



Federal Democratic Republic of Ethiopia

UNEP

Combating Deforestation

Minimizing the Adverse Effects of Pollution on the Environment

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Despite all the progress made to fight climate change, many problems still remain. Deforestation continues to take away 12 million hectares of forest each year, which many people depend on (UNEP). Pollution to both air and water causes health problems with 7 million dying from air pollution-related diseases each year (UNEP). The delegation of Ethiopia believes in both cases that unless the progress made to stop these issues also benefits the economy of the nation implementing these measures, then there will not be enough motivation to put the measures in place in developing countries.

Topic A: Combating Deforestation

Ethiopia as a nation has, in its history, helped combat the world threat that is the deforestation crisis. In recent years, the nation itself has faced issues with deforestation; since 2000, there has been a 3.9% decrease in tree cover within the entirety of Ethiopia (GFW), most of it being in the past 5 years as well as the 2011-2014 period. The root cause of this deforestation is for two major reasons: agricultural and industrial expansion. As urbanization and industries grow so does the need for room to expand and natural resources to utilize; this becomes apparent when looking at the coffee industry in Ethiopia which in the late 1980s was the major cause of deforestation. 24% of all lost forests in Ethiopia are a result of further industrialization with coffee plantations (Ecohubmap). However, to combat this, Ethiopia has also begun taking steps to remedy its past transgressions regarding deforestation. In 2019, Ethiopia, with support from the U.N.E.P, set the world record for planting the most amount of trees in one day totaling 350 million (UNEP). Ethiopia has also worked with other international organizations such as the UN-Redd to help create infrastructure that will better support and ensure the safety of the remaining Ethiopian forests. On an international level, organizations such

as the United Nations Convention to Combat Deforestation (UNCCD) and the United Nations Environmental Program stop deforestation by helping developing nations find more sustainable ways to manage their forests and the natural resources that come from it. The UNCCD specifically focuses more on the development of land through agriculture and land degradation due to natural and human sources.

Ethiopia, despite being a less developed country, has been working hard to combat deforestation. Ethiopia, as part of the Great Green Wall initiative, has restored 150,000 acres of forest and another 850,000 acres of other land. This land reduces wind speed, keeping soil from being kicked up, which promotes farming. Some of the trees planted also produce products that can be collected by locals without hurting the trees, allowing rural communities to earn more income (Borgen Project). Ethiopia also recently launched a project with FOLUR, the Food Systems, Land Use and Restoration project run by the Global Environmental Facility (GEF). This project aims to teach Ethiopian coffee farmers how to farm more sustainably, which not only protects the environment as coffee farmers looking for more land is a large reason for deforestation in Ethiopia, but also increases the coffee's value. The project will also encourage investors to invest in sustainable coffee farms (FOLUR) and will plant more trees (UNDP).

The Delegation of Ethiopia believes that the best way to combat deforestation is to make sure the economy is also being boosted. Ethiopia's proposed program, which would be an extension of FOLUR, recommends teaching farmers how to farm sustainably, which often helps boost the prices of their crops. By also creating forests and other environments that would act as windbreaks and fortify the watershed, the program would at the same time improve the soil quality of the farmer's land and prevent desertification, as well as provide small amounts of income for some local communities. The farmers would, therefore, become richer with this

increased income, allowing them to become part of the larger economy, which provides a reason for the implementation of the program.

Topic B: Minimizing the Adverse Effects of Pollution on the Environment

The rapid industrialization of Ethiopia in recent years has been profoundly good for further economic development within the nation but neglects the key negative byproducts that come with industry: pollution. Two forms of pollution affect Ethiopia the most -- air pollutants and microplastics in Ethiopia's water sources. The average air quality in Ethiopia is 6.3 times worse than the WHO recommended guideline value (IQ Air). The issue of air pollution in Ethiopia is of immense urgency and stems from the nation's poor infrastructure built for waste management as well as motorcars that constantly produce greenhouse gasses. Pollution within Ethiopia's waters is also another major issue that the nation faces. Fertilizer runoff from the agricultural sector of Ethiopia, primarily composed of livestock and farming industries, infects freshwater sources with harmful chemicals. These freshwater sources have also been found to have microplastics which get ingested by fishes living there and have negative side effects upon human consumption. In recent years the situation in Ethiopia has only gotten worse, but the government has made great strides to facilitate improvement. This is seen by the government's emphasis on greener sources of energy as well as more renewable ways to process waste management. On a more international scale, major organizations such as the International Union for the Conservation of Nature (IUCN) and UNEP work to end pollution, both in air and water, by assisting government organizations and streamlining new technologies to reduce the amount of pollutants in both sources. The IUCN surveys ocean and freshwater around the world to figure out the effects of microplastics and other pollutants on the organisms living in the water (IUCN).

The UNEP has air quality monitoring technology to track the severity of air pollution worldwide. Using this technology, the UNEP can give out warnings and allocate attention to areas in dire climatic conditions.

Ethiopia has implemented many projects to stop the adverse effects of pollution and has become a regional leader. In Addis Ababa, a waste-to-energy plant was built at the Koshe dump site, which incinerates around 1,400 tonnes of waste per day (80% of the city's waste) and takes care of 25% of its electrical needs (UNEP). With another waste-to-energy project in Reppie, which will incinerate 1,200 tonnes of waste per day, Ethiopia is working on keeping pollutants from waste from ever reaching the environment. Ethiopia also has created a National Biogas Programme (NBP) which works to take biogas like methane from the environment and use it for energy production, reducing pollution. Ethiopia is also a member of the Climate and Clean Air Coalition (CCAC), using its membership to reduce the effects of cookstoves in rural areas contributing to climate change and to reduce black carbon emissions from motor vehicles (CCAC).

The delegation of Ethiopia proposes that a potential solution to help minimize the adverse effects of pollution on the environment is to turn waste into a clean source of energy. Waste, and how it is managed, is a key part of reducing the amount of pollution in the environment. This program will be an extension of the many waste-to-energy plants already built in Ethiopia such as the Reppie waste-to-energy facility. These waste-to-energy facilities already exist in more developed nations in the West such as in North America and Europe; however, if implemented more internationally these facilities can help limit the amount of waste around the globe and keep pollutants from ever even reaching the water or air. The issue of air pollution is amplified in underdeveloped nations that already have a multitude of other problems. Installing these

waste-to-energy facilities worldwide will not only reduce the amount of waste in the nation and thus its overall pollution, but also create another source of energy in nations that already struggle to fulfill their own electricity needs.

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