



The Hague International Model United Nations

Forum:	Environment Commission 2
Issue:	Alternatives and practical solutions to address and mitigate deforestation and land degradation
Student Officer:	Ryan Vaziri
Position:	Deputy President

Introduction

Known as one of the biggest threats to Earth as a whole, deforestation and land degradation have already left a negative footprint and are increasingly becoming a more significant problem. The issue of deforestation has multiple negative impacts on the environment that need to be taken into consideration when addressing the topic. The physical loss of the trees in a forest alone accounts for strong declines in local ecosystems and animal life that depend on the trees for numerous necessities. The strong decline in tree population is also a main contributor to climate change as the CO₂ that comes from carbon emissions is failing to be regulated by the lack of consumption by the dwindling forests. The decline of thick tree barriers leaves more ecosystems and human populations at risk from the impacts of floods and other natural disasters that were previously hampered by forests.

The impacts of deforestation are tightly knit with the problem of land degradation as well. With a lack of trees and forests, the ecosystems in such areas suffer tremendously, which

negatively affects the soil in the deforested area along with surrounding regions. The issue of land degradation as a whole is an extremely complex and multifaceted issue that requires great ingenuity. The topic can encompass all issues ranging from overgrazing to poor irrigation practices. Reaching a cohesive and coordinated solution is no easy task as all the different aspects of land degradation are inherently related at a core level, meaning there isn't a blanket solution to solving the issue.

In the past, efforts have been made to combat both deforestation and land degradation. Some approaches have involved establishing protected forested areas as well as placing moratoriums on agricultural products produced on deforested lands. However, these attempts seem to be localized and only effective on a small scale, rather than pervasive and globally reaching. While the solutions for preserving land quality and hampering land degradation vary slightly from those faced with deforestation, both approaches are rooted in the same principles. The aim of land degradation is a more holistic approach to the environment, rather than just forests. According to the United Nations, some solutions that have been in common practice that target land degradation include reforestation, soil conservation, and the protection of natural processes. While there is some overlap in the approaches to fixing these issues, the blanket term for reversing land degradation is "land restoration," which can also apply to the solutions that aim to tackle deforestation.

Previous UN initiatives such as Reducing Emissions From Deforestation and Forest Degradation (REDD+) developed by the United Nations Framework Convention on Climate Change (UNFCCC) focus on mitigating carbon emissions by reducing deforestation in developing mix-market economies such as Mexico and Vietnam. The United Nations Environmental Program (UNEP) as a whole has been charged since the late 20th century with finding compatible solutions to putting deforestation to an end. While such solutions have been effective and are still being implemented and improved, newly efficient solutions are in high demand.

Definition of Key Terms

Deforestation

Deforestation or forest clearance refers to the removal and destruction of a forest or stand of trees from land that is then converted to non-forest use. Deforestation can involve the conversion of forest land to farms, ranches, or urban use. About 31% of Earth's land surface is covered by forests at present.

Land Degradation

Land degradation refers to a process where land becomes less healthy and productive due to a combination of human activities or natural conditions. The causes of land degradation are numerous and complex. Human activities are often the main cause, such as unsustainable land management practices. Natural hazards are excluded as a cause; however human activities can indirectly affect phenomena such as floods and wildfires.

Greenhouse Gas (Carbon) Emissions

Greenhouse gas (GHG) emissions refer to human activities that intensify the greenhouse effect. This contributes to climate change. Carbon dioxide (CO₂), from burning fossil fuels such as coal, oil, and natural gas, is one of the most important factors in causing climate change. The largest emitters are China followed by the United States.

Net Deforestation

Net Deforestation refers to the difference in forest area between two points in time, taking into account both losses from deforestation and gains from forest regeneration and restoration. Net deforestation is measured concerning a given geographic area (eg, a district, state, nation, or globe) and a given timeframe.

