The Africa RiskView Bulletin is a monthly publication by the African Risk Capacity (ARC). ARC is a Specialised Agency of the African Union designed to improve the capacity of AU Member States to manage natural disaster risk, adapt to climate change and protect food insecure populations. ARC relies on Africa RiskView, a drought modelling platform that uses satellite-based rainfall information to estimate the costs of responding to a drought. These modelled response costs are the underlying basis of the insurance policies issued by the ARC Insurance Company Limited, the financial affiliate of the ARC Agency, which pools risk across the continent.

Rainfall
The month of September 2016 was characterised by significant rainfall in most of Central and West Africa, as well as in parts of East Africa (including Uganda, western Kenya, north-western Ethiopia, Sudan and South Sudan). In Southern Africa, dry conditions prevailed in line with seasonal patterns, as the rainy season is expected to start in October 2016. Compared to the 2001-15 average, the rains performed better than normal in parts of East Africa, including Uganda, South Sudan and western Ethiopia. However, slightly drier than normal conditions were observed in central Ethiopia and western Kenya, where the rainy season is expected to intensify in the coming weeks. In West Africa, most countries experienced above average rainfall in September 2016, with the exception of localised areas in central Chad, eastern Niger, south-eastern Nigeria, central Mali, north-western Burkina Faso, central Mauritania and eastern Senegal. Particularly during the first dekad (1-10) of September, rainfall deficits were recorded in most of these areas.

The overall performance of the 2016 rainy season in West Africa to date has been good, with cumulative rainfall totals above the 2001-15 average in most countries, except for parts of central Senegal and The Gambia, as well as central Niger (Zinder region).

Drought
Burkina Faso: In Burkina Faso, the in-country Technical Working Group (TWG) decided to use sorghum as the reference crop for the performance of the agricultural season, which lasts from June to early December. According to Africa RiskView, the current end-of-season WRSI projections are in line with the benchmark selected by the country as an indicator of normal conditions (median of the previous 5 years). Only in parts of north-eastern Burkina Faso, below normal conditions are likely to prevail at the end of the season.

Mali: In Mali, the TWG chose maize as the reference crop for the agricultural season which lasts from May to October. The 2015 agricultural season is used as benchmark for normal conditions, and according to the modelled end-of-season WRSI projections, most of south-western Mali is likely to experience normal condi-

For more information visit our website: www.africanriskcapacity.org
tions at the end of the season. However, localised areas in central and northern Mali are currently at risk of experiencing below normal conditions, depending on the performance of the rains between now and the end of October 2016.

**The Gambia:** The Gambian TWG chose groundnut as reference crop for the performance of the agricultural season in the country, which lasts from June to November. According to the current end-of-season WRSI projections, the situation at the end of the season is likely to be in line with the 5-year median, which is the benchmark selected by the country as an indicator for normal conditions.

**Senegal:** Similarly to The Gambia, Senegal uses groundnut as its reference crop in Africa RiskView. As discussed in the previous section, the country experienced a slightly delayed start of the season, with erratic rainfall in some areas between June and mid-August 2016. As a result, Africa RiskView estimates that the sowing conditions were not reached in parts of central Senegal, despite the rains picking up from mid-August onwards. Normal conditions are likely to prevail in the rest of the country.

**Affected Populations**

**West Africa:** Given the overall good performance of the 2016 rains in West Africa, it is unlikely that drought will have a major impact on people’s livelihoods at the end of the ongoing agricultural season. Nonetheless, Africa RiskView estimates that up to 1.5 million people might be affected in the West African countries currently participating in the ARC Risk Pool.¹ The country with the

---

¹ This does not include population affected estimates for Mauritania and Niger, which are still in the process of defining their participation in the ARC Risk Pool.

