**Forum :** Environmental Commission

**Issue :** Deforestation for Economic Purposes

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**Position :** Deputy Chair

**Introduction**

One third of planet Earth is covered by trees, including 10 enormous living forests such as the Amazon Rainforest and Ecuador’s Cloud Forest. Despite this biodiversity, about 28,000 wildlife species could become extinct in the next quarter of the century due to deforestation. Trees are often cleared in order to produce non-renewable resources such as palm oil and to make way for roads, highways and mining operations. This is especially true in countries such as Indonesia, where palm oil is used in food and beauty products. Indonesia is aiming to double its palm oil production by the end of 2020 despite the environmental impact of this industry. On the other hand, governments around the world are working toward the sustainable use of our forests. For example, in 2002 the Malaysian government decided to take action through a project called Biomass Power Generation and Cogeneration in the Palm Oil Industry (BIOGEN); a sustainable plan aiming to minimize waste and pollution resulting from the country’s palm oil production. Following the lead of nations such as Malaysia, it is the responsibility of UN member states to work together to come to a solution to this pressing matter. This is not only important as a means to preserve the environment but also develop sustainable national and international industries.

**Definition of KeyTerms**

**Deforestation**

The clearance of trees in an area of land, often for the production of non-renewable resources.

**Non-renewable resources**

 Resources which are not replenished with the speed at which they are produced.

**Biodiversity**

The variety of living organisms in the world or in a particular habitat.

**Climate change**

 Global or regional variations in the climate typically due to greenhouse gases.

**Greenhouse gases**

Any gas which traps heat from the sun upon being released into the atmosphere, leading to climate change in the form of increased global temperatures. This process, known as the greenhouse effect, is most commonly seen with carbon dioxide, methane and nitrous oxide.

**Air Pollution**

The adulteration of the air through the release of harmful chemicals or substances, largely in the form of greenhouse gases released as factory emissions.

**Monocultures**

 The practice of cultivating a single crop or species of livestock in a given area.

**Artificial fertilizers**

Chemical compounds that mimic soil's natural minerals and elements to maximize plant growth.

**Pesticides**

 Substances designed to prevent pests, such as insects or weeds, from harming crops and livestock.

**Soil erosion**

The displacement of the top layer of soil, often caused by climate change or excessive agricultural activity.

**Background Information**

**Habitat Destruction**

Human activity has continued to encroach on the environment and disturb its species. Its city states and industrial areas are increasing in number and in development. This has fragmented natural habitats, leaving isolated islands of the natural population. According to the Intergovernmental Science Policy Platform on Biodiversity and Ecosystem Services (IPBES), only one quarter of land areas and one third of oceans remain relatively undamaged by human activity. Furthermore, one million species risk becoming extinct. According to the International Union for Conservation of Nature (IUCN) Red List of Threatened Species, 41% of amphibians, 25% of mammals, 34% of conifers, 13% of birds, 31% of sharks and rays, 33% of reef-building corals, and 27% of crustaceans are threatened with extinction. One major example of this is the current situation in the Amazon Rainforest, which has depleted in size by 17% over the past 50 years. This is largely attributed to cattle ranchers surrounding the Amazon who clear expansive areas of land to accomodate more livestock. This became especially damaging in 2019, where thousands of fires spread throughout the Amazon as farmers wanted to extend land used for meat production.

**Agricultural Intensification**

Agricultural intensification is an increasingly popular form of agriculture whereby agricultural output is maximized in order to meet the unsustainable consumption patterns of the developed world. This is achieved by overcrowding livestock and using excessive amounts of chemical fertilizers, among other unsustainable methods. These agricultural systems rely on monocultures, artificial fertilisers and pesticides. Monocultures are prone to disease, which may spread elsewhere, and pesticides can take out entire insect populations. Livestock farming contributes to more climate emissions than the entire transport sector and is the biggest cause of deforestation. Intensive farming also leads to soil erosion as land is not given as much time to recover. Furthermore, this can affect marine life as chemicals and other pollutants that wash off from farms can seep into bodies of water, causing harmful algal blooms and the collapse of fish stocks.

