African Risk Capacity
Sovereign Disaster Risk Solutions
A Specialized Agency of the African Union

Africa RiskView
Monthly Bulletin

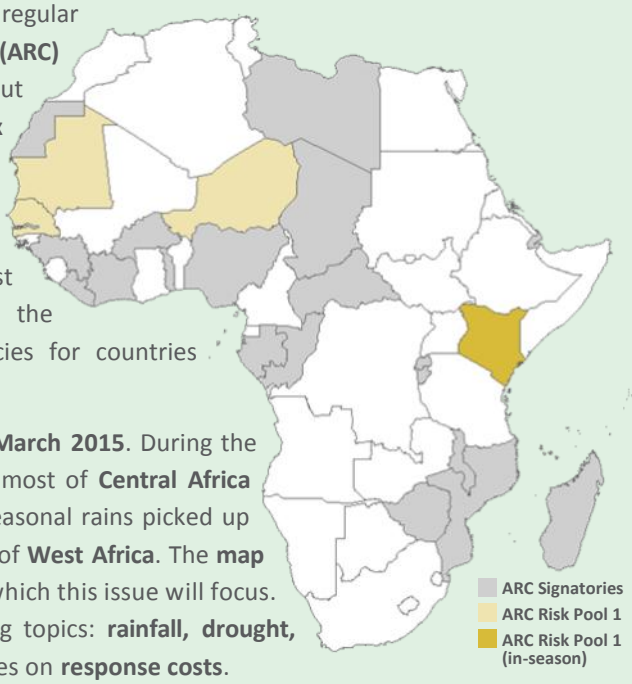
April 2015 | Period Covered: March 2015

Highlights:

- ***Rainfall:***
  - Drier than normal conditions in **South-East Africa** and parts of **East Africa**
  - Early start of the rainy season in coastal areas of **West Africa**
- ***Drought:***
  - Due to slightly drier than normal conditions in the first part of the 2015 long rains season, the rangeland WRSI is currently below normal in some pastoral areas of **Kenya**
- ***Potentially Affected People:***
  - No projection can be made yet regarding the development of the **2015 long rains season in Kenya**, however the current end-of-season projection indicates a slightly above average number of potentially drought-affected people
- ***Insurance:***
  - **Four countries** (Mauritania, Niger, Kenya and Senegal) **form the first ARC risk pool**
  - **Niger**, **Senegal** and **Mauritania** received pay-outs by the ARC Insurance Company Limited in January 2015, ahead of the 2015 humanitarian appeal for the Sahel

Introduction

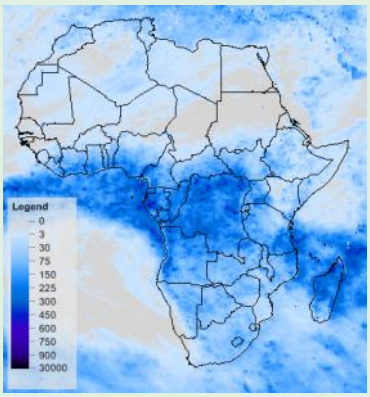
The ***Africa RiskView*** **(ARV) Bulletin** is a regular publication of the ***African Risk Capacity*** **(ARC) Agency**. It provides information about current **rainfall and drought index developments** as detected by ARV, and their potential **impact on vulnerable populations**. It also provides updates on **estimated response costs** to assist potentially affected people, which are the underlying basis of the insurance policies for countries participating in the ARC insurance pool.



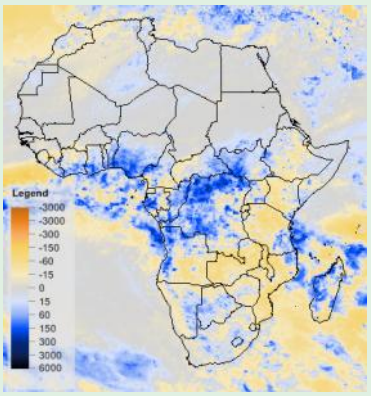
This month's issue covers the month of **March 2015**. During the reporting month, the rains continued in most of **Central Africa** and in **Southern Africa**. Moreover, the seasonal rains picked up in intensity in **East Africa** as well as parts of **West Africa**. The **map on the right** highlights the countries on which this issue will focus. The ARV Bulletin will cover the following topics: **rainfall, drought, populations affected** and update estimates on **response costs**.

