

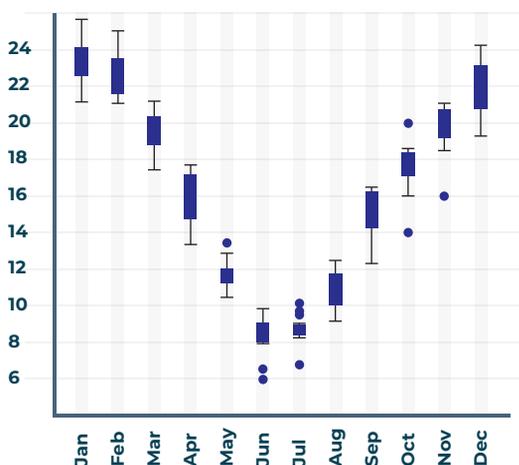
## COUNTRY OVERVIEW

Drought has become one of the most visible causes of hunger and malnutrition in Lesotho. The country is prone to both drought and desertification, making it highly vulnerable to climate change. Drought has disrupted agriculture reflected in the deterioration of pasture and livestock conditions. Longer lean seasons have reduced food reserves to drastically low levels, leaving affected populations in IPC Crisis-level food insecurity. More than a quarter of its population of 2.2 million faced severe food insecurity during the 2019/2020 drought, declared as a national disaster by the Government of Lesotho. The 2018/2019 planting season was further characterised by late onset of rains and extremely hot temperatures, leading to poor harvests: reduced production yield of cereals of more than 60% compared to 2018, including a 78% reduction for maize, 61% reduction for wheat, and 93% reduction for sorghum. Future climate projections show continued reduced surface and subsurface run-off as a result of the late onset of rains, below-average rains, dry spells and increased temperatures relative to recent decades. Drought has also debilitated livestock trading, with livestock prices and the quantity and quality of wool and mohair compromised. Disease outbreaks, such as Anthrax, amongst livestock are threatening both animals and humans.

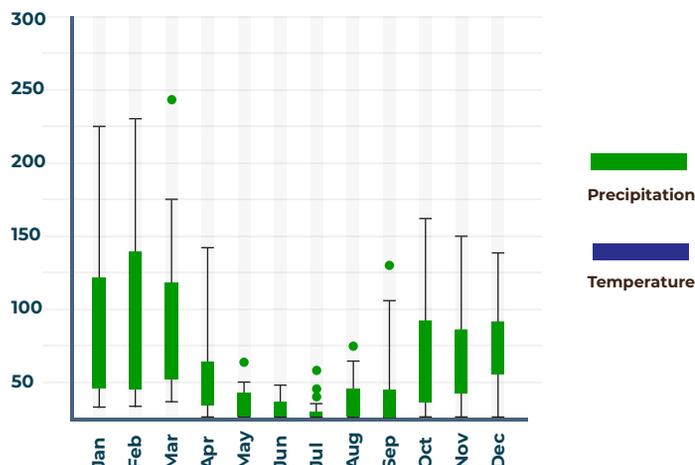


Fig 1. Long-term Rainfall and temperature anomaly over Lesotho, 29.61S, 27.11E

Distribution of Temperature [°C]



Distribution of Precipitation [mm]



**Vulnerability and Impact Assessment**

Medium

**Monitoring and Early Warning Systems**

Low

**Mitigation, Preparedness and Response**

Medium

■ Low
 ■ Medium
 ■ High

The Integrated Drought Risk Management Framework highlights a three-pillar approach centered around interconnected, multi-disciplinary, multi-institutional activities. These are 1) Monitoring and early warning systems; 2) Vulnerability and impact assessment; and 3) Mitigation, preparedness and response. This country's Drought Resilience Profile contains drought information based on these three pillars.

This profile provides an overview of Lesotho's drought resilience capacity in the three pillars as well as a snapshot of the impacts of the most recent drought. Lesotho's vulnerability and impact assessment capacity is categorized as medium. Despite its functional institutional arrangements to assess the impact of drought, as well as the support from institutions such as the FAO and WFP on vulnerability and impact assessments, a lack of consistent information, awareness and sufficient networks of communication provide gaps in coordination and information exchange. Moreover, the existing Vulnerability Assessment Analysis (VAA) has a strong focus on food-security related vulnerability mapping and less so on hydrological and other impacts. Lesotho's monitoring and early warning systems (EWS) capacity is categorized as low, as it is hampered by inadequate institutional coordination and information sharing and the lack of an EWS framework/protocol for such information sharing. Lesotho's capacity in Pillar 3, mitigation, preparedness and response, is categorized as medium, due in large part to its reactive drought response, and the need for a targeted drought policy and one that integrates all sectors and impacts.



