



# AFRICA THE IMPACT OF CLIMATE CHANGE

*“The earth is the LORD's, and everything in it, the world, and all who live in it.”*



*The effects of climate change are already being felt by people across Africa. Evidence shows that the change in temperature has affected the health, livelihoods, food productivity, water availability, and overall security of the African people.*

*Over the past 25 years, the number of weather-related disasters, such as floods and droughts, has doubled. Africa has seen a decrease in rainfall over large parts of the Sahel and Southern Africa, and an increase in parts of Central Africa.*

*The impact that Climate Change is having in Africa can be categorised under eight headings. These are briefly outlined here.*

## **1. Impact on Weather Patterns:**

Changing weather patterns have brought an increase in flooding and droughts. Flooding has been the most prevalent form of natural disaster, especially in North Africa, but it is also common in other parts of the continent. This has resulted in thousands of deaths, the displacement of millions of people and the loss of food and agricultural land.

Droughts are also more common and last longer. The drought experience in the East Africa region in 2011/2012 was said to be “the worst drought in 60 years.”

## **2. Impact on Water Supply:**

Climate change is reducing water resources in Africa. Change in the distribution, timing and frequency of rainfall has led either to flooding or to the drying-up of rivers and lakes.

*“The warming caused by huge consumption on the part of some rich countries has repercussions on the poorest areas of the world, especially Africa, where a rise in temperature, together with drought, has proved devastating for farming.”* Laudato Si’ 51



A reduced water supply is having a direct effect on economies and peoples. For example the production of electricity in Ghana, Tanzania and Zambia has, over the past years been disrupted due to low water levels at dams. Mali is dependent on the river Niger for food, water and transport. However, great stretches of the river are now polluted. In Nigeria, it is estimated that half the population has no access to clean water.

A clear example of the impact of climate change is the receding of the glaciers on Mount Kilimanjaro. As a result rivers fed by the glaciers are drying up. It is estimated that 82% of the ice that capped the mountain, when it was first recorded in 1912, is now gone. (IPCC, 2001).

### 3. Impacts on Agriculture and Food:

Across Africa the landscape is changing. Droughts, heat stress and flooding have led to a reduction in crop yields and livestock productivity. East Africa is facing a food crisis. According to Oxfam, 12 million people in Ethiopia, Kenya and Somalia are in dire need of food. Rainfall has been below average with 2010/2011 being the driest year since 1950/1951. In 2015, South Afri-

ca recorded the lowest rainfall since records began in 1904. Across the continent rising temperatures and changing rainfall patterns hold back crop production and inevitably cause food prices to rise. This will hit the poorest people.

### 4. Impacts on Human Health:

These include heat stress due to sustained increases in temperature and breathing problems that exacerbate respiratory diseases. The impact of climate change on agriculture and food production increases poverty and malnutrition and the prevalence of diseases that accompany them. Climate change will also directly contribute to the spread of diseases such as malaria and dengue fever causing deaths, and increased pressure on already inadequate and stretched medical services.

### 5. Impact on Habitation and Homes:

Severe flooding and intense droughts have led to the destruction or abandonment of many homes and villages across Africa. Conflicts over scarce resources also exacerbate



these impacts and, in turn, contribute to displacement and migration within and between countries. Extreme events displace large amounts of people, especially those who are poor and unable to rebuild after disasters. More and more people are being forced to migrate to cities to seek a livelihood, thus contributing to urbanisation and the growth of slums in Africa.

### 6. Impacts on Vulnerable Populations:

Women, children and the elderly are the most vulnerable to climate change impacts across Africa. Women labourers often experience additional duties as caregivers, as well as from societal responses to climate change after extreme weather events (eg, male migration). The water scarcity places an additional burden on African women, who walk hours and sometimes even days, to fetch it. (IPCC, 2014)

Children and the elderly face graver risks due to susceptibility to infectious diseases, such as Malaria, limited mobility and reduced intake of food. The elderly face physical danger and even

death due to droughts, heat stress and wildfires. Children often die from starvation, malnutrition, diarrhoeal diseases and flooding. (IPCC, 2014).

### 7. Impact on National Security:

Climate change is having an impact on national security issues and is increasing international tensions. Conflicts often occur over the use of already limited natural resources, fertile ground and water. (IPCC, 2014). Changes in the timing and intensity of rainfall has led to conflict between farmers and nomadic cattle-herding tribes. This is happening, for example, in the Turkana region of Kenya and in Nigeria between nomadic Fulani and settled populations.

A United Nations Development Programme report predicts that access to water may be the single biggest cause of conflict and war in Africa in the next 25 years. Such wars are most likely to be in countries where rivers or lakes are shared by more



than one country. There is already fierce competition over water for irrigation and power generation - most notably in the Nile river basin. Cairo warned in 1991 that it was ready to use force to protect its access to waters of the Nile, which also runs through Ethiopia and Sudan.

The changes in precipitation and temperature are already affecting crop yields in Sub-Saharan Africa. This has resulted in food shortages, that have triggered cross border migration and intra-regional conflicts that have caused deaths, displacement and destruction of property.



***Despite the fact that the African continent has contributed the least to anthropogenic (human) factors causing climate change, Africa is the worst hit.***

## 8. Impacts on ecosystems:

Climate change has already led to changes in freshwater and marine ecosystems in eastern and southern Africa, and terrestrial ecosystems in southern and western Africa. The extreme weather events have demonstrated the vulnerability of some of South Africa's ecosystems. The migration patterns, geographic range and seasonal activity of many terrestrial and marine species have shifted in response to climate change. The abundance and interaction among species has also changed (IPCC, 2014).

Source: This Briefing is largely based on information from "Eight Ways climate change is already affecting Africa" Bhavna Deonarain, Dec 2014

### FACTS

Eighty percent of the African population is dependent on agriculture for their livelihoods.

Of the world's twenty countries most vulnerable to agricultural production loss due to climate change, sixteen are in Africa.

The current population of nearly one billion people in Sub-Saharan Africa is expected to double in the next 40 years.

In Africa the average person produces less than 0.1 tons of carbon emissions per annum. In Ireland, the figure is 10 tons per person - one hundred times more.