



PALESTINE

The capacity of Palestine to adapt to challenges of climate change is constrained due to its limited control over and access to its natural resources, especially land and water, as a result of the restrictions and discriminatory policies imposed by Israel.

Population: estimate 5,159,076 (2020);

Annual population growth: 2.5 % (2021);

Surface area: total 6,020 km²;
of which water: 3.5%;

Climate: Predominantly of the eastern Mediterranean type; warm to hot, dry summers and mild, rainy winters. Various climate zones, combined with its geographic location close to Africa, Asia and Europe, have made Palestine historically rich in biodiversity.

GDP: 18.04 billion USD (2021)

Economy: Agriculture represents a dominant sector, employing 13.4 % of the population formally (and about 90 % informally) and representing 21% of all exports. Olives (and their derivatives in food, soap, fuel, and crafts) are a staple in Palestinian homes, and the olive sector contributes 15% of total agricultural income.

CLIMATE CHANGE IMPACTS

▶ Over the last 30 years, **the mean temperature** in the Middle Eastern region (Israel, Jordan, Lebanon, Palestinian Territories and Syria) **significantly increased at a rate of 0.4 degrees per decade**. At the same time, rainfall **has decreased**.

▶ The prevailing climate trend of **rising temperatures and declining precipitation** is leading to **water (un)availability**, which is impacting **agricultural production** in the West Bank and **winter crop production** in the Gaza strip. This comes on top of Israel's systemic and long-term discriminatory policies, which have had a devastating impact on Palestinians' access to safe and drinkable water.



Read more about Palestine's adaptation to climate change in light of the ongoing occupation [HERE](#) and [HERE](#).



Olive trees in Palestine are considered one of the country's main agricultural products, however, the productivity of the olive crop has been declining steadily in the past years due to the high temperature and the lack of rainfall. Read the testimonies of olive farmers Hussam Youssef here and Ramadan Ishtewi [HERE](#).



The *Struggle for Self-Determination in the Face of Climate Change* is a documentary film, which captures the reality of climate change adaptation in the occupied Palestinian territory, within the context of Israel's prolonged occupation. Watch it [HERE](#).



Water crisis is especially problematic in Gaza as it has no surface water available and relies solely on groundwater aquifers. It is estimated that due to salinization and contamination 96.2 % of household water from Gaza's aquifer is not safe for drinking without treatment. Five stories of Gazans who live in this reality are described [HERE](#).



CLIMATE PROJECTIONS

Increased Temperature
Extreme floods and droughts
Sea level rise



Climate change has had a great impact on the way of life of Palestinians. Anwar Samara answered some of our questions concerning changes in Palestine in the video [HERE](#).



Global warming will undoubtedly exacerbate the side-effects of prolonged occupation, but the occupation itself is already exacerbating the effects of global warming. How this is transforming the livelihoods of Palestinian farmers can be read in the testimony by Fareed Taamallah [HERE](#).

KEY CLIMATE IMPACTS

Food Security

Water Availability

Energy & Infrastructure

Public Health

Coastal Areas

- ▶ **Annual precipitation rates are likely to decrease** by 20% by 2050 and may reach a decrease of 35% by 2100 with an **increased risk and length of summer droughts**. Between the years 2031-2060 most of the droughts will be classified as **extreme droughts**.

- ▶ Due to increased likelihood of **intense, short periods of rainfall, flash floods** are highly likely. Currently existing infrastructure is not capable of supporting heavy rainfall, which could lead to **flooding in urban areas due in part to inadequate drainage and sewage systems**.

- ▶ Salinization of freshwater sources is already leading to reduced availability of potable water. The **sea level along the Gaza coastline is projected to rise** by 0.1 meters to 0.4 meters by 2100, making saltwater intrusion into the already stressed Coastal Aquifer much worse. It is expected that this will additionally harm low-lying coastal agriculture and will threaten food security in the already vulnerable enclave.



CLIMATE CHANGE AND FORCED MIGRATION IN PALESTINE

Years of occupation and blockade have left a majority of the population dependent on international assistance while the continuing intra-Palestinian divisions serve to exacerbate the humanitarian and service delivery crisis on the ground. Indeed, millions of Palestinians today are already refugees who are heavily reliant on aid from humanitarian organizations.

Although there is no official data on Palestine and climate migration from the country, its population

has weathered increasingly acute environmental vulnerabilities which may only grow worse as groundwater aquifers are depleted and infrastructure developments are slow in the face of the ongoing occupation. Additional question related to climate migration and the case of Palestine is, what happens when migration is not an option for struggling communities living in Palestinian exclaves such as Gaza Strip, where people are prevented from leaving the territory to begin with.



"The fight for climate justice for all is directly connected to the Palestinian struggle. Palestine is a climate justice issue," writes Abeer Butmeh (Friends of Earth Palestine) in a testimony [HERE](#).



"I think it is both climate change and occupation that together made the lives of Palestinians miserable and forced many of them to move from area C to other areas. With climate change, you need to adopt new regulations and different infrastructure [...] In our case, occupation controls everything and refuses to give permits for water wells, for electricity and even to have solar panels. That leads many people to move from area C (under full Israeli control) to area A (under partial Israeli control)," explains Fareed Taamallah in the short interview on how climate change and occupation are changing the livelihoods of people in Palestine. You can read it [HERE](#).