

**FACTSHEET**

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THE OXFORD REPORT:

**“Global Climate Change Impacts Attributable to Deforestation of the Brazilian part of the Amazon Rainforest driven by the Bolsonaro Administration”**

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**1. Executive Summary**

The impacts of climate change are increasing in magnitude worldwide. The global burden of climate change impacts already spans deaths, disease, the loss of livelihoods, damage to property and infrastructure, other economic losses, and the loss of biodiversity. Every tonne of carbon dioxide added to the atmosphere today compounds these impacts. Unless drastic action is taken to eliminate net emissions of greenhouse gases from human activity and remove historical emissions from the atmosphere, the impacts of climate change will persist for centuries. Some of its consequences, such as sea-level rise or glacier retreat, will become more severe over time, even if human emissions ceased today. Climate change is a global crisis, though one whose impacts will be felt unequally around the world, with the greatest harm typically affecting communities in the Global South, vulnerable individuals in society, and future generations.

The impacts of climate change manifest through changing likelihood and intensities of extreme weather events, such as floods, heatwaves, droughts and storms, and slow-onset changes, such as sea-level rise and glacial retreat. Even though the impacts of greenhouse gas emissions arise via the complex intermediary processes of the atmosphere, developments in climate science now allow causal links to be drawn between drivers of climate change (i.e. emissions) and their impacts.

The Oxford report<sup>1</sup> summarises the latest scientific evidence that spans the causal chain from emissions of greenhouse gases as a result of human activities, through to the consequences that affect societies. Despite global understanding of the impacts of climate change and the humanitarian crises that will occur in coming decades in the absence of rapid reductions in greenhouse gas emissions, deforestation rates – and therefore emissions – in the Brazilian Amazon have increased substantially during the government of Jair Bolsonaro. Prior to Bolsonaro’s election, deforestation in the Brazilian Amazon had fallen substantially from its peak in the early 2000s, and then stabilised over the decade from 2009-2018. However, the rapid increase in deforestation since 2019 has resulted in a major uptick in emissions of greenhouse gases from the Brazilian Amazon, which will have global humanitarian consequences.

The Oxford report<sup>2</sup> provides a scientific evaluation of the consequences of the greenhouse gas emissions that result from the acceleration of deforestation and land-use change that can be attributed to the government of President Jair Bolsonaro.

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<sup>1</sup> being an integral part of the Article 15 Communication to the ICC, filed by AllRise

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## 2. Greenhouse gas emissions and the Bolsonaro administration

- Deforestation is responsible for 19% of global CO<sub>2</sub> emissions since 1959. In the Amazon, the emissions from deforestation now exceed the carbon uptake of the rest of the rainforest<sup>3</sup>.
- According to data from the Brazilian National Institute for Space Research (INPE), in 2019, deforestation rates were 34% above the 2018 rate, and the highest for over a decade. Deforestation accelerated further in 2020, to 44% above 2018 levels.
- In 2018-19 and 2019-20 a deforestation area of 10,129 and 10,851 km<sup>2</sup> was recorded in the Brazilian Amazon, respectively (deforestation is calculated for the period August-July). This is equal to an increase in deforestation area of 3,985 km<sup>2</sup> per year across these two years compared to the average for the previous decade. Given that deforestation rates had previously stabilised, this increase can be linked to the actions of the Bolsonaro administration.
- The annual emissions attributable to the Bolsonaro administration alone are equivalent to approximately 1% of global emissions, similar to the total emissions of the UK.
- This increase in deforestation rates contributes substantially to global greenhouse gas emissions. If deforestation continues at 2020 levels in 2021 and 2022, across the duration of President Bolsonaro's term in government, 1.7 billion tonnes of CO<sub>2</sub> will be attributable to Bolsonaro due to the increase in Amazon deforestation alone.
- The emissions of the Bolsonaro administration jeopardise efforts to limit global warming to 1.5 °C and worsen the humanitarian consequences of climate change.
- Under the Paris Agreement, 190 ratifying states (including Brazil) agreed to limit global warming to well below 2 °C and pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels. The increase in deforestation-related emissions from Brazil during the Bolsonaro administration directly compromises this commitment.
- To have a 67% chance of limiting global warming to 1.5 °C, global carbon dioxide emissions must not exceed 360 billion tonnes from 2021 onwards. By 2022, the emissions attributable to the Bolsonaro administration- will have used up at least 0.47% of the remaining global emissions budget for limiting warming to 1.5 °C.

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<sup>3</sup> Luciana V Gatti and others, 'Amazonia as a Carbon Source Linked to Deforestation and Climate Change', *Nature*, 595.7867 (2021), 388–93 <<https://doi.org/10.1038/s41586-021-03629-6>>.

### **3. The impacts of the emissions of the Bolsonaro administration**

- Every tonne of carbon dioxide added to the atmosphere worsens the impacts of climate change.
- The emissions attributable to the Bolsonaro administration will cause over 180,000 excess heat-related deaths globally over the next 80 years, based on one recent estimate.
- The impacts of climate change are already substantial. Climate change has been shown to cause more extreme weather events, including heatwaves, storms, floods, droughts, and wildfires, sea-level rise, and glacial retreat. These impacts affect billions of people globally, and lead to food and water insecurity, disease, poverty, and loss of lives, property, and livelihoods. Continued emissions of greenhouse gases will cause the impacts of climate change to worsen over coming years.
- Substantial impacts of climate change are occurring within Brazil and the wider Latin America region, as well as elsewhere around the world. In Latin America, these impacts include increasing deaths due to extreme heat; reduced freshwater availability as glacial water towers decline; threats to some of the world's most biodiverse ecosystems through habitat loss, disease outbreaks, wildfires, ultimately causing species extinctions; sea-level rise, ocean warming and acidification leading to the decline of fisheries and compromising food security.
- Deforestation and the resulting climate change increases the risk of causing abrupt changes in the Amazon region, known as the 'Amazon tipping point'. While this is unlikely to occur in coming decades, accelerated deforestation increases the chances that the Amazon rainforest will enter into a period of decline and shift to become a savanna or seasonally dry forest, leading to the release of the carbon stored in the existing forest.
- The impacts of climate change, including increased water stress, may create conditions that increase the risk of armed conflict or population displacement. This further increases the consequences of greenhouse gas emissions.

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