



NHSMUN

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UPDATE PAPER

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Analucia Tello
Sofia Velasco

Renata Venzor

Dear Delegates,

My name is Ana Carolina and welcome to NHSMUN 2025, and the CMS Committee. This is my first year on NHSMUN staff and I will be the Assistant Director for Session I. I started doing Model United Nations in 2023 and, since then, it has helped me to discover a passion for diplomacy and international relations.

I was born and raised in São Paulo. Currently, I am taking a gap year before beginning college. I like to spend my free time engaging myself in social projects, traveling, and of course, doing Model UN. I have participated in more than 20 conferences! Overall, my main takeaway has been that the friends you make, the memories of long sessions, the notes, and signed placards will be wonderful memories forever!

This year for CMS, we will be discussing two important topics: “Preventing the Illegal Exploitation of African Elephants” and “The Conservation of River Dolphins Habitats in the Amazon River”. The goal of our Update Papers is to help give you some recent information regarding both topics.

My main goal on this committee is to make a discussion about contemporary challenges something memorable for you all. These are complex topics that require innovative and creative solutions to solve. So, here is a tip: take a chance and allow yourself to experience what NHSMUN is all about. Embody representatives of your countries and the diplomatic spirit that exists within each of you. Keep in mind that you can count on me for everything you may need. I cannot wait to see the debates and get to know you as soon as possible.

Sincerely,

Ana Carolina Carvalho

Convention on the Conservation of Migratory Species

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Assistant Director, Session I



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Renata Venzor

Dear Delegates,

I am excited to welcome you to the Committee on the Convention of Migratory Species (CMS)! My name is Eileen Jungmin Lee, and I will be the Assistant Director for Session II of NHSMUN 2025. This is my first year being a part of the NHSMUN staff, but it'll be my third year attending NHSMUN! This will also be my second year on NHSMUN's CMS committee.

I was born and raised in Southern California, but I am currently living in Massachusetts. I am a first-year student at Wellesley College, and I am planning to study International Relations and Data Science. I'm involved in a few organizations at Wellesley (including MUN!). I spend my free time listening to music, reading, and trying different kinds of tea. I love exploring Boston and trying new restaurants with my friends.

I have been a part of the Model UN for about four years, and I am so glad I have the opportunity to continue it in college. The public speaking and research skills that I have gained from MUN have become essential in my everyday life. My experiences with MUN helped me become more sure of myself and cultivated my passion for research. During conferences, I was challenged and pushed to new heights. Attending NHSMUN as a delegate has become one of my fondest memories. I hope that everyone attending this year has as positive and invaluable an experience as I did!

The issues about African elephants and the Amazon's River Dolphins are key to protecting the Earth. This paper brings important developments to the issues that have recently occurred that delegates should address in their solutions. I encourage you to continue following these events as the conference draws near to have an accurate idea of the situation. Feel free to contact us if you have any questions, comments, or concerns. I look forward to hearing about your innovative ideas at the conference!

Eileen Jungmin Lee

Convention on the Conservation of Migratory Species

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CMS

NHSMUN 2025

TOPIC A: PREVENTING ILLEGAL EXPLOITATION OF AFRICAN ELEPHANTS

Photo Credit: Bumihillsfoundation

Introduction

African Elephants face major threats of poaching and wildlife trafficking as the demand for ivory and elephant tusks increases. Within the last century, 90 percent of the population has been severely threatened or eliminated, and their numbers continue to dwindle. The extinction rate of these animals causes global concern. Currently, it is estimated that roughly 86 elephants exist between East and Southern Africa, while the number in Central Africa remains unknown.¹ These populations have been greatly impacted by deforestation, climate change, the illegal ivory trade, poaching, and the loss of the natural resources necessary for their survival. The black market ivory trade runs through long-standing crime networks. The majority of these networks sell ivory in Asia, mainly India and China. However, the source of this ivory is typically Africa. While an international and total ban on ivory sales was issued in 1989, poaching continues to rage throughout the world, especially in Africa and Asia. As a result, the status of African elephants is labeled as critically endangered.²

Overall, wildlife protection is a key part of the United Nations Agenda for Sustainable Development. The Sustainable Development Goals (SDGs) 13 and 15, focus on combating climate change, promoting sustainability and biodiversity, and reconciling with animal welfare.³ Conservation efforts for African Elephants are crucial for biodiversity and the ecosystem. Without these animals, the survival of other species is also threatened. To effectively preserve the population, a combination of strategies is required. Implementing long and short-term solutions is essential to address the issues causing African elephant exploitation. Animal conservation efforts have recently ramped up and assisted in preservation initiatives, such as ecotourism. Delegates must develop a balanced approach that targets the root causes of elephant exploitation. These plans should focus on eliminating poaching, and habitat loss, the development of sustainable practices, and the involvement of local communities.

Ecotourism in Africa

Ecotourism is defined as “responsible travel to natural areas that conserves the environment, sustains the well-being of

the local people, and involves interpretation and education”.⁴ One of the central goals of ecotourism is to preserve and protect nature. It minimizes environmental impact and allows countries to explore natural resources sustainably. It also assists with job creation, sustainable development, and business practices. Additionally, ecotourism offers opportunities for investments in energy systems, infrastructure, and preservation methods.

One successful initiative includes Ecotourism Clusters developed by Belarus and the United Nations Development Program (UNDP). This plan provides projects and development strategies for local government, citizens, and educational institutions. This helps to guarantee natural conservation, the preservation of culture, and economic advancement.⁵ The collective work of all involved in these initiatives helps create more efficient and effective environmental preservation processes, as well as seeks to engage the community in helpful practices. The results of the clusters are visible in Belarus. This is evidenced by the number of tourists growing by 32 percent and the income from sustainable tourism growing by 77 percent between 2021-2023.⁶ In Africa, clusters can be

1 TeamAG, “African elephants – how many tuskers are left?,” Africa Geographic, December 5, 2024, <https://africageographic.com/stories/african-elephants-how-many-tuskers-are-left/>.

