



# GIEWS Update

## Southern Africa

### Dry weather conditions reduce agricultural production prospects in 2019

#### Highlights:

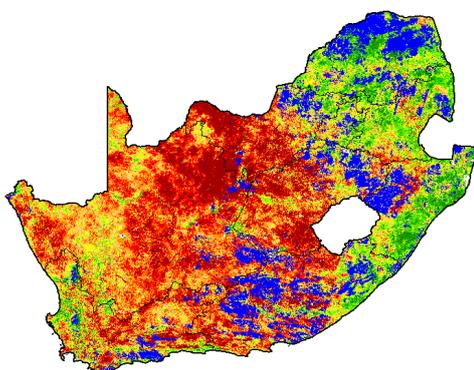
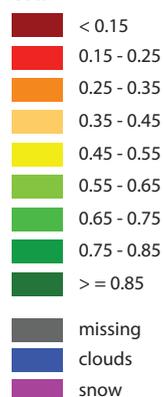
- Delayed rains and below-average precipitation since October have reduced cereal production prospects and lowered pasture yields in western areas of Southern Africa.
- Rains picked up in late December across most of the subregion, partly alleviating moisture deficits.

Since the start of the 2018/19 cropping season in October, anomalous dry conditions have developed across parts of Southern Africa, with more intense moisture deficits registered in Botswana, Namibia and South Africa, in addition to the western parts of Madagascar. Although there are a few months remaining in the cropping season, with the main harvest period usually commencing in

April, the impact of the reduced rains is expected to have caused a contraction in the area planted and lowered yield prospects, particularly in the aforementioned areas. Heavier rainfall since mid-December provided some respite and helped to alleviate moisture deficits, but concurrently resulted in localized flooding in parts of Malawi, Zambia and Zimbabwe.

**Figure 1: South Africa - Vegetation Health Index (VHI)**  
(Dekad 1, January 2019)

#### VHI



Note: The Index calculation is based on METOP-AVHRR data.

Disclaimer: The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of FAO concerning the legal status of any country, territory, area or of its authorities, or concerning the delimitation of its frontiers and boundaries.

Source: FAO/GIEWS Earth Observation - [www.fao.org/giews/earthobservation](http://www.fao.org/giews/earthobservation).

In **South Africa**, the largest rainfall deficits were recorded in western provinces of Northern Cape and Western Cape, where cumulative rains between October and December were more than 50 percent below average. These areas account for a small proportion of the total national maize output and, hence, reduced harvests would have a comparatively smaller impact on the national outcome. In central and eastern provinces, where the bulk of the summer maize crop is grown, moisture deficits have also been observed, but to a lesser degree. In eastern regions of Mpumalanga and Kwazulu Natal, rainfall has been mostly sufficient to facilitate planting activities and for normal crop growth, with only a few areas showing signs of water stress. In the central regions, crop conditions are more mixed and in some cases poor. In the large cereal-producing provinces of Free State and North West, reduced rains delayed plantings and are expected to have curbed the area sown; cumulative rainfall at the provincial level has been 40-50 percent below average since October.

Production declines in these areas would have a significant impact on the national output.

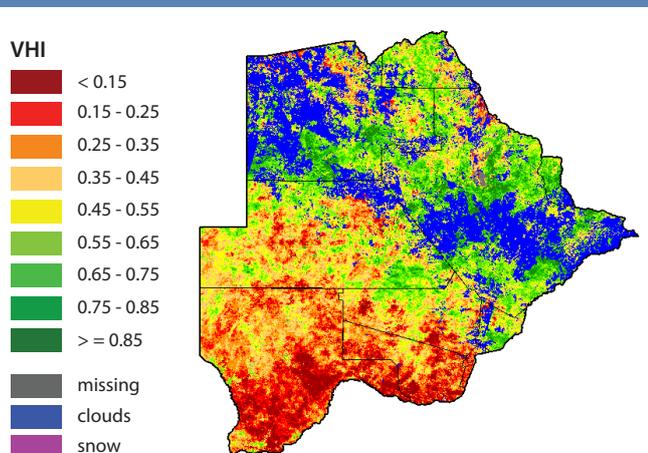
Preliminary planting intentions portended that farmers would expand the 2019 area to maize to an average level of 2.4 million hectares. However, the unseasonable dry weather conditions, in combination with relatively lower prices that likely acted as a disincentive to farmers to take risks (i.e. sowing outside of the optimal planting window), are expected to have curtailed plantings. Although early in the season, the 2019 maize output is currently forecast by FAO at a below-average level of between 9 and 11.5 million tonnes.

