



# PAST PRESENT FUTURE



*For better visualization,  
view in horizontal mode.*

**ENGLISH VERSION**

# THE ANCESTRAL CONSCIOUSNESS





Fire has had an essential role in human evolution. The use of fire by the indigenous communities of the Amazon ranged from aiding in food production to cultural and spiritual purposes. These communities applied knowledge accumulated by past generations, with the tribal elders advising on the most suitable period for certain uses of fire.

Among their land management practices, vegetation burning occurred in defined and small areas, not only to grow food, but also to manage the landscape, using controlled fires to open clearings. With this type of burning, fire rarely extended beyond the limits of the cultivation areas and when it did it was short-lived, since the humid climate prevented the occurrence of large forest fires.





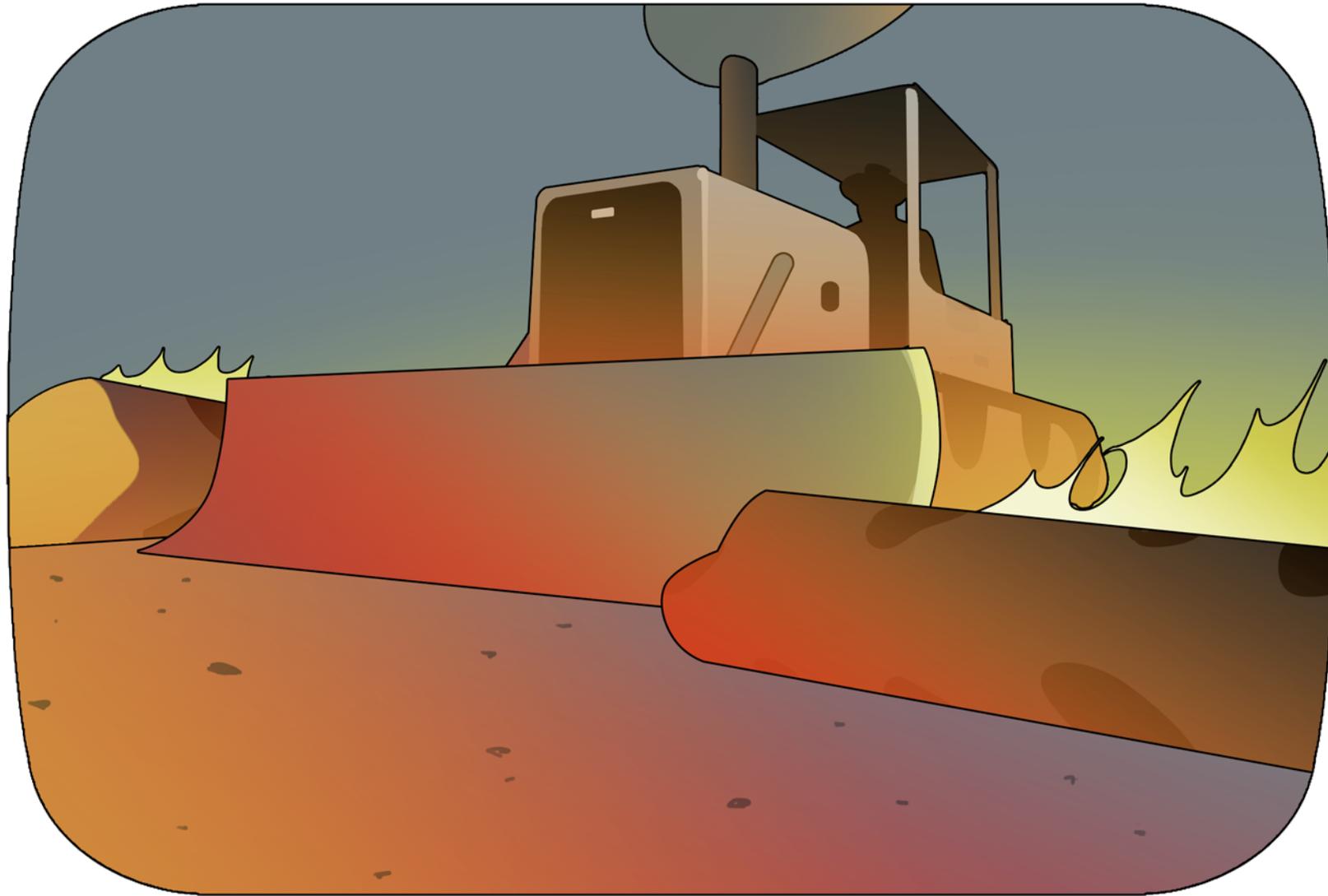
From these fires, small particles of charcoal accumulated in soil layers over the years. By digging up the charcoal and through the analysis of Carbon 14\*, researchers can reconstruct a history of the use of fire, determining an approximate age of fire events and their extent in the region.