Rainfall

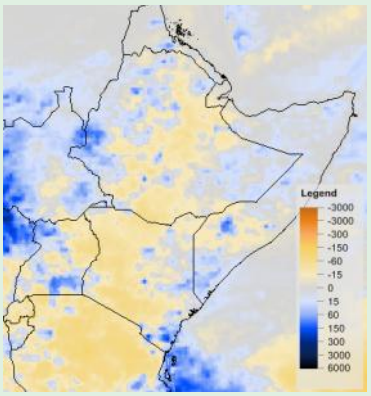
During the reporting month, the rainy season continued in most of **Central** and **Southern Africa**. Particularly south-eastern Africa (Madagascar, northern Mozambique and southern Tanzania) experienced cumulative rains of up to 500 mm during the month of March 2015. In **East Africa**, the seasonal rains picked up in intensity, with parts of Kenya and Somalia recording over 200 mm of rainfall. Similarly, in **West Africa**, the rainy season started in coastal areas in the Gulf of Guinea (see Map 2). These rains are expected to move northwards towards the Sahel in the coming months.



Map 2: Cumulative Rainfall, RFE2 (Mar 2015)



Map 3: Rainfall compared to normal, RFE2 (Mar 2015)



Map 4: Rainfall compared to normal, Horn of Africa, RFE2 (Mar 2015)

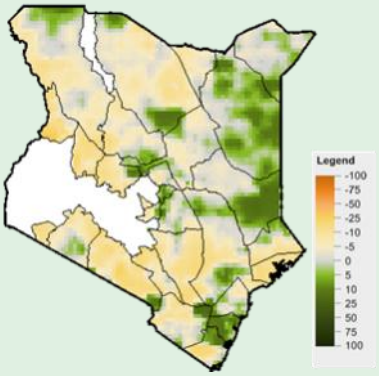
Compared to the long-term average (2001-2014), most of **south-eastern Africa** experienced drier than normal conditions, with the exception of western Madagascar (see Map 3). Particularly southern and central Mozambique, Malawi and parts of Zambia and Tanzania experienced rainfall deficits over up to over 100 mm. Conversely, **south-western Africa** recorded slightly above normal rains, which however might come too late to alleviate the effect of a poor rainy season in South Africa, Namibia and Botswana. In **West Africa**, most coastal areas along the Gulf of Guinea benefited from above normal rains, which could indicate an early start of the rainy season in the region. Conversely, in **East Africa**, the rains were below average in central and western Kenya (see Map 4). This delayed start

of the long rains comes after several consecutive poor rainy seasons and has thus raised concerns over the situation in some pastoral areas. The fact that above normal rains were recorded in western Kenya in the last dekad of March (21-31 March) might however indicate that the seasonal rains will pick up in intensity in the coming weeks.

DROUGHT

ARV 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 ARV, **countries intending to take out insurance customise the software's parameters** to reflect the realities on the ground. This issue of the ARV Bulletin will discuss insured countries that are currently in season.

Kenya (2015 first rangeland season): Kenya chose to focus on its arid and semi-arid lands (ASAL) in the context of its participation in the ARC insurance pool. ARV was customised to show rangeland development in the country's bi-modal pastoral areas. The performance of the 2015 long rains since February has been normal to below normal throughout most pastoral areas, with the season ending in June. Due to the delayed start of the rainy season, the rangeland WRSI is currently below the long-term average (2001-2014) in most pastoral areas of central and western Kenya (see Map 5). The situation in the pastoral areas is exacerbated further by the compounding effect of three consecutive poor rainy seasons between 2013 and 2015, which have severely affected pasture regeneration in some areas. However, parts of eastern Kenya have benefitted from above normal rains in mid-March, which might have alleviated the situation slightly. The seasonal rains are expected to pick up in intensity in the coming weeks, as the bulk of the rains is usually received between April and June. The progression of the long rains season will be monitored closely in the coming issues of the ARV Bulletin.

