

2023

**UNEP**

Background Guide

**INMUN**

# Letter From The Director



Greetings Delegates,

I am delighted to welcome you all to the United Nations Environment Programme committee of INMUN 2023. It is with great enthusiasm that I anticipate facilitating and fruitful debate throughout the course of committee. It is my aim to run committee in a manner where each delegate gets the opportunity to participate and collaborate with others.

Our agenda, "Addressing the problems that arise from land degradation and deforestation," presents a significant challenge that requires our collective attention. As delegates, your task is to delve into these issues, explore solutions, and develop effective strategies that can make a tangible impact.

While this background guide offers a starting point, it is essential to understand that it is not exhaustive. I encourage you to conduct your own research, thoroughly examine your assigned country's policies and position, and familiarize yourselves with the agenda's history. This preparation will empower you to engage in thoughtful and productive debate and negotiations throughout the course of our sessions.

As the Executive Board, we are committed to ensuring fair debate and supporting your efforts throughout the conference. The aim is to foster a productive environment where every delegate actively participates, upholding the principles of mutual respect and active listening. We eagerly anticipate meeting each of you and listening to the innovative ideas you bring to the table. Together, we can address the agenda at hand and work towards a more sustainable world.

Wishing you all the very best of luck and may the odds be ever in your favour!

Best regards,

UNEP Executive Board ([unep@inventureacademy.com](mailto:unep@inventureacademy.com))



## What is the UNEP?

The United Nations Environment Programme (UNEP) is a vital organ of the United Nations (UN) system dedicated to promoting sustainable development and addressing global environmental challenges. Established in 1972, the UNEP has played a crucial role in raising awareness about environmental issues, catalyzing international cooperation, and formulating policies to safeguard the planet for future generations.

The primary objective of the UNEP is to provide leadership and guidance on environmental matters within the UN system. Its mandate encompasses a wide range of issues, including climate change, biodiversity, ecosystem management, sustainable consumption and production, and the overall protection of the Earth's natural resources. UNEP seeks to achieve these goals through collaboration with governments, civil society organizations, and other stakeholders.

One of the key bodies within the UNEP is the UNEP Committee. Comprising representatives from UN member states, the committee serves as a forum for discussion, decision-making, and action on pressing environmental concerns. It provides a platform for nations to exchange knowledge, share experiences, and develop innovative strategies to tackle global environmental challenges.

The UNEP Committee engages in various activities to fulfill its mission. It regularly convenes meetings and conferences where member states discuss and negotiate environmental agreements, resolutions, and action plans. The committee also oversees the implementation of these agreements, monitors progress, and facilitates cooperation among nations to achieve their environmental objectives.

The UNEP Committee places great emphasis on the principle of inclusiveness, recognizing that sustainable development requires the involvement and commitment of all nations. It encourages collaboration between developed and developing countries, promoting technology transfer, capacity building, and financial assistance to help countries meet their environmental goals.

Furthermore, the UNEP Committee significantly raises awareness and mobilizes resources for environmental conservation and sustainability initiatives. It works closely with other international organizations, NGOs, and the private sector to foster partnerships and leverage expertise to address environmental challenges effectively.

In summary, the UNEP Committee is a crucial component of the United Nations Environment Programme, providing a platform for international collaboration and decision-making on environmental issues. Through its inclusive approach and commitment to sustainable development, the committee plays a vital role in shaping global environmental policies and promoting the responsible stewardship of our planet.

## Addressing the Problems that arise from Land Degradation and Deforestation

Esteemed Delegates,

It is with great honor and a shared commitment to building a morally just world that we convene today under the auspices of the United Nations Environment Programme (UNEP). As representatives of nations and stewards of our planet, we gather here to address one of the most pressing global challenges of our time – the problems arising from land degradation and deforestation.

The Earth, our home, provides us with abundant resources and sustains all life in its diverse landscapes. However, the indiscriminate exploitation and degradation of our land and forests threaten this delicate balance, endangering ecosystems, biodiversity, and the well-being of present and future generations. Our collective responsibility is to address these challenges and work towards sustainable and ethical practices that safeguard the health and resilience of our planet. Land degradation, characterized by the deterioration of the land's quality and productivity, has far-reaching consequences.