**Climate Change**

Climate change remains one of the most pressing environmental issues given a rapid increase in the production of greenhouse gases. According to current projections, global temperatures are expected to rise by 3°C by the end of the century. This is largely due to industries such as fossil fuels, biofuel, and animal-based products which rely on unsustainable methods of energy production and agriculture. This has a knock-on effect on affected ecosystems as species forced to migrate due to inhospitable climate alter the biodiversity of the Earth’s habitats. The extinction of keystone species, those which are integral to a specific habitat, is also concerning. For example, as reef-building corals die out, the intricate ecosystems they sustain die out as well.

**Major Countries and Organizations Involved**

**Indonesia**

Indonesia’s rapidly growing economy is largely based on unsustainable and illegal deforestation practices. Specifically, illegal logging, which is a form of deforestation carried out to obtain timber, is widespread, having occurred in 37 out of 41 of its national parks. This costs the government up to $4 billion annually as third-parties disregard the country’s environmental regulations. Entire forests, such as those in Sumatra and Borneo, risk being completely exhausted by 2022. Investigations carried out by organizations such as Transparency International have raised concerns over Indonesia’s allegedly corrupt judiciary and whether their economic interests have superseded their environmental responsibilities.

**Malaysia**

Malaysia’s major role in addressing the issue of deforestation for agricultural purposes is the establishment of the Biomass Power Generation and Cogeneration in the Palm Oil Industry (BIOGEN) project. This project aims to reduce the growth rate of greenhouse gases as well as the fossil fuels fired combustion processes through the recycling of biomass waste. Malaysia’s historic economic development has relied almost entirely on fossil fuels, although the country hopes to transition to a more sustainable economy. Biomass in Malaysia contributes to about 14% of the country’s energy production, highlighting how energy efficiency can be achieved to reduce the resources required from logging and other forms of deforestation.

**Ethiopia**

The main explanation for deforestation within the country of Ethiopia can be attributed to a growing population and subsequent higher demand for agriculture, livestock and fuelwood. Other reasons include a lack of education and inactivity from the government, although this government has taken some steps to tackle deforestation. Organizations such as Farm Africa are working with the federal and native governments to form a system of forest management. Ethiopia, the third largest country in Africa by population, has repeatedly faced famine due to droughts and a depletion of natural resources. Deforestation has further worsened the country’s droughts and, by extension, has led to increased soil erosion. Ethiopia has lost 98% of its forested regions within the last 50 years. At the start of the 20th century, around 420,000 km² or 35% of Ethiopia's land was covered with forests. Recent reports indicate that this has declined to 14.2% at best and 11.9% at worst.

**Brazil**

Increases in the prices of Brazil’s commodities may increase the rate of deforestation as farmers seek to earn higher profits. Recent developments of soybean plantations have led to the displacement of beef ranches and farms of other crops, which, in turn, move farther into the forest. Certain areas like the Atlantic Rainforest are diminished to merely 7% of their original size. Few national parks or reserves are efficiently enforced. 80% of logging within the Amazon is prohibited. In 2008, Brazil's government announced a record rate of deforestation within the Amazon. Deforestation could wipe out or severely damage nearly 60% of the Amazon rainforest by 2030, in line with a 2007 report from the World Wildlife Fund. Brazil’s efforts and commitment to the protection and conservation of native vegetation is a necessary step for the country in reaching the 2030 Agenda for Sustainable Development. It will be implemented by the government of Brazil and supported by the United Nations Development Programme (UNDP), together with national and native governing institutions, civil society representatives and personal sector. It focuses on ecosystem restoration, the prevention of forest degradation and incentives for environmental services within the Amazon. This will mostly benefit family farmers and traditional and indigenous communities.

**Global Environmental Facility**

The Global Environmental Facility (GEF) is an organization focused on addressing a range of environmental issues. The GEF plays an integral role in The United Nations Framework Convention on Climate Change (UNFCCC), a non-binding convention aiming to reduce the production of greenhouse gases in developing countries. Industrialized nations agree under the convention to support global climate change activities in developing countries by providing them with resources, financial support and technology transfer. The GEF is involved through the managing of a system of grants and loans funded through the convention. This has been effective in nations such as Brazil, which received a grant in 2015 after taking action against environmental degradation in the country.

