



# Measures to Protect the Earth and its Natural Resources

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## Introduction: Threats to the Earth

Today, many issues relating to the global ecosystem have arisen as countries seek how to create a healthy balance between economic growth and the preservation of the natural environment. Namely, scientists have theorized that human actions have led to the development of a rapidly changing climate and mass extinction event unseen since the Cretaceous-Tertiary Mass Extinction that resulted in the loss of the dinosaurs.



Much of the international focus has been on how to tackle this climate crisis, where-in the cause of global warming was first recognized by the UN in the early 1990's.<sup>1</sup> This threat has resulted in a series of major international agreements, including the 1992 United Nations Framework Convention on Climate Change (UNFCCC), the 1997 Kyoto Protocol and the Paris Climate Convention of 2015. These set targets to reduce the worst emissions and slow global temperature increases. However, actions to protect against

species extinction remain minimal at an international level with the focus continuing to be on Climate change.

Although mass extinction poses many risks, among the largest relevant to this committee is the harm done to the global economy. Conservative estimates have suggested that biodiversity is responsible for 11% of the total global economy.<sup>2</sup> Similar studies have placed this value to be over 10 times higher in the global economic system.<sup>3</sup> These contributions come from naturally provided services which include climate regulation, waste treatment, flood mitigation, erosion control, food production, and much more.

This body will have to respond to the growing threat of species extinction through the examination of current economic institutions in order to incorporate the protection of the natural Earth with the growth of national economies.



<sup>1</sup> Sadat, Nemat "Small Islands, Rising Seas" August 2009 *UN Chronicle*  
<https://unchronicle.un.org/article/smallislands-rising-seas>

<sup>2</sup> Pimentel, David, Christa Wilson, Christine McCullum, Rachel Huang, Paulette Dwen, Jessica Flack, Quynh Tran, Tamara Saltman, and Barbara Cliff. "Economic and Environmental Benefits of Biodiversity." *BioScience* 47, no. 11 (1997): 747-57. <https://doi.org/10.2307/1313097>.

## The Scientific Background

One tragedy that reveals the extent of the threats to the Earth is extinction of animals. The extinctions of *megafauna* are most celebrated, such as the elimination of giant sloths, mastodons and other very large mammals, widely associated with the rise of paleolithic human hunting. Other large species like bears and wolves were destroyed more recently, in the Seventeenth and Eighteenth Centuries. But the process accelerated in the Nineteenth Century, as human population and industrialization grew rapidly.



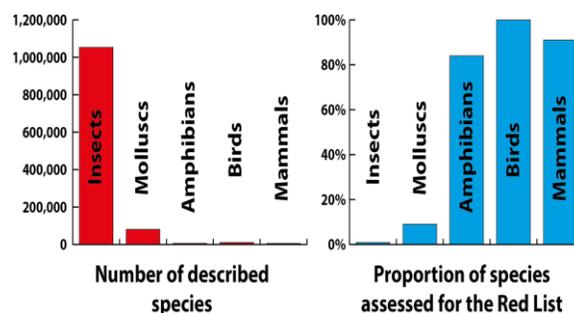
The current extinction crisis is referred to as the *Holocene Extinction*, to acknowledge the role of humanity in the situation. The trends are a hotly contested, with extensive scientific research, but also with partisans on all sides contesting all aspects of the science.<sup>3</sup> Unlike studies of climate change, overseen by the highly authoritative International Panel on Climate Change (IPCC) there is not widely accepted body monitoring extinctions. Estimates gathered by the

<sup>3</sup> Cowie, Robert H., Philippe Bouchet, and Benoît Fontaine. "The Sixth Mass Extinction: Fact, Fiction or Speculation?" *Biological Reviews* 97, no. 2 (January 10, 2022): 640–63. <https://doi.org/10.1111/brv.12816>.

<sup>4</sup> Costanza, Robert, Ralph d'Arge, Rudolf de Groot, Stephen Farber, Monica Grasso, Bruce Hannon, Karin Limburg, et al. "The Value of the World's Ecosystem

International Union for the Conservation of Nature, in its Red List, show that until the mid-20th Century, the number of species facing extinction was typically in the range of 0.04 percent.