2 National Committee of the Netherlands, “African elephant species now Endangered and Critically Endangered – IUCN Red List,” International Union for Conservation of Nature, March 25, 2021, <https://www.iucn.nl/en/news/african-elephant-species-now-endangered-and-critically-endangered-iucn-red-list/>.

3 “15 Life on Land,” United Nations Sustainable Development Goals, Accessed January 21, 2024, <https://www.un.org/sustainabledevelopment/biodiversity/>.

4 “What is Ecotourism?,” The International Ecotourism Society, accessed January 21, 2025, <https://ecotourism.org/what-is-ecotourism/>.

5 United Nations Development Programme, “Ecotourism Clusters: Cooperating People and Nature,” United Nations Development Programme, September 26, 2024, <https://www.undp.org/belarus/stories/ecotourism-clusters-cooperating-people-and-nature>.

6 United Nations Development Programme, “Ecotourism Clusters: Cooperating People and Nature.”



The Albertine Rift Conservation and Tourism group
Credit: Esme Stewart

applied through nature reserves and educational initiatives. The African continent has the potential to implement it on a large scale, aiming to protect wildlife. Due to these projects' success, countries including Kenya, Uganda, and Morocco are currently implementing similar projects that will contribute to the local economy and sustainability. The "One tourist, one tree" project in Kenya promotes the conservation of the Kajulu Forest and also encourages tourists to plant trees.⁷ As the initiative becomes more popular, efficiency has also improved. However, within this project, it is important to ensure ecotourism efforts are mindful of preventing deforestation. Occasionally, tourists can create high demand for timber to build lodges and hotels, which puts further stress on the environment.

Morocco, which maintains the position that ecotourism is a focus of the country, is expanding its vision of sustainable tourism activities. The country already attracts a large number of visitors annually who experience a cultural and sustainable immersion. The main destination is the Agafay region, which offers tours and activities that engage tourists in the local culture, desert, and animal life. Fatim-Zahra Ammor,

a government representative, stated that the country's goal is to attract 26 million tourists by 2030.⁸ This goal aligns with national and international preservation goals, including those in SDGs 9 (Industry, Innovation, and Infrastructure) and 11 (Sustainable Cities and Communities). Successful ecotourism projects in safaris or reserves also aim to conserve elephants. A successful example includes Kottoor Ecotourism. This is an elephant rehabilitation center in India, which rescues animals and helps protect the species through sustainable tourism. The Sarara Camp, in Kenya, is also a great destination for people who want to have contact with the Savannah's wildlife. As a result of local and global wildlife protections, these places, which were previously the target of illegal hunting, have become popular ecotourism destinations. Through rehabilitation and sustainable practices, elephants have begun to migrate back to the region.

However, success is dependent on global cooperation. Africa is one of the least visited regions for ecotourism. As a result, the African Development Bank hosted an event with the theme "Valuing protected areas to promote ecotourism in Africa". As a result, delegates were more engaged in building

⁷ Niels Bartels, "Kenya's "One Tourist, One Tree" Campaign Promotes Eco-Tourism," Africa News Analysis, October 15, 2024,

<https://www.africanewsanalysis.com/kenyas-one-tourist-one-tree-campaign-promotes-eco-tourism/15/07/00/42/10/2024/>.

⁸ Africanews, "Morocco Embraces Eco-Tourism for Sustainability and Increased Yield," AfricaNews, September 2, 2024, <https://www.africanews.com/2024/09/02/morocco-embraces-eco-tourism-for-sustainability-and-increased-yield/>.

a culture of sustainability for the second-largest ecological system in the world.⁹ Public-private partnerships were vital for this plan's success as they facilitated communication between government representatives and private entities. The building of shared interests promoted a sustainable and economically promising future. Furthermore, they enable the exchange of resources and facilitate the construction and implementation of such projects. However, the investment fund is low, indicating a lack of discussion and prioritization. This is likely due to the fund's focus on sustainability and environmental/animal protection, which are not priorities for many major entities. Despite some difficulties, some destinations around the African continent have implemented successful ecotourism initiatives. For example, the management of Bwindi National Park in Uganda depends heavily on revenue from gorilla-viewing ecotourism.¹⁰ Other notable initiatives include the South Luangwa National Park safari in Zambia, Etosha National Park in Namibia, and Sabi Sands Game Reserve in South Africa. All of these work on nature conservation and animal protection, including elephants. Ecotourism has great potential to help preserve species and conserve habitats, in addition to contributing positively to local communities through the creation of jobs and economic growth. For the future, it is especially important to develop projects in regions where countries do not prioritize or do not have sufficient resources to implement effective projects.

The Tsavo Trust, a non-profit conservation organization, reduced the rate of human-animal incidents by almost 90 percent in the region it serves.¹¹ The project aims to serve local communities in Kenya close to reserves that suffer interference from animals, especially elephants. This project specifically works in the Tsavo National Park and the surrounding regions to prevent further degradation. This was also the case for baby elephants that were abandoned or separated from their herds due to illegal poaching and were rescued by the Wild Is

Life Zimbabwe Elephant Nursery (WIL-ZEN) team.¹² These elephants were taken to nurseries, located in Zimbabwe, where they received the necessary assistance. In several cases, animals arrive dehydrated, injured, or hungry. Thus, the elephants receive attention from experts until they fully recover. This group also works to raise awareness and promote coexistence between elephants and humans, especially for those who work near safaris and sanctuaries.¹³

In addition to the practical aspect and care service, legislative measures were also taken. This included the ban on the sale of ivory by the state of New York.¹⁴ This was initially enacted in 2014 since New York was previously considered one of the biggest destinations for ivory traffickers. The Humane Society of the United States advocated against killing elephants and rhinos for their horns. They also pointed out the violence generated by the ivory trade and the threat it posed to the species. As a result, in the last ten years, 13 American states have approved measures similar to this to end illegal trade. This decision represents a milestone in the fight against the ivory trade and encourages more states to do the same.