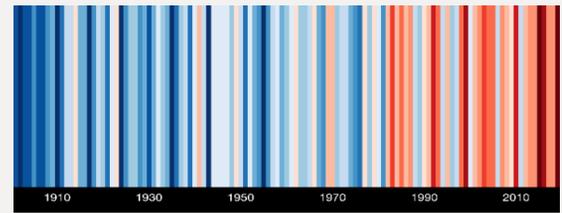
This document is meant to provide a brief overview of drought risk issues. The key resources at the end of the document provide more in-depth country and sectoral analysis. The contents of this report do not necessarily reflect the views of World Bank, NDMC, CIWA or IWMI.



## Historical climate

- As illustrated in the #ShowYourStripes 'warming stripe' graphic for Lesotho (Fig. 2) average temperatures are rising, illustrated by stripes turning from mainly blue to mainly red in more recent years.
- Drought frequency is increasing. There was one drought in the 1980s, one in the 1990s, two in the 2000s, and three in the 2010s (Table 1).
- The mean annual temperature is 12.8°C (1901-2016), and has increased by 0.76°C between 1970-2001 (World Bank, 2021).
- The average temperature ranges between -10°C in winter and 30°C in summer (World Bank, 2021).
- Mean annual precipitation is 761.15mm (1901-2016) (World Bank, 2021)

Fig 2. Temperature change in Lesotho, 1901-2019



Source: Berkley Earth/#ShowYourStripes

## Future climate

- Mean annual temperature is expected to increase by 2.12°C (1.46°C to 2.96°C) in 2040-2059 (RCP 8.5, Ensemble).
- The largest increase is expected to occur in the lowlands along the northwestern border of the country, which is the most drought-prone area in Lesotho (World Bank, 2018).
- Annual precipitation is expected to decline by 22.7mm in 2040-2059 (RCP 8.5, Ensemble) (World Bank, 2021)...
- Projections suggest a late onset of summer rains and a change in rainfall patterns that will become more erratic (World Bank, 2021)
- Projections indicate an increase in the intensity and frequency of floods and droughts (World Bank, 2021)

Table 1. Major droughts in Lesotho (Source: EM-DAT, 2020)

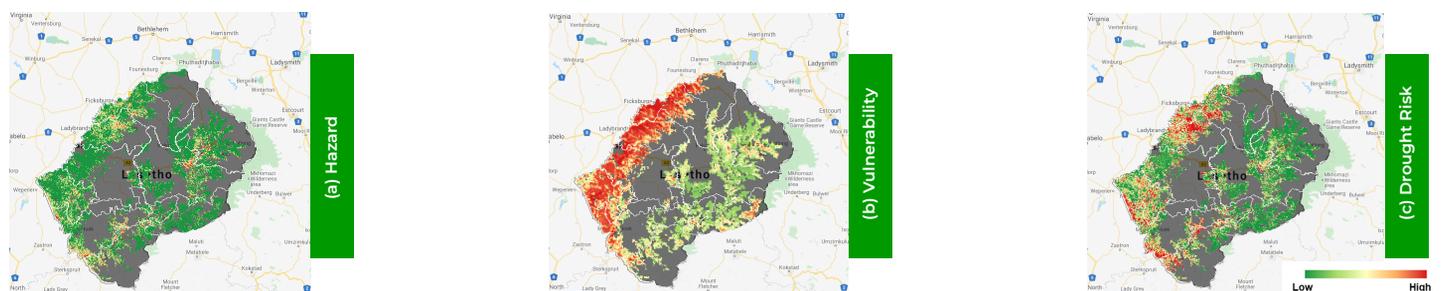
Year	Location	Affected Population
1983	No data*	500,000
1990-91	No data*	331,500
2001-02	Qacha's Nek, Quthing, Mohale's Hoek districts	500,000
2006-07	Lowlands region	475,000
2011-12	Quthing, Mohale's Hoek, Mafeteng, Maseru, Berea, Leribe, Botha-Bothe, Mokhotlong, Thaba-Tseka districts	725,515
2015-16	Qacha's Nek, Mokhotlong, Thaba Tseka, Quthing, Mafeteng, Botha-Bothe, Berea, Leribe, Maseru, Mohale's Hoek districts	979,000
2018-19	Berea, Maseru, Mafeteng, Mohale's Hoek, western parts of Qacha's Nek and Quthing districts	433,000

\* No data provided from source

## Vulnerability and Impact Assessment



Fig 3a-c. Drought hazard, vulnerability and risk maps for Lesotho



While drought vulnerability, risk and impact assessments related to droughts have been conducted in Lesotho, they mostly pertain to food security and agricultural impacts. The above maps (Fig 3a-c) depict: (a) Drought hazard areas, (b) Areas of vulnerability and (c) Drought risk.

Drought risk is defined by characterizing hazard and exposure to vulnerability and the lack of adaptive capacity, using multisource information from satellite-derived drought indices and socio-economic conditions. In terms of components, hazard is defined through meteorological and agricultural drought i.e. Integrated Drought Severity Index (IDSi); and exposure and vulnerability expressed through population density, the human modification index, water risk and irrigated systems. Agricultural production (agricultural practices i.e. irrigated area, food production as provided on HarvestChoice) is used to define levels of vulnerability which were finally combined with all three components to define levels of drought risk at the country level, referred to as the National Drought Risk Index (NDRI).