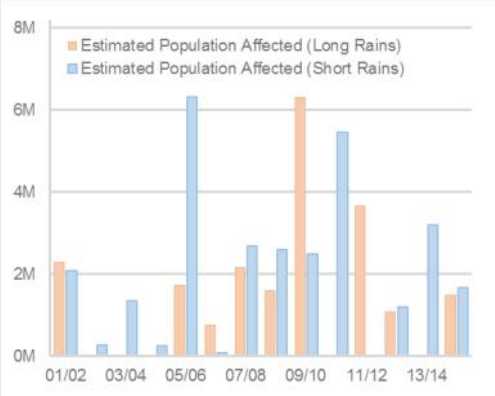


MAP 5: RANGELAND WRSI COMPARED TO NORMAL, KENYA (2015 FIRST RANGELAND SEASON)

AFFECTED POPULATIONS

Based on the WRSI calculations discussed in the previous section of this bulletin, ARV 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 sub-national levels for each country, which define the potential impact of a drought on the population living in a specific area. It is important to note that not all those affected by a drought might be in need of humanitarian assistance. Moreover, needs are often driven by a variety of factors including but not limited to the weather. This bulletin reviews the affected population estimates and projections for countries insured and in-season.

Kenya (2015 first rangeland season): While Kenya is nearly half-way through its 2015 long rains season, it is important to note that, as mentioned above, the bulk of the seasonal rains is received between April and June. Currently, ARV estimates that about 2.5 million people in the country's arid and semi-arid lands might be affected at the end of the season in June 2015, which can be attributed to the delayed start of the rains in some areas and the resulting below normal rangeland WRSI (see previous chapter). However, the rainfall performance in the coming months will determine the final outcome of the ongoing season, and updated projections will be discussed in the coming issues of the ARV Bulletin. Considering the mixed performance of the 2014/15 short rains, which have led to localised drought events in most of central and eastern Kenya, as well as the two previous seasons, the progress of the 2015 long rains needs to be monitored closely. While the individual impact of each of these seasons might have been absorbed by the adaptive capacity of households, their resilience could seriously be affected by the compounding effect of several consecutive poor rainy seasons. The graph to the right illustrates the estimated drought impact for the short and long rains seasons since 2001. It shows how for each of the last three seasons, Kenya has seen between around 1.5 and 3 million people being directly affected by drought conditions (see Graph 1).



GRAPH 1: ESTIMATED POPULATION AFFECTED BY DROUGHT, KENYA (2001-2015)

About ARC:

- 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.
- The ***Africa RiskView*** **(ARV)** software is the technical engine of ARC. It uses satellite-based rainfall information to estimate the cost of responding to a drought, which triggers a corresponding insurance pay-out.
- The ***ARC Insurance Company Limited*** is the commercial affiliate of the ARC Agency, which pools risk across the continent through issuing insurance policies to participating countries.

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RESPONSE COST ESTIMATION

In a fourth and final step, ARV 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**. Pay-outs 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. This bulletin will monitor the progression of estimated response costs for countries that are in-season and have insured their respective seasons. Currently, **four countries form the first ARC risk pool** (Kenya, which is insuring two seasons, Mauritania, Niger and Senegal). These four countries insured in total five agricultural or rangeland seasons against the cost of a drought-related intervention. So far, Mauritania, Niger and Senegal have received pay-outs by the ARC Insurance Company Limited, while the insured short rains season in Kenya recently finished without the country being eligible for a pay-out. Regarding the ongoing **2015 first rangeland season in Kenya**, it is currently too early to predict whether or not the country will receive a pay-out.

As mentioned above, **the three West African countries in the first ARC risk pool have received pay-outs by the ARC Insurance Company Limited** in early 2015, due to the poor rainfall performance during their respective 2014 agricultural seasons. The countries are currently preparing the implementation of the activities outlined in the **Final Implementation Plans** (FIPs), which were approved by the ARC Agency Governing Board in January. To date, targeting of beneficiaries has been completed in Mauritania, where 50,000 households have been identified and provided with food distribution cards. It is expected that the beneficiaries will receive support in April 2015. In Senegal, a targeting exercise will take place during the month of April to identify beneficiaries of food distributions, which are expected to start in May, alongside subsidised livestock fodder sales for drought-affected pastoralists. Finally, in Niger, the target areas and implementing partners for cash transfers have been identified and trained. Food commodities suppliers for School Feeding have been selected and the activities are expected to be assisted in the coming weeks. The implementation of these programmes will be monitored closely in the coming editions of the ARV Bulletins.