Conferences in Africa, including the UN Biodiversity Conference on Valorization of Protected Areas for Ecotourism, focus on natural conservation. These conferences also discuss the end of the ivory trade and new ways to conserve elephants and their habitats.¹⁵ Other advances occurred at the African elephant conference held in Hwange, Zimbabwe. A group called for a temporary end to the ban on the ivory trade, claiming it would stabilize the growth of the species. However, it was found that this would lead to significant exploitation of the species and the violation of the animal rights that have been enacted.

Many African countries are known for their large elephant population. While many have been designated with wildlife sanctuary status, they still face a threat from illegal poaching.

9 African Development Bank, "Africa's Untapped Ecotourism: Experts Call for Action at COP16 Side Event," African Development Bank, September, 02, 2024, <https://www.afdb.org/en/news-and-events/africas-untapped-ecotourism-experts-call-action-cop16-side-event-76091>.

10 Guest Writer, *Uganda Gorilla Trekking – A successful ecotourism adventure in Africa*, (Mijas: Euroweekly, 2024), EuroWeekly, <https://euroweeklynews.com/2024/11/11/uganda-gorilla-trekking-a-successful-ecotourism-adventure-in-africa/>.

11 "Top 10 Animal Victories of 2024," International Fund for Animal Welfare, Accessed Nov, 20, 2024, <https://www.ifaw.org/international/journal/top-10-animal-victories-2024>.

12 "Top 10 Animal Victories of 2024," International Fund for Animal Welfare.

13 "Big Tusker Project - Tsavo Trust," Tsavo Trust, November 9, 2023, <https://tsavotrust.org/big-tusker-project/>.

14 Kitty Block, "In win for elephants and rhinos, federal court upholds New York's ivory and horn ban," The Humane Society of the United States, November 14, 2024, <https://www.humanesociety.org/blog/new-york-ivory-horn-ban>.

15 "Big Tusker Project - Tsavo Trust," Tsavo Trust

This is often a result of a lack of government regulations and poaching punishment structures, which are often due to financial interests. This typically leads to the suffering of elephants through starvation, captivity, and forced reproduction for the ivory trade.¹⁶ Currently, many efforts focus on working with local communities.¹⁷ In Kenya, the Amboseli Trust for Elephants works with Maasai communities. This organization protects elephants and their habitats. They combine local knowledge with current strategies to educate locals regarding the protections for elephants, and the harmful effects of the ivory trade. To sustain economic support for these families, they often transition them to eco-tourism and preservation jobs instead.¹⁸

The Consequences of Climate Change

Climate change refers to fluctuations in temperature and weather patterns over a long period. Some events happen naturally, however, increases in human activity often push these changes at a faster rate. The increase in deforestation,

the burning of polluting gases, and the destruction of biomes contribute to global warming and habitat loss. Rising temperatures, extreme weather, and shifting precipitation patterns disrupt natural habitats and displace their inhabitants. As a result, animals are forced to either adapt or migrate or they face extinction. The countries on the African continent are those that regulate the current climate situation the least but suffer most of the consequences. These countries are losing approximately 5 percent of their Gross Domestic Product (GDP) due to climate change.¹⁹ Furthermore, much of its wildlife is affected. The World Wide Fund for Nature revealed that the average size of wildlife populations in Africa declined 76 percent between 1970 and 2020.²⁰ If immediate action is not taken, the continent could pass irreversible tipping points due to the continuous destruction of ecosystems.

The African Elephant population is especially vulnerable. These species are losing parts of their habitats and facing degrading conditions that affect their survival. Between 1990 and 2017, Africa had lost more than 20 percent of its

¹⁶ “Big Tusker Project - Tsavo Trust,” Tsavo Trust

¹⁷ Matthew Krcmarik, “A Bold New Strategy for AZA’s Elephant Populations,” Aza.org (AZA, 2024), <https://www.aza.org/connect-stories/stories/a-bold-new-strategy-for-azas-elephant-populations>.

¹⁸ Krcmarik, “A Bold New Strategy for AZA’s Elephant Populations,”

¹⁹ United Nations Environment Programme, “African Climate Leadership: COP29 and Beyond,” United Nations Environment Programme, November, 17, 2024, <https://www.unep.org/news-and-stories/speech/african-climate-leadership-cop29-and-beyond>.

²⁰ World Wildlife Fund Kenya, “Catastrophic 76% decline in the average size of African wildlife populations in just 50 years, reveals WWF’s Living Planet Report 2024,” World Wildlife Fund Kenya, October 11, 2024, <https://www.wwfkenya.org/?237410/Catastrophic-76-decline-in-the-average-size-of-African-wildlife-populations-in-just-50-years-reveals-WWFs-Living-Planet-Report-2024>.



Loxodonta africana South Luangwa National Park

Credit: Geoff Gallice

rainforests.²¹ The majority of these rainforests in Africa are located in the Congo basin, Equatorial Guinea, Cameroon, Gabon, and the Central African Republic. Many dry forest habitats have been destroyed due to deforestation. These are primarily located in the Western, Southern, and East parts of Africa, including Senegal and Somalia. Dry forests have higher rates of deforestation compared to rainforests.²² Currently, the largest amount of intact trees in a forest is in the Congo basin, which goes across the Central African Republic, the Republic of the Congo, Gabon, Equatorial Guinea, and Cameroon. In this region, there is a rainforest that is approximately two million square kilometers. This further contributes to climate change. As areas of trees are cleared by corporations, greenhouse gases, especially carbon dioxide, are released into the atmosphere. In 2022, more than five billion tons of carbon dioxide were released into the atmosphere from deforestation. The majority of this was from Africa.²³

In recent years, the elephant population has been continuously declining, with a reduction of more than 70 percent of their populations in just half a century, for both types of African elephant species, the forest and savanna.²⁴ Illegal hunting, motivated by the ivory trade, is one of the main problems that puts the species at risk. However, the destruction of habitats due to climate catastrophes increasingly contributes to the safety of these populations. Furthermore, the species also has a birth rate that decreases over time, which further contributes to their decline. Human interference is largely to blame for the reduction of elephant habitats and resources. Access to water has largely declined since 1980 in Africa. Elephants average drinking 50 gallons of water each day. Unfortunately, as climate change has increased the average temperature in Southern Africa, water in elephant habitats has become even

more scarce. For example, there are approximately 36,000 elephants in Kenya's savannah. However, Kenya has been in the worst drought of its history and has been receiving below-average rainfall for the past 40 years. This has resulted in the death of at least 130 elephants in the region. Additionally, in Zimbabwe, an intense drought resulted in the drying up of many of the water holes that elephants often visit. This killed over 250 elephants in only two months.²⁵