# Vulnerability and Impact Assessment

This drought risk profile is therefore based on the probabilistic estimation of hazard and vulnerability to assess the drought risk in the exposed areas. Using this method, 42% of the agricultural areas in the regions of Leribe, Mafeteng, Mohale's Hoek, Berea and Quthing are amongst the most drought-prone areas in Lesotho (Maps generated by IWMI).

## Droughts have adverse on effects population and GDP

While the 2018/19 drought was a significant one for Lesotho, which left a fourth of its population facing severe food insecurity and the Government of Lesotho declaring a national disaster as a result, the earlier 2015/16 El Niño-induced drought was arguably the worst the country had experienced in 35 years (World Bank, 2019). It affected 979,000 people (EM-DAT, 2020) and left around 709,000 people food-insecure (LVAC, 2016).

During both these droughts, women and girls have been most affected. Women farmers have been acutely affected as they typically have less ability to cope with shocks as their productive capacity and asset base are considerably smaller than male farmers (UN-OCHA, 2019). In addition, the 2019 Vulnerability Assessment reported that 47.3% of rural households are headed by women. In the March 2019 Rapid Assessment Report, 12.5% of women reported that the access to their main water sources dramatically changed. Roughly 90% of rural water sources dried up according to the department of Rural Water Supply. As a result, many women were forced to travel longer distances to get water, exposing them to protection risks. It was further reported that children and women are at risk of increased exposure to abuse, violence and other protection issues during drought. Lesotho is a source, transit and destination country for trafficking, and vulnerability to trafficking rises when families are struggling to cope. It has further been reported that a number of women and girls have left their rural homes to urban areas and/or South Africa in search of work, mostly as domestic workers trading sex for money and/or food (UN-OCHA, 2019).

## Drought impacts on water resources, hygiene and malnutrition

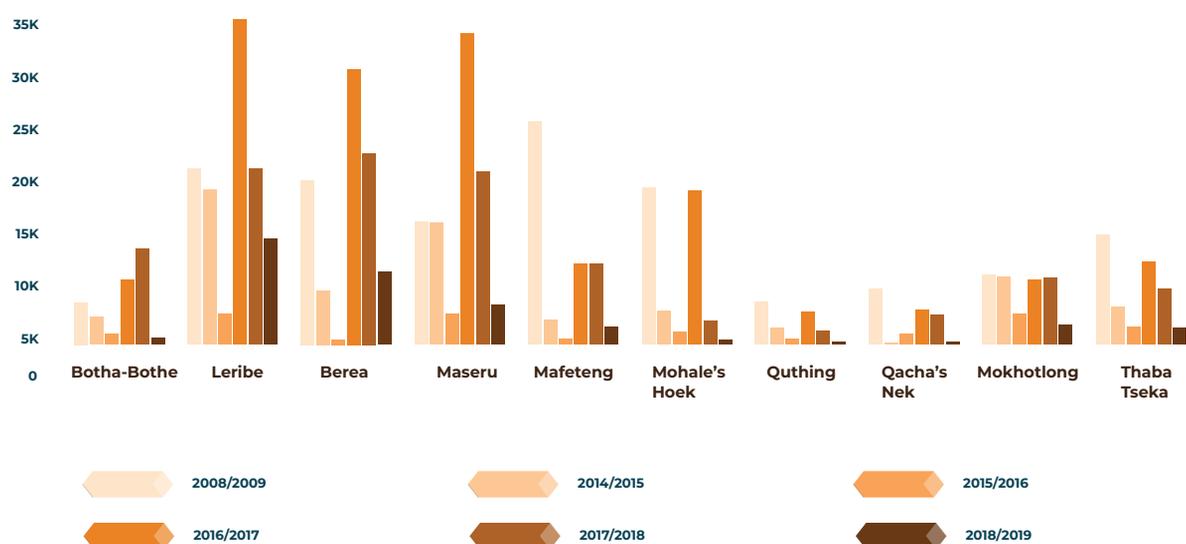
High temperatures and the resulting increase in evaporation have led to the drying up of water reservoirs, impacting access to safe water and increasing the risk of water-borne disease. In November 2019, two of the major reservoirs had very low water levels: the Katse dam was at 13%, while the Mohale dam was at 32% (UN-OCHA, 2019). According to the Department of Rural Water Supply, 90% of rural water sources dried up due to prolonged drought in the country in 2019 including along the Senqu, Mohokare and Makhaleng rivers. Between 2 and 12% of households use unprotected water sources, according to a Lesotho Vulnerability Assessment Committee Analysis (LVAC, June 2019).

