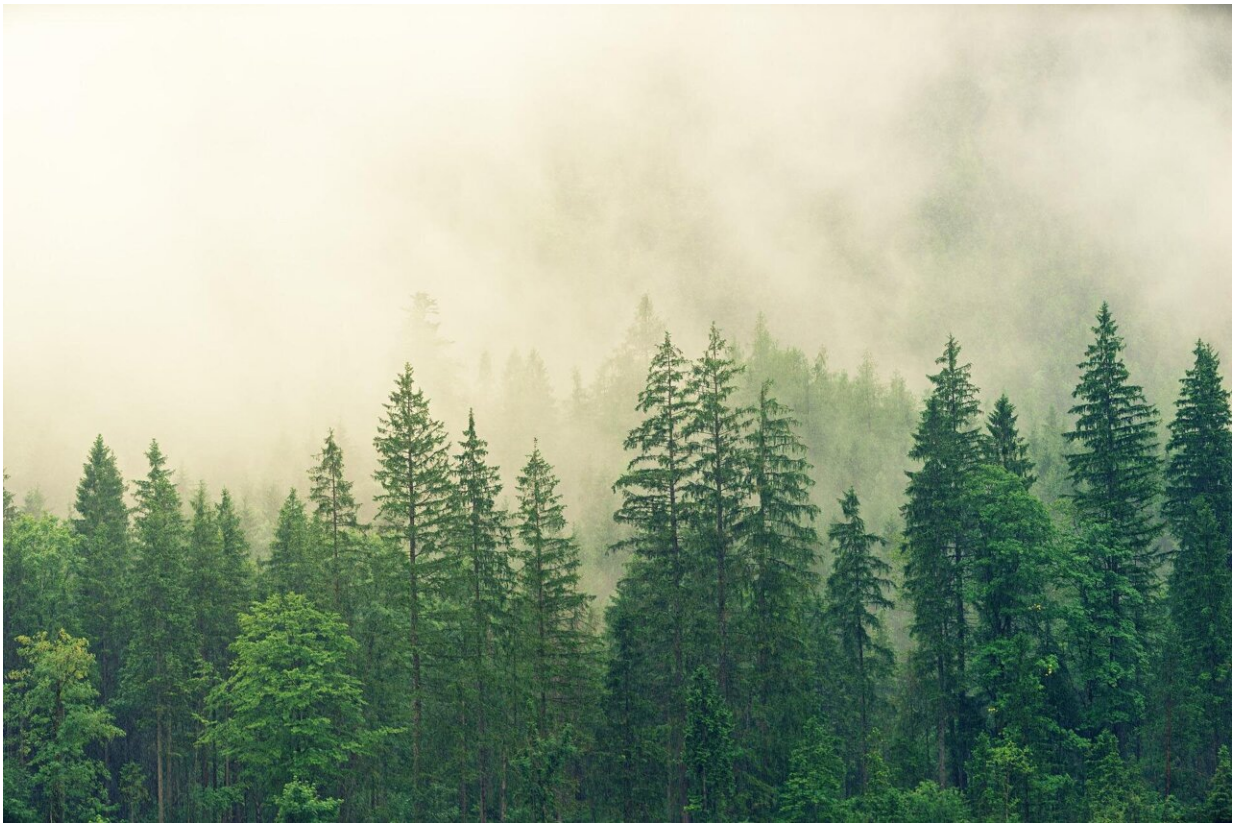


New study finds global forest area per capita has decreased by over 60%

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Over the past 60 years, the global forest area has declined by 81.7 million hectares, a loss that contributed to the more than 60% decline in global forest area per capita. This loss threatens the future of

biodiversity and impacts the lives of 1.6 billion people worldwide, according to a new study published today by IOP Publishing in the journal *Environmental Research Letters*.

A team of researchers, led by Ronald C. Estoque from the Center for Biodiversity and Climate Change, Forestry and Forest Products Research Institute (FFPRI) in Japan, have found that the global [forest](#) area has declined by 81.7 million hectares from 1960 to 2019, equivalent to an area of more than 10% of the entire Borneo Island, with gross forest loss (437.3 million hectares) outweighing gross forest gain (355.6 million hectares).

The team used global land use dataset to examine how global forests have changed over space and time. Consequently, the decline in global forests combined with the increase in [global population](#) over the 60-year period has resulted in a decrease of the global forest area per capita by over 60%, from 1.4 hectares in 1960 to 0.5 hectares in 2019.

The authors explain, "the continuous loss and degradation of forests affect the integrity of forest ecosystems, reducing their ability to generate and provide essential services and sustain biodiversity. It also impacts the lives of at least 1.6 billion people worldwide, predominantly in developing countries, who depend on forests for various purposes."

The results also revealed that the change in the spatiotemporal pattern of global forests supports the forest transition theory, with forest losses occurring primarily in the lower-income countries in the tropics and forest gains in the higher-income countries in the extratropics. Ronald C. Estoque, the lead author of the study, explains, "despite this spatial pattern of forest loss occurring primarily in the less developed countries, the role of more developed nations in this said forest loss also needs to be studied more deeply. With the strengthening of forest conservation in more developed [countries](#), forest loss is displaced to the less [developed](#)

[countries](#), especially in the tropics."

"Today, monitoring of the world's forests is an integral part of various global environmental and social initiatives, including the Sustainable Development Goals (SDGs), the Paris Climate Agreement and the Post-2020 Global Biodiversity Framework. To help achieve the goals of these initiatives, there is a profound need to reverse, or at least flatten, the global net forest loss curve by conserving the world's remaining forests and restoring and rehabilitating degraded forest landscapes," the authors further explain.

More information: Ronald C Estoque et al, Spatiotemporal pattern of global forest change over the past 60 years and the forest transition theory, *Environmental Research Letters* (2022). [DOI: 10.1088/1748-9326/ac7df5](#)

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