



**THE PRESIDENCY
MINISTRY OF DEVOLUTION AND PLANNING**

National Drought Early Warning Bulletin

October 2016



Summary

Most ASAL counties are experiencing some degree of drought stress as the dry season draws to a close. Areas in the south-east and the coast are the most affected since they received below-average rainfall during the long rains season. One county (Kilifi) is in the alarm drought phase, while all others are in alert or normal, with a generally worsening trend.

In parts of Kilifi, Garissa, Lamu, Kwale, Taita Taveta, Tana River, Makueni, Kajiado, Narok and Marsabit there are now significant shortages of pasture and water, and in some cases livestock mortality. The food insecurity situation is exacerbated by conflict in some counties, the most serious case in the previous month (September) being along the borders of Isiolo and Garissa where pastoralists' convergence is common.

The prospects for the coming months will be determined by the onset and performance of the short rains season. If the season is below average, as currently forecast, or its onset is late, then the drought situation will become significantly worse, with impacts on health and nutrition, household purchasing power, and security. The implications of a poor season are particularly worrying for the marginal agricultural counties which are short rains-dependent.

The NDMA in collaboration with county governments and other stakeholders has activated drought contingency plans in seven counties and is supporting all counties to coordinate their response and plan for a possible La Niña event.

1 DROUGHT STATUS

1.1 Drought indicators

Rainfall

September is generally a dry month across the ASALs. Most counties received no rainfall, or a few light showers, which is normal for the season. Baringo and Lamu received below-average rainfall for the month.

Vegetation condition

The Vegetation Condition Index (VCI) communicates the vigour of vegetation cover, comparing it with the range of values for the same period in previous years. Annex 1 contains the VCI data as at September 27, 2016. There are five categories: above-normal vegetation, normal vegetation, moderate vegetation deficit, severe vegetation deficit, and extreme vegetation deficit.

The areas with the highest vegetation deficit at present are largely in the south-east and at the coast, where the long rains season was below average:

- One county (Kilifi) is in the severe vegetation deficit band. Two other sub-counties (Kinango in Kwale and Lamu West) are also in the severe vegetation deficit band.
- Four counties (Garissa, Kwale, Lamu and Narok) have a moderate vegetation deficit.
- The remaining 18 counties have either normal or above-normal vegetation for the time of year, though with a moderate deficit in some of their sub-counties:
 - Moyale (Marsabit)
 - Bura (Tana River)
 - Kajiado Central (Kajiado)
 - Kibwezi East and West (Makueni)
 - Voi (Taita Taveta)

In counties experiencing moderate or severe vegetation deficit, such as Garissa, Narok and parts of Tana River, the available pasture and browse will last for only one month, even less; in the ranching zone of Kilifi the pasture has already been depleted. Water sources are under significant pressure: for example, 90% of pans and dams in Moyale, Turbi and Saku areas of Marsabit are already dry.

Livestock production

Livestock production indicators are generally worsening, in line with seasonal norms. However, in some counties the falls have been particularly steep:

- In Isiolo, milk production fell by 42% on the previous month and is now half of the long-term average (LTA).
- In Kwale, milk production fell by 41% on the previous month and is now 60% of the LTA.
- In Tana River, milk production fell by 58% and is now only 17% of the LTA.

Drought-related livestock deaths are reported in the following counties:

- Garissa: unusual premature and still-births in Ijara, which is particularly affected by livestock disease. Livestock deaths in the county are also linked to dehydration.
- Kilifi: a significant number of livestock deaths in Kaloleni and Ganze.
- Kwale: 90 cattle deaths attributed to water shortages.
- Lamu: livestock deaths in the agro-pastoral livelihood zone.

- Tana River: mortality rates estimated to be 5% of cattle and 3% of sheep.

The county drought early warning bulletins include few references to unusual livestock migration, most being the normal movement that is expected in the dry season. Two exceptions were Narok, which noted unseasonal migration within the county, and Taita Taveta, which noted migration to Kajiado and into the Tsavo national park. In addition, Garissa County has reported livestock out migrations to Isiolo county on the north west wing and towards Lamu county in the southern wing.