In addition, there was an increase in disease outbreaks during the 2018/19 drought. Cases of diarrheal diseases including epidemic-prone diseases such as bloody diarrhea, watery diarrhea and typhoid increased between August to November 2019 due to drought conditions, according to the health sector. A measles outbreak was declared on 26 October 2019 in Qacha's Nek district (Lebakeng constituency), and confirmed cases of measles were further recorded in Berea (Mabote) and Leribe (Maputsoe) (UN-OCHA, 2019)

## Droughts drag macro-level agricultural growth

In terms of supply and demand for cereals, there has been a consistent deficit in meeting the country's requirements (287,000 metric tons). And even though this deficit is usually covered by imports from South Africa, the poor climate outlook and possible reduction in agricultural labour opportunities, together with resulting price hikes, indicate that the situation is likely to continue deteriorating (SADC RVAA, 2019). The 2018/2019 planting season was characterized by a decrease in production of major cereals by more than 60% compared to the previous year, including a 78% decrease for maize, 61% for wheat, and 93% for sorghum. This followed a poor 2017/2018 season, leaving families across the country suffering from consecutive shocks (UN-OCHA, 2019).

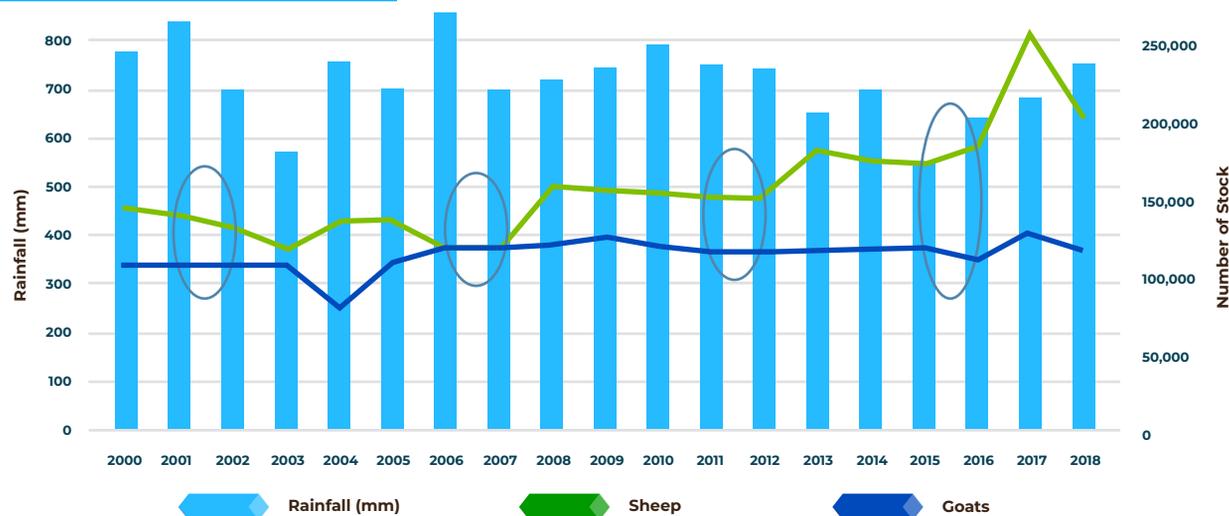
Fig 4. Maize production (MT) in Lesotho by district, 2008/09-2018/19





## Droughts have an impact on livestock production

Fig 5. Commodity prices and rainfall patterns, 2008-2020



Source: Own compilation from FAOSTAT & CHIRPS 2020

Drought has debilitated livestock trading in Lesotho (UN-OCHA, 2019). Rangelands conditions deteriorated earlier than normal in August 2019, impacting on livestock body conditions, which had not fully recovered from the 2018/2019 lean season. This has affected livestock prices and the quantity and quality of wool and mohair was similarly compromised. At the same time, disease outbreaks amongst livestock has threatened both animals and humans. An Anthrax outbreak in animals was reported in Maseru district from April to June 2019 where more than 100 people were exposed to the disease and given prophylaxis. The drought years are marked in ovals in Fig 5. Correspondingly, Lesotho registered reductions in the number of livestock available in the country following occurrences of drought especially in 2002 and the erratic rainfall in 2003. After the 2007 drought, Lesotho observed an increase in the number of sheep recorded by the country while goats were constantly declining until 2016 (drought year). From 2016, there was an increase in the number of sheep and goats in the country and in 2018 the country saw a decline in both livestock. According to the Drought Situation Update (2019), in 2019, rangelands conditions deteriorated earlier than normal (August 2019). Livestock body conditions had not fully recovered from the previous lean season, which had an effect on livestock prices, as well as the quantity and quality of wool and mohair.