The residues from these fires—carried out in a controlled manner—made important changes to soil properties: increasing soil fertility and moisture retention, with the vegetation making use of the ash, and thus improving the cycling and storage of nutrients for plant growth. Therefore, this charcoal, also called pyrogenic carbon, plays a positive role for the soil and potentially for the growth and maintenance of the forest. Currently, the situation in the Amazon is very different from this ancestral management with low impact on forests and soils.





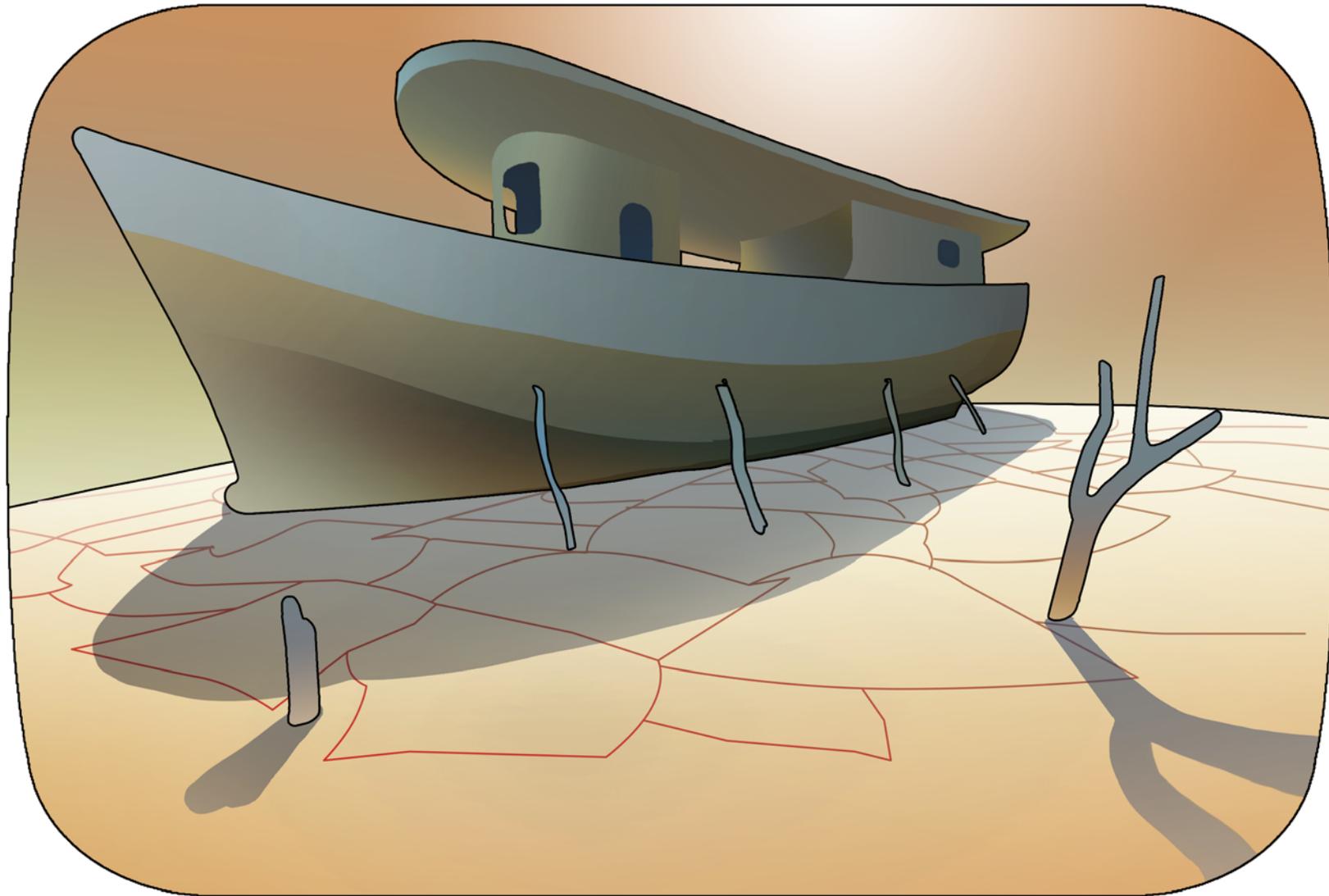
**OUT OF CONTROL  
AND THE THREAT**



The spirit of interconnectedness with the forest of indigenous peoples and even small producers who practice low-impact agriculture, is threatened by the mindset of predatory exploratory production. Today, land speculation, forest degradation by fires, illegal selective logging and mining are the biggest enemies of the Amazon, which often precede the process of deforestation.