# Introduction



It disrupts agricultural systems, compromises food security, exacerbates poverty, and contributes to the loss of livelihoods for millions of people. Concurrently, deforestation, the rapid destruction of forests, not only disrupts vital habitats for countless species but also intensifies climate change by releasing vast amounts of carbon dioxide into the atmosphere.

The agenda before us demands our urgent attention and decisive action. Therefore, we must focus on developing a variety of comprehensive strategies to combat land degradation and deforestation, ensuring that we try our very best to preserve and restore our precious natural resources. We catalyze the creation of a harmonious coexistence between human activities and the environment, in order to live in the morally just world we deserve.

During our deliberations, we encourage you, esteemed delegates, to engage in thoughtful discussions, propose innovative solutions, and forge alliances that transcend national boundaries. Together, we must develop policies that promote sustainable land management practices, foster reforestation and afforestation efforts, and prioritize the conservation of biodiversity hotspots. Furthermore, we must address the underlying drivers of land degradation and deforestation, such as unsustainable agriculture, illegal logging, and land-use conflicts, through effective governance and international cooperation.

Let us not forget the principles that guide our work within the United Nations: justice, equity, and inclusivity. As we embark on this critical mission, we must ensure that our solutions and interventions benefit all nations, particularly those disproportionately affected by land degradation and deforestation. It is imperative that we recognize the interdependence between environmental sustainability and social justice, striving for an equitable distribution of resources and opportunities.

In the spirit of collaboration, let us embark on this journey together. As we explore the multifaceted dimensions of this agenda, let us seek common ground, bridge differences, and prioritize the needs of future generations. Together, we can address the problems arising from land degradation and deforestation, forging a path toward a morally just world that respects and protects our environment.

May this conference be a stepping stone towards transformative change, and may our efforts today lay the foundation for a sustainable and prosperous future for all.



1. **United Nations Framework Convention on Climate Change (UNFCCC):** The UNFCCC is an international environmental treaty aimed at addressing climate change, including the impacts of deforestation and land degradation.
2. **Convention on Biological Diversity (CBD):** The CBD is a global agreement that focuses on the conservation of biodiversity, sustainable use of natural resources, and equitable sharing of benefits derived from genetic resources. It is relevant to protecting ecosystems affected by land degradation and deforestation.
3. **United Nations Convention to Combat Desertification (UNCCD):** The UNCCD is an international treaty that addresses desertification, land degradation, and drought. It aims to improve land management practices and promote sustainable development in affected areas.
4. **Paris Agreement:** The Paris Agreement is an international treaty under the UNFCCC that aims to combat climate change and limit global warming. It encourages efforts to reduce greenhouse gas emissions, including those associated with deforestation and land degradation.
5. **Forest Principles:** The Forest Principles, adopted during the United Nations Conference on Environment and Development in 1992, provide guidelines for the sustainable management, conservation, and development of forests. They highlight the importance of addressing deforestation and promoting reforestation efforts.
6. **Ramsar Convention on Wetlands:** The Ramsar Convention is an intergovernmental treaty that promotes the conservation and sustainable use of wetlands. Wetlands play a crucial role in addressing land degradation and preserving biodiversity.
7. **United Nations Sustainable Development Goals (SDGs), particularly Goal 15: Life on Land,** encompass targets related to the protection, restoration, and sustainable use of ecosystems affected by land degradation and deforestation.
8. **International Tropical Timber Agreement (ITTA):** The ITTA is an international agreement aimed at promoting the conservation and sustainable management of tropical forests, which are often threatened by deforestation.

# Case Study 1 - Niger



Niger, a landlocked country in West Africa, is characterized by arid and semi-arid regions. It experiences multiple forms of land degradation, including desertification, soil erosion, deforestation, and loss of biodiversity. These factors have led to the deterioration of agricultural lands, reduced water availability, and increased vulnerability to climate change.

## Problems faced

### *Agricultural Challenges:*

Land degradation hampers agricultural productivity, leading to food insecurity and poverty among rural communities. It diminishes soil fertility, exacerbates water scarcity, and restricts the availability of arable land.