## Vulnerability and impact assessment capacity

In terms of Lesotho's capacity in the vulnerability and impact assessment pillar, estimates on the food-insecure population have been collected annually since 2003 by the Lesotho Vulnerability Assessment Committee (LVAC), under the Disaster Management Authority in the Office of the Prime Minister (OP), and in coordination with other national and regional government institutions as well as development partner agencies. LVAC is the primary body that conducts vulnerability assessments through the yearly Vulnerability Assessment and Analysis (VAA) to identify vulnerable groups, the prevalence and degree of risk and their causes using agreed indicators and assessment tools. As such, it provides the first stage of short-, medium- and long-term planning for drought.

LVAC's membership consists of Government ministries and departments, United Nations organisations, non-governmental organizations and the private sector. The process of vulnerability assessment and analysis is currently centralized, although there is a decentralisation process underway whereby district teams are now responsible for data collection in their respective districts.

In Lesotho, like in most countries, the VAA methodology is based on the Household Economy Approach (HEA) that takes a holistic approach to food security based on livelihood systems including all strategies that households apply to make their living and the external context that may support and/or restrain them. The 2018 VAA combined HEA methodology with household survey data in order to integrate nutrition, HIV and gender into VAA and also to understand the impact of various shocks on different sectors. That said however, there remains a stronger focus on food security in methodology and reporting in the VAA and less of a focus on water security, health, and other impacts. As an overall guide, the analytical framework that informed the structure of the study and design of applied tools was the Food and Nutrition Security Conceptual Framework agreed between SADC member states for integrated assessment and analysis. The SADC Regional Vulnerability Assessment and Analysis (SADC-RVAA) also conducts and supports the VAA process in Lesotho.

Despite these institutional arrangements, as well as the support from institutions such as the FAO and WFP on vulnerability and impact assessments, a lack of consistent information, awareness and sufficient networks of communication provides gaps in coordination and information exchange. In instances where there is information, the information is often not adequately shared between government departments or published in a central repository.

Finally, data on the cost of disaster response are not systematically recorded in Lesotho and were available only for two disasters, the El Niño-induced drought in 2015/16 and the floods in 2010/11. The resources needed to respond to these events were estimated to be around US\$38 million (M 584 million) and US\$67 million (M 462.7 million) respectively. This is roughly 1.7% and 3.2% of GDP. The World Bank Lesotho Poverty Assessment found that the El Niño-induced drought significantly impacted poverty reduction, without which the pace of national poverty reduction would have nearly doubled (Sulla et al., 2019).





## Monitoring and early warning systems capacity

Table 2 represents a summarized traffic light checklist to illustrate the state of monitoring and EWS capacity in Lesotho. It summarizes key aspects needed for a strong monitoring and EWS framework, most notably, whether there is an official definition of drought used in country; whether drought indicators are used, and if so, which ones; whether there is a drought early warning system (DEWS) in place; and if so how functional it is and whether the country makes use of seasonal forecasting.

Table 2. Summarized checklist of monitoring and EWS capacity

Official definition of drought	●
Drought indicators used	●
Existence of a DEWS	●
Capacity to tailor EWS messages to end-user needs	●
Effective communication of early warnings with built-in feedback mechanisms	●
Use of most salient communication channels to reach women/youth/disenfranchised communities	●
Use of community relays, extensions services, local media to communicate EWS and reach at risk communities promptly	●
Seasonal forecasting	●

● Yes    
 ● No    
 ● Limited

A few key institutions are involved in drought monitoring and DEWS to varying degrees but much can be done to strength this pillar. The Lesotho Vulnerability Committee (LVAC) undertakes an annual assessment that provides information for IPC analyses. The Lesotho Meteorological Services (LMS) through its weather forecasting office prepares and issues weather forecasts and outlooks, issues warnings on extreme weather events and provides seasonal forecasts and updates, but could benefit from further capacity strengthening. Its activities are limited to early warning on crop conditions and climatic conditions related to crop production. LMS relies on the Standardized Precipitation Index to characterise the severity of droughts in drought monitoring.

In terms of knowledge dissemination and communication outreach, the Disaster Management Authority (DMA) established a drought communications working group to broadly communicate prevailing drought conditions. The working group is guided by the Drought Response Communications Plan on how to manage the flow of information, package and communicate drought-related activities. Significant gaps exist in terms of multi-sectoral and multi-tiered (national to district to community level) information flow of early warnings. DMA have for example, established a national EWS task team, which, unfortunately, is yet to effectively fulfil its mandate due to limitations in the current EWS and the lack of clear national protocols for responding to early warnings.

In terms of drought declarations, the Prime Minister has the authority to declare a state of emergency. And once this happens, the Deputy Prime Minister convenes the National Disaster Response Task Force who then provides recommendations to the cabinet on suitable response measures.

At present, Lesotho does not have a strong, integrated and well-coordinated EWS, and relies on some local capacity within LMS and the capabilities of the Southern Africa Development Committee (SADC) Climate Services Centre and the Regional Vulnerability Assessment and Analysis Program (RVAA), as well as the United States government-funded famine early warning systems network (FEWSNET). The SADC EWS works in tandem with the MSD and LVAC to generate, analyse and validate early warning information.

