garsen), Turkana:(South, Loima, West), Wajir (Tarbaj, North, South, West, Eldas, East), Baringo (Central, North, South, Ravine), Isiolo (North, South), Garissa (Balambala, Fafi, Lagdera, Ijara, Daadab, Township),

1.3 Livestock production

1.3.1 Pasture and browse condition

Overall, forage conditions ranged from fair to good during the reference period. Pasture conditions were reported as good by 78% of ASAL counties, while 22% deemed the pasture condition fair. For browse, 91% of counties reported good conditions, with 9% reporting fair conditions, the stability is attributed to regeneration impacted by the recent rainfall. Fair

conditions were observed in regions like Samburu and parts of Marsabit, mainly due to invasive species hindering natural regeneration, heat effects in February, and compromised grazing lands from heavy flooding.

Table 2.0: Pasture and Browse Condition, February 2024

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

1.3.2 Livestock body condition

Livestock body condition in the 23 ASAL Counties was generally stable, with 58% reporting good condition and 22% fair condition for cattle, while goat and sheep showed 96% in good condition and 4% in fair condition. The favorable trend was attributed to abundant pasture and accessible water resource within shorter distances. The observed livestock body condition in February was within the normal to above-normal range for the same period. Overall, livestock in the ASALCounties exhibited good body condition, driven by ample pasture and close water sources, with February conditions falling within the usual or above-normal range for the season.

Table 3.0: Livestock Body Condition, February 2024

Cattle			Goats/Sheep		
Poor	**Fair**	**Good**	**Poor**	**Fair**	**Good**
	Turkana, Kitui Makueni, Narok West. Pokot	Baringo, Garissa Isiolo, Mandera Marsabit, Wajir		Nyeri	Baringo, Garissa Isiolo, Mandera Marsabit, Samburu

		Samburu Tana River Embu, Kajiado Kilifi, Kwale Laikipia, Lamu Meru, Narok, Taita Taveta, Tharaka Nithi			Tana River, Wajir Turkana, Taita Taveta Narok, Embu Kajiado, Kilifi, Kitui Kwale, Laikipia, Lamu, Makueni, Meru, WestPokot, Kilifi

1.3.3 Milk production

Milk production remained consistent compared to the previous month, but many Arid counties reported below-average production due to low Tropical Livestock Units (TLUs), stemming from livestock mortality during previous failed seasons. Among the sampled households, Samburu had the lowest average milk production of 0.4 liters among Arid counties, while Embu reported the lowest average milk production of 0.6 liters among semi-arid counties during the reviewed period.

Table 4.0: Milk production, February 2024

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

1.3.4. Livestock diseases

Sheep and goat pox, along with suspected cases of foot and mouth disease, were documented in Garissa, Kajiado (Mile 46 and Ewuaso Kendang), and Narok (Siana, Kilgoris Central, Naroosura, Nkareta ward in Narok West, Transmara West, Narok South, and Narok North Sub Counties). An increase in listeriosis (circling) disease in goats was observed in Waso ward, Samburu County. Rift Valley Fever outbreak cases were reported in Marsabit and Wajir, with 52 positive samples out of 275 tested in Wajir. In Mandera, instances of camel deaths occurred in Banissa and Lafey, but the cause remained undetermined. Tsetse flies were noted in large stock, particularly in the plains of North Horr in Marsabit, while a rabies outbreak was reported in Tigo, Marsabit County and goat's abortion noted across the county.

1.3.5 Cattle prices

Cattle prices remained steady throughout the ASAL counties compared to the previous month. The decrease in price in these areas was due to high volumes, caused by an influx of cattle into the markets as farmers sold cattle to raise fees for their learners in the schools new academic year and other household expenses. Conversely, in other regions, the stable to improving trend in prices was attributed to the favorable body condition of cattle, allowing pastoralists to command higher prices. Across all counties, prices were higher than usual for the period, driven by factors such as good body condition, active market participation, market scarcity due to hoarding and below normal volumes, and increased demand for cattle meat.

