

TRENDS DEFORESTATION



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Successive reports observe rising numbers of attacks on nature, and none of the recommended measures have succeeding in breaking the trend. Millions of hectares of forests are being lost, rivers polluted, biodiversity destroyed, and megatonnes of CO<sub>2</sub> emitted. But what if all of these natural elements had rights? Would nature be better protected if it had a legal personhood? All over the world, citizens and local associations have obtained official recognition of the rights of natural sites, with varying degrees of success.



### Deforestation continues unabated

Forests play a key role in mitigating climate change. They store about 861 billion tonnes of carbon (GtC), and over half of the global stock of carbon in soil is located in tropical primary forests.<sup>1</sup> Deforestation and the degradation of forest ecosystems mean that at least 260 GtC of that stock risks being emitted into the atmosphere. Without additional measures, 289 million hectares (Mha) of forests could disappear from 2016 to 2050, emitting 169 GtCO<sub>2</sub>e.<sup>2</sup> According to estimations, deforestation is responsible for around 15% of global CO, emissions.<sup>3</sup> Tropical deforestation in particular is a significant source of CO<sub>2</sub> emissions: if it were a country, it would be the third biggest source of carbon dioxide emissions in the world, after China and the United States. In 2021, 25.3 million hecatres of tree cover was lost, of which 3.75 Mha of primary forests (FIG. 1).<sup>4</sup> Tropical deforestation led to emissions of 2.5 GtCO2e, equivalaent to the annual fossil fuel emissions of India. In the Brazilian Amazon, deforestation shot up by 22% in 2021, reaching its highest level for 15 years.<sup>5</sup> In Africa, the annual net rate of forest loss from 2010 to 2020 is evaluated at 3.9 Mha (the highest in the world).6

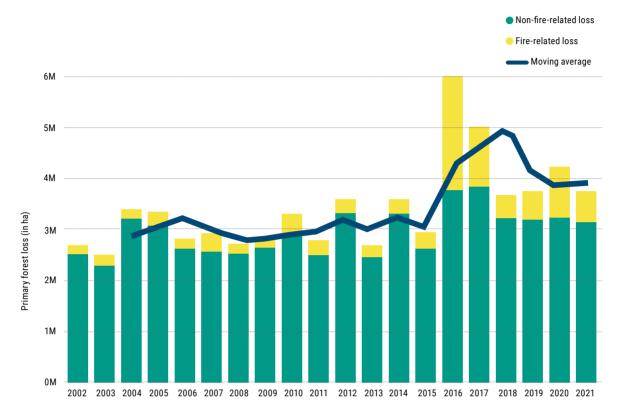
One of the causes of this disaster is agriculture, identified as responsible for 90% of global deforestation. In Africa and Asia, for example, 75% of deforestation is due to land use changes for agricultural purposes. In 2019, emissions from the farming sector represented about 7  $GtCO_2e$ .<sup>7</sup> An estimated 4  $GtCO_2$  of emissions are due to changes to land use. Deforestation and land use changes also bring health risks. Scientists have reported a correlation between climate change, the loss of biodiversity, and deforestation,<sup>8</sup> while more generally, eco-

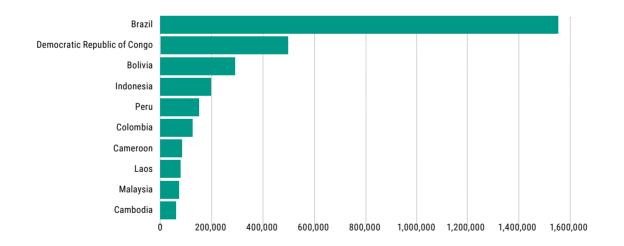
nomic crises, ecological crises, and health crises are closely linked. Changes to land use are for example responsible for 30% of the new diseases identified since 1960. A recent study has also showed that, out of 250 emerging infectious diseases considered, 15% had a connection with forests.<sup>9</sup> Agriculture is also identified in numerous countries as the main source of water pollution. According to the FAO, about 2,250 km<sup>3</sup>/year of wastewater is discharged into the environment, of which 1,260 km<sup>3</sup>/year is drainage water from farmland.<sup>10</sup>

Among the potential solutions, the IPCC, FAO, and other monitoring organizations recommend better forest management and the implementation of innovative, inclusive measures that respect nature. The so-called rights of nature movement seems to fit in with this way of thinking. It calls for a new paradigm to protect nature, based on a legal principle, i.e., legal personality. Scattered round the world, 409 initiatives<sup>11</sup> in 39 countries (**FIG. 1**) including Ecuador, New Zealand, Uganda, the USA and India have had varying degrees of success in protecting rivers and forests by recognizing their rights on the same level as human rights.