In addition, a five-year climate change EWS project (2019-2024, 2nd phase of the LMS/GEF/UNEP LDCF NAPA Early Warning Project), co-financed by the Global Environment Facility and the Government of Lesotho was recently launched to strengthen the climate monitoring capabilities, including EWS and enabling coordination of weather information in Lesotho. This project aims to build on the efforts of the first phase through procurement of additional modern equipment/technology and through provision of additional support for the improvement of the institutional and human capacity needed to develop and operationalise an effect climate change EWS. Some capacity challenges highlighted in this project included 1). The incomplete installation of equipment to consistently generate high quality real time climate data on a continuous basis in a network with adequate geographical coverage; 2). Incomplete training/hiring/retention of staff for LMS to adequately cover forecasting, modelling, EWS message generation/packaging and ongoing maintenance of the meteorological stations; 3). The established EWS is not geared to handle EWS message generation for sectors other than agriculture (other key vulnerable sectors that could benefit from EWS include energy (hydropower), forestry, tourism and health); 4). The established EWS is primarily focused on the three pilot regions, and will need additional resources to be scaled up and rolled out at the national level.

Finally, more informal EWSs exist in terms of communities' knowledge and experience in observing and interpreting changes in the environment. However, there is no institutional support to harness this indigenous knowledge and incorporate it into local level planning and decision-making processes.

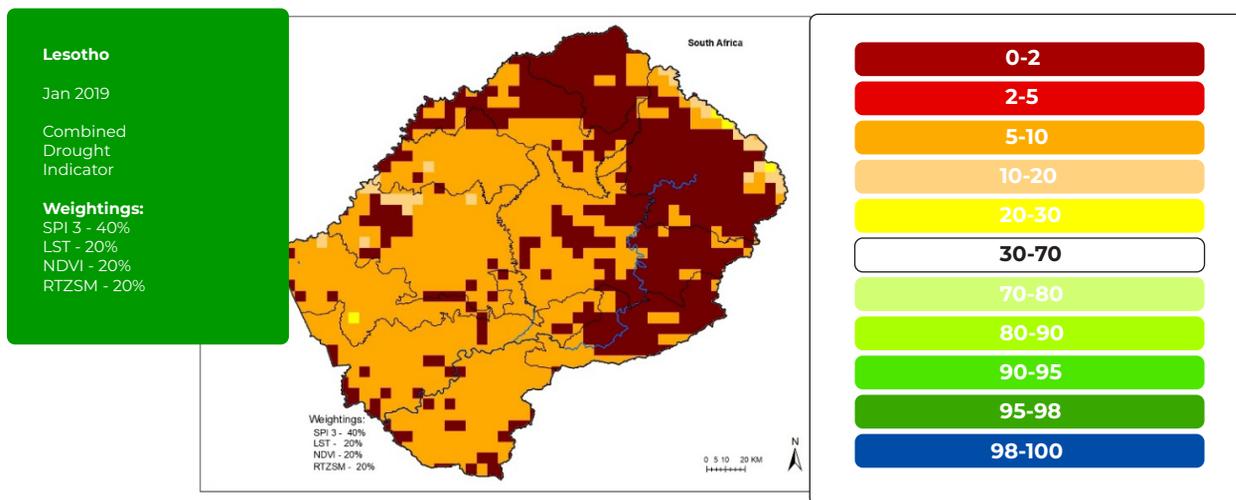


## Combined Drought Indicator (CDI)

Using a Combined Drought Indicator (CDI) approach, the National Drought Mitigation Center (NDMC) at the University of Nebraska, in partnership with the World Bank, has developed a Drought Monitor that represents a consolidation of indices and indicators into one comprehensive drought map. The CDI map for Lesotho uses a weighted combination of four indicators of drought: precipitation, vegetation stress, land-surface temperature and soil moisture. January 2019 was selected to depict the severity of the recent 2018/19 drought. January, being the peak of the rainy season when more rain is expected, provides an assessment of the drought's magnitude (duration and intensity), spatial extent,

probability of occurrence, and impacts. The January 2019 CDI map shows much of the country impacted by some degree of drought, particularly in the north-east. Without an effective drought monitoring and EWS to deliver timely information for early action, such as the CDI, effective impact assessment procedures, proactive risk management measures, preparedness plans aimed at increasing the coping capacity and effective emergency response programmes directed at reducing the impacts of drought, the country will continue to respond to drought in a reactive, crisis management mode.

Fig 6. Combined Drought Indicator for Lesotho, January 2019



# Mitigation, Preparedness and Response



## Drought policy framework

Lesotho has in place legal and policy frameworks for disaster risk management that encompass drought: Disaster Management Act of 1997, Lesotho's National Strategic Development Plan 2012/13–2016/17, Budget Strategy Paper for 2018/19 to 2020/21 National Resilience Strategic Framework (NRSF) and Theory of Change, Multi-Hazard Contingency Plan 2015–2018, Lesotho Water and Sanitation Policy of 2007.

