



BOLIVIA

(South America)



More than a decade after the "Save the Rainforest" movement forced changes that dramatically slowed deforestation across the Amazon basin – also in Bolivia, activity is roaring back in some of the biggest expanses of forests in the world. That resurgence, driven by the world's growing appetite for soy and other agricultural crops, is raising the specter of a backward slide in efforts to preserve biodiversity and fight climate change. More on deforestation in Bolivia [HERE](#).

Population / Annual population growth:
11.4 million / 1.4% (2019)

Surface area: 1,098,581 km²; **of which water:**
1.2 %

Biodiversity and conservation: 123 protected areas, 10 national parks

Climate: Tropical savanna climate, subtropical climate, semi-arid climate, cold desert climate.

GDP: 40.41 billion USD (2021)

Economy: agriculture 29.4%; industry 22%; services 48.6% (2015)

CLIMATE CHANGE IMPACTS

▶ **Droughts**, since the temperatures in the Andes increased by 0.1 °C per decade from 1939 to 1998, and more recently the rate of increase **has tripled** (to 0.33 °C per decade from 1980 to 2005), causing glaciers to recede at an accelerated pace and create **unforeseen water shortages** in Andean agricultural towns.

▶ **Floods:** Given their frequency and the proportion of the population exposed to them, floods in Bolivia cause **significant**

economic losses primarily affecting **infrastructure, agricultural, and livestock production.**

▶ **Glacier reduction** is another consequence of climate change, evident in Bolivia, with devastating impact on access to water for the local population. The Bolivian glacier Chacaltaya, located 20 km to the northeast of the city of La Paz, **has lost 82% of its surface area** since 1982.



Globally, climate change disproportionately affects women. Paola Flores Carvajal is a climate activist from Bolivia who organizes workshops to educate Indigenous women who are living through the impact of climate change every day. Read about her work [HERE](#).



Lake Poopó in the Andes used to be Bolivia's second largest lake, next to which a thriving fishing village was located. The lake has now dried up as a consequence of droughts and other impacts of climate change. Watch how the area transformed [HERE](#).



Celia Mamani spent time in the rescue shelter after record floods in Bolivia in 2021. She moved there with her family and neighbours, after water came into their homes and cracks appeared in the walls. As a consequence, they were really scared to stay in their homes. Watch the report of the flooding [HERE](#).



Another Bolivian glacier affected by climate change is Huayna Potosí. Raymundo Condori warns: "The mountain was covered by snow 20 years ago. In the past 20 years, glaciers have been disappearing. Due to climate change, this glacier may not exist anymore in 5 years. If the glacier disappears, we will no longer have water." Video was prepared by associated partners of the Beyond the Tales project, Teatro Trono. Watch it [HERE](#).



CLIMATE PROJECTIONS

Increased intensity of extreme weather events

More intense rainfall episodes

Increased temperature



Bolivia is particularly vulnerable to climate change due to widespread poverty, its variety of ecosystems, weather extremes, melting glaciers and high deforestation rates. Many producers and local farmers are already witnessing a changing climate, in terms of unpredictable rainfall, more disasters stemming from extreme weather events and higher temperatures, with negative impacts for their livelihoods. More about inequality and resilience in the context of climate change [HERE](#).

KEY CLIMATE IMPACTS

Water shortages
(especially in agriculture)

Forest fires

Altered ecosystems

Biodiversity loss

Greater inequality of women
and indigenous people

- ▶ The documented reduction of glaciers due to global warming can **increase seasonal runoff in the short term**, as well as **increase the dependence on seasonal rains** for the provision of water in the medium to long term.

- ▶ Bolivia has experienced its two worst years of forest fires ever – in 2010 it lost 2.9 million hectares, and from August to September 2019 over 5 million hectares of forested areas were burnt – **10% of Bolivia's total forested areas were destroyed in just two months**.
- ▶ The land conversion for agriculture uses and **the destruction of wetlands releases large quantities of carbon dioxide (CO₂)**, which is the gas that contributes 60% to global
- ▶ Climate change threatens to seriously affect the Amazon, which in turn would alter global climate and increase the risk of biodiversity loss.
- ▶ Women are in charge of tending to crops and livestock as well as providing food for their families — all difficult tasks even before the added burden of climate change. According to one study, these duties place Indigenous women directly on the front line of increased droughts, water pollution, soil erosion, and other climate change impacts.



CLIMATE CHANGE AND FORCED MIGRATION IN BOLIVIA

Interestingly, in Bolivia, a lot of migration flows occur within the country. Farmers have taken to **temporary city jobs** when there is poor yield for their crops, while others have started permanently leaving the agricultural sector and are migrating to nearby towns for other forms of work. Some view these migrants as the **first generation of climate refugees**.

However, environmental degradation and climate change can also trigger **international migration**. In particular, droughts and land degradation have led to migration of people from Chuquisaca and Tarija to move, temporarily and permanently, **to both urban areas in Bolivia and Argentina**. Migrants from rural areas of Potosí, Oruro and La Paz have moved to Chile to look for better jobs, but also in response to climate-related challenges affecting their agricultural practices.



Environmental migration is a reality in Bolivia as climate change and disasters affect internal and international migration patterns every year. It is predicted that climate change impacts will continue to act as a driver of climate migration. In particular, climate change may exacerbate desertification processes through the alteration of spatial and temporal patterns in temperature, rainfall and winds. Desertification affects more than 40 per cent of the Bolivian territory and acts as a migration driver mainly in the highlands, inter-Andean valleys and the Chaco. More on this [HERE](#).