

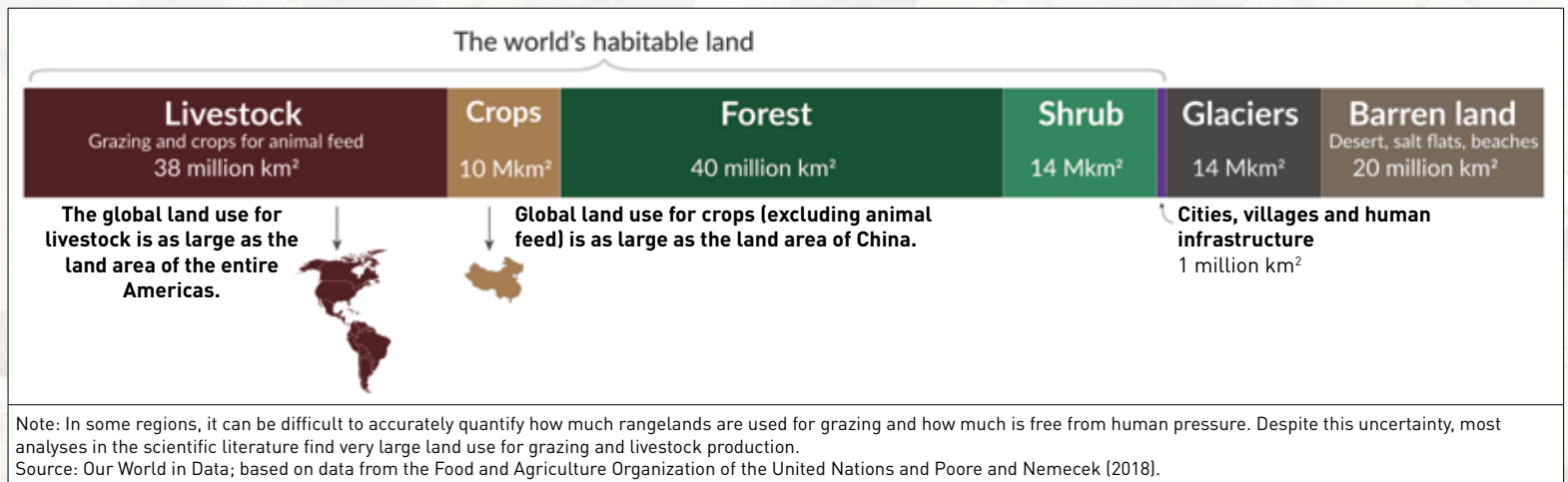
Some facts and figures on ...

... Land use

The most visible mark that humanity has left on the planet is the transformation of wild habitats into farmland. If we rewind 1,000 years, it is estimated that only 4 million square

kilometres – less than 4 per cent of the world's ice- and desert-free land – was used for farming. Today almost half (44 %) of the world's habitable land is used for agriculture. More

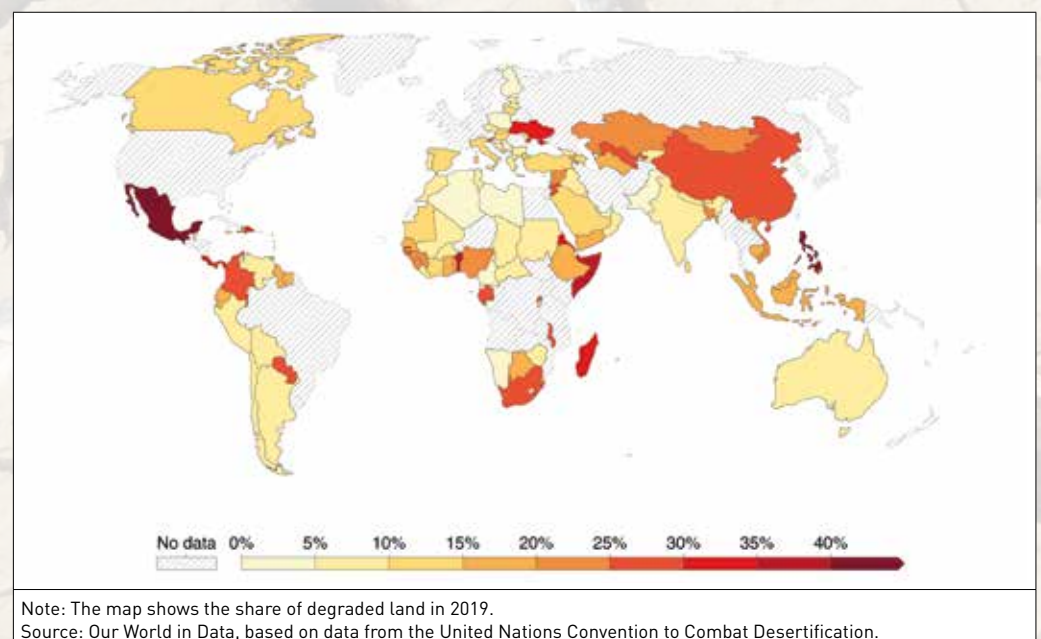
than three-quarters of global agricultural land is used for livestock, despite meat and dairy making up a much smaller share of the world's protein and calories. (*Our World in Data*)