Table 5.0: Cattle prices, February 2024

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

1.3.6 Goat Prices

Stability in goat prices was observed across ASAL counties, driven by favorable livestock body conditions. However, oversupply to markets, driven by the necessity to raise funds for school fees and household needs, led to a decline in goat prices. In contrast, some counties experienced a positive trend due to high export demand and ample browse availability, contributing to good body conditions. The prevailing market prices for goats across all counties exceeded usual rates for the period, possibly attributed to sustained improvements in goat body conditions following favorable brief rainy seasons, increasing the availability of quality goats.

Table 6.0: Goat prices, February 2024

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

1.4 Crop Production

Agricultural activities, encompassing the cultivation of food and horticultural crops, are predominantly concentrated in the Agro-pastoral (AGP), Coastal Marginal Agriculture (CMA), and South East Marginal Agriculture clusters (SEMA). These regions serve as focal points for crop cultivation in the arid and semi-arid lands (ASAL). Nevertheless, it is noteworthy that even within other clusters, a significant number of households engage in crop production along the riverine areas of rivers such as Tana, Daua, Turkwel, and others. This diversification of agricultural practices highlights the adaptability and resourcefulness of communities across ASAL counties. The following summary table provides an overview of the agricultural landscape in these regions.

Table 7.0: Current status of crop production

Cluster	Counties	Current state of crop production
SEMA	**Kitui**	The main food crops in the field were at harvesting stage and their condition varied from good to fair. The performance of crops was affected by logging due to excessive water in some areas. Crop pests' manifestation also affected the performance of crops in the field; thus, no optimal production was expected
SEMA	**Makueni**	Most of these crops were on harvesting stage and in good to fair condition. The expected crop production was 30-60 percent above the long-term average. High incidences of crop pests and fungal diseases (caterpillars, bollworms, and Tuta absoluta) contributed to the reduced crop production especially for irrigated cropping
SEMA	**Meru**	Harvesting of short-cycle legumes such as beans has been completed across the livelihood zones. Most farmers in the county began harvesting maize across all the livelihood zones. Near average to below average harvest of maize is expected. In the Agropastoral areas of Igembe North and Central below normal maize crop harvest was observed. This is as a results of water logging from the enhanced rains leading to stunted growth of maize in these areas. However, near average-to-average maize crop harvest was observed in the Mixed Livelihood Zone of Tigania East. The harvest is expected to improve food availability at the household level periodically with most households opting to sell the harvest to meet other expenses or use as payment for school fees. Land preparation for the March -April – May (MAM) rains has begun in some areas.
Agropastoral	**Baringo**	Farmers have started clearing their farms in preparation for the long rains season. In the Irrigated livelihood zones, farmers were harvesting maize and tomatoes. Some maize farms were affected by fall army warms in Baringo Central and Eldama Ravine sub counties, leading to reduced crop yield.

1.4.1 Maize prices

Maize prices remained stable during ongoing harvesting, the prices are expected to decrease post-harvest. January prices exceeded the long-term average in counties, attributed to elevated fuel costs affecting transportation, and heightened demand. Ongoing harvests are stabilizing maize prices, anticipated to decline further. January's prices surpassed long-term averages due to increased fuel prices impacting transportation costs, and heightened demand for the commodity.

Table 8.0: Maize prices, February 2024

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

1.5 WATER ACCESS

1.5.1 Access to water for households

The distance to household water sources slightly increased but within the normal ranges, with Mandera reporting the longest trekking distance (8.3km) and Isiolo the shortest (2.2Km) among Arid counties. Tharaka Nithi recorded the longest distance (5.9km), while Nyeri reported the shortest (1.2km) among Semi-arid counties. The generally lower-than-normal trekking distances were attributed to water facility recharge during the October to December short rains and sporadic January showers in specific areas.