### *Water Resources:*

The degradation of watersheds and rivers reduces water quality and availability, affecting both agriculture and human health. This scarcity forces communities to travel long distances for water, leading to increased conflicts and economic burdens.

### *Biodiversity Loss:*

Land degradation contributes to the loss of biodiversity and habitat destruction, threatening unique ecosystems and the survival of numerous plant and animal species.

### *Population pressure:*

Rapid population growth further hinders Niger's ability to combat land degradation effectively. The constraints on financial and technological resources exacerbate this challenge.

### *Climate Change Vulnerability:*

Niger is highly vulnerable to climate change, as rising temperatures, prolonged droughts, and erratic rainfall patterns worsen the effects of land degradation.

## Measures being taken to Combat Land Degradation

### *Sustainable Land Management:*

Niger has implemented sustainable land management practices, like agroforestry, terracing, and soil conservation, to rehabilitate degraded lands and improve agricultural productivity.

### *Reforestation and Afforestation:*

The government of Niger has launched extensive tree-planting initiatives, such as the Great Green Wall project, which aims to plant millions of trees to combat desertification.

### *Community-Based Initiatives:*

Niger promotes community participation in natural resource management through local committees, providing training, and supporting sustainable income-generating activities.

Strengthening policy frameworks, promoting research and innovation, and adapting to strengthen its resilience with water management and smart agriculture are some other practices that Niger plans on implementing.

The case study highlights the significant extent of land degradation in Niger, its associated issues, and the impacts on the country's socio-economic development. However, Niger has taken proactive measures to combat land degradation through sustainable land management practices, reforestation initiatives, and community engagement. The long-term plan emphasizes strengthening policy frameworks, promoting research and innovation, and enhancing climate change adaptation strategies. By implementing these measures, Niger seeks to mitigate land degradation and ensure a sustainable and prosperous future for its people.

# Case Study 2 - Indonesia



Indonesia, a country renowned for its rich biodiversity and vast rainforests, faces significant challenges due to deforestation. The causes, effects, impacts, and solutions of deforestation in Indonesia present a complex web of interconnected issues with far-reaching consequences for both the environment and society. This case study aims to shed light on the specific context of deforestation in Indonesia and explore potential solutions to address this pressing problem.

## 1. Causes of Deforestation in Indonesia:

### a. Agriculture Expansion:

The expansion of commercial agriculture, particularly for commodities like palm oil, timber, and pulp and paper, is a major driver of deforestation in Indonesia. Large-scale plantations often replace natural forests, resulting in widespread land clearance.

### b. Illegal Logging:

Rampant illegal logging activities, driven by the demand for valuable timber, contribute significantly to deforestation. Weak law enforcement and corruption exacerbate the problem, making it challenging to control.

### c. Mining and Infrastructure Development:

The extraction of minerals and the construction of infrastructure projects such as roads and dams often lead to forest clearance, fragmenting ecosystems and accelerating deforestation.

## 2. Effects of Deforestation in Indonesia:

### a. Biodiversity Loss:

Indonesia is one of the world's most biodiverse countries, home to countless unique species. Deforestation destroys habitats, displaces wildlife, and increases species extinction risk.

### b. Climate Change:

The loss of forests contributes to greenhouse gas emissions and exacerbates climate change. Forests act as carbon sinks, absorbing and storing significant amounts of carbon dioxide. Deforestation releases this stored carbon, intensifying global warming.

### c. Soil Erosion and Land Degradation:

Without the protective cover of forests, soil erosion increases, leading to decreased fertility and agricultural productivity. Moreover, deforestation disrupts the water cycle, causing water scarcity and affecting local communities.

### d. Fires and Haze:

Deforestation in Indonesia is often accompanied by using fire to clear land, resulting in widespread forest fires. These fires release massive amounts of carbon dioxide, exacerbate air pollution, and contribute to the annual transboundary haze problem.