... Land degradation

Land degradation is the result of human-induced actions which exploit land, causing its utility, biodiversity, soil fertility and overall health to decline. Land degradation is defined here as the reduction or loss of the biological or economic productivity and complexity of rain-fed cropland, irrigated cropland, or range, pasture, forest and woodlands resulting from a combination of pressures, including land use and management practices. The United Nations Convention to Combat Desertification warns that land degradation is rapidly advancing world-wide.

Ensuring food security for a growing global population requires healthy land resources and flourishing ecosystems. Yet our current agricultural practices are causing soils world-wide to be eroded up to 100 times faster than natural processes replenish them. We have already altered 70 per cent of all ice-free land, impacting over 3.2 billion people. At current rates, 90 per cent of land will bear our imprint by 2050. The impacts of land degradation are going to be felt by most of the world's pop-

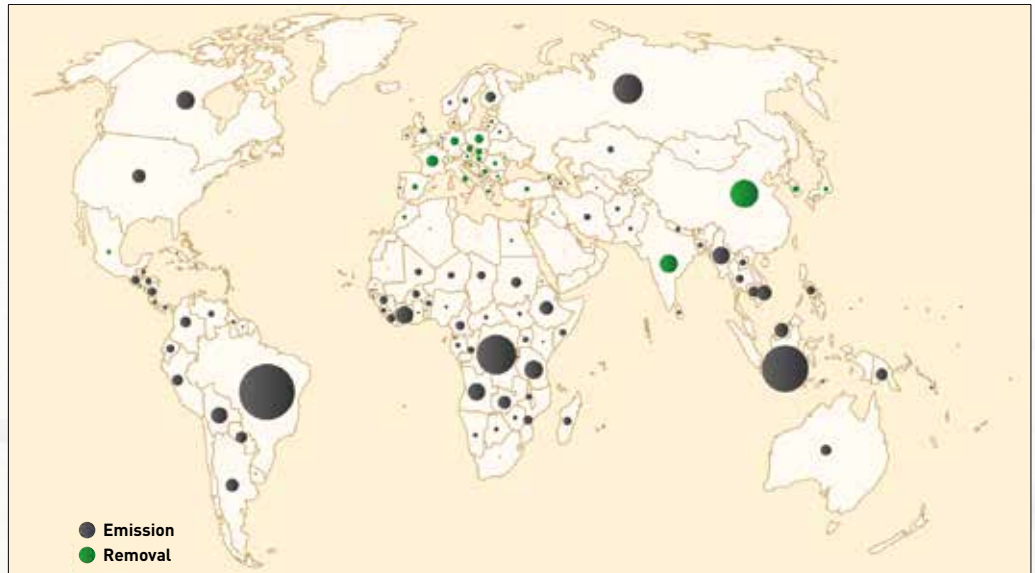


ulation. Land degradation also changes and disrupts rainfall patterns, exacerbates extreme weather like droughts or floods and drives

further climate change. It results in social and political instability, which drives poverty, conflict and migration. (*UNCCD*)

