Model United Nations at UCSD presents
On Saturday April 25th, and Sunday April 26th, 2015

United Nations

Environmental Programme

TritonMUN XI

Introduction

Most Esteemed Advisors and Honorable Participants,

As the Chair of the United Nations Environment Programme (UNEP), I, Emily Lu would like to welcome everyone to another conference hosted by University of California, San Diego. I am a second-year majoring in Physiology and Neuroscience from Revelle College of UCSD. Over the past five years of my Model UN career, I have attended nine international conferences, six of which I have served as a student officer and Secretary General. Every year, our conferences continue to diversify and progress with the participation of many schools. It is difficult for me to put in words how privileged I feel to witness students coming together from different places to resolve current issues and to demonstrate to the United Nations how possible solutions may still be created despite the daunting issues that we face.

As this conference takes its next step toward a new level of success, we hope delegates can cherish this unique opportunity to participate in active debates, aiming to solve issues of utmost importance. During the Model United Nations program, we have seen students explore their future careers and build long-lasting friendships. Therefore, enjoy this experience and make an effort to be the force that can lead to change. Remember, your voices are the future's best seed of hope.

Sincerely your chair,

Emily Lu

e7lu@ucsd.edu

Topic A: Reducing and Preventing the Usage of Pesticides and Herbicides

I. Background

The world has long since abandoned the days of small-scale farming and has revolutionized the agricultural sector with technological improvements in hopes of adequately feeding an ever-growing global population of seven billion people. One such change is the addition of pesticides to crop production. The idea behind the pesticide is that the chemicals kill organisms that otherwise would have destroyed crops. Pesticides give farmers higher crop yields—translating into more food for everyone, more money for the farmers, and fewer seeds wasted. This clearly sounds like an ideal plan.

The problem is that pesticide use has its share of detrimental side effects. The most obvious one is the depletion of health that results from exposure to pesticides. This is deplorable, observing that pesticides are incredibly toxic. When they enter the human body, it is inevitable that they damage the human nervous system. In addition to affecting human health, pesticides kill animals that were not supposed to be harmed in the first place. They precipitate the extinction of keystone species in food webs and throw delicate ecosystems off balance, thus decreasing biodiversity. Sometimes, the pesticides are so powerful that they can even stunt the growth of the crops themselves.[1]

Herbicides, a type of pesticide that kills unwanted plants are widely used. The use of herbicides shares similar side effects on both all living species and the environment. Herbicides have the potential to harm our natural communities. Some herbicides are not selective in what

[1] "The Effects on Spraying Insecticides on Fruits and Vegetables." *Garden Guides*. N.p., n.d. Web. 10 Jan. 2015..

they kill; instead, they remove all types of vegetation. Water runoff is also a concern. Irrigation often carries herbicides into unwanted areas and can bring detrimental effects on marine species that are fatal to them. When used repeatedly, many plant species begin to create weed resistance to the chemicals in herbicides. Eventually, weeds stop responding to the herbicides, losing their purpose.

Since it is well established that pesticides and herbicides may do more harm than good, why don't we just stop using them and grow crops the organic way, without all of these chemicals tampering? The solution is not that simple because this environmental problem is entangled in a web of economics and large profit-driven companies. In the current era of industrial agriculture, only ten corporations hold control over half of the global seed market. The global pesticide market is likewise controlled by only ten corporations. The result is a massive amount of power consolidated in the hands of a dozen or so corporate moguls. They get to suppress the selling of naturally occurring seeds and force farmers to buy genetically modified (GM) seeds that the companies manufacture themselves. Instead of making GM seeds pest-resistant, they engineer the seeds to be resistant against the company's own best-selling pesticide, therefore boosting the sales of both products. It is only when we explore the battle between consumers and the companies that we can find ways to eliminate pesticides and herbicides from agricultural practice.

Pesticides are not recent innovations. The first recorded pesticide use occurred around 4,500 years ago, when Sumerians used sulfurous compounds to decimate mites. Humans have used chemicals for pest control throughout history, but the real boom in synthetic pesticides occurred in 1940s. One of the most famous pesticides discovered at the time is dichlorodiphenyltri-