Crop production

In the marginal agricultural counties, land preparation is underway in advance of the short rains, which for many are the main cropping season; as a result, few bulletins yet have much to report. In counties which received off-season rains, such as West Pokot, the condition of crops already in the fields is currently good. However, in Turkana, pests and disease have affected both irrigated and rain-fed production.

Access to water

Average return distances to water for both households and livestock are increasing, as is normal at this time of year. In several counties these increases are modest, but in some they are considerable:

- In Samburu, the distances for households and livestock increased by 60% and 51% respectively on the previous month.
- In Meru North, the distance for livestock increased by 153%, while the distance for households is now more than three times the LTA.
- In Lamu, the distance for households increased by 143%, though it is still only 1km above the LTA.
- In Kilifi, the distance for households increased by 44% and is now more than twice the LTA.

However, distances to water are also a factor of the quality of water infrastructure, which in several counties is not adequate to sustain producers through the dry season. The Isiolo, Laikipia and Samburu bulletins all mention the need to repair broken boreholes and pumps, while in Tana River there is pasture available but no water sited in locations that would allow livestock to reach it. As a result of these underlying challenges in the water sector, communities are more vulnerable to comparatively mild drought conditions.

Terms of trade

Each month, the drought early warning system monitors the relative price of goats and maize, showing the number of kilogrammes of cereal that can be exchanged for one goat.¹ Table 1 summarises the movements on the previous month and the trend. The largest falls in terms of trade were in Tana River (38%) and Mandera (23%).

With regard to livestock and maize prices:

- Livestock prices are holding up in several counties, even rising, and not just in those where environmental conditions are reasonably good for the season (such as Isiolo, Laikipia, Turkana and West Pokot) but also in those experiencing greater environmental stress (such as Garissa, Lamu and Marsabit). However, in other counties livestock prices are reducing, with sharp falls noted in Mandera, Meru (North), Tana River, Wajir, Kitui (cattle) and Nyeri (cattle).
- With a few exceptions, maize prices are generally stable across all counties. The largest price movements were in Lamu (an increase of 23%) and in Mandera (a decrease of 27%).

Table 1: Terms of trade, September 2016

<i>Trend</i>	Improving	Stable	Worsening
Below long-term mean (LTM)		Isiolo	Kilifi Marsabit Tana River
At / close to LTM		Makueni	
Above LTM	Garissa Laikipia Samburu Turkana West Pokot		Kajiado Kitui Mandera Tharaka Nithi Wajir

Note: Data based on 15 counties

Health and nutrition

The bulletins monitor the percentage of children under-five at risk of malnutrition, determined by a mid-upper arm circumference (MUAC) measurement (Table 2). In summary:

¹ These terms of trade are an important indicator of pastoralists' purchasing power. As drought stress increases, animals lose condition and more of them enter the market causing the price to fall. At the same time, the price of cereals tends to rise as stocks become depleted prior to harvest. Thus, livestock-keepers are caught in a pincer movement, as the value of their principal asset decreases and the price of the food they need increases.

- Seven counties have MUAC rates above the 15% threshold: Garissa, Mandera, Marsabit, Meru (North), Samburu, Turkana, Wajir.
- Of these, the highest is Samburu at 26.3%. Global acute malnutrition is also reported to be above 20% in Laisamis and North Horr (Marsabit).
- There are hotspots of concern in a number of counties, including Komolion (Baringo), Merti and Oldonyiro (Isiolo), and Magadi (Kajiado).

The largest movements in the MUAC rate on the previous month were as follows:

Increase		Decrease	
Meru (North)	54%	Turkana	22%
Makueni	37%	Kwale	17%
Kajiado	27%		
Samburu	14%		
Kitui	14%		
Narok	13%		

In counties which are otherwise under stress, the MUAC rate can be stable. For example, the rate in Kilifi has been little changed for the past three months and below the long-term average. This is attributed to supplementary feeding at health facilities and early detection through enhanced community screening.