### 3. Solutions to combat Deforestation by Indonesia:

#### a. Forest Moratorium:

Indonesia implemented a two-year moratorium on new permits for primary natural forests and peatlands in 2011. This policy aimed to reduce deforestation by limiting the conversion of these critical ecosystems for agricultural purposes. Forest Conservation programs like the Heart of Borneo Initiative, also are being implemented to protect and sustainably manage a majority of the island's forests. Social forestry programs that empower and allow local communities also to do the same have started being implemented. Degraded peatlands are also being restored since they are highly inflammable and cause carbon emissions.

#### b. Sustainable Palm Oil Certification:

Indonesia has made progress in promoting sustainable palm oil production. The Indonesian Sustainable Palm Oil (ISPO) certification scheme sets standards for sustainable palm oil practices, including environmental protection, social welfare, and legal compliance.

#### c. Collaboration and International Support:

Indonesia has engaged in international collaborations and received support from organizations like the United Nations and non-governmental organizations to address deforestation, in the form of technical assistance, capacity building, and financial support for sustainable initiatives.

It's important to note that while these solutions are being implemented, the challenges of deforestation in Indonesia are multifaceted, and ongoing efforts are needed to achieve long-term success.

Deforestation in Indonesia presents a complex set of challenges, with causes and effects intertwined on multiple levels. Addressing this issue required a comprehensive approach, for which the efforts are still ongoing. We firmly hope to see other countries follow in these footsteps and make significant strides in protecting the rich biodiversity, mitigating climate change, and securing a sustainable and prosperous future for the people of our world.



# Causes and Effects of Land Degradation and Deforestation



## Land Degradation

### *Causes*

Land degradation is a complex and multifaceted issue that arises from a combination of natural and human-induced factors. Several key causes contribute to this problem, each with its own set of implications for the environment, society, and economies.

**Deforestation and Habitat Loss:** Deforestation involves the clearing of forests for agriculture, urbanization, and logging. This practice disrupts ecosystems, removes vegetation cover, and exposes soil to erosion. Without trees and plants to stabilize the soil, heavy rainfall and wind can erode the topsoil, leading to decreased soil fertility and loss of arable land. Moreover, deforestation disrupts the habitat of various species, impacting biodiversity and ecological balance. As land is cleared for agriculture or urban expansion, natural habitats shrink, fragment, or disappear, affecting local ecosystems' ability to support various plant and animal species.

**Soil Erosion:** Soil erosion is the process by which topsoil is removed from the land's surface by wind, water, or human activities like construction and agricultural practices. Unsustainable farming practices such as over-tilling, monocropping, and inadequate soil conservation measures exacerbate erosion. When topsoil is lost, the land's capacity to support vegetation and agriculture diminishes, as it carries essential nutrients and organic matter necessary for plant growth. Erosion also contributes to sedimentation in water bodies, leading to water quality deterioration, reduced aquatic biodiversity, and increased risk of flooding as water courses become clogged with sediment.

**Overgrazing:** Overgrazing occurs when the vegetation cover is grazed excessively by livestock, often beyond the land's capacity to regenerate. This leads to soil compaction, reduction in plant diversity, and soil degradation. Overgrazed areas are vulnerable to erosion, and the trampling of soil by livestock further contributes to soil compaction and reduced water infiltration. In arid and semi-arid regions, overgrazing can cause desertification – the transformation of once productive land into desert-like conditions due to prolonged degradation.

**Unsustainable Agricultural Practices:** Intensive agricultural practices, including excessive use of synthetic fertilizers, pesticides, and improper irrigation methods, can degrade the land. The overuse of chemical inputs can lead to soil salinization, where salt accumulates on the soil surface, rendering it less fertile. Inefficient irrigation practices can cause waterlogging, further exacerbating soil salinity. Additionally, the excessive use of chemical inputs can harm soil biodiversity, impacting its resilience and long-term productivity.

**Mining Activities:** Mining operations, whether for coal, minerals, or metals, often involve massive excavation and disturbance of land. This leads to the destruction of ecosystems, alteration of soil structure, and release of pollutants into the environment. Mining can result in land subsidence, soil contamination, and altered hydrological patterns, disrupting the natural balance of the affected area.