**Timeline of Events**

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| **Date** | **Description of the event** |
| 9 May 1992 | The UNFCCC is adopted |
| 2002 | Malaysia’s BIOGEN project is founded |
| 2015 | Brazil receives a grant from the UNFCCC |
| 2019 | The Amazon Rainforest is subject to thousands of fires which draw international attention |

**Relevant Events and Treaties**

* **Trust Fund for the United Nations Forum on Forests, 15 October 2003 (A/C.2/58/6)**
* **United Nations Strategic Plan for Forests 2017–2030 and quadrennial programme of work of the United Nations Forum on Forests for the period 2017–2020, 20 April 2017 (E/RES/2017/4)**
* **United Nations Strategic Plan for Forests 2017–2030, 27 April 2017 (A/RES/71/285)**

**Previous Attempts to Solve the Issue**

Policies to scale back emissions from deforestation and degradation (REDD+) have been implemented in many countries in various ways. They are often paired with financial incentives to encourage nations to be more environmentally conscious, as can be seen with the UNFCCC’s grants and loans system. Together with the Sustainable Development Goals, which are UN-Established goals aimed to be completed by 2030, these have created a framework for member states to work toward making their economies more stable through incentives and defined goals.

Another major attempt at reaching a solution was the 2020 Tropical Forest Alliance (TFA) Marrakesh Declaration of the Sustainable Development of the Oil Palm Sector in Africa. This declaration, which aims to implement sustainable, yet economically feasible, systems and technologies into the palm oil sector, was signed by seven African nations including Ghana, Liberia, the Republic of the Congo, Sierra Leone, Côte d’Ivoire and the Central African Republic. This is a pivotal attempt at coming to a solution not only because it occured recently, but also because the countries involved contain 70% of Africa’s and 13% of the world’s forests. Africa is estimated to play a pivotal role in the future production of oil given an increase in global demand, making this all the more important.

**Possible Solutions**

Companies can take action by introducing and implementing policies which encourage sustainable supply chains. These should hold suppliers of commodities such as timber, beef, soy, oil and paper accountable and ensure such resources are sourced sustainably and with minimal environmental impact. Companies should set ambitious targets to maximise the employment of recycled wood, pulp, paper and fiber in their products and production process, such as BIOGEN’s use of biomass in energy production.

Governments should also crack down on deforestation carried out illegally, such as illegal logging in protected areas. This is not only beneficial in preserving the environment, but also in preventing the country from losing money through the expenses required to make up for these violations of regulations. This can be done through the enforcement of comprehensive laws in nations which lack environmental regulation, such as Ethiopia, or strengthening existing laws through more severe punishment or awareness in nations such as Indonesia.

Furthermore, member states should evaluate their allocation of resources in relation to agriculture in order to determine country-specific solutions to the problem. For example, if a nation notices that it lacks fertile land, such as Brazil, it may want to begin importing more agriculture rather than inevitably sacrifice its forests in order to meet the demands of the population. If a country sees that they lack agricultural development in certain sectors, production can be encouraged through subsidies or by applying to grants from organizations such as the UNFCCC.

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**Appendix or Appendices**

1. <https://greentumble.com/15-strategies-to-reduce-deforestation/>

*This source discusses the different strategies done to reduce deforestation. This provides various viewpoints and alternative ways of thinking in order to develop efficient and effective measures to achieve sustainable living methods.*

1. <https://disruptiveenvironmentalist.com/8-innovative-solutions-to-deforestation/>

*This source offers a brief overview of the negative causes of deforestation and solutions where technology is used to spread awareness as well as finding alternatives to solve this issue.*

1. <https://www.theguardian.com/global-development-professionals-network/2017/apr/04/how-to-stop-deforestation-indigenous-people-are-the-best-park-rangers>

*This source discusses the causes of deforestation and solutions that should be encouraged within the economy to reduce its impact.*