Table 2: Children at risk of malnutrition (MUAC), September 2016

<i>Trend</i>	Improving	Stable	Worsening
Below long-term mean (LTM)	Kwale Mandera Nyeri (Kieni) Turkana	Kilifi Isiolo Laikipia Lamu Marsabit	Baringo Embu (Mbeere) Kajiado Makueni Tharaka Nithi Wajir
At / close to LTM		Taita Taveta West Pokot	Tana River
Above LTM			Garissa Kitui Meru (North) Narok ² Samburu

Note: Counties highlighted in bold have MUAC rates above 15%

² The MUAC rate in the pastoral zone of Narok is above 15% (16.2%)

1.2 Drought phase classification

On the basis of the range of indicators monitored above, most counties are currently categorised in either the 'normal' or 'alert' drought phase, with Kilifi in 'alarm'. Most are also on a worsening trend (Table 3). Anomalies within counties are mentioned in footnotes.

Table 3: Drought phase classification September 2016

<i>Trend</i> Drought status	Improving	Stable	Worsening
Normal		Baringo ³ Embu (Mbeere) ⁴ Kitui Laikipia ⁵ West Pokot	Isiolo Nyeri (Kieni) Samburu Tharaka Nithi Turkana
Alert			Garissa Kajiado Kwale Lamu ⁶ Makueni Mandera Marsabit Meru (North) Narok Taita Taveta Tana River Wajir
Alarm			Kilifi
Emergency			
Recovery			

2 OTHER FOOD SECURITY CHALLENGES

Seven county bulletins mentioned conflict as a concern. The most serious case was in Isiolo, where violence in Garbatulla led to three deaths and curtailed access to water and pasture. Some border areas are also areas of growing tension, particularly Marsabit/Wajir and Turkana/Ethiopia.

Mandera continues to be affected by cross-border insecurity, while in Lamu and Tana River the security situation is being contained, though in both counties there

³ Pastoral livelihood zone: alert

⁴ Marginal mixed farming livelihood zone: worsening

⁵ Pastoral livelihood zone: alert

⁶ Irrigated cropping, farming/casual labour, and agro-pastoral livelihood zones: alarm

are also resource-based conflicts which in Tana Delta led to displacement. Insecurity in Koom, Samburu, closed off pasture to herders. Human/wildlife conflict was highlighted by Lamu, Samburu and Taita Taveta counties.

3 ACTIONS BEING TAKEN

3.1 Drought Contingency Fund

Since July 2016, the NDMA has disbursed Ksh53 million of drought contingency finance provided by the European Union in seven counties, complementing what the counties and their partners are already doing (Table 4).

Table 4: Drought Contingency Fund (DCF) disbursements, July 2016 to date

County	Coordination	Education	Health and Nutrition	Livestock	Security	Water	Total
	<ul style="list-style-type: none"> • Oversight of response • Planning for La Nina 	Food for fees to promote retention	<ul style="list-style-type: none"> • Medical outreach • Disease surveillance • Nutrition supplements for under-fives 	<ul style="list-style-type: none"> • Vaccination • Livestock feed supplements • Commercial and slaughter de-stocking 	Peace building & conflict management activities	<ul style="list-style-type: none"> • Fuel subsidies • Borehole spares & repairs • Water trucking 	
Garissa	1,585,800		1,172,000	5,373,700		2,893,300	11,024,800
Kilifi	627,900			9,344,200	160,950	1,461,000	11,594,050
Kitui	931,200		1,076,100	4,699,600		1,060,300	7,767,200
Kwale	689,575		594,650	4,035,250	93,000	1,126,568	6,539,043
Makueni	784,700		1,362,600	2,046,800		862,300	5,056,400
Taita Taveta	700,100		188,000	2,618,900	653,100	3,572,880	7,732,980
Tana River	714,600	315,000	795,000	904,800	519,000	50,000	3,298,400
Total	6,033,87	315,000	5,188,350	29,023,250	1,426,050	11,026,348	53,012,873

3.2 Shock-responsive cash transfers

The Hunger Safety Net Programme (HSNP) provides regular cash transfers to a chronic caseload of the poorest households in Turkana, Marsabit, Wajir and Mandera counties, but it also has the ability to scale up in times of drought (or other crisis) by providing temporary cash assistance to greater proportions of the

population as needs dictate. The scalability of cash transfer is triggered by the Vegetation Condition Index (VCI) when its value is indicating a severe or extreme vegetation deficit in one or more sub-counties. In September, no scalability of cash transfer has taken place since the VCI values in the four targeted counties have not reached the severe vegetation deficit threshold.