**Urbanization and Infrastructure Development:** Rapid urbanization and infrastructure development lead to the conversion of natural land into built environments. This process involves the removal of vegetation cover and the sealing of the soil with impervious surfaces like concrete and asphalt. As a result, water cannot infiltrate the soil, leading to increased surface runoff and reduced groundwater recharge. Urbanization also creates heat islands and alters local microclimates, impacting soil quality and vegetation growth.

Addressing land degradation requires a comprehensive approach that considers both natural and human factors. Sustainable land management practices, afforestation, soil conservation, and responsible agricultural and development strategies are essential to mitigate the adverse effects of these causes and promote long-term land health.



# Causes and Effects of Land Degradation and Deforestation

## Land Deforestation

### *Causes*

Deforestation, the widespread removal of forests for various purposes, is driven by a combination of complex factors ranging from economic interests to societal needs. Understanding these causes is crucial for devising effective strategies to mitigate deforestation and promote sustainable land use.

**Agricultural Expansion:** One of the primary drivers of deforestation is the expansion of agricultural activities, particularly for commercial crops like soy, palm oil, cattle ranching, and cash crops. As global populations grow, there is an increasing demand for food and agricultural products. To meet this demand, forests are often cleared to make way for large-scale farming operations. Clearing land for agriculture involves the use of slash-and-burn techniques or heavy machinery, both of which contribute to forest destruction. Profit-driven industries exploit forests for short-term economic gains, but this often comes at the cost of long-term ecological stability.

**Logging and Timber Trade:** The demand for timber and wood products, driven by industries and consumer preferences, contributes to deforestation. Logging can be either legal or illegal, with illegal logging often causing more significant ecological damage due to its lack of oversight and sustainable management. Clear-cutting for timber extraction disrupts forest ecosystems and removes canopy cover, making the remaining forest more vulnerable to degradation and fragmentation. Unsustainable logging practices also impair the ability of forests to sequester carbon and provide habitat for diverse species.

**Infrastructure Development:** Infrastructure projects, including roads, highways, dams, and urban expansion, can lead to deforestation. These projects often require substantial land clearing and alteration of landscapes. While infrastructure development can bring economic benefits, it can also open up remote and ecologically sensitive areas to exploitation, leading to habitat loss and fragmentation. Roads, in particular, provide access to previously inaccessible forest areas, facilitating the entry of loggers, miners, and settlers.

**Mining and Extraction:** Mining for valuable minerals, metals, and fossil fuels often requires clearing large areas of forests. Extraction activities can lead to deforestation, habitat destruction, soil contamination, and water pollution. As demand for these resources persists, forests are vulnerable to being sacrificed for short-term resource extraction, despite the potential long-term environmental consequences.

**Infrastructure Development:** Infrastructure projects, including roads, highways, dams, and urban expansion, can lead to deforestation. These projects often require substantial land clearing and alteration of landscapes. While infrastructure development can bring economic benefits, it can also open up remote and ecologically sensitive areas to exploitation, leading to habitat loss and fragmentation. Roads, in particular, provide access to previously inaccessible forest areas, facilitating the entry of loggers, miners, and settlers.

**Fire and Climate Factors:** In some cases, natural and human-induced fires contribute to deforestation. Forests that have been degraded through other means, such as selective logging or fragmentation, become more susceptible to fires. Additionally, intentionally set fires are sometimes used to clear land for agriculture or other purposes. Climate-related factors, such as prolonged droughts, can also increase the risk of forest fires, leading to deforestation and ecological disruption.

**Population Pressure and Land Ownership:** In regions with growing populations and limited access to land tenure systems, people may resort to clearing forests to secure land for subsistence farming or settlement. Often, these communities lack alternative livelihood options and may not have the means to invest in sustainable land management practices. As a result, forests are cleared to meet immediate survival needs.

