THE UNITED NATIONS ENVIRONMENTAL PROGRAMME

GENERAL ASSEMBLY





TOPIC ONE: DEFORESTATION

Introduction:

Forests are a crucial part of our environment and well-being. They help absorb greenhouse gases, reduce the amount of erosion near waterways, are a possible source of food and medicine, and are the crux of most of the ecosystems on this planet (WWF, 2015). They cover around 30% of world's land area but are at a substantial risk of disappearing due to human activities (National Geographic, 2017). These types of activities not only affect countries economically, but also our own collective sustainability, by increasing greenhouse gas contents in the air, perpetuating water cycles and even damaging the habitat of millions of species (National Geographic, 2017) 15% of greenhouse gas emissions per year come from deforestation, as forest act as carbon sinks. Between 46-58 thousand squares miles of forest are lost per year (WWF, 2012).

Agriculture is one of the main causes of deforestation, as farmers cut and burn hundreds of thousands of hectares for planting or grazing. Slash and burn forest clearing is used to facilitate rapid agricultural expansion. In the Amazon, the expansion of soy farming has led to large-scale deforestation. However, such destruction is not necessary for agricultural development. In 2006, soy traders and growers, in collaboration with Greenpeace, agreed to a moratorium on soy expansion in newly deforested land (Butler, 2012). The cattle industry, which requires space for grazing, has slashed significant portions of the Amazon Rainforest to facilitate expansion. Forest conversion for cattle ranching has been the primary cause of deforestation in the Amazon, with 17% of the rainforest being removed in the past half century (WWF, 2012).

Logging is another human action that affects forests. In general, logging is the action of cutting down trees for making paper or wood products (National Geographic, 2017). This activity usually is regulated by national laws, which help guide loggers and lets them know how much they can grow, cut and even how much they can sell (WWF, 2015). Unfortunately, restrictions are not strictly enforced, and often loggers are able to complete sidestep regulations (National Geographic, 2017).

Illegal logging is the illicit harvesting, transporting, processing, buying or selling of timber (i.e. tree wood and related products) in violation of regional laws. The illegal logging trade is estimated to be worth between \$30 and \$100 billion USD per year. These activities make up an astounding 15%-30% of globally-traded wood (WWF, 2015).

Not only does illegal logging have a harmful impact on the environment through the degradation of forests and exacerbating climate change, it also results in a loss of revenue for both regional inhabitants and countries as a whole. The main observable adverse ecological effect is a reduction of biodiversity in affected forests. When unregulated logging occurs, the population of affected species decreases, as one would expect, but the effects



reach further. Certain species of insects and animals feed either directly on these trees, heavily rely on them or use them for shelter. The reduction of the population of these trees could therefore harshly reduce the population of species which are dependent on these trees. Hence, illegal logging has a negative impact on biodiversity of local ecosystems (Chatham House, 2013) For instance, the spike in palm oil production in Indonesia since the 1990s, enabled by a massive clearing of rainforest, has had hugely negative effects on the orangutan population, as the oil palm monoculture cannot sustain wildlife (Butler, 2012).

Illegal logging also contributes to global warming. Most trees, being chlorophyllin, function by photosynthesis (i.e. "breathing" for plants): they convert carbon dioxide and other reagents into dioxygen and other products. With the acceleration of industry, more and more greenhouse gases are being emitted into the atmosphere which contribute to global warming. However, with more and more trees being harvested in an unruly fashion, the impact of these emitted greenhouse gases will be greater because the concentration will continue to rise (Chatham House, 2013).

Case studies:

The illegal logging in the Amazon Rainforest is a major contributor to climate change because of "forest degradation, which occurs when loggers move in to extract hard timbers" (Branford & Torres, 2017). The areas that are degraded and logged are "vulnerable to drought and fires" (Ibid.). The main perpetrators of the Amazon Rainforest destruction are aiming to increase the deforestation through bills and policies through the federal government (Ibid.).