3.3 Other interventions

The county governments have been the first line of action considering their devolved functions. The main activities supported by county governments include provision of relief food to the vulnerable populations, water trucking and operation and maintenance of water sources. Some county governments have been able to sustain livestock disease surveillance and control through routine vaccinations.

The NDMA with the support of the World Food Program (WFP) is implementing a Food For Assets/ Cash for Assets (FFA/CFA) programme in 13 arid and semi-arid counties. The aim of the programme is to protect vulnerable households and build productive assets thereby enhancing their resilience to drought risks. The key activities prioritised by the communities include soil and water conservation, irrigation and dry land agriculture. Currently, 691,800 people are supported directly by the Programme in Turkana, Isiolo, Taita Taveta, Kilifi, Mandera, Tana River, Kilifi, Baringo, Makueni, Kitui, Garissa and Marsabit counties. The programme is expanding to also cover Samburu and Wajir.

UNICEF is currently supporting the health and nutrition component in all the ASAL counties by prepositioning nutrition supplementation supplies to all health facilities in partnership with Kenya Red Cross.

4 PROJECTED FOOD SECURITY SITUATION

The forecast for the short rains season is that rainfall will be depressed and poorly distributed in both time and space, driven by the evolving La Niña condition. If the season is poor, and if its onset is late, then the current drought situation will become significantly worse. There will be a further decline in livestock body condition, and consequently in milk availability, child nutrition and household purchasing power, and a potential rise in resource-based conflict. The implications are particularly worrying for the marginal agricultural counties, which are already dealing with the impact of a poor long rains season, and for whom the October-December rains represents the primary production season.

5 CONCLUSIONS AND RECOMMENDATIONS

Drought conditions are currently of greatest concern in areas where the performance of the 2016 long rains was poor, such as parts of the south-east and coast. If the imminent short rains season is also below average, as the forecast suggests, then not only will these areas deteriorate to the alarm or even emergency phase, but drought stress will deepen in many other ASAL counties as well.

The following recommendations accommodate different scenarios and timescales:

1. **Immediate activation and implementation of drought contingency plans** in areas currently affected by drought conditions, in order to protect communities from further stress.
2. **Timely preparedness for the next dry season.** Given that the season may be short, with a late onset and early cessation, it is likely that a drought event may unfold in the next dry season (Jan-Apr 2017). This will require the review of the contingency plans and preparedness for their activation to ensure early response during the next dry season in case of need.
3. **Measures to mitigate the impact of a below-average short rains season and continued drought stress,** including:
 - a. Repair of broken water sources and positioning of fast-moving spares.
 - b. Expansion of rainwater harvesting capacity.
 - c. Expansion of nutrition monitoring and associated interventions.
 - d. Expansion of measures to retain students' access to education.
 - e. Management of a likely increase in livestock mobility, including the facilitation of inter-communal agreements where needed, and an expansion of livestock disease surveillance and control.
 - f. Provision of animal feeds to support vulnerable household members that are left behind when the main herds move in search of water and pasture in order to keep some milk production.
 - g. Commercial livestock destocking to encourage selling of animals before they lose their body condition.
4. **Measures to mitigate the impact of normal to above normal rainfall,** such as:
 - a. Expansion of public health interventions, including the provision of water treatment supplies.
 - b. Expansion of livestock disease surveillance and control.

5. **Accelerated implementation of measures that will reduce drought vulnerability**, in line with the Common Programme Framework for Ending Drought Emergencies, as well as their integration within planning frameworks for the 2017-18 budget year, including:
- Investment in appropriate and sustainable water infrastructure.
 - Repair or expansion of the rural road network.
 - Expanded access to appropriate education, health and nutrition services.
 - Measures that manage conflict and build peace.
 - Strengthening of market systems and producer power in markets.