Table 9.0: Distance from Households to Main Water Sources, February 2024

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

1.5.2 Access to water for livestock

Livestock trekking distances from grazing areas to water sources remained stable across ASAL counties, showing a positive trend due to enhanced short rains. In arid counties, the average distance increased to 7.3 kilometers from January 2023's 6.7 kilometers, with Turkana and Mandera reporting the longest round-trip distances of over 10 kilometers each, and Tana River County having the shortest at 4.5 kilometers. In semi-arid counties, trekking distances ranged from 2.2 kilometers to 4.9 kilometers, with Kitui reporting the longest and Kilifi the shortest distances. The improved livestock access to water sources is attributed to the successful performance of the short rains in 2023.

Table 10.0: Distance from Livestock Grazing area to Main Water Sources, February 2024

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

1.6 Terms of trade

Terms of trade remained stable across the ASAL counties, with Garissa and Turkana reporting the lowest among Arid counties at 40 and 42, respectively. In semi-arid regions, Nyeri recorded the lowest at 61. Comparatively, the terms of trade were favorable when measured against the long-term average. Marsabit county reported the highest terms of trade at 98.4, while Tharaka Nithi recorded the highest among the semi-arid counties at 142. The positive shift in terms of trade is attributed to the ongoing harvesting activities, which are contributing to price stabilization in the ASAL counties.

Table 11.0: Terms of Trade, February 2024

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

1.7. Health and nutrition

Nutrition conditions improved in Isiolo, Mandera, Embu, Kitui, Laikipia, Lamu, Meru, Nyeri, Taita Taveta, and Marsabit compared to the previous month. This positive trend is a result of ongoing nutrition interventions through health outreaches and improved food consumption, particularly from enhanced access to nutritious items such as fresh milk, pulses, and seasonal vegetables. Garissa, Tana River, Kitui, Kwale, and Makueni counties are on alert status based on MUAC rates, signaling potential nutrition concerns. Despite this, reported malnutrition rates remained below seasonal ranges in about 60 percent of ASAL counties, but approximately 26 percent experienced rates outside the usual ranges. This less favorable situation could be attributed to an increase in epidemic diseases, including cholera and diarrhea, during the OND 2023 period.

Table 12.0: Children at risk of malnutrition (MUAC), February 2024

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

2.0 Drought phase classification

Based on the range of early warning indicators monitored through the drought early warning system, all the 23 ASAL counties are at the 'Normal' phase with a stable to improving trend, while few counties are at Worsening Trend as shown in the table 13.

Table 13.0: Drought phase classification, January 2024

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

3.0 Recommendations

Table 14: Priority Recommended Interventions

No.	Sector	Intervention
1.	**Coordination**	• Enhance coordination at both national and county levels to monitor any effects of the low precipitation situation, given the likely dry conditions in March 2024, before onset of MAM 2024 season. • Stakeholders to be sensitized on livelihood support actions to prepare communities for improved conditions during MAM 2024.
2.	**Food and safety nets**	• Provision of regular food assistance and unconditional cash transfers targeting the vulnerable groups. • Implementation of deliberate actions to create and sustain IGAs for vulnerable households to set them on a path to resilience.
3.	**Water sector**	• Rehabilitation and maintenance of water facilities damaged by *El Nino* rains. • Support for point of use water treatment for households faced with water insecurity. • Support enhanced water harvesting and storage.
4.	**Livestock sector**	• Strengthening disease surveillance and control to facilitate migrations and access to markets. • Promote routine supportive livestock health initiatives including vaccinations and control of (endo and ecto) parasites • Facilitate safe migrations in accessing grazing areas and markets • Support restocking programmes aimed at herd redistributions. • Promote pasture seed collection in readiness for reseeding during MAM 2024.
5.	**Health and nutrition sector**	• Support health and nutrition surveillance and interventions. • Promote health seeking behaviour through community health strategy. • Promote baby-friendly initiatives through mother support groups and community health strategy.
6.	**Peace and security sector**	• Support intra/inter-community peace dialogues and resource-use agreements; Coordination of peace and security activities in conflict prone counties. • Strengthening community readiness systems for peaceful access of resources.
7.	**Education sector**	• Support initiatives to enhance education enrolment, transition and attendance. • Enhance hygiene promotion in learning institutions; and • Promote of school feeding programmes.