Although the Amazon rainforest has been the main source of concern over the last 30 years the spotlight has shifted to Brazil's Cerrado, a tropical savanna ecoregion in the centre of the country (Harvey, 2017). This area is being exploited for soy and beef production (Ibid.). A conference was hosted by the Prince of Wales at Lancaster House and was attended by countries such as Brazil, Gabon, Ghana and Indonesia in which the concern surrounding deforestation was a major point of discussion. 23 companies "signed up to a new resolution to halt the destruction of the Cerrado and ensure any future commercial exploitation of the area is sustainable and well-managed" (Ibid.). The companies that have signed this resolution have agreed that current laws do not protect the Cerrado destruction enough, and need to maintain a tighter system to balance the Cerrado's destruction and agricultural development in the future (Ibid.).

Illegal logging contributes to the majority of the country's timber production (Wallace, 2016). The wildfires sweeping through the Amazon rainforest are threatening the survival of Indigenous groups, which are already combating droughts and poverty. "Officials are accusing the loggers of resorting to arson to distract field agents and native militia from patrols aimed at deterring timber poachers" (Wallace, 2016). As can be seen from this, the



illegal logging is leading to the destruction of the rainforest as well as indigenous culture by causing wildfires and trespassing on people's lands.

Guiding Questions:

- 1. Which countries where, are or could possibly be affected by this problem? Is your country a part on that list?
- 2. Do these countries that have an increasing problem with illegal logging as well?
- 3. Seen through the eyes of different countries, why is deforestation (and illegal logging as well) bad?
- 4. Is there a positive side to this issue? Does it help some people in a "good" way? If so, why does that country's representative feel it needs to be stopped?
- 5. What are the possible measures that your country has taken, is taking, or could take to stop illegal logging?
- 6. Where are the funds required for reforestation coming from? Are they coming from within, from other countries, the WB, the IMF or other organizations from within the country itself?

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TOPIC TWO: Illegal Poaching

Introduction:

Poaching is the illegal trading and hunting of wildlife. As poaching is a well-run, underground trade network, statistics are uncertain, but poaching rates have been rising exponentially in the past decade (rhinoceros poaching saw an increase of 7,700% between 2007 and 2013); sources estimate the trade to be worth several hundreds of millions of dollars. Well-known examples of wildlife poaching include hunting elephants for ivory and sharks for fins. Such illicit commodities have major value in global black markets (Rinkesh, n.d). Poaching has, as one might expect, harmful effects on the environment, such as overhunting and driving climate change. Many nations impose regional laws to protect endangered species and to maintain equilibrium by regulating hunting. However, the unregulated hunting/trading of wildlife disturbs this equilibrium. Unrestrained poaching leaves many species at risk of overhunting, and subsequently, extinction. Ecosystems function based on a food chain, where certain species feed on others, which feed on others, and so on. Overhunting can cause the reduction of certain populations: for examples, if species A feeds on species B, which feeds on species C, and species C is overhunted, then the dependent species could suffer. By a complex progression of cause-to-effect, this disruption can contribute to the destruction of ecosystems (Rinkesh, n.d).

Case Study:

In Africa, poaching is largely motivated by the global ivory trade. Although overall it has declined over the past five years, the illegal killing of elephants remains at a scale it has



not been since before 2008. The poaching of elephants and other human activity has caused a decline in species populations in the region. (Press Association, 2017)

In three sites in Tanzania and one in Kenya, there were "fewer than half the number of elephants' carcasses in 2016 compared to 2015." However, despite these small steps to combat elephant poaching, the demand for the illegal ivory trade has still grown three-times greater in the past decade, and 2016 saw a "record high of illegal trade in ivory". (Wildlife Trade News, 2017)

Not only does poaching effect elephants, poachers have targeted "lions in sanctuaries, reserves and breeding farms for body parts" (Neme, 2017). There are even speculations that these same poachers are targeting rhinos. The increase in demand for rhino and elephant body parts on the international market, where this trade is still legal, contributes to these killings. The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) aimed to stop commercial trade of lion body-parts; however, their proposal was rejected. Some steps have been taken, such as in 2016 when the US Fish and Wildlife services "banned imports of trophies from captive-bred lions" (Neme, 2017). However, despite efforts at mitigation, the issue of poaching is still present and integral for UNEP to tackle.