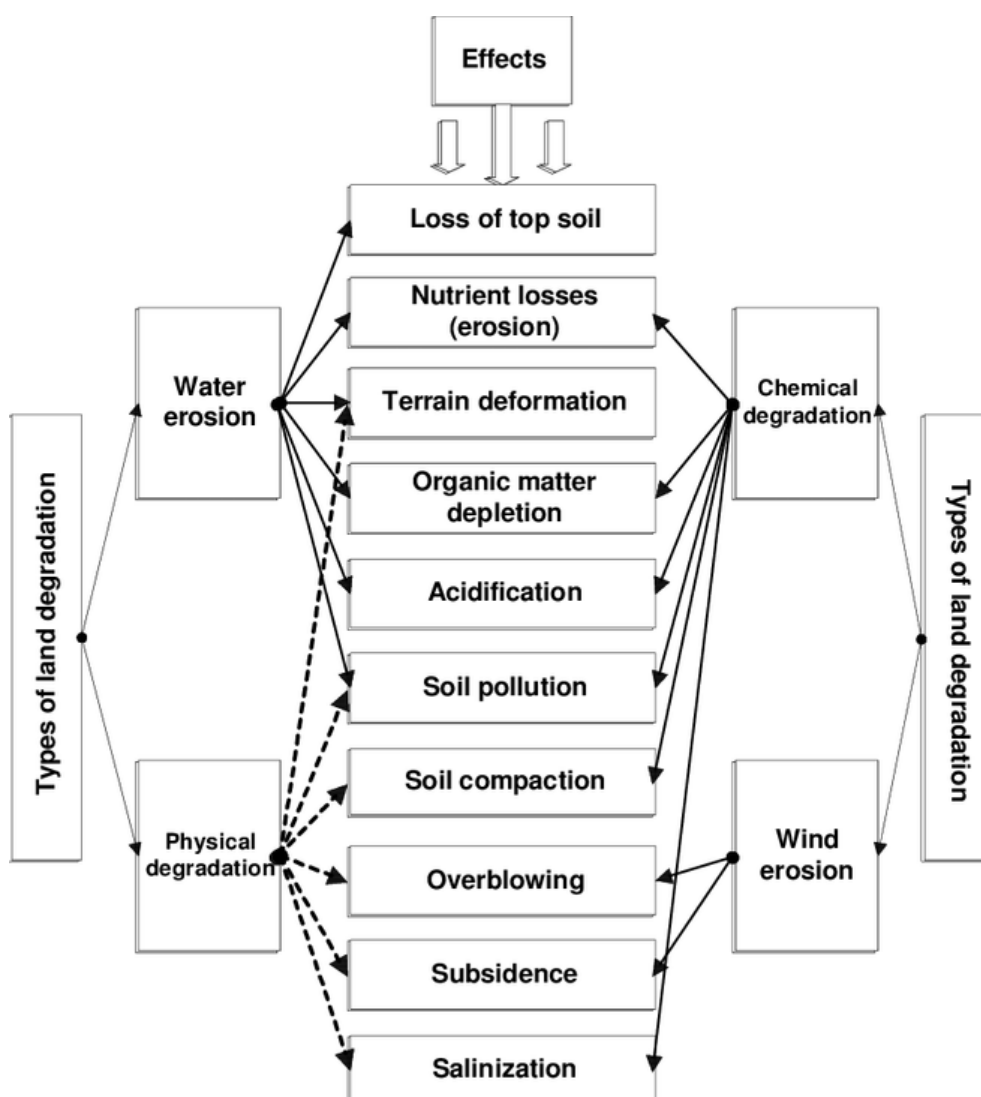
Combating deforestation requires a multi-pronged approach that addresses the economic, social, and environmental factors driving forest loss. Strategies should include promoting sustainable agriculture, enforcing responsible logging practices, supporting indigenous and local communities' rights, and fostering international cooperation to conserve critical forested areas.