More recent research shows the rate is increasingly significantly, due entirely to human activity, including the spread of modern agriculture, the expansion of cities, and the effects of climate change. Studies show that the proportion of invertebrate species, for example, facing extinction rate to be between 7.5 and 14.5 percent within the next 500 years.<sup>4</sup>



Connected to the mass extinction of species have been a loss in genetic variation in wildlife populations globally. Conservative estimates place this loss at 5.4 - 6.5 percent since the onset of the industrial revolution, with island species suffering the brunt at an average extinction rate of 27.6 percent.<sup>5</sup> Though the 6 percent rate appears low, this is because extinct species are difficult to estimate in the average. It can be inferred that areas among the highest in genetic variation loss are among the most heavily hit by species extinction.

Services and Natural Capital." *Nature* 387, no. 6630 (May 15, 1997): 253–60. <https://doi.org/10.1038/387253a0>.

<sup>5</sup> Leigh, Deborah M., Andrew P. Hendry, Ella Vázquez-Domínguez, and Vicki L. Friesen. "Estimated Six per Cent Loss of Genetic Variation in Wild Populations since the Industrial Revolution." *Evolutionary Applications* 12, no. 8 (May 7, 2019): 1505–12. <https://doi.org/10.1111/eva.12810>.



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The most profundo forces driving the Holocene Extinction and its indicators include those of habitat loss and degradation. Through the deforestation of age-old forests to make way for mass agricultural projects, the excessive use of pesticides and herbicides, and release of unindigenous wildlife have all contributed major parts to the declines of natural ecosystems. Such actions led to the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services releasing a 3-year report in 2018 on the severity of land degradation, concluding that <25% of surface lands remained free from substantial human activities, but would fall to <10% by 2050.<sup>6</sup>

Although the largest contributor to extinction, other forms of human pollution must also be noted in the threat to native wildlife. Pollution of the atmosphere, soil, and water continue to worsen despite recommendations from organizations such as WHO. The results have even allowed for the global contamination from plastic products which have resulted in formations such as the ‘great Pacific garbage patch,’ the floating islands of plastic waste that cover ever greater parts of the oceans.

Overexploitation of Earth’s natural resources has worsened the situation. Overhunting and poaching of animals like the Himalayan Musk Deer as critical components in the cosmetics industry or Horseshoe Fish for vaccine production. Killing wild animals in much of sub-Saharan Africa food enriches diets, but at great long-term cost.

Climate change, as earlier acknowledged, gets the brunt of international attention in regards to protecting the Earth. However, though argued to be equal in importance if not less to species

extinction, it also contributes to the toll of species loss. Between the rise in sea levels devastating Pacific Island habitats and the acidification of our Oceans has damaging repercussions on marine wildlife. This is furthered by damage done to terrestrial ecosystems that can only live within limited temperature ranges which feel the impacts most from rising average temperatures globally.

### United Nations Action

The United Nations approaches the problems of protecting the Earth through the broader framework of the *Sustainable Development Goals* (SDGs), the objectives for all development policy world-wide, agreed in 2015. Measures to Protect the Earth and its Natural Resources stands out on the General Assembly agenda because it engages a number of specific SDGs. Among the most relevant of the 17 SDGs are:

- [Goal 9: Industry, Innovation and Infrastructure](#)
- [Goal 11: Sustainable Cities and Communities](#)
- [Goal 12: Responsible Consumption and Production](#)
- [Goal 13: Climate Action](#)
- [Goal 14: Life Below Water](#)
- [Goal 15: Life on Land](#)



<sup>6</sup> Shivanna, K.R. “The Sixth Mass Extinction Crisis and its Impact on Biodiversity and Human Welfare”. *Resonance*

25, 93–109 (2020). <https://doi.org/10.1007/s12045-019-0924-z>.



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The SDSs are the UN's map for these issues, the way it thinks and references these issues, the way it measures frustrations and progress. This wide overlap makes the issue extremely important to the UN and its Member States. It offers a way to simultaneously achieve progress on multiple global goals.

The UN has a history of resolutions on these topics. Most stress conversation and protection of land, air and sea. The General Assembly finds it easiest to agree on goals. Actual action—which requires choices, sacrifices and funding—is much harder. The General Assembly can pass resolutions stressing the role of the UN Secretary-General and action by UN bodies, such as the UN Environmental Funds. It tends to encourage its member States to act, since it cannot require its sovereign Member States to do anything.

