Forum: Environmental Committee (EC)

Issue: Preserving biodiversity in Madagascar

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INTRODUCTION

Madagascar, often referred to as the “eighth continent”, is a megadiverse country with a high concentration of various types of coastal and tropical ecosystems as well as endemic species. Madagascar’s ecosystems are currently home to nearly 12.000 different species, including vascular plants, 389 species of reptiles, 278 species of amphibians and 282 species of birds[1]. The country’s biodiversity also provides enormous benefits to more than 18 million people, who are dependent on biodiversity for their subsistence needs. Approximately 80% of them are entirely dependent on natural resources and at least 70% rely on agricultural resources. Furthermore, there are 2300 plants utilized for medical purposes, of which most have not been commercialized and are a potential source of great income and scientific advancement[2]. While Madagascar’s ecosystem is incredibly beautiful and unique as well as useful for scientific research, it is also extremely fragile.

There are various factors that cause issues to Madagascar’s biodiversity to both flora and fauna. Among others the main causes are deforestation, habitat change, destructive human practices and overexploitation of natural resources. Initially, throughout the last decades more that 80% of the country’s original forest cover has been lost. Although recent studies indicate that the country’s deforestation rate has been declining, from 0.82% to 0.4% during the last 30 years, Madagascar's biodiversity remains under severe threat.[3] Additionally, habitat change is another immense issue the region faces. Habitat change can be divided in three under categories : habitat loss, which occurs when a habitat area becomes smaller, habitat fragmentation, which encompasses large habitat areas that are continuously split into multiple smaller areas and habitat degradation which occur when the conditions of a habitat worsen gradually.[4] Lastly the environmental decline in Madagascar is a consequence of destructive human practices including illegal logging and charcoal production as well as overexploitation of natural resources for instance overfishing, unregulated mining and wildlife trafficking. Although there have been efforts to resolve the problem and contribute to Madagascar's weakening ecosystem, the issue is yet to be solved.

The theme “Re-defining human rights in an ever-changing world” is profoundly connected with the topic of preserving biodiversity in Madagascar since it's not just an

[1] Unit, Biosafety. “Main Details.” *Www.cbd.int*, www.cbd.int/countries/profile?country=mg Accessed 30 June 2025.
[2] Unit, Biosafety. “Main Details.” *Www.cbd.int*, www.cbd.int/countries/profile?country=mg Accessed 30 June 2025.
[3] Unit, Biosafety. “Main Details.” *Www.cbd.int*, www.cbd.int/countries/profile?country=mg Accessed 30 June 2025.
[4] Lemur Conservation Network. “Habitat Change and Loss in Madagascar.” *Lemur Conservation Network*, www.lemurconservationnetwork.org/learn/conservation-threats-and-solutions-for-lemurs/habitat-change-and-loss-in-madagascar/ Accessed 30 June 2025.

environmental issue. We live in a constantly changing world, where globalization, climate crises and armed conflicts threaten both nature and humans. In order to combat this threat, humanity must adjust human rights to today's ecological reality by redefining them in a way that includes environmental sustainability and long-term biodiversity protection.

DEFINITION OF KEY-TERMS

Biodiversity

"Biodiversity refers to the variety of living species on Earth, including plants, animals, bacteria and fungi" [5]

Deforestation

"Deforestation is the purposeful clearing of forested land." [6]

Endemic / Endemism

A species is endemic when it's naturally only found in one specific place on the Earth.[7]

Flora and Fauna

"Flora refers to the plant life of a particular region of environment, while fauna denotes the anoma life within the same context." [8]

BACKGROUND INFORMATION

Madagascar's colonial period

Madagascar's colonial background dates back to the 1800s. Up until then the island was inhabited by Malagasy ethnic groups. In the early 1800s English Protestants and French Roman Catholics started competing for power and control over the island, due to Madagascar's unique ecosystem and the resources it provided. In 1863 the Merina oligarchy overthrew the islands former king, Radama II and gained control over the central highlands around Antananarivo and initiated certain reforms, including obligatory Christian education and western style governance. France used Madagascar's political instability to their advantage to gain control over the island, by launching the First Franco- Hova War which lasted 2 years, namely from 1883 until 1885. Madagascar lost the war and accepted the growing French influence on the island. However the country's formal protectorate status remained unsettled until 1890, when Britain recognized Madagascar as a French protectorate.