For more information visit our website: www.africanriskcapacity.org
highest number of people affected is Senegal, where Africa RiskView estimates that over 700,000 people could be directly impacted by drought in the central and western parts of the country due to the late and erratic start of the season. This assumes farmers did not have an opportunity to make the most of the later good rains by planting other crops or still planted groundnut despite the late and erratic start. In Mali, over 600,000 people might suffer from below normal crop outcomes at the end of the ongoing season, while an estimated 130,000 people in south-western and north-eastern Burkina Faso could also be affected by dry conditions. In all countries but Senegal, the people affected estimates are well below the historical average, highlighting the overall good performance of the season in the region. It is important to note that these projections could change depending on the performance of the rains between now and the end of the season in October/November.

**Update on the ARC Risk Pool**
Currently, nine countries form the 2016/17 ARC Risk Pool, namely Burkina Faso, The Gambia, Kenya, Madagascar, Mali, Mauritania, Niger, Senegal and Zimbabwe.² ARC has been working with countries throughout the continent on drought insurance since 2014/15 and is developing additional risk insurance products for floods and tropical cyclones together with its Member States. Countries interested in joining the ARC Risk Pool usually go through a year-long engagement process which involves the customisation of Africa RiskView by in-country technical experts with support from the ARC Secretariat, the definition of an Operations Plans that outlines the assistance to be provided to vulnerable populations in the case of a payout by the ARC Insurance Company Limited, as well as the creation of structures and processes that allow for the quick disbursement of the payouts and the activation of the pre-defined Operation Plans.

²) Some of these countries are still in the process of defining their participation in the ARC Risk Pool.
The African Risk Capacity (ARC) is a specialised agency of the African Union designed to improve the capacity of AU Member States to manage natural disaster risk, adapt to climate change and protect food insecure populations.

**Africa RiskView** is the technical engine of ARC. The software uses satellite-based rainfall information to estimate the costs of responding to a drought, which triggers a corresponding insurance payout.

**ARC Insurance Company Limited** is the financial affiliate of the ARC Agency, which pools risk across the continent through issuing insurance policies to participating countries.

**Note on Africa RiskView’s Methodology:**

**Rainfall:** Africa RiskView uses various satellite rainfall datasets to track the progression of rainy seasons in Africa. Countries intending to participate in the ARC Risk Pool are required to customise the rainfall component by selecting the dataset which corresponds the best to the actual rainfall measured on the ground.

**Drought:** Africa RiskView uses the Water Requirements Satisfaction Index (WRSI) as an indicator for drought. The WRSI is an index developed by the Food and Agriculture Organisation of the United Nations (FAO), which, based on satellite rainfall estimates, calculates whether a particular crop is getting the amount of water it needs at different stages of its development. To maximise the accuracy of Africa RiskView, countries intending to take out insurance customise the software’s parameters to reflect the realities on the ground.

**Affected Populations:** Based on the WRSI calculations, Africa RiskView estimates the number of people potentially affected by drought for each country participating in the insurance pool. As part of the in-country customisation process, vulnerability profiles are developed at the sub-national level for each country, which define the potential impact of a drought on the population living in a specific area.

**Response Costs:** In a fourth and final step, Africa RiskView converts the numbers of affected people into response costs. For countries participating in the insurance pool these national response costs are the underlying basis of the insurance policies. Payouts will be triggered from the ARC Insurance Company Limited to countries where the estimated response cost at the end of the season exceeds a pre-defined threshold specified in the insurance contracts.

**Disclaimer:** The data and information contained in this bulletin have been developed for the purposes of, and using the methodology of, Africa RiskView and the African Risk Capacity Group. The data in this bulletin is provided to the public for information purposes only, and neither the ARC Agency, its affiliates nor each of their respective officers, directors, employees and agents make any representation or warranty regarding the fitness of the data and information for any particular purpose. In no event shall the ARC Agency, its affiliates nor each of their respective officers, directors, employees and agents be held liable with respect to any subject matter presented here. Payouts under insurance policies issued by ARC Insurance Company Limited are calculated using a stand-alone version of Africa RiskView, the results of which can differ from those presented here.

For more information visit our website: [www.africanriskcapacity.org](http://www.africanriskcapacity.org)