choroethane (DDT).[2] People were not very concerned about the adverse effects of pesticide use throughout the 1950s. The consequences of pesticide use were finally brought to light in 1962, when scientist Rachel Carson published her environmentalist book *Silent Spring*. Carson presented evidence linking DDT and other chlorinated hydrocarbons to the death of birds that ate insects in areas where the pesticides were applied.[3] Carson's book started an anti-pesticide movement and led scientists to adopt a new approach to pest control called Integrated Pest Management (IPM). Instead of eradicating all pests, IPM seeks to keep pests at low levels by having beneficial predators come eat the pests and applying pesticides at periods in the pests' life cycle when they are most vulnerable. IPM does not substitute for pesticide use; rather, it diminishes the amount of pesticide used.[4] In the meantime, researchers sought to create an array of new, less toxic pesticides, and pesticide-related disasters continued. In 1984, over 8,000 people died in Bhopal, India from the explosion of a pesticide manufacturing plant. In the late 1980s, a company in Louisiana, USA left four million pounds of untreated DDT waste at a plant across the street from an elementary school. Clearly, some global measure must be taken.

The global anti-pesticide campaign reached its first milestone with the adoption of the Rotterdam Convention on Prior Informed Consent, or the PIC treaty, in 1998. PIC "gives countries the right to refuse the import of highly hazardous toxins" and therefore reduces the "dumping of obsolete or banned pesticides on the developing world". Although PIC mainly protects less economically developed countries (LEDCs) and does not directly address the amounts of pesticides manufactured, it does prevent further damage made by pesticides, especially because

[2]Unsworth, John. "History of Pesticide Use." *International Union of Pure and Applied Chemistry*. Ed. IUPAC. IUPAC, 10 May 2010. Web. 7 Jan. 2013.
[3]"History of Genetic Engineering." *American Radio Works*.American Public Media, 2013. Web. 7 Jan. 2013.
[4]"A Brief History of Pesticides & Herbicides." *Intensive Ecology*. Alternative Agricultural Products, n.d. Web. 7 Jan. 2013.

99% of acute pesticide-related fatalities occur in LEDCs.[5] The LEDCs finally reached a collective effort to diminish pesticide use in 2001 at the Stockholm Convention on Persistent Organic Pollutants, also known as the POPs treaty. The treaty calls for member states to reduce and eventually eliminate usage of certain POPs, including DDT (exceptions are given to countries that use DDT in mosquito nets to combat malaria). The "prohibited list" is lengthening as more evidence on the detrimental effects of new POPs is found.[6] The World Health Organization (WHO) has been following up with the Stockholm Convention and gauging its effectiveness in reducing the amount of pesticides released into the environment by conducting Human Milk Surveys, or bio monitoring of human milk for POPs.

Though we have made progress, we must not be complacent, because the problem is exacerbating over time. Between 500 and 1,000 species, they have become pesticide-resistant since 1945[5], forcing farmers to resort to stronger chemicals. However, this puts consumers in jeopardy. Pesticide exposure can result in many different types of neurological health effects such as memory loss. These chemicals could also lead to cancer and abnormal fetal development. We must act before more super weeds arise.

[5]PAN, ed. *Pesticide Action Network North America*.Pesticide Action Network, n.d. Web. 7 Jan. 2013.
[6]Secretariat of the Stockholm Convention, ed. *Stockholm Convention*.United Nations, 2008. Web. 7 Jan. 2013.

II. United Nations Involvement

The following organizations have been greatly involved in many actions taken to combat malnutrition by representing the United Nations.

World Health Organization (WHO)

WHO is the World Health Organization of the United Nations. This organization is "the directing and coordinating authority for health within the United Nations system. It is responsible for providing leadership on global health matters, shaping the health research agenda, setting norms and standards, articulating evidence-based policy options, providing technical support to countries and monitoring and assessing health trends." (WHO) During the 21st century, "health is shared responsibility, involving equitable access to essential care and collective defense against transnational threats" which is the responsibility WHO is taking hold of.[7] WHO achieves its goals through focusing on these topics:

- Growth Assessment and Surveillance (GRS)
- Reduction of Micronutrient Malnutrition (MNM)
- Nutirtion in the Lifecourse (NLU)
- Nutrion Policy and Scientific Advice

The Food and Agricultural Organization (FAO)

The FAO is one of the most involved UN bodies in the area of pest and pesticide management. The FAO provides the secretariat for the Rotterdam Convention and is a strong advocate for Integrated Pest Management (IPM) programs. Not only does this organization aim to

[7]"About WHO." *World Health Organization*.WHO, n.d. Web. 11 Jan. 2015.

achieve food security, but it also hopes to provide access of healthy food to individuals. Through such approach, the FAO IPM programme is currently providing assistance in constructing policies and strategies to grow and cultivate healthy crops and keep the use of pesticides to a minimum.