With the formal protectorate status and the growing French influence on the county's culture and political system. In the late 1894- early 1895 French troops invaded the island and a year later, in 1896, Madagascar was formally annexed by France. The Malagasy monarchy was

[5] National Geographic. "Biodiversity." *Education.nationalgeographic.org*, National Geographic, 2023, education.nationalgeographic.org/resource/biodiversity/ Accessed 14 July 2025.
[6] National Geographic Society. "Deforestation." *Education.nationalgeographic.org*, National Geographic, 26 Feb. 2025, education.nationalgeographic.org/resource/deforestation/ Accessed 14 July 2025. [7] Merriam-Webster. "Definition of ENDEMIC." *Merriam-Webster.com*, 2019, www.merriam-webster.com/dictionary/endemic Accessed 14 July 2025.
[8] "Flora & Fauna - (AP Human Geography) - Vocab, Definition, Explanations | Fiveable." *Fiveable.me*, 2024, library.fiveable.me/key-terms/ap-hug/flora-and-fauna Accessed 14 July 2025.

abolished in 1897. At that point France had fully colonized Madagascar. French language and education became obligatory, slavery was banned and the government embarked on infrastructure projects in order to export agricultural resources to France, such as rice, vanilla and coffee. In order to make room for harvest, France continuously cleared forests that were home to unique and rare plant and animal species. Though France contributed to the development of Madagascar in various ways, the county threatened Madagascar's ecosystems and biodiversity, which made many people unhappy.

Over the years, rebellion groups were established, which began to fight against the French. Despite the appointment as French overseas territory after World War II in 1946, Malagasy people were not satisfied and continued to rebel against France. This led to a big uprising on March 29, 1947, led primarily by members of the Democratic movement for Malagasy Renewal (MDRM), to which France responded with violence. Finally, on June 26, 1960 Madagascar gained independence with Philibert Tsiranana being the country's first president.[9]

Madagascar's geographical and ecological uniqueness

Madagascar is an island country located on the Indian Ocean. It is separated from the southeastern coast of Africa by the 400 km / 250 miles wide Mozambique Channel and is the 4th largest island on the world with an area of 587041km²[10]. The country's relief consists of three parallel longitudinal zones, namely the central plateau, the coastal strip in the east and the zone of low plateaus and plain in the west. The central highlands (central plateau), in which the national capital of Madagascar Antananarivo is located, are more than 2600 meters high. They feature three massifs the Tsaratanana Massif, the Ankaratra Massif, an enormous volcanic mass shoes summit is 2643 meters / 8671 feet high, and the Andringitra Massif. The eastern coastal strip is about 50 km wide with a low coastline and lagoons connected by the 600 km long Pangalanes Channel. Lastly, the western low plateau is approximately 100 - 200 km wide. The region's sedimentary layers slope towards the Mozambique Channel, producing a series of hills and the coastline is mostly straight with small dunes and mangroves.[11]

One of the country's main characteristics is its geographical asymmetry, which is evident in the island geological structure and affects its climatology and vegetation. While the two main sedimentary basins, the Majunga and the Morondava basins, are on the west coast, the east coast only has a narrow and broken sedimentary strip. This geological asymmetry affects the region's hydrographic system, meaning the island's main rivers are tributaries of the Mozambique Channel and flow towards the west of the north-west. Furthermore, the asymmetry has an effect on the area's climatology. The eastern slope of the island has the highest precipitation (up to 158 in / 400 cm per annum in some regions) due to its exposure to the

[9] "Madagascar - Outside Influences (1861–95)." *Encyclopedia Britannica*, www.britannica.com/place/Madagascar/Outside-influences-1861-95 Accessed 24 July 2025.
[10] "Madagascar | Interactive Country Fiches." *Dicf.unepgrid.ch*, dicf.unepgrid.ch/madagascar Accessed 9 July 2025.
[11] Kent, Raymond K, and Maureen Ann Covell. "Madagascar | Culture, History, & People." *Encyclopædia Britannica*, 14 Mar. 2019, www.britannica.com/place/Madagascar Accessed 9 July 2025.

south-east trade wind, while the rainfall decreases towards the west (up to 14 in / 35 cm per annum).[12]

As a result the two regions, the eastern and the western one, have two completely different types of vegetation. The east coast consists of dense humid forests, mainly rainforests, with trees that stay green all year around, grow in tight rows and reach up to 30 meters in height. The lower floors are ideal for many rare and endemic plants and species, making Madagascar's humid forests one of the richest in biodiversity ecosystems on the planet.[13]