Between May and June 2020, 350 elephants died in Botswana as a result of drinking water with toxic algae blooms.²⁶ This catastrophe is a direct result of climate change. Based on satellite observations, researchers identified 20 waterholes that had high levels of cyanobacteria.²⁷ This is known to be a group of algae that produces toxins. It is reported that these algae blooms are a result of the change from dry to wet conditions between 2019 and 2020, which was caused by significant rainfall during that period.²⁸ These rapid changes in weather patterns and conditions as a direct result of climate change and increases in human-made pollution. The author of this study, Davide Lomeo believes that more events such as this are likely to occur. Given the rapid rate of climate change, more months in South Africa are predicted to become drier and hotter.²⁹ This will further fuel the growth of harmful bacteria, as well as reduce available water supplies for animals.³⁰ Overall, Botswana's Okavango Delta is a significant water source for a large population of African elephants. As climate change continues, these natural water sources continue to be at risk. In this case, the harm was the death of many animals and very harmful damage to the region as a whole. In the future, more water holes may be a better risk of drying up or becoming infected.³¹

21 Cerutti, P. O. (2024, November 15). Deforestation in Africa. Chatham House – International Affairs Think Tank. <https://www.chathamhouse.org/2023/05/deforestation-africa>.

22 Cerutti, P. O., "Deforestation in Africa".

23 Olivia Lai, "Ghana", Oxfam International, May 25, 2022, <https://www.oxfam.org/en/what-we-do/countries/ghana>.

24 Miguel Ángel, "Only the South Remains for African Elephants," El Pais, November 15, 2024, <https://english.elpais.com/international/2024-11-15/only-the-south-remains-for-african-elephants.html>.

25 International Fund for Animal Welfare, "The impact of climate change on elephants," March 5, 2024, <https://www.ifaw.org/journal/impact-climate-change-elephants>.

26 James Ashworth, "Climate change linked to mass poisoning of hundreds of elephants," Natural History Museum, November 29, 2024, <https://www.nhm.ac.uk/discover/news/2024/november/climate-change-linked-mass-poisoning-hundreds-elephants.html>.

27 Ashworth, "Climate change linked to mass poisoning of hundreds of elephants,"

28 King's College London, "Satellite Evidence Bolsters Case That Climate Change Caused Mass Elephant Die-Off," King's College London, November 29, 2024, <https://www.kcl.ac.uk/news/satellite-evidence-bolsters-case-that-climate-change-caused-mass-elephant-die-off>.

29 Ashworth, "Climate change linked to mass poisoning of hundreds of elephants,"

30 King's College London, "Satellite Evidence Bolsters Case That Climate Change Caused Mass Elephant Die-Off."

31 King's College London, "Satellite Evidence Bolsters Case That Climate Change Caused Mass Elephant Die-Off."

The harm to elephant populations highlights the need for stronger conservation efforts. It is important to preserve and restore the water sources that animals depend upon. Unless addressed, the survival of many species, including elephants, is under threat. Reducing greenhouse gas emissions and protecting ecosystems have to be top priorities to sustain the natural world. To ensure the conservation of the African Elephant species, and others alike, addressing water contamination through climate change mitigation is vital.³² The forecast for the coming years, following reports issued by the UN, shows the damage is becoming irreversible. This represents a threat to African elephants, as without the right conditions for survival, their population will become completely extinct. Many countries are committed to a more sustainable future, investing in technology, sustainable energy, and ecosystem preservation. However, it is essential to have international cooperation to ensure these plans' success. If climate change continues to increase, a large part of animal populations and their habitats will be non-existent.

Conclusion

All in all, the current situation plaguing African elephants leaves them, and many other species, at risk of extinction. Climate change and human actions directly affect the way of life of this species. Ecotourism provides countries and locals with substantial economic incentives and also promotes sustainable practices that are directly tied to wildlife preservation. Through education systems and promoting awareness, the goal of ecotourism is to increase biodiversity, protect natural resources, and lower carbon emissions. Sustainable and efficient ecotourism practices also help create income for local communities, as well as encourage collaboration in conservation efforts. By transitioning communities towards preservation jobs and promoting sustainable travel, ecotourism serves as a responsible and effective process for preventing elephant harm. Therefore, it is necessary to implement universal and effective ecotourism practices and protective legislation to protect the species.

Investing in sustainable and efficient long-term practices

will help to preserve the resources and habitats necessary for species survival. The degradation of their habitats, as well as the continuing harm of poaching and the illegal ivory trade, has led to the rapid decline of the species. Rapid changes in the environment, including deforestation, water contamination, and climate change, have all harmed the species and their habitats. As their habitats continue to degrade, drought has also impacted many of Africa's savannas. This also leads to an ecological imbalance and further long-term damage to nature.

It is essential to work with local communities to provide educational programming to emphasize the importance of stopping poaching and the illegal trading of ivory. It is also important to strengthen legislation and crime-fighting networks to deter these crimes and protect elephant species. To grow and protect elephant populations, it is essential to secure their habitats and regulate environmental damage. Open dialogue, as well as negotiation about ideas, must be a priority. Only by joining forces will delegates achieve a fairer and more equal society in terms of sustainability and protection of endangered species.

