



# UGANDA

(East Africa)

Historically, the African continent has contributed the least of any global region (apart from Antarctica) to fossil fuel emissions and it accounts for only 2-3 % of the world's carbon emissions. Despite that, it is already experiencing some of the world's most dramatic changes in terms of drought, flooding, heat waves, and viable land use.

**Population:** 44.3 million

**Annual population growth:** 3.6% (2019)

**Surface area:** 241,038 km<sup>2</sup>;  
**of which water:** 15.39%

**Biodiversity and conservation:** 60 protected areas, 10 national parks

**Climate:** mostly tropical climate characterized by stable rainfall patterns.

**GDP:** 40.53 billion USD (2021)

**Economy:** **agriculture** 23.1% (2019); **industry** (incl. mining, construction, electricity, water, gas) 26.3%; **export** of goods and services 17.2%; **tourism** 6.6% (2016)

## CLIMATE CHANGE IMPACTS

▶ **Rapid loss of the ice field** in Rwenzori Mountains, which shrunk from 6.5 km<sup>2</sup> in 1906 to less than 1 km<sup>2</sup> in 2003.

▶ **Flooding**, particularly in low-lying areas of the country, presents the largest risk. Each year, floods impact nearly 50,000 people. Uganda experiences both flash floods and

slow-onset floods, which are common in urban areas, low-lying areas, areas along river banks and swamplands.

▶ **Droughts** affected close to 2.4 million people between 2004 and 2013, and drought conditions in 2010 and 2011 caused an estimated loss and damage value of \$1.2 billion, equivalent to 7.5% of Uganda's 2010 GDP.



Speech by Ugandan climate activist Vanessa Nakate at Pre-COP26, the Youth4Climate Conference. In the speech, Nakate implored global leaders to act and listen to the most-affected people. Watch [HERE](#).





Ronah Masika remembers when she could still see the snowy caps of the Rwenzori mountains, a Unesco World Heritage site on the border between Uganda and the Democratic Republic of Congo. But now she cannot even catch a glimpse of the ice because the glacier is receding. Her story [HERE](#).



If Joseph Natsitya Tshikanga had been home on 1 March 2010, he would most likely have perished alongside his four siblings in a landslide. The landslides buried houses, markets, and a church in three villages, killing an estimated 400 people and displacing 5,000. His story [HERE](#).



In Uganda, 80% of the population relies upon agriculture for its livelihood. As agriculture is mostly rain-fed, unexpected long dry periods and limited rains are making life unpredictable and increasingly difficult. Indeed, an estimated 800,000 hectares of Ugandan crops are destroyed by climate-related events every year. More [HERE](#).



From 1900 to 2018, the country has encountered 20 floods, 40 epidemics, 9 droughts, and 5 landslides events. The cumulative damages caused by those natural disasters amounts to over 200,000 deaths and at least \$80 million economic loss. More [HERE](#).





## CLIMATE PROJECTIONS

Increased Precipitation Unpredictability

More Frequent Precipitation

Increased Temperature



Roughly 75% of the population lives in rural areas, and most households report no significant buffers against climate stressors. More about climate risks in Uganda [HERE](#).

## KEY CLIMATE IMPACTS

Crop Production

Livestock

Ecosystems

Energy & Infrastructure

Human Health

Water Resources



- ▶ Air temperature over Uganda is projected to rise by 1.5 to 3.5 °C by 2080, compared to pre-industrial levels.
- ▶ Expected increased intense rainfall events, with the possibility of higher rainfall for some areas will lead to the heightened risk of flooding, loss of life, and damage to property and infrastructure. Intense rainfall and flooding may also result in soil erosion and water logging of crops, decreasing yields and increasing food insecurity.
- ▶ The increased likelihood of increased aridity and drought stress is expected to lead to water scarcity in some areas, resulting in increased demand for water, rising and the potential for conflict and biodiversity loss.
- ▶ Higher temperatures with increased aridity may also lead to livestock stress and reduced crop yields. Rising temperatures and projected rainfall increase during dry seasons threaten key crops in the country's agriculture sector such as coffee, tea, rice and maize.
- ▶ Climate change is likely to cause severe damage to the infrastructure sector in Uganda. Especially transport infrastructure is vulnerable to extreme weather events, yet essential for trading agricultural goods.





## CLIMATE CHANGE AND FORCED MIGRATION IN UGANDA

Both the slow-onset and sudden-onset climatic and environmental changes have a strong influence on population migration patterns in Uganda:

- ▶ Sudden-onset events, such as floods and landslides, often cause destruction of livelihoods and displace the affected populations who have to leave their homes mainly temporarily, but in some cases permanently.
- ▶ Slow-onset events, such as gradual land and environmental deterioration, force people to migrate permanently.



**Expected high levels of internal climate migration: As many as 12 million people, or 11% of the population could move within Uganda because of slow onset climate factors, without concrete climate and development action by 2050. The main climate factors driving migration are flooding (44%) and drought (30%). More [HERE](#).**



**200,000 Ugandans have been affected each year due to weather-related disasters over the past two decades as parts of the country (including the capital Kampala) are already prone to flash floods, mudslides, landslides, and drought. More [HERE](#).**