

Forest fires destroying vital buffer against climate change

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With fierce blazes raging in jungles from the Amazon to Indonesia, concerns are mounting about the impact as rainforests play a vital role in

protecting the planet against global warming.

The latest serious outbreak is in Indonesia, where smog-belching fires started to clear land for agriculture are burning out of control, blanketing the region in toxic smog.

Why are rainforests important in fight against climate change?

Humankind's reliance on fossil fuels usually receives much of the blame for climate change but scientists say that deforestation has also played a big role.

Forests are natural buffers against climate change, as they suck greenhouse gas carbon dioxide out of the atmosphere.

But forests worldwide have been logged on an industrial-scale over the decades for timber and to make way for agricultural plantations.

The burning of large expanses of trees also releases huge amounts of carbon dioxide.

At the peak of Indonesia's 2015 forest fires—the worst in the country for two decades—the nation spewed more greenhouse gases into the atmosphere each day than all US economic activity for the same period, according to environmental watchdog the World Resources Institute (WRI).

How much of Indonesia's rainforests have been destroyed?



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Greenpeace estimates that in the past 50 years, more than 74 million hectares (182 million acres) of Indonesia's biodiverse rainforests—an area twice the size of Germany—have been chopped down, degraded or burned.

They have often been destroyed to make way for plantations for the lucrative palm oil and pulpwood industries, particularly on Sumatra and Borneo islands, with fires often started illegally to clear land.

Indonesia suffers forest fires annually but this year's appear to be the worst since 2015. The country's disaster agency estimates that from

January to August, about 328,000 hectares (810,000 acres) of land was burned.

The country has, however, managed to slow the rate of deforestation in recent years.

Why are they burning and can it be stopped?

Farmers and plantation owners are usually blamed for starting the fires as a quick and cheap way to clear land.



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Major companies typically deny starting blazes and instead point to small-scale farmers and villagers. The most serious fires occur in peatlands, which are highly combustible when drained of water to be converted into plantations.

The situation this year has been worsened by drier weather in Indonesia. Authorities have deployed thousands of security forces to battle the blazes but most believe only the start of the rainy season—usually in October—will douse them.

After the 2015 fires, President Joko Widodo's government took steps to prevent a repeat of the catastrophe.

Authorities have tried to improve law enforcement to catch those responsible for illegal burning and set up an agency to restore degraded peatlands, which should make them less vulnerable to being set ablaze.

Arief Wijaya, from the Indonesia branch of WRI, told AFP that improving the lot of poor communities who have long turned to burning land for agriculture is also important.

How does this compare with the Amazon fires?

Indonesian haze

Indonesia's forest fires are an annual problem but have been worsened this year by particularly dry weather



Source: ASMC

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Map of Indonesia showing areas of haze and wildfire hotspots as of September 12

The fires in Indonesia are far smaller than those in the Amazon, the world's biggest rainforest. Close to 2.5 million hectares of land was burnt in August, Greenpeace has said, citing data from INPE, Brazil's national space research institute.

Wildfires in Bolivia have torched two million hectares (4.9 million acres) of forest and grassland since August while in Brazil 88,816 fires were recorded from January to the end of August, over half of them in the rainforest.

What will be the impacts for global warming if forests keep burning?

Increasing outbreaks of forest fires worldwide creates more greenhouse

gas emissions and makes it harder to limit temperature rises, experts say.

The landmark Paris climate deal requires all countries to devise plans to keep temperature increases to "well below" two degrees Celsius (3.6 degrees Fahrenheit) above pre-industrial levels.

It calls for rises to be limited to within a safer limit of 1.5C—but the UN's Intergovernmental Panel for Climate Change warned last year that at current levels of greenhouse gas emissions, we could pass this marker as early as 2030.



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"If (forest fires) continue, the dream to limit global temperature rises to 1.5 degrees will remain just a dream," said WRI's Wijaya.

"We will fail."

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