UN negotiations culminated in the 1992 *Kyoto Protocol* (United Nations Framework Convention on Climate Change) and the 2015 *Paris Climate Convention*. These agreed the specific steps for member nations to take in combating the climate crisis. In recent years, UN bodies such as the General Assembly have passed resolutions to urging additional protections for the Earth and its atmosphere, especially by calling on Member States to establish international legal protections.

Perhaps the most important UN landmark resolution is the *Convention on Biological Diversity*. Established at the Rio Earth Summit of 1992, the goal was to implement the goals of Agenda item 21 to protect not just the Earth, but

human society through the preservation of necessary systems for food, water, and medicine. Noteworthy measures based on this convention include the *Cartagena Protocol* and *Nagoya Protocol*. The Cartagena Protocol entered into force in 2003 with the goal of ensuring the safe transport of living modified organisms (LMO's) to protect against adverse impacts on biodiversity and human health.<sup>7</sup> The Nagoya Protocol entered into force in 2014, for the equal sharing of genetic resources and the benefits provided between member nations.<sup>10</sup> Among the effects include the establishment of the ABS Clearing-House to enable genetic data sharing on endangered species between nations.

More recent actions from the UN include a recent report from the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) detailing the historic extinction rates.<sup>8</sup> Included in this monumental report are updates to the current global ecosystem. Among these include that 75 percent of land and 66 percent of marine habitats have been significantly altered, as well as 20 percent of animal and insect species have fallen in most major ecosystems from invasive species.<sup>9</sup>

Historically, UN initiatives have led global efforts to agree on the nature of the problems, but the UN has not done as well on action to reduce the actual challenges of the global biosphere. Member States—who call all the shots on actual action—are generally supportive in principle.

<sup>7</sup> "Convention." Convention on Biological Diversity. United Nations. Accessed August 15, 2022. <https://www.cbd.int/convention/>; "The Cartagena Protocol on Biosafety." The Biosafety Clearing-House (BCH). Secretariat of the Convention on Biological Diversity. Accessed August 15, 2022. <https://bch.cbd.int/protocol>.

<sup>8</sup> "The Nagoya Protocol on Access and Benefit-Sharing." Convention on Biological Diversity. Secretariat of the

Convention on Biological Diversity. Accessed August 15, 2022. <https://www.cbd.int/abs/>.

<sup>9</sup> Tollefson, Jeff. "Humans Are Driving One Million Species to Extinction." *Nature* 569, no. 7755 (May 6, 2019): 171–71. <https://doi.org/10.1038/d41586-019-01448-4>.



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The hard part is winning agreement to by Member States to spend the money solutions require. Many issues require fundamental changes to important industries. Many solutions require major financial investments to protect endangered species and resources, but they reduce income from exploiting the land. Creating vast nature preserves, for example, requires not just buying land from farming and ranching interests, but also means there will be less future income. This puts Member States in an awkward situation. To do more, they must agree to have much less. Everyone favors conservation on environmental protection when it is a phrase, but not everyone is as enthusiastic about the sacrifices requires to make it happen.

### Country & Bloc Positions

**China:** When it comes to tackling issues of protecting the Earth, China remains mixed. China is dedicated to working through the UN and strongly supports multilateral initiatives, but it also seeks to minimize burdens on its own economic development. China is concerned with taking measures to ensure the burdens are not placed unfairly among member states. It tries to help poorer countries with generous loans, although these often involve crippling interest charges and Chinese political oversight.

Although China has taken steps domestically to protect against species extinction, the most notable being the giant panda, poverty remains a large issue for Chinese nationals. In attempts to balance economic growth with environmental protections, China has taken steps to create conservation areas domestically with strict

enforcement mechanisms against hunting and fishing within these areas.<sup>10</sup>

In the realm of international cooperation, China has taken steps to work with nations it historically has not gotten along well with diplomatically. These include regular meetings with Japan and South Korea to tackle acid rain and smog coming from China, with efforts to decrease carbon emissions performed with the EU, India, and the USA under the administrations of Obama and Biden.<sup>11</sup>

Despite attempts to limit poaching of endangered animals, Chinese law remains sparse in tackling other issues affecting species extinction outside of efforts to tackle climate change.