... CO₂ emissions from land-use change

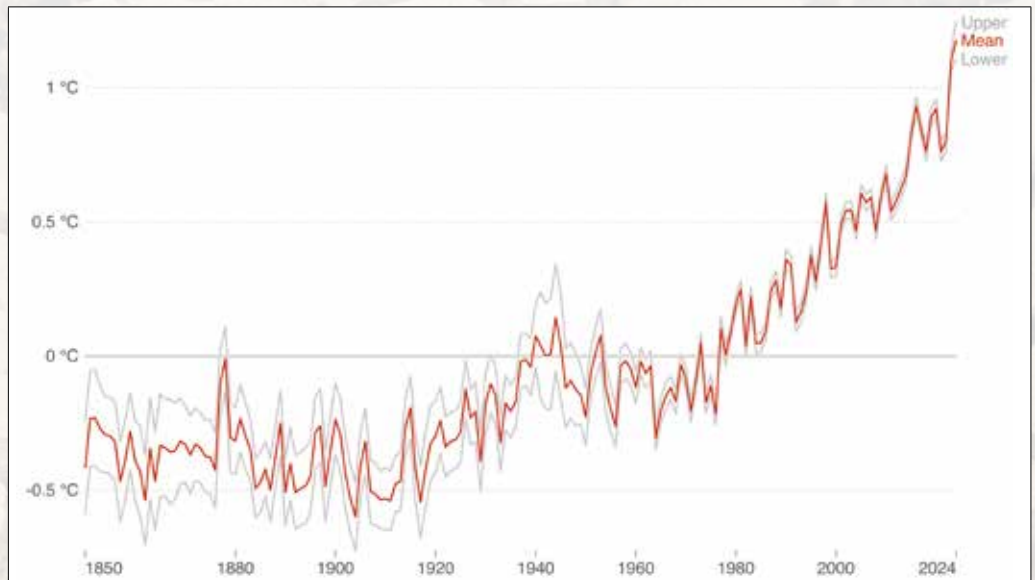
According to the Global Carbon Budget report, Brazil, Indonesia and the Democratic Republic of the Congo together contributed 60 per cent of the global net land-use change CO₂ emissions in 2023. In total, net CO₂ emissions from land-use change remain high, but they have decreased since their peak in the late-1990s, in particular in the past decade. Global net CO₂ emissions from land-use change averaged 4.1 gigatons of CO₂ for the past decade (2014–2023), with a projection for 2024 of 4.2 GtCO₂. (Global Carbon Project)



Note: The map shows CO₂ net emissions in 2023 (TgC/year = teragrams of carbon per year). Source: Global Carbon Atlas 2024

... Global warming

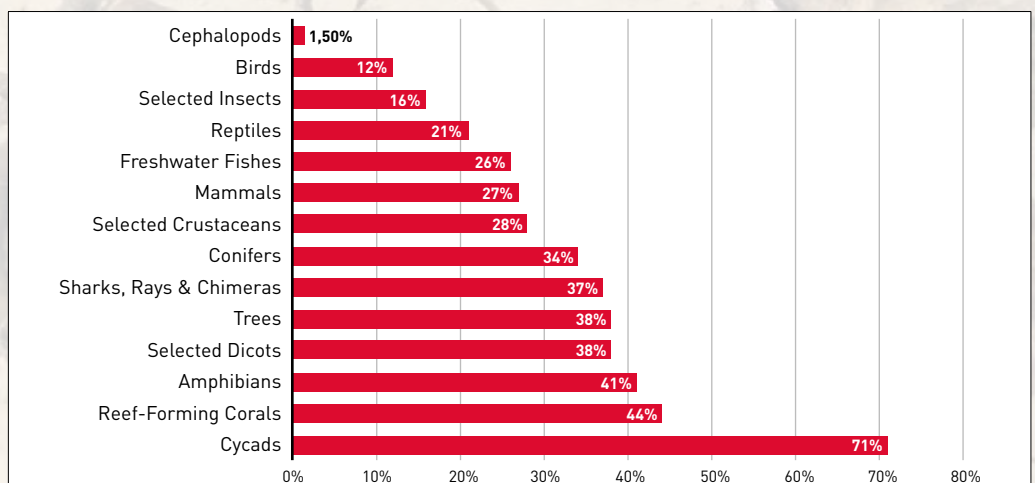
Human emissions of carbon dioxide and other greenhouse gases are the primary drivers of the global rise in temperatures. This link between global temperatures and greenhouse gas concentrations – especially CO₂ – has been true throughout Earth’s history. The chart shows the temperature relative to a baseline, which is the average between 1961 and 1990. Average temperatures have risen by over 0.8°C since then. You can also see that temperatures in 1850 were around 0.4°C cooler than the baseline, giving us a total temperature rise of about 1.2°C compared to pre-industrial times. This warming has not been equally distributed across the world. The Northern Hemisphere has warmed more than the Southern Hemisphere. And warming has been especially strong at the poles. (Our World in Data)



Note: The graphs show the global average land-sea temperature anomaly relative to the 1961–1990 average temperature baseline. The grey lines represent the upper and lower bounds of the 95 per cent confidence interval. Source: Our World in Data, based on data by Met Office Hadley Centre (2024).

... Biodiversity loss

The IUCN Red List is a critical indicator of the state of the world’s biodiversity. It shows that more than 46,300 species are threatened with extinction – which is 28 per cent of all assessed species. To date, more than 166,000 species have been assessed for the Red List. There are some important limitations to the current dataset that need to be fully understood before any analysis based on Red List data can be undertaken. The species groups covered so far are biased towards terrestrial and, in particular, forest ecosystems. Among the better-documented species, there is also a strong bias towards animals, rather than plants or fungi; but steps are underway to rectify these biases. (IUCN)



Note: The figure provides an overview of the proportions of threatened species within each of the comprehensively studied groups. Source: The IUCN Red List of Threatend Species