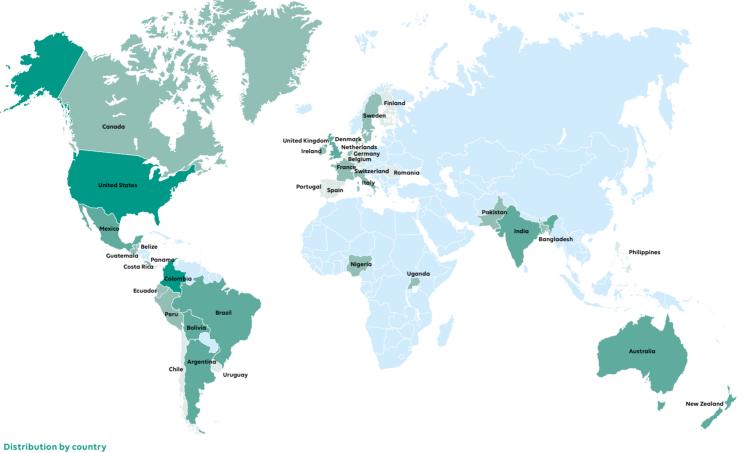
FIGURE 1 ABOVE: PRIMARY FOREST LOSS BY COUNTRY IN 2021 (HECTARES) BELOW: GLOBAL TROPICAL PRIMARY FOREST LOSS FROM 2002 TO 2021 (HECTARES) Source: <u>Global Forest Watch</u>, 2022







#### FIGURE 2 GLOBAL DISTRIBUTION OF THE RIGHTS OF NATURE Source: Putzer, A. Lambooy, T. Jeurissen, R. & Kim, J., 2022



None Ongoing/introduced 0-5 6-15 16 - 155

#### Legal types

Constitution	<ul> <li>National Law</li> </ul>	Court decision	Local regulation	<ul> <li>Policy</li> </ul>	<ul> <li>Indigenous law</li> </ul>	Other legal document

#### Debate on the constitutional rights of nature

(Ecuador is the only country to have adopted them)

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# Recognizing the rights of nature, a new paradigm to protect natural entities

## The origins of the movement: rights as a response to the relative failure of environmental law

The roots of this movement go back a long way, to the socalled animist cultures of Africa, South America and Asia, where indigenous peoples considered that natural elements, such as forests and rivers, had a soul. This meant that they were just as sacred as human life. Yet it was in the United States in 1972, in the wake of the "deep ecology" movement, that the idea of granting rights to nature clearly emerged. This school of thought appeared in the 1970s with the aim of establishing a deep relationship between humans and nature, "beyond simply repairing and limiting ecological damage".<sup>12</sup> At the time, in his article, Should Trees Have Standing?,<sup>13</sup> the lawyer Christopher Stone put forward the idea that biodiversity could have rights and plead its case when damaged by human activity.

This way of thinking was based on the following observation: the way that Western legal systems are designed makes them incapable of effectively protecting the environment. These legal systems are mostly based on the principle of summa divisio, which stems from Roman law and divides the legal method of analysis and organization into two categories. Western legal systems therefore make a distinction between people with rights and duties on the one hand, and things or goods likely to be appropriated on the other hand. This human-centred approach has therefore historically put human rights before natural elements, which are considered as secondary. Humans are viewed as external to nature, which is inferior, and which they dominate. Interdependence between humans and nature has no place in this system, which consecrates human domination over nature, leading to the overexploitation of natural resources, deforestation, destruction of biodiversity, pollution of lakes and rivers, and land degradation. In this system, legal and political mechanisms are established to protect forests and water courses. However, they tend to be limited by overriding economic interests and omnipresent anthropocentrism. The champions of the rights of nature movement see ecological crises like climate change and the loss of biodiversity as the consequences of legal instruments that treat nature like human property to be exploited.<sup>14</sup> In reaction to this relative failure of the law, the movement started by Christopher Stone, and since followed all over the world, promotes the original idea of recognizing a set of rights for natural entities like rivers and forests.

### Rights for nature and its components (forests, water bodies, animals)

Unlike classic environmental law, which sees nature as an object, a thing, or a good or resource at humans' disposal, the objective of rights of nature is to recognize nature as a natural entity with inherent rights. A forest or river can therefore be considered as a legal subject. The aim is to recognize that (non-human) nature has the same rights as humans do. Society, and humans in particular, are morally bound to respect these rights of nature and protect them.<sup>15</sup> These include for example the right of a natural element to exist, develop, regenerate and be restored, and the right to defend itself in a court of law. The places in which this movement has had the most success are South America and Oceania.