Overgrazing

Overgrazing occurs when plants are exposed to intensive grazing for extended periods, or without sufficient recovery periods. It can be caused by livestock in poorly managed agricultural applications, game reserves, or nature reserves. It can also be caused by immobile, travel-restricted populations of native or non-native wild animals. Overgrazing can lead to high erosion rates and loss of topsoil and nutrients. By reducing the protection of the ground, overgrazing leads to the erosion and compacting of land caused by wind, rain, and other natural elements.

Background Information

Since roughly around 10,000 BC, humans have cut down forests to make room for farms and crops. The practice has existed since then but dramatically increased recently. Before 12,000 years ago, humans were nomadic hunter-gatherers who cleared trees and forests for individual and small community needs. However, this approach quickly changed once large-scale farms and agriculture took off. With the large production of goods and economic establishment came a rapid increase in human population, which soon birthed deforestation.

Large areas of forest weren't then just cleared for agricultural purposes or functional needs but for the need for more space. This practice of extensive clearing of forests continues to this day on a much more sizable scale. While deforestation has existed for over 10,000 years, its industrialization has had devastating effects on the environment and the human population as a whole. From 1760 to 1840, technological innovations produced the solution to the hindrance of deforestation—the circular saw. With its production in 1777, clearing trees became easier and more efficient. Such similar innovations caused the loss of 67,000 square kilometers of forest in central European Russia from the late 1700s to the beginning of the 20th century (Climate Transform). The alarming rate of net deforestation today can be echoed in the situation with the overarching issue of land degradation as a whole. The origins of land degradation stem from human intervention and industrialization of agricultural practices which have been exasperated over time. Causes of land degradation such as overgrazing and overcultivation were introduced with the industrialization of agriculture and led to negative effects on the environment that encompasses it. Both practices cause poor soil health and expose the land to erosion due to the constant depletion of ground resources and protective measures. While both issues require extensive research and planning to solve, some solutions can be seen as previously effective and comprehensive.

To better understand how the challenges that both issues present, it's important to recognize the effects shown on dealing with the issues from a magnified perspective. Major efforts to stop deforestation through legislation and resolutions didn't begin in the United Nations until 2005 when the proposition of REDD+ was brought forward in large attempts at tackling the issue of deforestation (UCSUSA). Before this plan, all efforts at building a sustainable environment through the mitigation and reduction of net deforestation had been carried out on the national and mostly local levels. The majority of organizations fighting for change were nonprofits or community-based organizations that often received little government subsidization. This posed an issue as often smaller groups didn't have the ability to incentivize or control industrial forms of deforestation, especially in endangered ecosystems. However, with the establishment of the REDD+ program, governments had a support system that provided some incentive to manage forest operations and reduce greenhouse gas emissions. REDD+ offers an extensive framework that is used most significantly by developing countries that often lack funding and cohesive planning to tackle such a large issue. The problem that comes to deforestation within developing countries, is the fact that it just simply isn't high enough on the priority list for funding and efforts. For the past 20 years, national governments and agencies have become so preoccupied with feeding the populations of third-world countries, that the

funding for environmental concern is disregarded. For example, “95% of all aid agency agricultural investment has been channeled into projects that have, as their basic objective, short-term food production” (Spears 313). This results in a large part of developing countries being stuck in a cycle of immediate relief and lacking the resources for long-term sustainability and improvement, especially in agriculture and environmental safety. Such a cycle is detrimental to the suffering ecosystems as deforestation continues at alarming rates and the wear on the land causes much greater degradation in developing countries that can be combated with the dwindling resources available. The overarching issue regarding the solutions to deforestation and land degradation is the fact that they often don’t take into account the economic situation of the countries involved as well as the dependence on the businesses and practices that cause such issues in the first place.