Annex 1 Vegetation Condition Index (27th September 2016)

COUNTY	Sub-County	VCI as at 29 th Aug 2016	VCI as at 27 th Sep 2016	Color	VCI values	Drought Category
					3-monthly average	
					≥50	Vegetation greenness above normal
					35 to 50	Normal vegetation greenness
					21 to 34	Moderate vegetation deficit
					10 to 20	Severe vegetation deficit
					<10	Extreme vegetation deficit
BARINGO	County	72.73	67.28	Above-normal vegetation conditions in all sub-counties.		
	Central	66.85	67.17			
	Eldama	64.92	69.06			
	Mogotio	70.75	68.12			
	North	74.23	69.45			
	South	73.44	68.49			
	Tiaty	75.02	65.42			
MANDERA	County	61.16	62.13	Above-normal vegetation conditions across the entire county and all sub-counties except Mander West that is in the normal condition band.		
	Banissa	56.33	56.05			
	Mandera East	57.01	59.81			
	Lafey	56.34	59.63			
	Mandera North	56.56	56.97			
	Mandera South	83.02	86.57			
	Mandera West	50.60	47.55			
TURKANA	County	51.66	46.38	Normal/ above-normal vegetation conditions across the entire county but with worsening trend, especially in Turkana East. There is need to prepare in case of a late onset of the short rains.		
	Turkana Central	59.53	66.77			
	Turkana East	46.78	36.41			
	Turkana Loima	53.31	45.25			
	Turkana North	52.72	47			
	Turkana South	53.04	49.48			
	Turkana West	48.97	44.11			
MARSABIT	County	45.22	41.09	Normal conditions across the entire county except in Moyale, which is experiencing moderate vegetation deficit with worsening trend. There is need to prepare for possible worsening conditions in case of late onset of the short rains.		
	Laisaimis	57.84	51.88			
	Moyale	33.60	29.8			
	N. Horr	40.50	37.14			
	Saku	55.63	54.80			
WAJIR	County	49.55	50.87	Normal/ above-normal vegetation conditions across the entire county.		
	Wajir East	46.12	50.92			
	Eldas	66.56	59.46			
	Wajir North	54.91	54.35			

	Wajir South	37.88	42.94	
	Tarbaj	68.44	70.89	
	Wajir West	45.03	41.75	
SAMBURU	County	50.97	40.99	Normal/above-normal vegetation conditions across the entire county but with worsening trend.
	Samburu East	44.94	37.51	
	Samburu North	52.99	39.84	
	Samburu West	68.80	59.40	
GARISSA	County	33.68	30.63	Four sub-counties experiencing moderate vegetation deficit with a marked decline in Ijara that should be monitored to assess the drought impact on livelihoods. Fafi sub-county close to the severe vegetation deficit band.
	Balambala	46.11	43.40	
	Daadab	25.72	30.71	
	Fafi	23.52	20.17	
	Ijara	33.01	22.16	
	Lagdera	61.15	58.77	
	Dujis	26.37	29.00	
ISIOLO	County	53.26	51.61	County experiencing above-normal vegetation conditions. Isiolo South reporting normal vegetation conditions.
	Isiolo North	54.77	52.68	
	Isiolo South	50.96	49.97	
TANA RIVER	County	33.23	35.36	County experiencing mild vegetation deficit in Bura, while all other sub-counties experiencing normal vegetation conditions for the period.
	Bura	30.28	32.53	
	Galole	34.43	39.09	
	Garsen	34.98	35.43	
KAJIADO	County	34.34	36.23	Mild vegetation deficit reported in Kajiado Central while the county and all other sub-counties in normal vegetation conditions with Kajiado North experiencing above-normal vegetation conditions for the period.
	Kajiado Central	32.76	32.74	
	Kajiado East	39.55	38.61	
	Kajiado North	66.10	63.98	
	Kajiado South	31.59	36.11	
	Kajiado West	34.47	36.62	
LAIKIPIA	County	59.59	52.74	Above-normal vegetation condition for the entire county and all sub-counties except Laikipia North that is within normal vegetation conditions.
	Laikipia East	56.69	51.63	
	Laikipia North	54.53	45.53	
	Laikipia West	70.45	66.77	
THARAKA	County	60.76	63.84	Above-normal vegetation conditions for the entire county and all sub-counties.
	Chulga	63.61	68.37	
	Maara	66.80	70.56	
	Tharaka	57.76	59.98	
WEST POKOT	County	64.39	59.6	Above-normal vegetation conditions for the entire county and all sub-counties.
	Kacheliba	63.50	55.85	
	Kapenguria	67.83	67.49	
	Pokot South	65.74	70.32	
	Sigor	62.30	53.43	
EMBU	County	58.49	59.27	All sub-counties experiencing above-normal ranges of vegetation greenness, a trend similar to that of last month.
	Manyatta	77.30	69.70	
	Mbeere North	48.24	50.51	
	Mbeere South	54.88	58.02	
	Runyenjes	73.99	72.07	
KITUI	County	39.84	42.33	Normal vegetation conditions across the entire county and all sub-counties.
	Kitui Central	49.78	49.01	
	Kitui East	37.81	41.17	
	Mwingi Central	43.88	47.43	
	Mwingi North	49.62	49.27	
	Mwingi West	47.45	47.19	
	Kitui Rural	37.32	36.25	
	Kitui South	33.65	37.03	
	Kitui West	45.65	47.93	