Table 15: Vegetation Condition Index (VCI-3 month) as at 25th February 2024

ADMINISTRATIVE UNIT		VEGETATION GREENNESS		DROUGHT CATEGORIES/REMARKS		
COUNTY	**Sub County**	**VCI-3 month as at 31st Jan 2024**	**VCI-3 month as at 25th Feb 2024**	**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**	58.21	57.62	The county recorded above normal vegetation greenness in February.		
	Central	71.16	81.21			
	North	58.5	59.13			
	South	59.5	55.81			
	Ravine	63.94	78.59			
	Mogotio	48.02	48.13			
	Tiaty	57.25	52.31			
MANDERA	**County**	89.84	91	The county remained stable as compared to previous month of January with above normal vegetation greenness.		
	Lafey	93.9	97.39			
	North	95.2	95.68			
	Banissa	84.19	80.56			
	West	85.67	82.29			
	South	90.68	96.19			
	East	80.99	87.71			
TURKANA	**County**	54.66	49.86	The county recorded normal vegetation greenness during the month under review.		
	East	35.03	35.79			
	South	56.18	51.48			
	Loima	73.21	66.32			
	Central	45.92	47.92			
	West	68.43	60.06			
	North	48.29	41.96			

MARSABIT	**County**	82.75	73.86	The county recorded above normal vegetation greenness in February which was stable when compared to previous month of January.
	Laisamis	92.78	86.52	
	Moyale	90.77	83.5	
	North Horr	73.78	62.47	
	Saku	106.34	107.01	
WAJIR	**County**	80.25	86.25	The county maintained at above normal vegetation greenness in February, as compared to the previous month of January. This remained stable.
	Tarbaj	81.37	85.4	
	North	92.2	95.48	
	South	75.41	77.22	
	West	85.04	102.32	
	Eldas	70.25	83.21	
	East	81.61	88.99	
SAMBURU	**County**	74.6	74.2	The county remained stable at above normal vegetation greenness during the month under review.
	East	77.26	78.28	
	North	76.59	74.66	
	West	56.61	55.68	
GARISSA	**County**	79.78	81.91	The county remained the same in vegetation greenness at above normal vegetation greenness during the month of February.
	Balambala	77.94	83.15	
	Township	81.14	87.65	
	Ijara	79.75	84.49	
	Fafi	83.58	82.25	
	Lagdera	82.12	89.91	
	Dadaab	70.57	70.04	
ISIOLO	**County**	90.96	94.78	The county recorded stability in above vegetation greenness in February, which was stable when compared to last month.
	North	93.74	99.42	
	South	86.71	87.7	
TANA RIVER	**County**	78.53	75	The county recorded above normal vegetation greenness in the month of February.
	Bura	74.5	75.22	
	Galole	76.07	67.42	
	Garsen	83.49	79.55	

KAJIADO	**County**	81.05	90.66	Kajiado county recorded stability in vegetation greenness at above normal vegetation greenness.
	Central	79.16	90.95	
	East	86.31	93.38	
	North	75.03	84.22	
	South	88.06	93.65	
	West	74.31	87.05	
LAIKIPIA	**County**	74.16	74.32	The county recorded stability in vegetation greenness at above normal vegetation greenness during the month under review.
	East	79.06	79.28	
	North	78.21	76.61	
	West	64.21	67.63	
THARAKA NITHI	**County**	69.53	70.05	Th county recorded above normal vegetation greenness in the month under review.
	Chuka	80.42	80.11	
	Maara	76.53	81.17	
	Tharaka	63.2	62.71	
WEST POKOT	**County**	55.38	48.21	The county recorded decrease in vegetation greenness from, above normal vegetation greenness to normal vegetation greenness during the month of February.
	Kacheliba	50.37	41.34	
	Kapenguria	55.97	48.8	
	Pokot south	64.03	66.18	
	Sigor	58.9	49.58	
EMBU	**County**	80.13	77.49	The county recorded above normal vegetation greenness during the month under review.
	Manyatta	74.21	77.15	
	Mbeere north	84.3	76.74	
	Mbeere south	80.01	76.9	
	Runyenjes	77.82	81.86	
KITUI	**County**	74.09	71.98	The county recorded a stability in vegetation greenness at above normal vegetation greenness during the month of February.
	Kitui central	74.17	78.92	
	Kitui east	73.89	71.69	
	Kitui rural	80.32	82	
	Kitui south	76.92	76.14	
	Kitui west	73.33	74.99	