The irresponsible opening of new areas increases the probability of forest fires, killing trees, animals and causing a drastic reduction of all the benefits that the region's biodiversity offers, such as climate regulation, rainfall and soil protection. Without proper management, the soil is exposed and compacted, reducing permeability and water absorption and this results in erosion, causing the loss of organic matter and soil fertility.





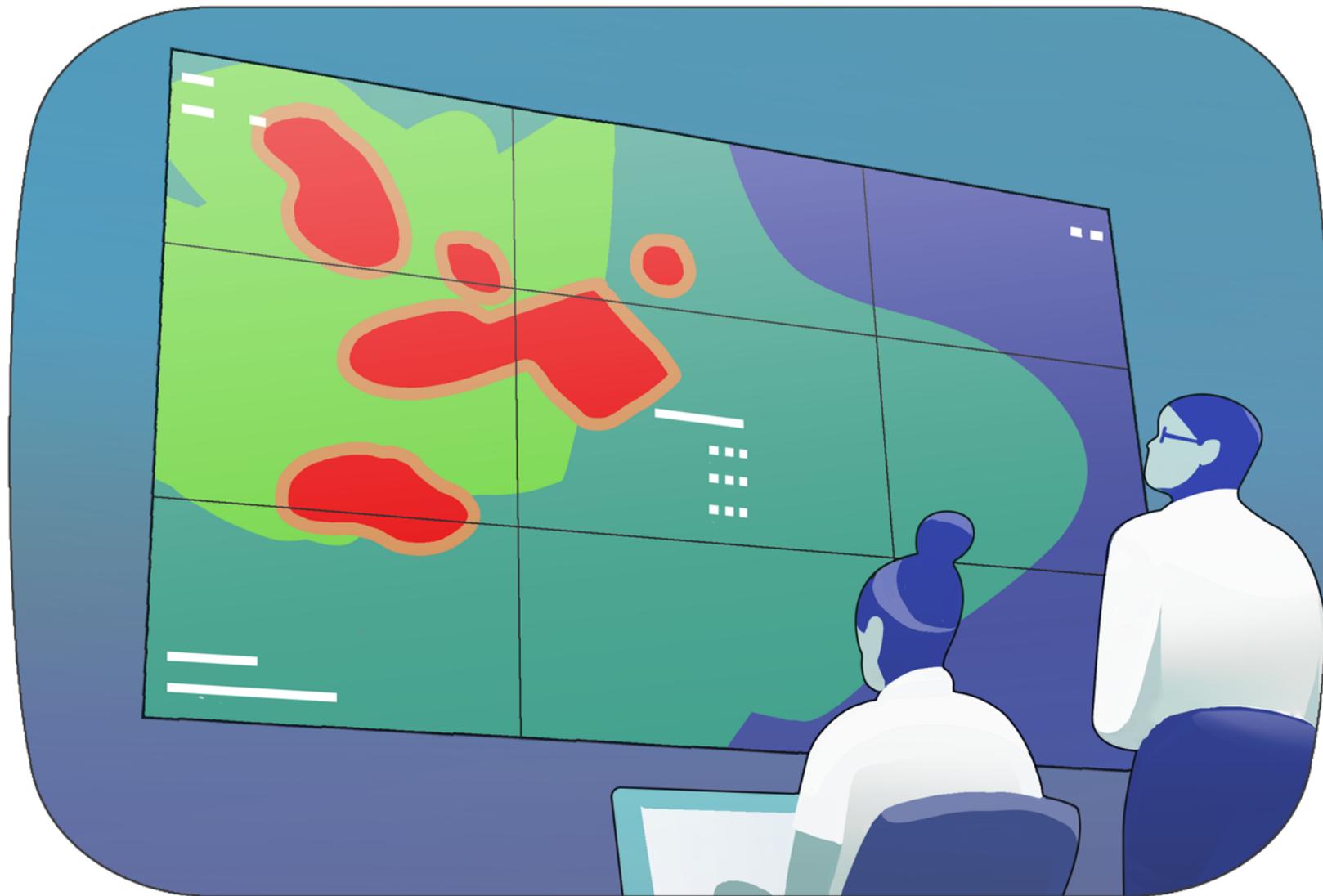
With nutrients being eroded or leached into the subsoil, the survival of fauna and flora is compromised. Over the past 40 years, the Amazon region became, on average, 1°C warmer and with 17% less rainfall during the dry season. The forest is responsible for distributing moisture from the Atlantic Ocean throughout the South American continent, nourishing agricultural areas in the central and southern regions of Brazil, and contributing to energy generation, providing water for the country's rivers and hydroelectric plants.