Alongside tropical rainforests the eastern part of Madagascar consists of montane forests which are very similar to rainforests with a cooler temperature and higher elevations.[14] The island's west coast is covered by the tropical dry forest with sparsely growing trees such as baobabs, tamarind trees and palm trees. Like the tropical rainforest, this ecosystem is extremely threatened by fires and intensive agriculture. In addition to tropical dry forests the west coast is characterized by mangroves, one of the most biologically rich ecosystems on the planet. Since mangroves are a coastal ecosystem, it is home to various aquatic species, most of which are endemic, as well as rare sea birds, reptiles, molluscs, amphibians and mangrove plants. Despite adapting to the harsh environment, mangrove plants remain extremely fragile and under severe threat by the frequent cyclones and storms. [15]

Endemic species and key biodiversity hotspots

Biodiversity is the variety of life on earth. It is essential for the regulation of the climate as well as the maintenance of healthy ecosystems in which every single animal, plant, fungi or microorganism can live. Areas with rich biodiversity and high levels of endemism are considered biodiversity hotspots. Currently there are about 36 official biodiversity hotspots that make up about 2,4% of the Earth's land area and contain about 50 % of plant species and about 42% of land animals on Earth[16] .

Alongside regions like the Amazonian Rainforests and the Caribbean Islands, Madagascar and the Indian Ocean Islands are considered a biodiversity hotspot of paramount importance, due to the unique diversification some animal and plant species underwent after Madagascar's separation from the supercontinent Gondwana 160 million years ago. The island is home to nearly 11000 plant species[17], 90% of which are endemic and around 200000 animal species[18] , 85% of which are endemic.

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[12] Battistini, R. "Madagascar Relief and Main Types of Landscape." *Monographiae Biologicae*, 1 Jan. 1972, pp. 1–25, https://doi.org/10.1007/978-94-015-7159-3_1 Accessed 9 July 2025.
[13] Tours, HT Agency. "TYPICAL VEGETATION of MADAGASCAR." *HT Agency Tours*, 16 Sept. 2021, www.ht-agency-tours.com/typical-vegetation-of-madagascar/ Accessed 10 July 2025.
[14] Marcin Wiorek, et al. "Malagasy Polka Dot Moths (Noctuoidea: Erebidae: Arctiinae: Syntomini) of Ambohitantely —Endemism in the Most Important Relict of Central Plateau Rainforest in Madagascar." *PeerJ*, vol. 9, 24 June 2021, pp. e11688–e11688, https://doi.org/10.7717/peerj.11688 Accessed 10 July 2025.
[15] Tours, HT Agency. "TYPICAL VEGETATION of MADAGASCAR." *HT Agency Tours*, 16 Sept. 2021, www.ht-agency-tours.com/typical-vegetation-of-madagascar/ Accessed 10 July 2025.
[16] "8-20 Madagascar: A Biodiversity Hotspot." *Duke Lemur Center*, lemur.duke.edu/8-20-ll1/ Accessed 10 July 2025.
[17] "Landscape Evolution Makes Madagascar a Hotspot for Plant Species Diversity." *Www.wsl.ch*, 2024, www.wsl.ch/en/news/landscape-evolution-makes-madagascar-a-hotspot-for-plant-species-diversity/ Accessed 10 July 2025.
[18] "Wildlife Guide | Madagascar Know before You Go." *Nathab.com*, 2025, www.nathab.com/know-before-you-go/african-safaris/madagascar/wildlife-guide Accessed 10 July 2025.

Among many unique animals, one of the most popular species are the lemurs. The lemurs have likely inhabited Madagascar for about 65 million years and are the only non-human primates on the island. Currently there are around one hundred different lemur species, most of which have evolved over the centuries and adapted to Madagascar's climate, helping researchers understand and discover more about primate evolution as well as the human genome. Unfortunately, like many unique species, most lemur species are endangered due to habitat loss.[19]

Taxonomic Group	Species	Endemic Species	Percent Endemism
Plants	13,000	11,600	89.2
Mammals	155	144	92.9
Birds	310	181	58.4
Reptiles	384	367	95.6
Amphibians	230	229	99.6
Freshwater Fishes	164	97	59.1

Figure 1: Plant and animal species currently found on the island of Madagascar[20]

Overview of biodiversity threats

Many habitats across the island including the eastern rainforests, the spiny forests and the western dry forests, are changing at an alarming rate, setting both Madagascar's ecosystems and biodiversity in danger.