**European Union (EU):** The EU and its 27 member states have become leaders on the international stage through their efforts to protect against species extinction and in efforts to bring back endangered species from the brink. Included among these regional efforts have been policies to combat wildlife trafficking and protections for essential breeding areas for the most at-risk of native European species. The EU stands out for its willingness—alone with countries like Australia, Canada and Japan—to financially support environmental conservation work around the world, albeit under strict conditions and supervision.

Currently the EU is struggling with the effects of the war in Ukraine. This has reduced their access to Russian oil and gas, forcing them to seek alternatives. In the short run this has been made up largely by suppliers in Europe (Norway

<sup>10</sup> Ruixue, Xia, and Meng Mingwei. China races to save endangered species from extinction. CGTN, January 3, 2021. <https://news.cgtn.com/news/2021-01-03/China-races-to-save-endangered-species-from-extinction-WKoJF195Ju/index.html>.

<sup>11</sup> Maizland, Lindsay. "China's Fight against Climate Change and Environmental Degradation." Council on Foreign Relations. Council on Foreign Relations, May 19, 2021. <https://www.cfr.org/backgrounder/china-climate-change-policies-environmental-degradation>.



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especially) and Northern Africa. In the long run, the EU is looking again at conservation, efficiency, nuclear power, and greater investment in solar and wind energy. The last two raise difficult issues. Solar power takes away farmland and forest, and wind power compromises shorelines.

This serious commitment to the protection of native life was shown in early 2022 when charges were brought against 15 member states who failed to adequately protect against an invasive bee species.<sup>12</sup> This effort came as a part of the larger European Biodiversity Strategy for 2030 to restore healthy ecosystems across the continent.

Perhaps the most successful effort among EU member states has been the establishment of Natura 2000. The goal of this project is to create protected areas across Europe for the most vulnerable creatures. To date, this program covers 18 percent of land and 8 percent of water bodies within the EU being the biggest intergovernmental effort to protect local ecosystems globally.<sup>13</sup>

Despite successful efforts within the EU to legislate against the threats of a Holocene Extinction, there remain states pushing for less integration with more emphasis placed on national efforts. Countries under the leadership of nationalists like those of Hungarian Prime Minister Viktor Orbán. Despite these nationalist leanings however, compromise has been able to be achieved on issues such as the conflict in Ukraine.

**Non-Aligned Movement (NAM):** This block makes up the majority of UN member states,

with 120 formal members and 17 more observers. Most developing nations that lack the financial power needed to make mass systemic changes to their own institutions. NAM should be motivated. Its members have the most to lose from a poor international effort to effectively tackle the sixth mass extinction. It is membership also includes many OPEC oil producers with resources to do much more, but weak motivation.

The primary goal of these nations will be passing resolutions that are fair for their developing economies by not requiring massive financial burdens to be placed upon them. Their biggest priority will be ensuring that international efforts include actions by the biggest contributors to ecosystem collapse in order to encourage their own publics to take action domestically.

**Russia:** Russia strongly supports the SDGs and protection of the Earth. It also is determined to protect its extractive fossil fuel industries, the source of most of its export income. Russia is suspicious of international standards that reduce its sovereign control over its territory. Winning Russian cooperation may mean reducing sanctions on its oil and gas exports, or even its leaders. In this regard, the effects of the war in Ukraine—especially on oil and gas exports and prices—may be very relevant to this issue.

On specific issues, like wildlife, Russia has taken steps to punish those who would hunt or traffick endangered animals within its borders. This includes placing harsh punishments on those who would commit such acts. There still lie exceptions however for when endangered animals may be hunted, such as under

<sup>12</sup> “Protecting Biodiversity: Eu Takes Action to Prevent Introduction of Invasive Alien Species That Would Damage European Nature.” The European Sting, February 10, 2022. <https://europeansting.com/2022/02/10/protecting-biodiversity-eu-takes-action-to-prevent-introduction-of->

[invasive-alien-species-that-would-damage-european-nature/](https://ec.europa.eu/environment/nature/natura2000/index-en.htm).

<sup>13</sup> Natura 2000. European Commission. Accessed August 15, 2022. <https://ec.europa.eu/environment/nature/natura2000/index-en.htm>.



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circumstances where the safety of a human or domesticated animals are in jeopardy.