	Mwingi central	71.1	65.81	
	Mwingi north	67.79	62.59	
	Mwingi west	81.35	78.26	
MAKUENI	**County**	79.77	86.02	The county recorded above normal vegetation greenness in February, which was stable when compared to previous month of January.
	Kaiti	81.57	90.79	
	Kibwezi east	76.51	88.05	
	Kibwezi west	80.78	81.91	
	Kilome	83.12	92.75	
	Makueni	82.07	82.82	
	Mbooni	78.12	87.47	
MERU	**County**	74.02	78.98	The county recorded above normal vegetation greenness across the sub-counties.
	Buuri	73.78	81.86	
	Central Imenti	74.08	76.15	
	Igembe central	78.6	80.93	
	Igembe north	83.82	86.89	
	Igembe south	75.76	74.21	
	North Imenti	53.3	64.8	
	South Imenti	76.08	84.74	
	Tigania east	66.84	71.53	
	Tigania west	61.64	71.32	
NYERI	**County**	61.83	74.92	The county recorded above normal vegetation greenness in February.
	Kieni	64.12	75.28	
	Mathira	55.57	63.89	
	Mukurweini	64.48	84.75	
	Nyeri town	66.73	84.04	
	Othaya	59.95	76.64	
	Tetu	56.06	75.87	
KILIFI	**County**	74.53	76.76	
	Ganze	77.09	76.97	
	Kaloleni	76.92	79.95	The county remained at above normal vegetation

	Kilifi north	68.46	73.64	greenness in the month of February.
	Kilifi south	65.42	69.43	
	Magarini	74.85	77.53	
	Malindi	70.73	71.29	
	Rabai	69.6	78.57	
KWALE	**County**	78.06	85.42	The vegetation condition index recorded was above normal vegetation greenness in February which was stable when compared to last month.
	Kinango	79.37	85.72	
	Lunga Lunga	80.01	86.49	
	Matuga	71.09	83.82	
	Msambweni	70.92	80.81	
LAMU	**County**	80.44	90.68	The county and all its sub counties recorded stability in vegetation condition at above normal vegetation greenness condition during the month of February.
	Lamu east	79.03	91.21	
	Lamu west	81.25	90.37	
TAITA TAVETA	**County**	82.11	92.25	The county remained stable at above normal vegetation greenness during the month of February.
	Mwatate	79.74	95.33	
	Taveta	84.74	104.3	
	Voi	81.44	85.41	
	Wundanyi	85.18	102.65	
NAROK	**County**	77.55	84.75	The County recorded above normal vegetation greenness in the month of February which was stable when compared to the last month of January.
	Emurua Dikirr	92.93	94.47	
	Kilgoris	76.55	81.28	
	Narok east	79.25	89.75	
	Narok north	64.01	71.41	
	Narok south	77.09	87.05	
	Narok west	83.63	88.37	

Table 14.0: Indicators monitored by the drought early warning system

Type of indicator	Examples of indicators monitored	Types of impact
Biophysical	Rainfall data Vegetation condition	Environmental

	State of water sources	
Production	Livestock body condition Milk production Livestock migration Livestock mortality Crop production	Livestock production Crop production
Access	Terms of trade (meat/maize) Milk consumption Distances to water	Markets Access to food and water
Utilization	MUAC (Mid-Upper Arm Circumference) Coping strategies Food consumption score	Nutrition Coping strategies

Summary of the drought early warning system

Each month, field monitors collect data in 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 indicators 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 4). Identifying the correct drought phase helps to guide the most appropriate response for that stage in the drought cycle.

Figure 4.0: Drought Phase Classification