Habitat change can be divided in three under categories namely habitat loss, fragmentation and degradation. Habitat loss occurs when a habitat region becomes increasingly smaller. Habitat fragmentation refers to large habitat areas splitting into multiple pieces, creating smaller sections of habitats, mostly known as "habitat islands" or "habitat shreds". Lastly, habitat degradation emerges when the quality of a habitat deteriorates. Even though habitat loss, fragmentation and degradation are seen as one major threat to both Madagascar's ecosystems and biodiversity, every subgroup has completely different causes from one another.

Habitat loss and fragmentation is mostly influenced by both business interest and local demand for food and income. Foreign and local agribusinesses highly contribute to deforestation by removing trees and forests to make planting areas for export crops. Many

[19] "8-20 Madagascar: A Biodiversity Hotspot." *Duke Lemur Center*, lemur.duke.edu/8-20-ll1/ Accessed 10 July 2025.
[20] "8-20 Madagascar: A Biodiversity Hotspot." *Duke Lemur Center*, lemur.duke.edu/8-20-ll1/ Accessed 10 July 2025.

companies based in Madagascar, rely on such products. The French-owned STAR brewing company in the western of Madagascar is alleged to have allocated money to local groups that clear forests. Moreover, rainforests in Masoala and Makira, in the northeastern part of the island, are illegally logged for rosewood. Rosewood is predominantly exported to Asia and used for luxury furniture. Despite various laws the enforcement is weak and those who try to stop the illegal export face consequences.

While habitat loss and fragmentation is driven by commercial agricultural and overexploitation of resources, habitat degradation is closely linked to the effects climate change has on the Earth's ecosystem. This includes more frequent and uncontrolled fires due to rising temperatures.[21] In the beginning of 2025, after the driest October to December on record, numerous fires threatened not only local communities but also the island's wildlife. On one day alone around 16 fires were reported to be raging across the island with most of them in the southeast. [22]

Despite its rich biodiversity, Madagascar faces pressing economic and social problems which make efforts to preserve biodiversity very difficult. With more than 70% of the island's population living in extreme poverty Madagascar encounters serious development issues that deteriorate with climate change[23]. Increasing temperatures and shifting precipitation patterns are expected to cause severe droughts in the south, while coastal regions face frequent cyclones and floods. About two thirds of the Malagasy population live along the coast, making them extremely vulnerable to tropical storms and sea level rise, which cause around $50 million in damage annually.

As agriculture is the primary source of income for over 70% of the Mlagasy population, increasing droughts as well as tropical storms are a menace to both crop production and national food security, which is one of Madagascar's most pressing development issues. With a rank of 116 out of 119 on the Global Hunger Index, the current food security situation is considered alarming[24]. According to a study, in 2020 alone, over one million Malagasy people suffered from acute food insecurity. Climate change is expected to further deteriorate food insecurity, particularly for less economically developed countries (LEDCs) including Madagascar[25].

The southern area of the island has endured numerous droughts, severely impacting not only local communities but also the state's exports and consequently its economic stability. As a means to address challenges related to climate change, Madagascar has and still allocates a large portion of its annual budget to infrastructure and social services. Despite its efforts, the

[21] ---. "Habitat Change and Loss in Madagascar." *Lemur Conservation Network*, www.lemurconservationnetwork.org/learn/conservation-threats-and-solutions-for-lemurs/habitat-change-and-loss-in-madagascar/ Accessed 11 July 2025.
[22] Madagascar. "Madagascar on Fire… Climate Change the Arsonist?" *SEED Madagascar*, 24 Jan. 2025, madagascar.co.uk/blog/2025/01/madagascar-on-fire-climate-change-the-arsonist Accessed 13 July 2025.
[23] "Madagascar | Interactive Country Fiches." *Dicf.unepgrid.ch*, dicf.unepgrid.ch/madagascar Accessed 13 July 2025.
[24] "Madagascar | Interactive Country Fiches." *Dicf.unepgrid.ch*, dicf.unepgrid.ch/madagascar Accessed 13 July 2025.
[25] "Madagascar | Interactive Country Fiches." *Dicf.unepgrid.ch*, dicf.unepgrid.ch/madagascar Accessed 13 July 2025.

country still faces major difficulties concerning natural disasters that cost between $470 million and $940 million per year over the last years.[26]