Lesotho does not currently have a dedicated drought policy, nor a Disaster Risk Financing (DRF) strategy. This not only results in a reactive approach to drought response, mitigation and preparedness, but also perpetuates inherent vulnerabilities and the dependence on external aid. A DRF strategy would allow the government to identify and plan where resources for responding to future disasters would come from, and will provide a legal framework to strengthen the financial management of disaster risks by outlining an optimal combination of risk financing instruments (World Bank, 2019).

## Institutions and coordination

Lesotho has institutional and technical capacity in preparing and responding to disasters. However, the absence of an appropriate agency to coordinate all drought-related interventions remains a critical gap in drought governance. Instead, drought management is embedded within the institutional framework of disaster management. This is typically acceptable if drought management is not diluted or overshadowed by other disaster risk reduction priorities.

The Office of the Prime Minister (OP) through the Disaster Management Authority (DMA) has the overall responsibility for managing and coordinating National Emergency Response as mandated by the Disaster Management Act of 1997. The DMA is responsible for activities such as prevention, mitigation, preparedness, response and recovery associated with disasters. Various structures are established at district level i.e. District Disaster Management Teams (DDMT) and village level i.e. Village Disaster Management Teams (VDMT) to serve as local level coordinating bodies. The Disaster Management Team in Lesotho brings together UN entities and INGOs to support government-led responses to natural disasters.

A temporary National Disaster Relief Task Force can be enabled through the Disaster Management Act, by the Prime Minister for the duration of a disaster. Their role is to provide policy guidelines to the DMA, mobilise funds to implement the National Disaster Relief Plan and to supervise and monitor District Disaster Relief Plans.



## Institutions and coordination

Drought Response plans across sectors

1

For each major disaster declared, the Government of Lesotho, through the DMA, develops a National Response Plan, with the overall objective of mounting a timely, consistent, effective and coordinated response to save lives, property and livelihoods for the affected communities.

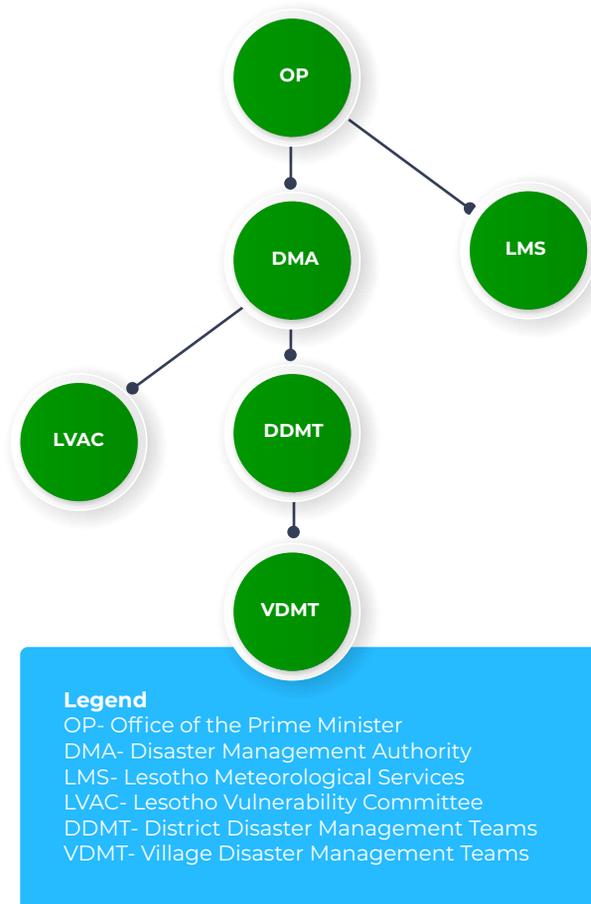
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The Multi-Hazard Contingency Plan 2015–2018, which targets a variety of hazards threatening Lesotho identifies standard operating procedures for a variety of hazards. At present, a new contingency plan is being developed that focuses on drought.

3

The National Resilience Strategic Framework (NRSF) has also recently been approved by the Cabinet. The NRSF recognises that increasing resilience is a crucial first line of defense against disasters, and it guides the process of building the country's resilience in the face of challenges posed by climate shocks.

Fig 7. Lesotho's drought institutional framework



## Recent drought resilience efforts and recommendations

Lesotho's drought response has largely been reactive to a particular crisis, and is heavily reliant on external humanitarian aid. Since the early 1980s, Lesotho (as with other southern African countries) has typically focused its drought relief response on food aid and fodder. Such interventions are important in addressing communities' immediate needs, but they are costly. In addition, they aim only to support affected communities to cope with the disaster and return to their pre-disaster conditions, without building community adaptive capacity.