The United Nations Environment Program (UNEP)

The UNEP's branch on chemicals works with nongovernmental organizations to promote IPM. It is also invested in enforcing the reduction and elimination of persistent organic pollutants covered under the Stockholm Convention. In order to protect human health and environment from potential damage, UNEP has been cooperating with FAO to host the Secretariat to the Rotterdam Convention, which intends "to promote shared responsibility and cooperative efforts among Parties in the international trade of certain hazardous chemicals in order to protect human health and the environment from potential harm; and to contribute to the environmentally sound use of those hazardous chemicals (UNEP, Pesticides).[8]

[8]"Pesticides." *United Nations Environment Programme Environment for Development*.UNEP, n.d. Web. 10 Jan. 2015.

III. Bloc Positions

Western

In order to prevent and reduce pesticide usage, the United States has taken many actions. Some actions include designating the United States Environmental Protection Agency (EPA) evaluate manufacturer's application for registration and regulate whether the use of the product results in unreasonable risk to the environment, wildlife, or humans. United States has banned several pesticides that have been determined as substances that pose unacceptable risks by the EPA.[9] The European Union is in favor of the sustainable use of pesticides, in attempt to diminish the negative impacts of pesticide use. The EU has set a common assessment project for all agricultural products for food or animal feed. Producers or importers of these products must submit an application in order for the setting of Maximum Residue Levels (MRLs) evaluation. Recently, the European Union legislation has approved the banning of highly toxic pesticides that are endocrine disrupting.[10]

Eastern

India is one of the largest pesticide users in Asia and is infamous for its huge pesticide industry. Pesticide exposure is a serious issue there. India also has a problem with illegal use of banned pesticides. These pesticides are obtained from old stockpiles or are produced illegally, and then sold in the black market or in small shops. Around 50% of widely available produce in India is contaminated with DDT and other illegal pesticides. India became the only country that has yet to ban the manufacturing of DDT when China placed a hold on DDT production in 2007.

[9]"Overview of Risk Assessment in the Pesticide Program | Pesticides | US EPA." EPA. Environmental Protection Agency, n.d. Web. 01 Feb. 2015.
[10]"Endocrine Disruptors." Europa. European Commission, n.d. Web. 7 Jan. 2015.

However, other pesticides are still widely used. In 2012, the overuse of pesticides has resulted in food safety problems and pollution.[11] Not only is there an overuse of pesticides and herbicides, there is also misuse that has caused Chinese agriculture to be highly reliant on these chemicals. Some farmers stress that they are pushed toward the use of chemical pesticides due to economic factors including the extra expense needed for pesticides that are less harmful. More regulations need to be strictly implemented.

Middle East

A few countries have banned some pesticides including Bangladesh and Pakistan. Pakistan is one of the few nations in the region to have banned the use of all severely toxic and hazardous pesticides. With the economy largely based on agriculture, several banned pesticides are still used due to farmers' lack of knowledge about these chemicals. Programs for guidance of the farmers in this respect should be further implemented. Similarly, in Bangladesh, although the government has made efforts to control pesticides misuse, farmers continue to expose themselves and their communities to high health risk. According to the Ministry of Health, almost 900 people died due to pesticide poisoning in 2011. A report published by the Department of Agricultural Extension on pesticide use also indicated that 89 percent of farmers used medium to strong chemical pesticide for vegetable cultivation.[12] Unfortunately, the farmers themselves fail to realize the damages made; instead, they use them for the mere purpose of boosting production, unaware of the side effects.

[11]Yang, Meng. "The Damaging Truth about Chinese Fertilizer and Pesticide Use." *China Dialogue*. N.p., 9 July 2012. Web. 11 Jan. 2015.
[12]Bangladesh: Farmers Not Heeding Pesticide Warning." *IRIN Humanitarian News and Analysis*. IRIN, 12 Sept. 2012. Web. 11 Jan. 2015.

Latin America

Several countries in this region depend on agricultural production as the main source of income. Take Colombia for example. Because agricultural production plays such an important role in their economy, Colombia has been ranked the 4th highest consumption and use of fungicides in the world regarding pesticide use. The Colombian government has been developing a regulation program for agrochemical production and applications and has issued several administrative rules and codes. Nevertheless, the current use of pesticides in Colombia has not decreased and human and environmental problems remain an issue despite all the existing regulatory restrictions. Unfortunately, the government of some other countries such as Argentina has not taken action yet. Health workers and researchers in Argentina are demanding a ban on aerial spraying of pesticides based on a significant increase in cancer and a range of pesticide-related illnesses.