MAJOR COUNTRIES AND ORGANIZATIONS INVOLVED

France

As Madagascar's former colonial power, France is still heavily involved in Madagascar's conservation and infrastructure development as well as efforts to preserve biodiversity worldwide. Among many organisations, France founded the Agence Francaise de Development (AFD), whose aim is to take action in favor of biodiversity. The organisation protects areas when they are under threat and contributes to international funds such as the Blue Action Fund, which is dedicated to preserving oceans or the Bacomab, which ensures the integrity of coastal protected areas and the integrity of the marine. The AFD has helped Madagascar by allocating money to the creation and management of conservation areas and national parks across the island. In addition to that the organisation has worked with Madagascar national park as well as international NGOs. [27]

Madagascar

Madagascar is working on protecting its unique and fragile biodiversity through protecting areas, establishing community based conservation and international collaboration. The government of Madagascar established a network of 123 protected areas, including national parks and coastal areas in order to safeguard its biodiversity. Most of these areas are managed by the Madagascar National Parks (MNP) and local conservation NGOs. Their work is guided by an approved Management and Development Plan as well as an Environmental and Social Safeguard Management Plan (ESSMP). These plans are developed by the country's government in consultation with all stakeholders and are updated every five years.[28] Furthermore, the country is leading efforts against deforestation, which include promoting sustainable agricultural practices, agroforestry and forest-friendly crops. In addition to that, Madagascar also aims at eliminating any type of illegal logging and other destructive activities through laws and strict penalties for those who don't comply with the laws. Despite the efforts, the enforcement of laws against deforestation and illegal logging are very weak.[29]

Wildlife Conservation Society (WCS)

The Wildlife Conservation Society (WCS) leads significant efforts to protect Madagascar's biodiversity and ecosystems. Primarily, the WCS contributed to the establishment and management of a network of protected areas that house endemic animal and plant species. These include various marine as well as terrestrial areas, e.g. the Masoala National Park as well

[26]"Madagascar | Interactive Country Fiches." *Dicf.unepgrid.ch*, dicf.unepgrid.ch/madagascar Accessed 13 July 2025.
[27] "Our Mission." *AFD - Agence Française de Développement*, 2021, www.afd.fr/en/our-mission Accessed 14 July 2025.
[28] "FAPBM." *Fondation Pour Les Aires Protégées et La Biodiversité de Madagascar*, 27 Sept. 2023, www.fapbm.org/en/preservation-of-biodiversity-in-madagascar-through-protected-areas/ Accessed 14 July 2025.
[29] Annetts, Melissa. "#Forests2Follow: Madagascar, a Haven of Biodiversity and Cultural Heritage - Trillion Trees." *Trillion Trees*, 22 Aug. 2024, trilliontrees.org/2024/08/22/forests2follow-madagascar-a-haven-of-biodiversity-and-cultural-heritage/ Accessed 14 July 2025.

as Makira Natural Park. The organisation also conducts scientific surveys to monitor endemic species, including lemurs, chameleons and rare birds and utilises this data to inform conservation strategies and fortify policies. This also helps the discovery and documentation of new species on the island. In total, the WCS protects over 2 million hectares of habitat and contributes to the reduction of deforestation rates while also strengthening collaboration between the government, international bodies and local communities.[30]

World Wildlife Fund (WWF)

The World Wildlife Fund aims to preserve, restore and manage Madagascar's fragile and unique biodiversity. The organisation collaborates with governments, scientists and local communities in various regions, which offer the best opportunities to secure a good future for the island's inhabitants and species. In order to protect the island's southeastern forests from immediate threat and help local communities manage their natural resources the WWF has developed a plan. This plan contains sustaining livelihoods of coastal communities, through the cooperation with traditional fisherman and government authorities to manage marine and coastal resources, as well as adapting to climate change, through the development of an implementation of responsive strategies to protect local communities. Moreover, the WWF has worked on various projects to help expand and consolidate Madagascar's marine protected areas. [31]

TIMELINE OF EVENTS

DATE	DESCRIPTION OF EVENT
1863	The Merina oligarchy overthrew the Malagasy government.[32]
1883 - 1885	The Franco- Hova War[33]
1890	Britain recognized Madagascar as a French protectorate [34]
late 1894 - early 1895	French troops invaded Madagascar [35]