In **Botswana**, rainfall in October and November was about 60-65 percent below average. Improved precipitation in December lowered this figure for the October-December period to approximately 40 percent. The reduced seasonal rains, notably in western portions, have led to a deterioration in vegetation conditions, negatively affecting pasture productivity and quality as well as diminishing water resources for livestock (e.g. drinking and servicing). Rangeland provides the bulk of feed requirements and the use of supplementary feed is not a common practice among the majority of households in the traditional farming sector. A continuation of these conditions would likely inhibit livestock production and raise mortality rates in 2019, with an adverse impact on food availability and income levels.

Domestic production of the main cereal staples accounts for a small proportion of the national consumption needs, with the bulk of domestic supplies imported from South Africa. Although precipitation volumes picked up in December and early January, recuperating vegetation conditions, the overall reduced cumulative seasonal rains are expected to have resulted in a contraction in the area sown and shortened the growing period for crops, diminishing yield prospects. Nonetheless, adequate supplies are expected in the next year as production shortfalls would be sufficiently mitigated by increased imports.

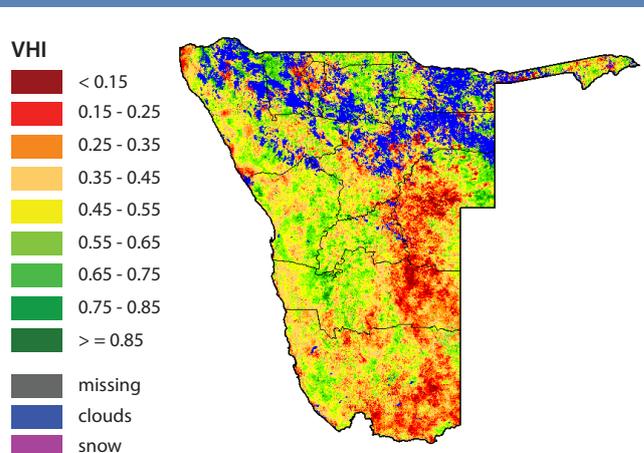
In neighbouring **Namibia**, rains were similarly below average across most of the country during the last quarter of 2018, which corresponds to the planting period of the summer cereal crops to be harvested from April. Some of the lowest cumulative rainfall was registered in central and southern parts of Otjozondjupa Region, the bulk of Omaheke Region, eastern parts of Hardap and Karas regions, several pockets in Erongo, Kunene, Khomas (eastern parts) and the northeastern regions (including the regions of Omusati, Oshana and Oshikoto), where a significant proportion of communal farming households are located. The reduced rainfall levels are expected to have delayed sowing activities and impeded early crop development, particularly given the low use of irrigation by communal farming households.

**Figure 2: Botswana - Vegetation Health Index (VHI)**  
(Dekad 1, January 2019)



Note: The Index calculation is based on METOP-AVHRR data.  
 Disclaimer: The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of FAO concerning the legal status of any country, territory, area or of its authorities, or concerning the delimitation of its frontiers and boundaries.  
 Source: FAO/GIEWS Earth Observation - [www.fao.org/giews/earthobservation](http://www.fao.org/giews/earthobservation).

**Figure 3: Namibia - Vegetation Health Index (VHI)**  
(Dekad 1, January 2019)



Note: The Index calculation is based on METOP-AVHRR data.  
 Disclaimer: The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of FAO concerning the legal status of any country, territory, area or of its authorities, or concerning the delimitation of its frontiers and boundaries.  
 Source: FAO/GIEWS Earth Observation - [www.fao.org/giews/earthobservation](http://www.fao.org/giews/earthobservation).