During the 2015/16 drought, the average annual cost of disaster response was estimated at US\$19.3 million, or 1.6% of Lesotho's total budget expenditure in the 2019/20 fiscal year, while the total funding mobilised to respond to the 2015/16 drought was US\$82 million (M 1.25 billion), or 3.6% of GDP in 2016 (Table 3; World Bank, 2019). In terms of disaster risk financing, Lesotho does not have a comprehensive financial protection strategy. It has set up two contingency funds, one at the Ministry of Finance and one at the DMA. These funds are often depleted early in the budget cycle, leaving the Government exposed when disasters occur later in the fiscal year. The Government often relies on budget reallocation; for instance, it mobilised US\$21 million (M 318 million) for the 2015/16 drought through the diversion of resources from much-needed planned investments.

On 30 October 2019, the Government of Lesotho declared a drought emergency. With the support of partners, a Drought Response and Resilience Plan was finalised, targeting 508,125 people and requiring US\$83.2 million. The Government allocated \$11.5 million to reach 20% of the food insecure population in the 10 affected districts through the Child Grants Program targeting 68,250 children and cash for work for 32,577 people. The UN-OCHA Flash Appeal of US\$34 million was also launched to support 261,000 people with life-saving interventions in the 10 affected districts between November 2019 and April 2020 in all key sectors.

According to the World Bank (2019), the Government of Lesotho relies mostly on reactive post-disaster government budget reallocation and donor assistance to finance post-disaster response. This approach has often resulted in uncertain and insufficient funding, as well as delays in response. The following recommendations are designed to help improve Lesotho's financial resilience to disasters:



Proactively develop and adopt a national disaster risk financing strategy.



Increase the amount and improve the timeliness of resources mobilised for disaster e.g. a dedicated contingency fund and purchasing sovereign insurance.



Strengthen budget execution systems for targeted support to affected households.



Table 2. Estimated funding gap due to disasters, for various return periods (Source: World Bank, 2019)

US\$ million	Ann. ave	1-in-5-yr event	1-in-10-yr	1-in-25-yr	1-in-50-yr	1-in-100-yr
Est loss	19.3	25.8	31.8	39.4	45.3	51.5
MoF fund						
DMF						
Funding Gap	12.5	18.9	24.9	32.6	38.5	44.7

## Recent drought resilience efforts by the international community

Table 3. Selected projects focused on drought, or some aspect of it, in Lesotho

Organization	Project Name	Budget (USD)	Time Period
FAO Unilateral Trust Fund	Emergency response to the El Niño-induced drought in Lesotho - improve the food security and resilience of vulnerable households in Lesotho through sustainable livelihood support and complementarities between social protection and agriculture production	1.1M	2016-2018
	Wool and Mohair Promotion Project (WAMPP)	39.3M	2014-2022
WFP	Emergency assistance for vulnerable households affected by El Niño drought conditions in Lesotho - WFP implements school meals and nutrition programmes in Mafeteng and Mhales' Hoek, targeting a combined total of approximately 30,000 beneficiaries. During 2015, WFP also implemented a Food Assistance for Assets (FFA) program in the same locations, supporting 30,250 people with the creation of community assets to enhance resilience to shocks and disasters	1.1M	2016-2018
	Second Smallholder Agriculture Development Project for Lesotho	50M	2019-2026
World Bank	Second Phase of Lowlands Water Development Project for Lesotho	78M	2019-2024
	Additional Financing for Smallholder Agriculture Development Project	10M	2018
	Social Assistance Project (CRW)	20M	2016-2017
UN OCHA	Flash Appeal	34M	2019-2020
	LMS/GEF/UNEP LDCF NAPA Early Warning Project - Strengthening climate services in Lesotho for climate resilient development and adaptation to climate change	5M	2019-2024
GEF	LMS/GEF/UNEP LDCF NAPA Early Warning Project - Strengthening climate services in Lesotho for climate resilient development and adaptation to climate change	5M	2019-2024
	Building resilience to drought in Lesotho	500K	2016-2017
FAO	Building resilience to drought in Lesotho	500K	2016-2017
World Bank	Contingent Emergency Response Component (CERC)	1.4M	2015-2016

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### Data Sources:

Climate Data: CHIRPS

Drought Risk: International Water Management Institute (IWMI)

CDI: National Drought Mitigation Center at the University of Nebraska-Lincoln

Population Data: WorldPop

Livestock, GDP: FAO, World Bank

## About the Southern Africa Drought Resilience Initiative (SADRI)

SADRI is a World Bank initiative supported by the Cooperation in International Waters in Africa Program (CIWA) that integrates across the energy-water-food-environment nexus to help lay the foundations for making southern African countries more resilient to the multi-sectoral impacts of drought. Its main objectives are to generate tools and dialogue for enhancing partnerships and capacity across Member States and to inform future national and regional investments in drought-related activities.