Several countries to date have recognized the right of elements of nature to exist and develop.<sup>16</sup> Sometimes this involves recognizing the rights of a specific natural element like rivers or forests, and sometimes the rights of nature as a whole.

The latter option was chosen by Panama in 2022. The Central American country recently passed a law on the rights of nature that guarantees the natural world (fauna and flora) the "right to exist, persist and regenerate its life cycles".<sup>17</sup> Much earlier, Bolivia made the pioneering choice of protecting all natural elements. Through its laws of 2010 and 2012, the country recognizes the legal personality of Mother Earth, which it arants numerous rights, such the right to exist, be protected, and have its rights respected.<sup>18</sup> Two years earlier in 2008, Ecuador was the first country in the world to recognize the rights of nature in its Constitution. Uganda is the only African nation to date to have passed a law, in 2019, consecrating the laws of nature.<sup>19</sup> In the same vein, but this time through legal action, an Indian court declared that nature has a legal status comparable to that of humans, and that humans are bound to protect it.20

Along with these cases of recognizing the rights of nature as a whole, other initiatives have led to the recognition of the rights of specific natural entities, like rivers and streams. The most emblematic example is the recognition of the Whanganui River in New Zealand as a legal person<sup>21</sup> in March 2017.<sup>22</sup> Similarly, but this time in the Himalayan region of India, the Ganges River and its main tributary, the Yamuna, were recognized by judges as legal entities possessing their own rights.<sup>23</sup> In the United States, citizens decided through referendum to grant a legal personality to Lake Erie in order to protect it from a number of threats.

Rights have also been granted to forests and natural parks. In India, for example, where in their judgement on the Ganges River, judges extended these rights to all elements comprising the Himalayan ecosystem (glaciers, streams and forests). In Colombia, in a case brought to court by young children claiming that deforestation of the Amazon undermined their right to a healthy environment, the Constitutional Court recognized by extension that nature had rights just as humans do. The Court considered that citizens were part of an interdependent ecosystem that included the Amazon rainforest. As a result, it was morally conceivable that the forest had rights that should be protected in the same way as human rights.<sup>24</sup> In New Zealand, based on the secular beliefs of a local tribe that considered the mountain as a living being, an agreement between the government and the tribe recognized that Taranaki Mountain had a legal personality and a set of rights.<sup>25</sup>



These numerous examples of consecration around the world show that promoting the rights of nature has become a lever of action employed by NGOs and local communities to preserve natural ecosystems.

### A means of combating deforestation, land use changes and pollution, all of which undermine natural ecosystems

This procedure can be an effective militant act used by NGOs, local inhabitants and citizens to block projects that have disastrous environmental impacts.

One example is the case of Serengeti National Park in Tanzania, the site of "the largest remaining intact animal migration in the world, in which more than a million wildebeest and hundreds of thousands of other ungulates (gazelles, zebras) engage in an annual 1,000 km circular trek, straddling neighbouring countries Kenya and Tanzania".<sup>26</sup> The Park harbors over 500 species of birds and 300 species of mammals (including 80 large mammals). Due to changes in land use, deforestation and climate change, the existence of the park is under threat.<sup>27</sup> Several initiatives to save the Park have been launched by local activists like Kisula Yeyeye, a member of the organization Nature's Rights, with the aim of recognizing the Serengeti National Park as a legal subject.

In Nigeria, the River Ethiope<sup>28</sup> is the focus of attention. The river is located in the south of the country, and crosses four areas housing over 1.7 million people. Yet the river water is highly polluted by industrial waste, along with household and farm waste, including pesticides. Lack of action by the authorities and companies concerned has seen the state of the river worsen. The Nigerian NGO RETFON, with the support of the Earth Law Center, has therefore campaigned to establish the legal rights of the Ethiope. Like other rivers in New Zealand and India, the idea is to ensure the recognition of the Ethiope's right to flow, to perform essential functions within its ecosystem, to be free from pollution, to be fed from sustainable aquifers, and its right to biodiversity and restoration.<sup>29</sup> In Tanzania, citizens have also employed this procedure to prevent the park from disappearing.