# Causes and Effects of Land Degradation and Deforestation

## Effects of Land Degradation and Deforestation

1. **Biodiversity Loss:** Habitats disappear, endangering countless species and disrupting delicate ecosystems.
2. **Soil Erosion and Agricultural setbacks:** Deforestation washes soil away, leading to reduced agricultural productivity.
3. **Water Scarcity:** Depleted soil's ability to retain water intensifies drought impacts.
4. **Carbon Emissions:** Deforestation not only releases carbon but also disrupts the planet's carbon balance.
5. **Air and Water Pollution:** Reduced trees lead to higher air pollution, while soil runoff carries pollutants into water sources.
6. **Climate Impact:** Altered land cover affects local and global climates, influencing weather patterns.
7. **Loss of Medicinal Resources:** Many medicinal plants are lost due to habitat destruction, affecting traditional and modern medicine.
8. **Disruption of Hydrological Cycle:** Reduced forests can disrupt rainfall patterns and water availability, impacting agriculture and ecosystems.
9. **Increased Vulnerability to Natural Disasters:** Deforested areas are more susceptible to landslides, floods, and other disasters.
10. **Negative Socio-Economic Impacts:** Reduced agricultural yields and disrupted ecosystems lead to economic hardships for local communities.





## Costa Rica's Payment for Ecosystem Services (PES) Program:

A program that financially incentivized landowners to preserve forests and engage in sustainable land management. The government pays landowners for the ecosystem services their forests provide, such as carbon sequestration, watershed protection, and biodiversity conservation.

## China's Conversion of Cropland to Forest and Grassland Program:

A large-scale reforestation and afforestation program to combat soil erosion and land degradation. The program involves converting marginal cropland into forests and grasslands, contributing to soil conservation and ecosystem restoration.

## India's Joint Forest Management (JFM) Initiative:

A program that involves local communities in the protection and management of forests. Communities are granted certain rights over forest resources and are responsible for preventing illegal logging and promoting reforestation, leading to reduced deforestation and improved forest health.

## Brazil's Action Plan for Prevention and Control of Deforestation (in the Amazon):

A comprehensive plan that includes satellite monitoring, law enforcement, protected area expansion, and support for sustainable livelihoods, leading to a significant reduction in deforestation rates in the Amazon rainforest.

## Ethiopia's Tigray Region Soil and Water Conservation Program:

This large-scale soil and water conservation program involves building terraces, checking dams, and tree planting. This initiative has helped restore degraded lands, reduce erosion, and improve agricultural productivity.

## South Korea's National Greening Program:

A reforestation program that involved massive tree planting efforts, ecological restoration, and sustainable forest management. Resulting in increased forest cover and improved ecosystem services.

## Niger's Great Green Wall Initiative:

By planting a belt of trees and vegetation along the Sahara's southern border, the project aims to restore land, boost agriculture, and prevent desert expansion.

# Points to cover in a Resolution



1. Identifying and analyzing the root causes, impacts, and effects of our agenda:
2. Proposing measures for sustainable land management, keeping in mind soil conservation techniques, sustainable agricultural practices, and responsible land-use planning.
3. Strengthening and creating policies and legal frameworks at national and international levels, around initiatives to increase reforestation and afforestation, practices to manage land and development, and enacting environmental regulations.
4. Financial and technical assistance programs to support developing countries in need of resources to combat land degradation and deforestation.
5. Emphasize the importance of collaboration and partnerships among communities across all sectors, in order to facilitate sharing of knowledge and practices.
6. Highlight the significance of raising awareness and promoting education, to enhance understanding and engagement of people at all levels of society.
7. Call for the establishment of robust monitoring and periodic review mechanisms to track progress, increase transparency and accountability, and identify areas for improvement.

# Resources to refer to for research



- United Nations Environment Programme:  
<https://www.unep.org>
- Food and Agriculture Organization of the United Nations:  
<http://www.fao.org/home/en/>
- Intergovernmental Panel on Climate Change:  
<https://www.ipcc.ch/>
- World Resources Institute:  
<https://www.wri.org/>
- Global Land Outlook:  
<https://knowledge.unccd.int/glo>
- Global Forest Watch:  
<https://www.globalforestwatch.org/>
- World Bank - Land and Poverty:  
<https://www.worldbank.org/en/topic/land>
- United Nations Development Programme:  
<https://www.undp.org/>
- International Union for Conservation of Nature:  
<https://www.iucn.org/>
- Global Environment Facility:  
<https://www.thegef.org/>

These resources will provide valuable information and insights for your research on land degradation and deforestation. On top of these resources, you should also be well-versed with your own country's stances regarding these topics and international policies, in order to portray yourself as a true delegate of your nation.

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