³² Ashworth, "Climate change linked to mass poisoning of hundreds of elephants,"



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TOPIC B: THE CONSERVATION OF RIVER DOLPHIN HABITATS IN THE AMAZON RIVER

Photo Credit: Auch

Introduction

The Amazon Rainforest is one of the most important natural habitats on Earth. Over half of known animal species and plants are located in the Amazon.¹ Aside from being the “Lungs of the Earth,” the Amazon Rainforest is the home to so many unique species of animals. Many animals that are found in the rainforest are unique to the region. Some are not found anywhere else on Earth. This makes protecting the Amazon Rainforest essential to the Earth’s health. The endangerment of River Dolphins poses a significant threat to the Amazon Rainforest and its biodiversity. Many communities rely on the Amazon’s natural resources, including the millions of species that inhabit it. For animals, the food chain within the rainforest is crucial in preserving the life of all shapes and sizes. If the food chain was disrupted, it could cause massive ecological devastation. The endangerment of River Dolphins may topple this ecosystem and destabilize many communities. Conservation of River Dolphins will also require countries to address prominent global issues, such as climate change and Indigenous land rights.

Recently, the Amazon has experienced severe challenges due to climate change. These changes have taken a toll on the environment in the Amazon. For instance, heat waves and prolonged droughts have led to unpredictable weather patterns. These droughts have dried up many rivers and left the largest ones at very low water levels. Animals have been unable to adapt, leading to a decline in animal populations, and unbalancing the ecosystem. For the River Dolphins, this has been incredibly difficult for their survival. There are fewer rivers to swim through and many end up beached on the shores of rivers. For native tribes, the droughts have also cut off their main form of transportation. Overall, the worsening effects of climate change have negatively impacted almost every aspect of the rainforest.

Political events in bordering countries have also contributed to the deterioration of the Amazon. These events have averted attention away from pressing environmental issues, allowing the climate’s condition to worsen. As a result, tensions between state governments and armed groups have risen. Armed groups in the Amazon take advantage of vulnerable communities in the region and abuse the natural resources. This causes the ecosystem to worsen as a whole. As a committee, delegates will need to look at the ecological, geopolitical, and humanitarian side of this entire issue. There are many stakeholders in this

topic. Delegates should not only focus on the River Dolphins. Instead, delegates will need to create solutions to address the outside factors that threaten these rare dolphins. Delegates will need to develop solutions that consider recent political events. By doing this, the committee will be able to deliver an effective response to the issue at hand.

Conservation Efforts

Climate change has contributed to the ongoing degradation of the Amazon Rainforest. As a result, the River Dolphin population has been critically affected. Climate change has caused changing weather patterns that local communities and animals have been unable to acclimate to. This results in declining populations. Droughts have been especially harmful to aquatic species, such as River Dolphins.² As apex predators, the decline of the species causes the ecosystem to suffer. To protect the River Dolphins in the Amazon, delegates must aim to increase local and global conservation efforts and address the negative impact of global climate change.

Climate change has brought out changing weather conditions. This caused an increase in carbon emissions which have brought on a severe drought in South America causing areas of land to dry out and heighten in temperature. As a result,

¹ Neil Greenwood, “Brazil’s fires: A wake-up call to climate change and human destruction of nature,” International Fund for Animal Welfare, September 11, 2024, <https://www.ifaw.org/uk/people/opinions/brazils-fires-wake-up-call-climate-change-human-destruction-nature>.

² Shanna Hanbury, “‘Tragic’ mass fish die-off devastates Amazon River channel amid historic drought,” Mongabay Environmental News, November 27, 2024, <https://news.mongabay.com/short-article/mass-fish-die-off-amazon-drought/>.

seasonal wildfires have taken over the region. The fires have negatively impacted the air quality, displaced both humans and animals and destroyed areas of the rainforest.³ Research shows that over 1,000 wildfires have taken place over just two months. About ten percent of the fires have taken place in Indigenous lands, and six percent affected protected land.⁴ Studies have shown that the number of wildfires in future years could increase up to thirty percent by 2050. In response, the United Nations Environment Programme (UNEP) has encouraged countries to improve prevention and response efforts to mitigate the damage caused by fires.⁵

As a marine species, one of the main causes of the depleting population is “extreme heat and drought.”⁶ To effectively combat this factor, further research is needed for conservation efforts. The Mamirauá Institute for Sustainable Development and the National Marine Mammal Foundation of California worked together to study River dolphins in Lake Tefé. In this area, the mortality rate was especially high. The scientists studied the dolphins’ health and their surroundings to determine other harmful factors. They found that higher temperatures from the drought and the pollutants in the water from human activity were significant factors. Studied specimens were equipped with microchips for future examinations.⁷

It is also important that Indigenous communities have access to these lands will be significant in future conservation efforts. Indigenous cultural knowledge of the land has been used to maintain the Amazon for years. This allows for human civilizations and surrounding animals to coexist without

harming the land.⁸ Countries in the Amazon have also invested in various technologies and research, such as Artificial Intelligence (AI), to assist in conservation efforts. Colombia is currently working with Project Guacamaya to ease conservation plans. Their collaboration utilizes AI and satellite mapping to more accurately track patterns of deforestation and locate species habitats.⁹ Similarly, the Embrace the Forest Initiative has also launched a tool that uses satellite technology and AI to decrease the time it takes to respond to wildfires. In half a year it successfully detected 323 fires, preventing about five million tons of carbon dioxide.¹⁰ Researchers have also utilized AI to study how animal species react to changes in “forest structure” and “forest fragmentation”. This is done by recording animals and satellite information. This research will aid habitat and species conservation plans.¹¹ The integration of technology into conservation efforts has also eased the process of coexistence between human communities and River Dolphins. The World Wildlife Fund and the Society for Research and Protection of the Environment collaborated to introduce a device called a “pinger” to communities. These are placed on fishing nets and output frequencies that deter River dolphins from approaching. Both human communities and dolphins rely on the fish for their survival. Furthermore, fishing equipment can be damaged by the dolphins. This improved human’s views of the River Dolphins and opened up potential opportunities for further research.¹²

As the threat of climate change increases, the Amazon Rainforest and its communities must grapple with the consequences. Brazil is one country that has been affected. In the past few years,

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5 United Nations Environment Programme, “As wildfires consume South America, experts warn of a new normal,” *United Nations Environment Programme*, September 27, 2024, <https://www.unep.org/news-and-stories/story/wildfires-consume-south-america-experts-warn-new-normal>.