[30] "Home." *Wcs.org*, 2025, programs.wcs.org/madagascar/Home/Search/News.aspx Accessed 28 July 2025.
[31] Kramer, Rachel. "Madagascar | Animals, People, and Threats | WWF." *World Wildlife Fund*, 2010, www.worldwildlife.org/places/madagascar Accessed 14 July 2025.
[32] "Madagascar - Outside Influences (1861–95)." *Encyclopedia Britannica*, www.britannica.com/place/Madagascar/Outside-influences-1861-95 Accessed 24 July 2025. [33] "Madagascar - Outside Influences (1861–95)." *Encyclopedia Britannica*, www.britannica.com/place/Madagascar/Outside-influences-1861-95 Accessed 24 July 2025. [34] "Madagascar - Outside Influences (1861–95)." *Encyclopedia Britannica*, www.britannica.com/place/Madagascar/Outside-influences-1861-95 Accessed 24 July 2025. [35] "Madagascar - Outside Influences (1861–95)." *Encyclopedia Britannica*, www.britannica.com/place/Madagascar/Outside-influences-1861-95 Accessed 24 July 2025.

1896	Madagascar is formally annexed by France[36]
1897	The abolition of Malagasy monarchy [37]
1946	Madagascar is an overseas territory of France[38]
29 March 1947	The Malagasy uprising against France[39]
26 June 1960	Madagascar has officially gained independence[40]
1990 - 1996	The first phase of the NEAP[41]
1997 - 2002	The second phase of the NEAP[42]
2003 - 2008	The third phase of the NEAP[43]
29 July 2024	Madagascar submitted National Targets to the Convention of Biological Diversity (CBD)[44]

RELEVANT UN RESOLUTIONS, TREATIES AND EVENTS

United Nations Framework Convention on Climate Change (UNFCCC)(1992)

The United Nations Framework Convention on Climate Change (UNFCCC), was adopted in 1992 and is a global agreement concerning climate change. It is aimed at addressing climate change through efforts such as reducing greenhouse gas emissions as well as helping states adapt to its impacts. It laid the foundation for other agreements such as the Kyoto Protocol in 1997 and the Paris Agreement in 2015.[45]

UNGA Res. 73/284 – UN Decade on Ecosystem Restoration (2021–2030)

This resolution concerns the ecosystem restoration which aims at preventing, halting and reversing the degradation of ecosystems, both on land and ocean. This resolution urges

[36] "Madagascar - Outside Influences (1861–95)." *Encyclopedia Britannica*, www.britannica.com/place/Madagascar/Outside-influences-1861-95 Accessed 24 July 2025. [37] "Madagascar - Outside Influences (1861–95)." *Encyclopedia Britannica*, www.britannica.com/place/Madagascar/Outside-influences-1861-95 Accessed 24 July 2025. [38] "Madagascar - Outside Influences (1861–95)." *Encyclopedia Britannica*, www.britannica.com/place/Madagascar/Outside-influences-1861-95 Accessed 24 July 2025. [39] "Madagascar - Outside Influences (1861–95)." *Encyclopedia Britannica*, www.britannica.com/place/Madagascar/Outside-influences-1861-95 Accessed 24 July 2025. [40] "Madagascar - Outside Influences (1861–95)." *Encyclopedia Britannica*, www.britannica.com/place/Madagascar/Outside-influences-1861-95 Accessed 24 July 2025.

[41] *The World Bank*. 2008.

[42] *The World Bank*. 2008.

[43] *The World Bank*. 2008.

[44] "NBSAP Tracker: Check Your Country's Nature Progress." *Panda.org*, 2022, wwf.panda.org/act/nbsap_tracker_check_your_countrys_nature_progress/ Accessed 14 July 2025.

[45] United Nations. *United Nations Framework Convention on Climate Change*. 1992.

countries, communities and organisations to take action by supporting ecosystem restoration efforts.[46]

PREVIOUS ATTEMPTS TO SOLVE THE ISSUE

National Biodiversity Strategy and Action Plan (NBSAPs)

The National Biodiversity Strategy and Action Plan (NBSAPs) is a plan developed by countries that are considered biodiversity hotspots, in order to conserve their biodiversity. Governments that develop as NBSAP need to take the global goals and targets by the Global Biodiversity Framework (GBF), adopted by the Convention of Biological Diversity (CBD) in 2022, into consideration and convert them into national goals and actions. On July 29th 2024, Madagascar submitted 23 National Targets to the CBD, which concerned the conservation and protection of 30% of zones that are "particularly important" and the restoration of 30% of degraded ecosystems by 2030.