While past solutions have fallen short in their flexibility and pervasivity to developing countries, developing solutions seem promising in their widespread effect—holding inclusivity as one of their top priorities. As of 2017, the first-ever UN Strategic Plan for Forests was forged. According to the UN Department of Economic and Social Affairs, this plan is supposed to be effective until 2030, hoping to make significant changes to forests for even longer. The plan was originally adopted by the UN Economic and Social Council to only be taken on a week later by the UN General Assembly on April 27, 2017 (un.org). The plan collectively includes three central resolutions from the General Assembly, ECOSOC, and the UN Forum on Forests. All three resolutions recognize the adoption of the plan that was proposed in April 2017 and show the uniform support of the United Nations in allocating resources and money to combat both deforestation and land degradation. Seeing that this plan aims to stretch over 13 years, the benefits being seen so far are not complete and the UN stresses that the plan is doing more to reach the remaining of the six goals that were initially set upon the plan’s forging. Regarding individual governmental concerns, the legislation passed in the United States serves as a good symbol of work being done in other developed countries to combat the issue of deforestation globally as well as aid developing countries throughout the process. Specific to the United States and other developed countries, illegal wood products are a large concern as trade with larger economies is harder to keep in check. Therefore, a notable number of illegal wood products are involved with US trade specifically, which leads to the encouragement of illegal foresting practices and a disregard for the environmental impact. Due to this, the United States government has passed a considerable amount of legislation including the Endangered Species Act, the Wilderness Act, the Lacey Act, and the Roadless Rule to prevent such illegal

substances from entering the U.S. through trade and further disincentivizing malpractice in deforestation (Greenpeace).

Establishing sustainable alternatives to agricultural practices to combat overgrazing and over-cultivation

One of the largest contributors to land degradation as a whole is the practice of overgrazing and over-cultivation, both of which fall under the overconsumption of goods and malpractice in agriculture. Especially in developing countries and economic powerhouses, these harmful practices are common and often barely regulated leading to severe consequences for the environment. Despite having solutions to provide alternatives, governments fail to implement them due to a lack of priority and fear of negative economic consequences. The United Nations has previously applied resolutions and other forms of legislation to further encourage member states to reduce the depletion of natural resources and agricultural abuse but has come up short countless times. Although some progress is being made, the majority of solutions apply to nations on a case-by-case basis due to different economic situations and the variety of natural resources that are being taken advantage of. The UN continues to create programs to combat the issue but still requires a cohesive solution to provide.

Ensuring collaborative and widespread efforts in combatting deforestation between nations

The largest reason that solutions to deforestation tend to lack effectiveness is the lack of collectivity and pervasiveness. According to the New York Declaration on Forests (NYDF), global deforestation rates have increased in the past five years, despite being pledged to be halved by 2020. Despite these false hopes and ambitious promises, companies and governments are finding it increasingly lucrative to clear out forests rather than allocate money and resources to maintain a sustainable practice and maintain forest preservation. While some experts believe the UN deadline for ending deforestation by 2030 can still be met, others are starting to think that it's already too late. Almost all scientists and NYDF members can agree, however, that if serious changes are implemented and large amounts of deforestation continue past 2030, it will be too late to make a strong enough impact on climate change. The UN requires a solution that reaches out and encourages nations to become involved in the battle against deforestation. Because the majority of previous solutions have been isolated and underwhelming, a solution that carries global cohesion is imperative.

Major Parties Involved

UN and International Involvement (Relevant Resolutions and Commissions)

- Report of the Secretary-General on Linkages between forests and the internationally agreed development goals, including those contained in the Millennium Declaration, 23 March 2005 **(E/CN.18/2005/7)**
- Report of the Secretary General on Forests and Economic Development, 29 January 2013 **(E/CN.18/2013/4)**
- Report of the Special Session of the UN Forum on Forests, 8 February 2017 **(E/CN.18/SS/2017/2)**
- General Assembly Resolution: United Nations Strategic Plan for Forest, 1 May 2017 **(A/RES/71/285)**
- ECOSOC Resolution: United Nations Strategic Plan for Forests and quadrennial programme of work of the United Nations Forum on Forests, 7 July 2017 **(E/RES/2017/4)**
- Assessment of progress made on the implementation of the U.N. non-legally binding instrument on all types of forests and towards the achievement of the four global objectives on forests, 15 November 2010 **(E/CN.18/2011/2)**
- Means of implementation for sustainable forest management, 13 February 2020 **(E/CN.18/2020/5)**
- Technical discussions on the implementation of the United Nations strategic plan for forests 2017–2030, 14 February 2023 **(E/CN.18/2023/2)**

The United States of America (U.S.)

