

## ENVIRONMENT

# Madagascar's forests face uncertain future

Country's new president has a patchy record on environmental regulation and conservation.

BY JEFF TOLLEFSON

Madagascar is famous for its biodiversity, and its new president rode to victory on promises to combat corruption, lift people out of poverty — and protect natural resources. Now, scientists are pressing Andry Rajoelina — who was sworn in on 19 January — to make good on those pledges, starting with halting the destruction of the country's world-class forests.

Conservationists and researchers remain wary after more than a decade of increasing deforestation, illegal mining, government corruption and clashes over resources. These activities, which threaten habitats that host thousands of species found nowhere else, surged during Rajoelina's previous term as president, from 2009 to 2013.

In 2009, the military deposed former president Marc Ravalomanana and installed Rajoelina. Under international pressure, Madagascar held elections in 2013, and Rajoelina's former finance minister, Hery Rajaonarimampianina, prevailed. Ravalomanana, Rajoelina and Rajaonarimampianina faced off in a bitter election last November that culminated in a December run-off; Rajoelina won with nearly 56% of the vote.

Many hope the incoming president will recognize the need to protect Madagascar's forests, which support local communities while attracting tourists and the philanthropists who help to fund conservation efforts.

"Rajoelina has no choice," says Jonah Ratsimbazafy, a primatologist at the University of Antananarivo. To garner international respect, attract investment and improve livelihoods, Ratsimbazafy says, the president must curb corruption and improve the government's management of natural resources.

Ratsimbazafy was part of a group of scientists and conservationists who have met with Rajoelina to state their case. He says the president seemed receptive to their agenda and expressed a desire to make Madagascar a model of conservation and a destination for ecotourism.

But Rajoelina's track record raises alarm: illegal exports of valuable rosewood soared under both him and Rajaonarimampianina, and environmentalists allege that Rajoelina's government was complicit in the activities of powerful timber barons. Many continue to



Madagascar's forests are under threat from illegal activities such as logging.

question his motivations and fear that corruption will continue.

The environmental situation is dire. Madagascar has lost nearly half of its forests since the 1950s, and satellite data indicate that deforestation hit a record high in 2017, with loss of tree

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cover across more than 500,000 hectares. A 2018 assessment of 23 biodiversity hotspots in Madagascar found that 43% of the freshwater species in these areas are similarly imperilled, says the International Union for Conservation of Nature (see [go.nature.com/2fkta9n](http://go.nature.com/2fkta9n)).

The country has more than 100 protected areas, but many receive little to no support from the government. Instead, they rely on conservation groups to raise money for operational costs and to implement management strategies. "The government doesn't really have the money to manage them," says Herizo Andrianandrasana, a forest ecologist with the Durrell Wildlife Conservation Trust in Antananarivo.

His group works in eight of Madagascar's protected areas, and is in the process of signing agreements with the government to officially manage two of them in cooperation with local

communities. Andrianandrasana says that the deteriorating environmental situation has discouraged villagers from participating in the management of these areas, because they feel their forests are being pillaged for hardwood and other resources by wealthier — and politically connected — individuals.

Researchers have also raised alarms about a spike in violence around Ranomafana National Park, a popular tourist destination in eastern Madagascar. In a case last November, bandits raided a village on the edge of the park, and then a police commandant who arrived to investigate was killed, says Julia Jones, an ecologist at Bangor University, UK, who studied crayfish harvesting there in the 2000s. Gold miners have also invaded the area, destroying forests, polluting local waterways and threatening the livelihoods of villagers.

"Ultimately, it comes down to the challenges the government of Madagascar has with tackling law and order," Jones says. She is sceptical, but hopes Rajoelina will realize that the government must take action.

Rajoelina might have a bad image, particularly among international donors, but Ratsimbazafy stresses that the politician was democratically elected this time. "We have to help him," he says. "This is the last chance for Madagascar." ■