In the United States, a citizen ecologist called Chuck O'Neal campaigned against his home county of Orange in Florida. The aim was to change the county's charter - its mini constitution - by introducing rights of nature.<sup>30</sup> The county's rivers, such as the Wekiva, are subject to pollution from agricultural fertilizer, run-off from septic tanks, and badly managed rainwater. Thanks to O'Neal's efforts, an amendment recognizing the rights of nature was voted in 2020 by 89% of voters in the county. Lake Erie, located in Toledo (Ohio), has also been impacted by fertilizer and manure run-off from industrial farming, making it vulnerable to a proliferation of blue-green algae. To solve the situation and provide optimal protection for the lake, in a referendum 67% of citizens voted in favour of a project to give the lake the legal right to "exist, flourish and naturally evolve".<sup>31</sup> In Minnesota, rights of nature have been employed to block a controversial project to construct the Line 3 pipeline by Enbridge Energy, a Canadian company specializing in transporting oil. The 2.6-million-dollar installation was to bring Canadian tar sands to the Enbridge terminal

on the banks of Lake Superior, the biggest freshwater lake in the world. The pipeline was planned to go through non-tribal waters where the tribes of the Indian White Earth reserve "have the right to hunt, fish and harvest rice under treaties".<sup>32</sup> In December 2018, with the "Rights of Manoomin" tribal law, the Ojibwe Indians on the White Earth reserve recognized the legal personality of wild rice, including rights like the right to exist and to flourish. Since they esteem that these rights are threatened by the oil pipeline project, the tribe has decided to take legal action.<sup>33</sup>

One of the most recent examples of this kind of legal action took place in France, concerning a landfill project on the banks of the Tavignano River in Corsica. The potential site is located in a Natura 2000 area,<sup>34</sup> and the landfill risks exposing the river to irreversible pollution, with potentially disastrous repercussions on the river's ecosystem functions. The Tavignano provides some of the coastal area with drinking water, "irrigates surrounding crops and harbors protected species like the Raspail snail".<sup>35</sup> Determined to save the river and its ecosystem, militant ecologists in the Taviananu Vivu collective are campaigning to have the river's legal rights recognized. A first step was made with the symbolic adoption of a declaration of the river's rights in 2021. With support from local groups in the region, the collective hopes to have the legal value of this declaration recognized in order to reinforce protection of the river.

## Authorities and guardians responsible for protecting recognized rights of nature

Despite the successes of this movement to recognize the rights of nature, several uncertainties remain. These mostly concern two key points: the effectiveness of the respect of these rights of nature, and how they will be defended before a judge.

In terms of their effectiveness, the movement is in its early days, and progress has been relatively recent. Nevertheless, several court cases involving the respect of recognized rights of nature have already taken place.<sup>36</sup> Concerning the actual protection of these rights, some original solutions have been put in place in different countries. In Ecuador and Bolivia for example, all citizens are morally bound to respect the rights of nature. Therefore, a forest can be defended by any citizen who observes that a right has not been respected. The different governments are also bound to respect these rights.

In other systems, like in New Zealand, guardians have been designated to ensure that the rights of natural entities are respected. The River Whanganui has two guardians (one named by the Maori community, or the Iwi, and another by the Crown) to defend its interests. They are therefore the river's legal representatives. Sometimes, governance committees are created to protect the rights of the natural entity concerned. This is the solution chosen for Taranaki Mountain, by which eight Maori tribes share guardianship with the government. In Bangladesh, the National River Conservation Commission has been set up to ensure the wellbeing of Bangladeshi rivers and ensure that their rights are respected.<sup>37</sup>



Another concern is whether this mechanism is really capable of protecting the natural entities in question. The case of the Colombian Amazon rainforest underlines this concern. In 2018, following an appeal by about twenty young people supported by the NGO Dejusticia, the Supreme Court of Justice of Colombia recognized that the Amazon forest had a legal personality.<sup>38</sup> However, in practice, the impact of this decision remains limited due to a number of factors, such as the lack of financial, logistical and human resources.<sup>39</sup> In addition, several people involved in protecting the Amazon rainforest have received threats, and the land continues to be occupied by private individuals. And all the while, deforestation carries on at a worrying pace.<sup>40</sup> Since the Farc guerrillas laid down their arms in 2016, the expansion of agricultural land and coca cultivation has accelerated the rate of forest loss: in 2021, 174,103 hectares of forest have disappeared, 1.5% more than in 2020.



Forests, rivers and other natural elements are subject to anthropogenic violations with disastrous impacts, but at the same time a developing movement is promoting a new defence system: a legal personhood status for nature. This notion consists in recognizing the nature of fundamental rights through a jurisdiction or law. Given the relative failure of classic environmental law, rights of nature constitute a serious alternative in numerous countries around the world, such as Ecuador, Bolivia, New Zealand, India, Tanzania, and Nigeria. Indigenous communities, NGOs, and citizens have taken up this shield to tackle the threats confronting rivers, lakes and forests. Although in some countries the results have been remarkable, they need to be weighed up against the failures observed in others.



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