The United States of America is one of the leading economic powerhouses in the United Nations, making headway in taking serious action to combat deforestation and illegal practices. Due to the New York Declaration on Forest (NYDF), the United States has put forth large amounts of funding and resources to reach goals that have been set nationally and globally. The US is also home to one of the largest trading economies, resulting in large amounts of illegal wood products and practices being imported and exported throughout the nation. As a result, the United States has made a great effort to pass large amounts of legislation to combat and prevent such illegal trade to further promote proper practices on forests and restrict the mobility of illegal organizations and companies from contributing to unjust deforestation. Because of the

large influence of the United Nations, monetary and resource support to other nations battling deforestation has been a staple of US aid.

Brazil

Brazil has been one of the major contributors to combating deforestation but lacked international recognition. The UN proposed program REDD+ had its largest impact in both Brazil and Vietnam. Brazil's initial goal was to reduce deforestation rates by 80 percent by 2020, which was proposed in the year of 2005. Brazil met this goal by 2010 which was effectively over 10 years ahead of schedule, while a majority of nations across the world have fallen short of all similar goals and ambitious propositions. According to the UCSUSA, Brazil's area of deforestation dropped 67 percent from 19,508 square kilometers to just 6,451 km². Despite having such success, Brazil is not easing up on its initiative to combat deforestation and degradation. Instead, new initiatives such as the PPCDAM are still being produced and implemented, demonstrating Brazil's commitment to positive change.

United Nations Environment Programme (UNEP)

The United Nations Environment Programme has had a significant impact on the war against deforestation and land degradation within the UN. Overseeing all environmental concerns within the United Nations, the UNEP has played a major role and acted as a first responder to the reality of deforestation and its consequences such as climate change and ecosystem degradation. Not only has the UNEP effectively admonished perpetrators of global environmental laws, but has also planned and executed numerous pervasive solutions to land degradation as a whole, significantly reducing severe climate consequences. Despite all the efforts made by the UNEP, it's clear that greater efforts are needed and the issue of deforestation and land degradation as a whole is too large for one programme or organization to tackle alone. Despite all the resolutions and treaties passed by the programme, there still proves to be a majority of goals that haven't been met by their proposed deadline and a residual alarming rate of net deforestation.

Timeline of Events

Date	Description of Event
June, 3 rd , 1992	The declaration of the Rio Summit, the fight against deforestation has been discussed at international meetings to

	create a global framework for action and maintain the essential role of our forests.
October, 29 th , 2010	The World Conference on Biodiversity in Nagoya, the objectives of Aichi are adopted by the Parties to the CBD with the aim, inter alia, of “reduce the rate of loss of natural habitats, including forests, by at least half, or where possible to close to zero;” and “a biodiversity conservation target for 17% of land and inland waters and 10% of marine and coastal areas“. The creation of IPBES, the “IPCC Biodiversity” is announced.
2014	The New York Declaration on Forests sets the goal of “reducing natural forest loss by half by 2020, with efforts to eliminate it by 2030”.
2015	UN included in Sustainable Development Goal 15 (SDG15) the theme of terrestrial life: ” Preserve and restore terrestrial ecosystems, ensuring their sustainable use, sustainably manage forests, combat desertification, halt and reverse land degradation and halt the loss of biodiversity.
December, 12 th , 2015	The Paris Agreement, which sets the objective of keeping global warming “well below 2°C”, recognizes “the importance of conserving and, where appropriate, strengthening sinks and reservoirs of greenhouse gases”. Among these sinks and reservoirs of greenhouse gases, forests store a significant proportion of carbon. During COP21, seven countries signed the Amsterdam Declarations, which aim to eliminate deforestation in agricultural supply chains and support private sector efforts to support sustainable palm oil supplies by 2020.
2018	The report of the IPCC (Intergovernmental Panel on Climate Change) warns of the need to preserve carbon sinks, without which it will be impossible to limit global warming to 1.5°C compared to the pre-industrial era.