6 Kirsten Schuijt, Maria Susana Muhamad Gonzalez, “The Amazon is close to the point of no return. COP16 is a critical opportunity to act,” *World Economic Forum*, October 11, 2024, <https://www.weforum.org/stories/2024/10/amazon-fires-nature-cop16/>.

7 Bruno Kelly, “Drought-threatened Amazon dolphins studied for climate change impact,” *Reuters*, August 23, 2024, <https://www.reuters.com/business/environment/rare-amazon-river-dolphins-studied-climate-change-impact-2024-08-22/>.

8 Tracey Osborne, “Toward a climate justice approach for the Amazon: Reimagining REDD+ for Indigenous-led solutions,” *One Earth*, August 19, 2024, <https://www.oneearth.org/reimagining-redd-for-indigenous-led-solutions/>.

9 Elliot Smith, “Project Guacamaya uses daily satellite images, Amazon-specific AI models in battle against deforestation,” *Microsoft*, September 25, 2024, <https://news.microsoft.com/source/latam/features/ai/project-guacamaya-rainforest-deforestation/?lang=en>.

10 Guillermo Martínez, Julián González Martínez, Akanksha Sharma, “Protecting the Amazon Region with AI, Algorithms and Data,” *IDB Invest*, September 16, 2024, <https://idbinvest.org/en/blog/digital-economy/protecting-amazon-region-ai-algorithms-and-data>.

11 Elizabeth Gillooly, “Research using AI to track Amazon rainforest species produces landmark results,” *George Mason University*, November 25, 2024, <https://www.gmu.edu/news/2024-11/research-using-ai-track-amazon-rainforest-species-produces-landmark-results>.

12 Ana Barbour, “Technology tested in the Tapajós can reduce conflicts between riverside fishermen and river dolphins by up to 40%,” *World Wildlife Fund*, December 17, 2024, <https://www.wwf.org.br/?90641/Technology-tested-in-the-Tapajos-can-reduce-conflicts-between-riverside-fishermen-and-river-dolphins-by-up-to-40>.

Brazil has made significant progress in increasing protections for the Amazon rainforest. In 2023, Brazil's President Lula set a goal to end deforestation by the year 2030. Lula promised to target illegal logging groups and to work towards a "green economy".¹³ By the end of 2024, Brazil had decreased its deforestation rate by 30.6 percent.¹⁴ Lula has also secured several foreign investments to expand the 'bioeconomy'. As many countries have investments in the Amazon's resources, strengthening relations with them will be vital for the health of the region.¹⁵ Since the beginning of Lula's term, he has increased communication with Indigenous communities. He recognized thirteen Indigenous territories, granting legal protections against harmful human activities. These include illegal logging and mining.¹⁶ President Lula has expressed plans to continue expanding the number of legally protected areas in the Amazon rainforest.¹⁷ Expanding protections in the Amazon Basin ensures the livelihood of the river dolphins. By reducing the amount of human activity, these habitats are

more likely to remain as clean and stable environments. This will allow for species such as the river dolphins to flourish. Historically, Indigenous communities have been protectors of their land. By offering these communities protections they can maintain their sustainable practices. These efforts will help stop additional environmental damage.

Illegal gold mining is a lucrative industry in Brazil. However, this activity has caused widespread environmental damage in the Amazon Basin. This includes water pollution, mercury contamination, and large-scale deaths of marine life.¹⁸ In the last two years, the government has increased efforts to curb illegal mining. Brazil has funded research into improving satellite mapping and forensic technology to track illegal gold mining. In December 2024, Brazil established the "Targeting Gold" program. The program assists law enforcement in finding where illegally sourced, unrefined gold had originated.¹⁹ This mitigates the threat of mercury pollution in soil and

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17 Carolina Bataier, "President Lula signs the recognition of three Indigenous lands in Brazil," Brasil de Fato, December 5, 2024, <https://www.brasildefato.com.br/2024/12/05/president-lula-signs-the-recognition-of-three-indigenous-lands-in-brazil>.

18 Shanna Hanbury, "Brazil cracks down on illegal gold mining, sparking anger in the Amazon," Mongabay, September 27, 2024, <https://news.mongabay.com/short-article/brazil-cracks-down-on-illegal-gold-mining-sparking-anger-in-the-amazon/>.

19 Ricardo Brito, Anthony Boadle, "Forensic technology aids Brazil's crackdown on illicit Amazon gold trade," Reuters, December 18,



G20 Summit being hosted in Brazil
Credit: Agência Senado from Brasilia, Brazil

water. This also prevents illegal miners from encroaching on Indigenous land. The Yanomami tribe had been struggling with mercury poisoning in their water due to the illegal gold mining operations in their territory. In the past year, successful efforts to clear these operations from Yanomami territory have increased.²⁰ With Targeting Gold, other areas suffering from mercury poisoning could be assisted more efficiently.

In 2024 Brazil hosted the Group of 20 (G20) Summit. President Lula emphasized the global impact of climate change and the need for action. At this time, he called upon the leaders of the 20 largest economies to plan to slow global warming. In opening the session, Lula focused on environmental challenges. The countries in attendance accounted for 80 percent of global emissions.²¹ As a result, Lula emphasized the need for these countries to reduce harmful emissions. To do this, he stressed moving up 2050 emission goals forward to 2040.²² The Brazilian government's commitment to climate change has inspired others to be proactive. The World Bank contributed USD 325 million to the clean technology fund. Furthermore, US President Joe Biden announced a series of climate and development initiatives.²³ It was also announced that the UN, Brazil, and the United Nations Educational, Scientific and Cultural Organization (UNESCO) will establish the Global Initiative for Information Integrity on Climate Change.²⁴ This initiative will foster collaboration between States and global organizations. Together they will fund research to gather regional data. The information will be used to boost strategic action and combat disinformation about climate change. This effort aims to expand climate change solutions and mitigate its effects. Countries committing to the Initiative will contribute

to a UNESCO-administered fund. The fund aims to raise USD 10 to 15 million over the next 36 months to support NGOs in climate research, communication strategies, and public awareness campaigns.²⁵ This type of collaboration has the power to promote sustainable practices, increase investments in green technologies, and drive changes in legislation.