Specific efforts have however been taken to preserve specific creatures like the Siberian Tiger. Under the guidance of the Russian Geographical Society, and NGO, efforts have been taken to instigate the repopulation of the Siberian Tiger whilst supporting stricter enforcement of anti-poaching measures.<sup>14</sup>

**United States:** American policy on these issues tends to oscillate depending on which political party controls its government. Currently under the Biden Administration, the US is sympathetic to international action on climate, Earth and environmental preservation.

Since the passage of the US Endangered Species Act (ESA) in 1973, the US has taken steps to protect endangered species and help them to recover, including their national bird the Bald Eagle. Along with these efforts remains the preservation of certain pieces of land across the country through national reserves and parks.

More recently, the current Biden administration has taken steps to reverse previous actions taken by the former Trump administration. Biden has taken a proactive step in ensuring that sufficient protections are in place to protect currently endangered species under the ESA. The permanence of these steps is hard to predict.

### Some proposals for action

The United Nations has set many precedents in the past on global cooperation to protect the Earth and its natural resources relating not just to climate action, but also protection of wildlife. The range of proposals open to the General

Assembly is wide and goes far beyond those suggested here. Some possibilities of future action include:

- **Create a United Nations fund** to assist Member States trying to preserve their land and fauna. The General Assembly could agree on tax for wealthy countries to fund conservation in poorer states. Or it could call on Member States to create their own sovereign funds to support work within their own territory and oceanic economic zones. The General Assembly also would have to develop policies—criteria—to guide allocation of the money.
- **Establish global best practices** for the integration and reconciliation of economic growth and environmental preservation. This would be a list of recommendations for use by Member States and their people. This could include measures on how to help countries transition existing agricultural and logging methods to be more cognizant of local wildlife needs by increasing the efficiency of current methods. The General Assembly could create a new body—an experts panel organized by the UN Secretary-General—to develop agreed best practices.
- **Expand current funding programs to assist countries in restoring degraded landscapes.** Current programs under the United Nations Environmental Program work to support developing nations restore damaged lands and ecosystems. The Restoration Initiative (TRI) is the largest of these programs to date. Future

<sup>14</sup> “Protection of Endangered Species: Siberian Tiger.” Russian Geographical Society. Accessed August 15, 2022. <https://www.rgo.ru/en/projects/protection-and-study->

[endangered-species/protection-endangered-species-siberian-tiger](https://www.rgo.ru/en/projects/protection-and-study-endangered-species/protection-endangered-species-siberian-tiger).



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steps could include collaboration with NGO's and encouraging international investment in such programs to further the available resources.

Where the money would come from is the big question. Traditionally wealthy Westerns countries have been expected to bear the expenses. This time the General Assembly also could demand all countries pay, based on a population/wealth formula. Other alternatives can readily be imagined.

- **Strengthen existing efforts to preserve endangered species.** Another path forward could be to allocate additional resources to the preservation of currently endangered species through the use of expanded seed banks and animal sanctuaries. Such efforts could expand to connect local communities in the rebuilding process through the gardening of endemic plant life.
- **Increase current support for research into species extinction.** For some nations, collective action can be a controversial decision. Some nations may prefer to minimize the action taken by instead focusing on researching more into the issue. A comprehensive study of the impacts of species extinction in different parts of the world may be able to better arm nations to take individual actions to address the issue locally.
- **Choose to pursue individual actions.** The UN could instead decide the best

course of action is no action and instead instruct member states to pursue this issue at an individual level. The General Assembly can pick issues: a species to protect, a country to stress, a forest or sea to save. It could make the job the responsibility of one Member States, or combine resources of the entire international community.

- **Only act to protect certain lands, seas or species.** For some member states, they may want to limit assistance strictly to species that provide financial and cultural benefits to their nations. As such, a potential resolution may seek to focus any assistance on supporting individual creatures such as pollinators over others. Member States with vulnerable coasts or coral formations might welcome the guidance and support of the international community. But targeting also risks rejection. Member States whose fisheries or cattle industries are affected, for example, may reject international guidance.
- **Partner with private business to create new eco-standards for industrial projects.** Some multinational corporations may be interested in working jointly with the UN to reform the way business is done in favor of international interest. This is especially true for nations seeking to garner positive public relations on an international scale and invest into new markets.



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