2019	The IPCC publishes a thematic report on Soils & Climate Change. The report confirms the significant impact of deforestation and agriculture on greenhouse gases (1/4 of the land is degraded by human activity). In the face of the current climate crisis, IPCC scientists are highlighting two major solutions: protecting and restoring forests, accompanied by a radical transformation of the global food system.
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Previous Attempts to Resolve the Issue

At the 2014 United Nations Climate Summit, the New York Declaration on Forests (NYDF) proposed a plan to halt all deforestation by the year 2030. This ambitious proposition was backed up by 10 subgoals which acted as checkpoints along the 16 years of the project. According to the UNDP (United Nations Development Programme), the proposal from the NYDF aimed to do more than just target deforestation, but rather tackle the large multifaceted issue that stemmed from the result of deforestation. The proposition was to not only halt all deforestation by 2030, but also restore 350 million hectares of “degraded landscape and forestlands,” as well as “improve governance and the rights of forest communities, increase financial flows to forests, and reduce carbon emissions from deforestation and forest degradation” (UNDP). Such an ambitious goal seemed achievable when the project first launched in 2014 but soon proved to be problematic as a lack of progress was seen by 2020. Therefore, as of 2024 reports, the world is not on track to meet any of the goals originally set out by the NYDF. As stated by the UNDP, as of 2021, deforestation is still occurring at a rate of 10 million hectares a year. What seemed like a straightforward and cohesive plan, soon became overwhelming to individualized organizations such as the NYDF and other partnering establishments. Where the plan fell short was the large number of tasks to be accomplished, rather than just devoting resources and time to stopping a couple of the goals in mind. The wide range of fields that were attempted to be impacted hampered this resolution to the issue and proved to be too multifaceted of a task to handle.

Possible Solutions

Establishing sustainable alternatives to agricultural practices to combat overgrazing and over-cultivation

One of the largest issues when dealing with alternatives to agricultural practices is the concern of funding. As previously mentioned, the majority of nations struggling with the malpractice of agriculture and poor environmental awareness are classified as developing countries. This is partly because the priority of feeding civilian populations takes precedence over the environmental impacts of the methods used. A potential solution to this issue involves the use of targeted funding programs for developing countries struggling with combating such malpractice. Because sustainable agriculture often faces barriers to money and resources, targeted funding from developed nations could have a positive impact on nations unable to make changes themselves, but that are still looking for a viable solution.

Ensuring collaborative and widespread efforts in combatting deforestation between nations

Warranting a collaborative global approach to combating deforestation and degradation is a large issue facing the United Nations, mainly due to the large variety of priorities and agendas owned by each country. A possible way to increase the participation of nations involved could be to establish individual nation goals along with the global goals that have been previously proposed. The majority of plans that nations propose individually are often for political status rather than the true goal and incentive. By holding participating nations accountable to their individual goals proposed by the UN, participating countries will feel more incentive and public pressure to meet said goals or allocate more resources and time to making significantly more progress. The creation of UN and territorial task forces can also be used to incentivize other countries that were previously uninvolved to join collective efforts in combating both deforestation and land degradation.

Other possible solutions to ensuring a collaborative effort between nations could include promoting multi-stakeholder partnerships and providing capacity building and technical support. Regarding partnerships, the UN encouragement of collaboration between local organizations and governments promotes a decentralization of the issue and allows for a more pervasive solution that would reach heavily affected areas that are often overlooked. Recognizing that the majority of nations struggling with deforestation are developing countries, providing technical support and training on proper forestation practices could significantly reduce the net deforestation that is a result of unnecessary practices and misinformation. Supporting such

countries with funding and technical support for capacity building could also remove the need for deforestation in nations with developing economies.

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