The rainfall deficits in these areas have also manifested in poor vegetation conditions in grassland areas, indicating a likely reduction in the availability of forage from natural rangeland, adversely affecting body conditions and productivity of animals. Weather conditions in the northeast were more favourable, with rains from November onwards generally adequate to facilitate satisfactory crop growth. Overall national cereal production prospects have weakened due to the generally poor rains since October. However, a larger domestic supply deficit in 2019/20 would be expected to be met sufficiently by increased import volumes, with the country normally a net importer of cereals.

In other parts of the subregion, below-average rains were registered in **Lesotho**, western parts of **Zambia** and **Zimbabwe**, which interrupted and set back planting activities. As a result, the area sown to cereal crops is estimated to have contracted for the 2018/19 cropping season to an average or below-average level in these countries. Improved rains in late December and early January

alleviated moisture stress in most eastern portions of Southern Africa and precipitation volumes were near-sufficient for crop requirements at the early vegetative growth stages. Weather forecasts for much of the subregion during the February-April period point to a slightly higher likelihood of below-normal rainfall, while in Botswana, South Africa, Madagascar, Malawi and Zambia, precipitation volumes are expected to be near average. Forecasts also point to an increased probability of higher temperatures, which could exacerbate the negative impact of reduced rains on crop yields.

Overall, the 2019 cereal production outlook in most parts of Southern Africa has diminished since the start of the season and average to below-average harvests are foreseen. Livestock production is also expected to be curtailed by the dry weather conditions. However, prospects in Malawi, Madagascar and Zambia, based on current conditions and predicted weather patterns, are more favourable.

This report is prepared by the **Global Information and Early Warning System (GIEWS)** of the Trade and Markets Division of FAO. The updates focus on developing anomalous conditions aimed at providing early warnings, as well as latest and more elaborate information than other GIEWS regular reports on the food security situation of countries, at both national and sub-national levels. None of the information in this report should be regarded as statements of governmental views.

For more information visit the **GIEWS Website** at: [www.fao.org/giews](http://www.fao.org/giews)

Enquiries may be directed to:

Global Information and Early Warning System (GIEWS)

Trade and Markets Division (EST)

Food and Agriculture Organization of the United Nations (FAO)

Viale delle Terme di Caracalla

00153 Rome, Italy

E-mail: [GIEWS1@fao.org](mailto:GIEWS1@fao.org)

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO) concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by FAO in preference to others of a similar nature that are not mentioned.

The views expressed in this information product are those of the author(s) and do not necessarily reflect the views or policies of FAO.

Some rights reserved. This work is made available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; <https://creativecommons.org/licenses/by-nc-sa/3.0/igo/legalcode/legalcode>).

Under the terms of this license, this work may be copied, redistributed and adapted for non-commercial purposes, provided that the work is appropriately cited. In any use of this work, there should be no suggestion that FAO endorses any specific organization, products or services. The use of the FAO logo is not permitted. If the work is adapted, then it must be licensed under the same or equivalent Creative Commons license. If a translation of this work is created, it must include the following disclaimer along with the required citation: "This translation was not created by the Food and Agriculture Organization of the United Nations (FAO). FAO is not responsible for the content or accuracy of this translation. The original [Language] edition shall be the authoritative edition."

Disputes arising under the licence that cannot be settled amicably will be resolved by mediation and arbitration as described in Article 8 of the licence except as otherwise provided herein. The applicable mediation rules will be the mediation rules of the World Intellectual Property Organization <http://www.wipo.int/amc/en/mediation/> rules and any arbitration will be conducted in accordance with the Arbitration Rules of the United Nations Commission on International Trade Law (UNCITRAL).

**Third-party materials.** Users wishing to reuse material from this work that is attributed to a third party, such as tables, figures or images, are responsible for determining whether permission is needed for that reuse and for obtaining permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

**Sales, rights and licensing.** FAO information products are available on the FAO website ([www.fao.org/publications](http://www.fao.org/publications)) and can be purchased through [publications-sales@fao.org](mailto:publications-sales@fao.org). Requests for commercial use should be submitted via: [www.fao.org/contact-us/licence-request](http://www.fao.org/contact-us/licence-request). Queries regarding rights and licensing should be submitted to: [copyright@fao.org](mailto:copyright@fao.org).



Some rights reserved. This work is available under a [CC BY-NC-SA 3.0 IGO](https://creativecommons.org/licenses/by-nc-sa/3.0/igo/) licence