Vegetation transpiration and evaporation from the land surface are responsible for half of the moisture transported through the immense invisible air currents of the Amazon, the so-called "Flying Rivers", which also irrigate other regions of Brazil and nourish agricultural and natural areas in neighbouring countries. This is crucial for the productivity and income of crops, rivers and hydroelectric reservoirs, which directly affects the economy and the perception of Brazil abroad.



A stylized illustration of Earth from space, showing continents in shades of green and yellow and oceans in various shades of blue. A satellite with a cylindrical body and a rectangular solar panel is positioned in the upper left quadrant. The text "A FUTURE THAT DEPENDS ON US" is centered in white, bold, uppercase letters. The entire scene is framed within a rounded rectangular border.

**A FUTURE THAT  
DEPENDS ON US**



The combination of information from the past and the present puts us on track for a not very optimistic projection for the future. We are approaching a critical state, close to the "point of no return", regarding the survival of the forest, and therefore of life on the planet as it is today. The results from studies of fires in Amazonia, through analysis of soil charcoal, in parallel with satellites for real-time monitoring of changes in the region, corroborate this understanding of the current situation.

A temperature increase ranging from 1.5 °C to 4 °C is projected for the coming decades. A timeframe is uncertain for the collapse of the Amazon ecosystem, but the effects of global warming and forest degradation are already being felt across the planet and affecting people's quality of life.





An approach is needed, not only by governments, but also by society to reverse these harmful effects and to recognize that the Amazon region, with its preserved biodiversity and culture, is much more valuable to all of us than deforestation that benefits just a small group of people. In Brazil, extensive areas of unproductive pasture and degraded lands can be restored for productive agriculture, so that there is no need for further deforestation.

With territorial planning, technology, and proper land management, we can increase agricultural production, both for the domestic market and for export, without cutting down any trees. These technological and management solutions align with the main aims of COP 26\* in which more than one hundred countries, including Brazil, signed an agreement to reverse deforestation by 2030.

**END**



## AMAZON: PAST, PRESENT, FUTURE

*Text developed by:*

**Dr Liana Anderson**, CEMADEN

**Dr. Lidiany Carvalho**, University of Exeter

**Ma. Monique Rodrigues da Silva**, CEMADEN

**Prof. Beatriz Marimon**, UNEMAT

**Prof. Ted R. Feldpausch**, University of Exeter

**Prof. Ben Hur Marimon Junior**, UNEMAT

*Translation to English:*

**Prof. Ted R. Feldpausch**

*For more informations:*

**liana.anderson@cemaden.gov.br** (CEMADEN)

**t.r.feldpausch@exeter.ac.uk** (University of Exeter)

*Illustration and graphic design:*

**Sidnei Silva**

sidonsilva.com.br

sidonsilva@gmail.com

*This material was composed with the fonts:*

**Silka** (atipo foundry)

**Oswald** (Vernon Adams)

*Realization:*



*Support:*



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**FAPEAM**  
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MAP-Fire SGP-HW 016



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Realization:

"I didn't think I was fighting to save rubber trees, I thought I was fighting to save an Amazon rainforest. Now I realize that I am fighting for humanity."

**Chico Mendes**



University  
of Exeter

**UNEMAT**  
Universidade do Estado de Mato Grosso  
Carlos Alberto Reyes Maldonado