Guiding Questions:

- 1. What has the government of your country done (what policies have been put in place or what organisations have been established) to stop illegal poaching?
- 2. What is the relationship between your country and the situation in Africa?
- 3. Is your country positively or negatively involved?

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TOPIC THREE: OVERFISHING

Introduction:

Fish are considered a major staple in many regions of the world. Due to an increasing global demand for their consumption, however, significant problems have arisen. Overfishing "occurs when more fish are caught than the population can replace through natural reproduction" (WWF, 2012). According to the WWF, more than 85% of the world's fisheries, environments with populations of fish, are being pushed to their biological limits, meaning that the rate of fishing is almost equivalent to the rate of repopulation of the species being targeted (WWF, 2012). As such, this practice is not durable and is approaching catastrophe.

This phenomenon can be illustrated by the example of the Pacific Bluefin Tuna being labelled as a "threatened" species. This species of fish has seen its population decline steadily since the 1970s due to overfishing. This has had a negative effect on local fishing communities. According to reports, catching a tuna in recent years is considered rare. It is thus having a negative economic impact on these communities, as they are not able to catch tuna very often, which is traditionally a great source of income (Gilhooly, 2016).

Overfishing does not only affect fishing communities, however, with it also having a powerful negative impact on the environment. Like most ecosystems, the oceans follow a complex food chain, which due to this practice can throw this chain into chaos. If too many members of a species of fish die out, then the species that these fish feed upon could proliferate to abnormal levels. For example, if the fish that eat surface algae were to die out, then the surface algae could proliferate (known as a harmful algal bloom), blocking sunlight and thus lowering the concentration of dioxygen in the water, which would in turn cause deaths in the ecosystem (NOAA, 2016). Possible global consequences of overfishing include a loss of biodiversity, climate change and unviability of ecosystems to host life.

Case Study:

The issue surrounding overfishing in Japan is primarily concerned with the bluefin tuna and 2 major fishing companies; Kyuko Co and Nippon Suisan Kaisha have begun its export due to the high demand for fish being used in Japanese cuisine internationally. "Cost



reduction remains a hurdle for expansion of cultivation techniques" (The Japan News, 2017). Primarily in the Osaka Bay, many fishermen are being exploited by distributors where they are having to sell large amounts of their fish for small profit. This is because of a switch from the auction system to face-to-face negotiations resulting in smaller profits. However, "resource control awareness has grown strong in fishing communities" (The Japan Times, 2017). In a UN Ocean Conference meeting that occurred in New York, "Japan did not send a Cabinet minister-level official to the U.N." (The Japan Times, 2017). This conference was mainly designed to "discuss conservation, sustainability and development of marine resources" (The Japan Times, 2017). As can be seen from this, the issue of overfishing in Japan is one that requires the cooperation of the fishermen as well as distributors to actively make efforts to stop the exploitation of resources (in this case the bluefin tuna) Corporate focus on the bottom line means that fishing of the bluefin tuna is done unsustainably and irresponsibly. Industrial activity and the burning of fossil fuels in Japan are also contributing to the species being killed off. Additionally, the rising of ocean temperatures is impacting the environment the fish are acclimated to. The overfishing in Japan is only worsened by these climate change impacts (The Japan Times, 2017) leading to an even smaller population of fish present in the water.

Other states have made efforts at curbing overfishing. The Canadian government introduced a full moratorium on the fishing of North Atlantic cod in 1992 after it was discovered that irresponsible fishing practices had led to the near-full depletion of cod stocks. The economic impact of the moratorium in Newfoundland and Labrador was devastating; 45,000 fishers were unemployed overnight. Since 1992, stocks have slowly increased, but the moratorium remains in place (CBC, 2017).

Guiding Ouestions:

- 1. Is the government of your country trying to solve this problem or is it doing nothing at all?
- 2. Has your country done anything to help Japan with this problem? What exactly?
- 3. Is it causing a positive or a negative effect in your country?
- 4. What is the statistical approach of overfishing over the years?
- 5. What are the possible solutions that your country could implement?
- 6. Is overfishing affecting other marine life as well?
- 7. What are the long-term repercussions and will they, in turn, affect other countries?



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