Despite the warning signs, global actors are still hesitant to take action due to the potential costs of implementing sustainable solutions. During 2024's climate summit, tensions between wealthy and poor countries were an obstacle in reaching an agreement to reduce carbon emissions.²⁶ Less wealthy countries lack the finances to enact climate-friendly solutions and continue to rely on harmful energy sources. Many of these countries are also the most exposed to the harmful effects of climate change. The lack of economic mobility to navigate this issue requires less developed countries to seek assistance from wealthier countries. According to the Independent High-Level Expert Group on Climate Finance, developing countries must acquire at least USD 1 trillion from outside sources to meet climate targets.²⁷ Wealthier countries were reluctant to provide funding without sufficient incentives. Many eyes were on the US after the results of its 2024 election, which reinstated Donald Trump as president. Trump's previous presidency caused a backsliding in the US's efforts against climate change. This increased concerns at the UN Climate Summit.²⁸ The final agreement called for developed countries to contribute "at least USD 200 billion." Several countries left the Climate Summit dissatisfied with the outcome.²⁹ The lack of substantial financial support from developed countries continues to limit underdeveloped countries' abilities to conserve the Amazon

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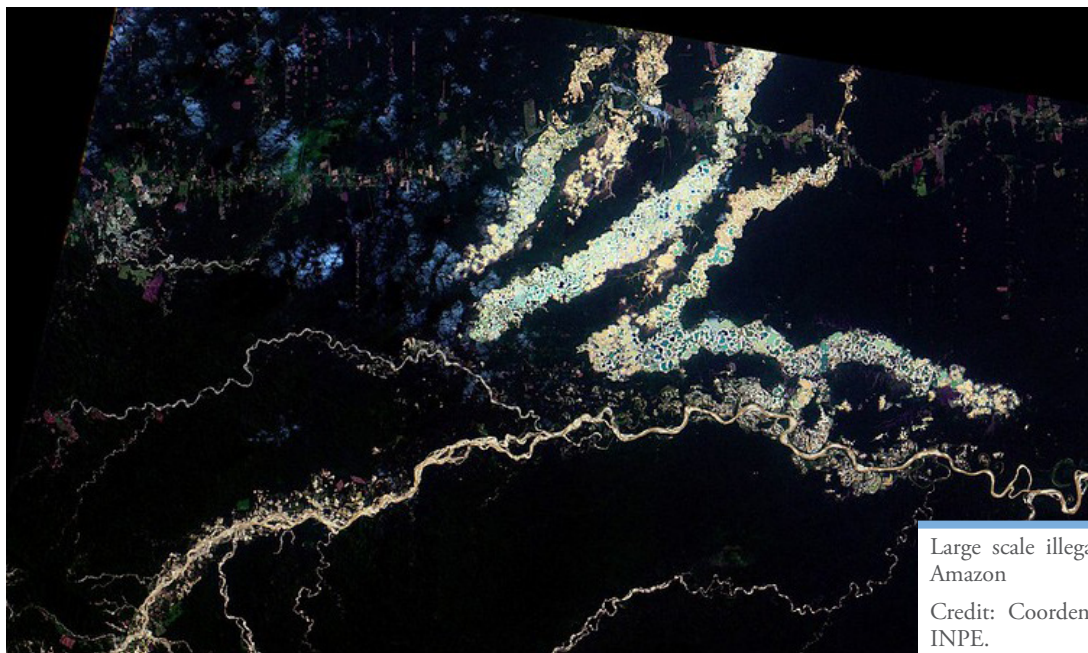
25 United Nations Educational, Scientific, and Cultural Organization, "G20: Leaders' Summit: Brazil, UNESCO and UN launch Global Initiative for Information Integrity on Climate Change."

26 Sara Schonhardt, Zia Weise, Zack Colman, Karl Mathiesen, "Climate summit ends with a long-fought deal — and a lot of anger," *Politico*, November 23, 2024, <https://www.politico.com/news/2024/11/23/climate-summit-cop29-00191386>.

27 "Raising ambition and accelerating delivery of climate finance," (The London School of Economics and Political Science, 2024), <https://www.lse.ac.uk/granthaminstitute/publication/raising-ambition-and-accelerating-delivery-of-climate-finance/>.

28 Valerie Volcovici, Nailia Bagirova, Kate Abnett, "COP29: US climate envoy says work will continue despite Trump's return," *Reuters*, November 11, 2024, <https://www.reuters.com/world/trump-trade-worries-cloud-cop29-climate-summit-baku-2024-11-11/>.

29 Sara Schonhardt, Zia Weise, Zack Colman, Karl Mathiesen, "Climate summit ends with a long-fought deal — and a lot of anger."



Large scale illegal gold mining at Southern Peruvian Amazon

Credit: Coordenação-Geral de Observação da Terra/INPE.

rainforest.

Political Instability

The Amazon Rainforest houses several countries in South America with an abundance of resources. The area also hosts many territorial and political conflicts. Recent conflicts have caused the land and surrounding communities to sustain serious injuries. Armed groups have been one of the main causes of these disputes. They utilize the rainforest to facilitate activities such as drug trade, trafficking of humans and animals, illegal logging and mining, and farming. This increases their power and influence, making it difficult for governments to put restrictions on their activities. Furthermore, many armed groups bribe politicians to prevent government interference.³⁰ Deforestation from conflict or illegal logging can cause an imbalance in the ecosystems, affecting other flora and fauna, and various species. Mining that uses mercury for extraction can contaminate the soil and water, risking the health of aquatic species. This has caused a large amount of harm to species'

³⁰ Hughes, Eleonore. "Organized crime gangs expanded into a third of cities in Brazil's Amazon, report finds." *AP News*. December 11, 2024. <https://apnews.com/article/brazil-amazon-gangs-crime-50bfd26e8a3a69c7d1c2b50ccb0a7608>.