Even though the government of Madagascar outlines good targets as a means to protect its biodiversity, most of them are considered vague and hard to achieve. The country faces generally immense difficulties with the targets it has set due to the luck of financial resources and the insufficient local involvement. Due to the high poverty rate in the country, conservation efforts mostly rely on foreign financial aid which is often inconsistent and inadequate. Moreover, while the NBSAP highlights community participation to achieve goals, many local communities lack capacity and training to manage resources sustainably.[47]

National Environmental Action Plan (NEAP)

The National Environmental Action Plan (NEAP) was an action plan supported by the World Bank, the USAID, the UNDP and the AFD as well as other donors. The plan aimed at integrating environmental protection alongside national development by fostering sustainable natural resource management, institutional development concerning environmental governance as well as public awareness and educational campaigns on conservation and protection areas. The NEAP was enforced in three phases: phase 1 which took place from 1990 to 1996, phase 2 started in 1997 and ended in 2002 and phase 3 started in 2003 and ended in 2008.

In phase 1 the focus was on institution building and raising awareness. During this phase organisations such as the ANGAP and ONE where established and initial protected areas across the island were created. In phase 2 the aim was to fortify environmental laws and promote community participation in observation. Additionally, pilot projects for reforestation and marine conservation were started. The third and last phase of the plan emphasized integrating environmental policy across the government and promoting sustainable livelihoods through ecotourism and eco- agriculture. Unfortunately, the plan was very complex and wide- ranging for

[46] "Document Viewer." *Un.org*, 2025, docs.un.org/en/A/RES/73/284
[47] "NBSAP Tracker: Check Your Country's Nature Progress." *Panda.org*, 2022, wwf.panda.org/act/nbsap_tracker_check_your_countrys_nature_progress/ Accessed 14 July 2025.

a country that faces immense financial struggles and since Madagascar lacked the capacity to fully implement all measures the plan proposed, it did not succeed. [48]

POSSIBLE SOLUTIONS

Expand and effectively manage protected areas

One of the most efficient strategies to handle the issue is to expand existing protected areas and ensure they are effectively managed. This involves increasing the number as well as the size of national parks and conservation zones across Madagascar, in order to support species diversity, provide room for animals to adapt to environmental changes and reconnect fragmented ecosystems. In order to identify and prioritize key biodiversity areas that need immediate protection, the UN could utilize ecological surveys and conservation research that locate endemic species habitats that are under severe threat. Expansion alone however is not adequate to resolve the issue. The effective management of such areas is vital to guarantee that the goal of protecting the environment is achieved. This includes measures such as implementing strong enforcement against illegal activities such as logging, poaching and land encroachment. Furthermore, monitoring biodiversity health, for instance with scientific research and technological tools like camera traps and remote sensing will help determine how successful the protected areas' expansion and management is. Even though this solution could potentially resolve the problem, there are certain challenges that must be taken into consideration in order to successfully enforce such measures. These include financial restrictions as well as political and bureaucratic difficulties.

Natural resources management

Another way to approach the issue is to manage natural resources as a means to ensure the sustainable use and protection of land, water, forest and wildlife in general. Natural resources management can be implemented through various ways for instance community-based forest management. This includes involving local communities in overseeing forests, national parks and conservation areas as well as approving certain legal rights to local groups to preserve biodiversity while also utilizing resources sustainably. Additionally, community- based forest management includes promoting reforestation, agroforestry and fire prevention through programs. Furthermore, it is of paramount importance to use soil-friendly and water-efficient techniques for sustainable farming, including crop rotation, composting and permaculture and eliminate dependence on slash-and-burn farming. In order to successfully enforce these measures legal and institutional support through strengthening laws against illegal logging land conversion is indispensable. Although with the appropriate legal support this solution could potentially help resolve the matter, there are many challenges that should be taken into account such as lack of funding, training and tools that are necessary for the effective management of resources. These measures could also lead to potential conflicts between stakeholders over land use and disputes over who controls land areas and resources.

Enhance international cooperation and funding

[48] *The World Bank*. 2008.

Another strategy to resolve the issue, is to deepen partnerships with international organisations, to secure long-term funding as well as countries that face similar problems in order to emphasize the importance and severity of the issue. Stable and more sustainable foreign funding, from global mechanisms such as the UNDP and support from other states and NGOs can contribute to the expansion of conservation programs, the improvement of law enforcement and support of local communities in managing natural resources.

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