MAKUENI	County	39.73	39.84	Moderate vegetation deficit for Kibwezi East and West in line with the previous month. All other sub-counties reporting normal vegetation conditions.
	Kaiti	70.74	71.78	
	Kibwezi East	26.73	28.92	
	Kibwezi West	30.83	30.46	
	Kilome	50.15	46.26	
	Makueni	44.64	42.73	
	Mbooni	59.82	62.19	
MERU	County	54.66	54.81	Normal to above-normal vegetation conditions for the period in the entire county and all sub-counties.
	Buuri	47.47	46.43	
	Central Imenti	60.59	59.49	
	Igembe Central	59.42	60.29	
	Igembe North	59.34	60.25	
	Igembe South	70.24	71.38	
	North Imenti	53.35	49.55	
	South Imenti	67.37	71.51	
	Tigania East	37.42	36.23	
	Tigania West	37.26	37.04	
	NYERI	County	56.53	
Kieni		55.29	56.77	
Mathira		54.86	57.59	
Mukurweini		36.69	57.82	
Town		58.28	57.13	
Othaya		67.46	70.78	
Tetu		63.61	68.2	
KILIFI	County	19.07	19.74	County continues to experience significant vegetation deficit across all sub-counties. Four sub-counties are in the severe vegetation deficit band, while Magarini is facing moderate drought but approaching the severe vegetation deficit band.
	Ganze	11.85	14.66	
	Kaloleni	14.14	14.65	
	Magarini	22.08	21.56	
	Malindi	16.65	16.16	
	Kilifi North	12.36	16.56	
	Rabai	41.5	40.24	
	Kilifi South	34.95	36.16	
KWALE	County	23.76	21.62	Entire county experiencing significant vegetation deficit with Kinango in the severe band and Lungalunga showing moderate vegetation conditions but close to the severe band. A significant worsening trend is recorded in Matuga sub-county.
	Kinango	19.17	17.62	
	Lungalunga	22.46	21.38	
	Matuga	40.38	34.88	
	Msambweni	41.18	35.72	
LAMU	County	37.02	26.94	Marked worsening condition in Lamu West that requires prompt action to assess the impact on livelihoods and identification of possible response initiatives.
	Lamu East	52.96	41.85	
	Lamu West	27.7	18.23	
TAITA T.	County	37.58	41.49	Marginally better trends compared with the previous month. Voi still experiencing mild vegetation deficit.
	Mwatate	40.57	41.94	
	Taveta	49.20	57.51	
	Voi	31.49	34.32	
	Wundanyi	41.45	45.18	
NAROK	County	47.10	34.00	Vegetation greenness significantly declining across the county with three out of six sub-counties entering the moderate vegetation deficit band. There is need to assess the possible impact of the vegetation deficit especially on pastoral livelihoods, being much more vulnerable than those in the high potential areas of Transmara.
	Narok-East	46.64	38.35	
	EmuruaDikirr	67.85	45.98	
	Kilgoris	40.55	23.06	
	Narok North	53.11	48.66	
	Narok South	41.73	33.97	
	Narok West	51.19	29.54	

Annex 2 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 5). The combined analysis from all four indicator groups then determines the particular drought phase: normal, alert, alarm, emergency or recovery (Figure 1). Identifying the correct drought phase helps to guide the most appropriate response for that stage in the drought cycle.

Table 5: 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	MUAC (Mid-Upper Arm Circumference) Coping strategies	Nutrition Coping strategies

Figure 1: Drought Phase Classification