³¹ "How conflict impacts our environment," *United Nations*, accessed December 19, 2024, <https://www.un.org/en/peace-and-security/how-conflict-impacts-our-environment>.

³² "Biodiversity COP 16: Important Agreement Reached Towards Goal of "Making Peace with Nature," *Convention on Biological Diversity*, November 2, 2024, <https://www.cbd.int/article/agreement-reached-cop-16>.

³³ "Environment @ 57th Session of the UN Human Rights Council," *Geneva Environmental Network*, October 14, 2024, <https://www.genevaenvironmentnetwork.org/resources/updates/environment-57th-session-of-the-un-human-rights-council/>.

habitats. Restoring damaged land requires large investments in time and money, which not every state can afford.³¹

To combat this issue, countries agreed to allocate money from the Cali Fund to Indigenous communities during the 2024 United Nations Biodiversity Conference. These funds would assist Indigenous communities in implementing frameworks that encourage biodiversity.³² This is important because many of these Indigenous communities know the rainforest the best. Many of these tribes have lived in the rainforest for centuries. As a result, it makes sense for governments to turn to them to guide experts on how to preserve biodiversity. In addition, the Human Rights Council (HRC) discussed the impact of climate change. They recommended states focus on raising funds to implement solutions, work to reduce the harmful effects, and create strategies to adapt to the changing climate.³³ However, this can only be done if the governments near the rainforest are focused enough to directly implement the HRC's recommendations. For countries like Bolivia, this can prove to be difficult.

However, political discourse in Bolivia has deeply impacted

the country's ability to protect the Amazon forest. Bolivia's current president, Luis Arce, and former president Evo Morales have been engaged in a tense power struggle since 2020.³⁴ Additionally, the weak state of Bolivia's economy has escalated tensions between the civilian population, politicians, and the government. There have been many calls from the public for President Arce to resign due to economic issues. The involvement of Morales in these events has caused Indigenous communities to participate in "street protests, marches, and road blockades". This has led to several injuries, deaths, and increased tensions.³⁵ With over 40 percent of Bolivia's population being made up of Indigenous peoples, political issues cannot be ignored.³⁶ The power struggle between President Arce and Morales has diverted attention away from pressing issues, such as the drought and fires in the Amazon. The drought and wildfires have inflicted great harm on Indigenous communities and the environment. As wildfires have increased, 45 of the Indigenous lands recognized by Bolivia's government have been harmed by fires and droughts, displacing many communities. Decreasing water quality and the loss of crops have forced people from their homes. As Indigenous communities continue to be displaced, they are unable to continue their cultural practices. The lack of access to their lands hinders their ability to protect many animal species in the Amazon, including the River dolphins.³⁷

In 2024, Bolivia declared a national emergency due to the severe damage caused by the fires. According to data from the World Resources Institute, the wildfires have damaged "roughly 5 times as much forest as they did 20 years ago."³⁸ Despite the urgency of the situation, the Bolivian government

has failed to provide a sufficient solution. Although Bolivia recognized "the rights of Pachamama, or Mother Earth" in 2010 to increase protections for the environment. However, they have been ineffective due to a lack of enforcement from the government. "Slash-and-burn agriculture" is one of the top causes of fires in the Amazon. However, legislation that aims to mitigate this has also been ineffective for similar reasons.³⁹ The lack of economic stability has led to the government being unable to provide firefighters with proper supplies to combat fires. Affected Indigenous communities are also not receiving enough aid from the government to restore damaged lands.⁴⁰

The state of democracy in Brazil also hinders the ability to make significant progress towards biodiversity preservation. While it is one of the strongest democracies in South America, Brazil has also had its difficulties. The presidency of former Brazilian president Jair Bolsonaro was marked by investments in agriculture and a surge in deforestation.⁴¹ President Bolsonaro often supported more development projects that would have cut down more trees and created more open land for cattle and farming. In July 2024, a judge blocked a massive highway from being constructed through the middle of the rainforest.⁴² This road was supported by Bolsonaro and many more populist Brazilian politicians. Even though President Lula is in power, the rise of populism across the world threatens continued efforts to preserve the Amazon. To prevent this, delegates would need to continue monitoring political developments in the region. Solutions focused on long-term investments in the region should be considered. Delegates should also look into international agreements with conditions that make it difficult for countries to withdraw. While that may be difficult, it is

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certainly much easier to withdraw from an agreement than nursing a rainforest back to health.

be able to address a wide range of issues to preserve the River Dolphin species.

Conclusion

The protection of River Dolphins is integral to stabilizing the biodiversity of the Amazon. For a population that is at such a high risk, they must be prioritized immediately. The River Dolphins play a large role in balancing the ecosystem. As a species at the top of the food chain, they play a key role in preserving the Amazon's biodiversity. Human involvement has caused the condition of the Amazon rainforest to rapidly decline. This has continued to harm the land and animals. Mining, oil extraction, and violent conflict have damaged the air, water, and land. All of this eventually harms the animals and humans in the area. Stronger regulations and harsher crackdowns may be needed to stop this from happening. Environmental issues have become secondary to countries affected by political instability. The rise of populism has also led to governments completely disregarding environmental protection. Regardless, many factors play into the deforestation of the Amazon and the loss of habitats. Preserving the River Dolphin species is a part of a larger issue. It is only a small part of the much larger degradation of the Earth and the depletion of natural resources.

However, external factors may keep countries from fully committing to conservation efforts. Less developed countries lack the economic means to fully commit to conservation efforts. Many of these countries need more land to allow for more industry and agriculture. This means the international community must work on more sustainable ways to grow economies. Additionally, many countries in South America are caught in power struggles with armed groups in the Amazon. This fighting continues to damage the environment. A peaceful resolution would be needed to make sure that the rainforest does not continue to be damaged by fighting. Delegates must develop solutions that balance sustainability, the needs of local communities and species, and the economic needs of citizens and countries. It is through comprehensive solutions that delegates can create overarching frameworks to address all issues. Through global collaboration, delegates will

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