IV. Questions to Consider

1. What are some possible solutions that can help reduce use of pesticides?
2. If pesticides cause so many negative side effects to the environment and human health, why are there still countries that insist on the use of pesticides and herbicides?
3. What are some major damages that pesticides produce?
4. What are some primary benefits of pesticide use?
5. What are some previous attempts that were initiated in order to resolve the issue?
6. What kind of programs should be established in order to ban the harmful pesticides but at the same time prevent a colossal damage toward agricultural based countries and industries?

V. Suggested Sites

http://www.un.org/ -UN Main Website

http://www.who.int/en/- WHO Website

https://www.cia.gov/library/publications/the-world-factbook/- CIA World Factbook

http://www.cnn.com/ - CNN Website

http://www.fao.org/countries/en/- FAO

http://www.fao.org/agriculture/crops/core-themes/theme/pests/en/ -Plant Production and Protection: Pest and Pestacide Management

http://www.panna.org/ - Pesticide Action Network

http://www.unep.org/ - UNEP

VI. Bibliography

"About WHO." *World Health Organization*.WHO, n.d. Web. 11 Jan. 2015. <http://www.who.int/about/en/>.

"A Brief History of Pesticides & Herbicides." *Intensive Ecology*. Alternative Agricultural Products,n.d.Web.7Jan.2013. <http://www.alternative agriproducts.com/a_brief_history_of_pesticides.php>.

Bangladesh: Farmers Not Heeding Pesticide Warning." *IRIN Humanitarian News and Analysis*. IRIN, 12 Sept. 2012. Web. 11 Jan. 2015. <http://www.irinnews.org/report/96223/bangladesh-farmers-not-heeding-pesticide warnings>.

"The Effects on Spraying Insecticides on Fruits and Vegetables." *Garden Guides*. N.p., n.d. Web. 10 Jan. 2015. <http://www.gardenguides.com/ 125732-effects-spraying-insecticides fruits-amp-vegetables.html>.

"Endocrine Disruptors." Europa. European Commission, n.d. Web. 7 Jan. 2015. http://ec.europa.eu/environment/chemicals/endocrine/strategy/substances_en.htm.

"History of Genetic Engineering." *American Radio Works*.American Public Media, 2013.Web.7Jan.2013. <http://americanradioworks.publicradio.org/features/gmos_india/history.html>.

"Overview of Risk Assessment in the Pesticide Program | Pesticides | US EPA." EPA. Environmental Protection Agency, n.d. Web. 01 Feb. 2015. <http://www.epa.gov/pesticides/about/overview_risk_assess.htm>.

PAN, ed. *Pesticide Action Network North America*.Pesticide Action Network, n.d. Web. 7 Jan. 2013. <http://www.panna.org>.

"Pesticides." *United Nations Environment Programme Environment for Development*.UNEP, n.d. Web. 10 Jan. 2015. <http://www.unep.org/chemicalsandwaste/UNEPsWork/Pesticides/tabid/298/Default.aspx>.

Secretariat of the Stockholm Convention, ed. *Stockholm Convention*.United Nations, 2008.Web.7Jan.2013. <http://chm.pops.int/Implementation/NewPOPs/FrequentlyAskedQuestions/tabid/762/Default.aspx>.

Unsworth, John. "History of Pesticide Use." International Union of Pure and Applied Chemistry. Ed. IUPAC. IUPAC, 10 May 2010. Web. 7 Jan. 2013. <http://agrochemicals.iupac.org/index.php?option=com_sobi2&sobi2Task=sobi2Details&catid=3&sobi2Id=31>.

Yang, Meng. "The Damaging Truth about Chinese Fertilizer and Pesticide Use." *China Dialogue*. N.p., 9 July 2012. Web. 11 Jan. 2015. <https://www.chinadialogue.net/article/show/single/en/5153-The-damaging-truth-about Chinese-fertiliser-and-pesticide-use>.

Topic B: Deforestation

I. Background

Despite the fact that forests have been key players in the development of civilizations since prehistoric times, deforestation has occurred throughout our documented history. These forests have provided us with fuel and building materials to meet our needs. This process of forest thinning was relatively slow before the dawn of industrial era allowing ecosystems to adapt. The quickly growing societies have led to an increase in the rate of deforestation. According to Food and Agriculture Organization, nearly thirteen million hectares of forests worldwide disappear every year.[13]

From the Stockholm Conference in 1972 till now, deforestation and forest degradation have been considered to be of utmost importance.[14] However, despite the efforts of the international community to provide sound land and forest use policies like Reduced Emissions from Deforestation and Forest Degradation, the issue is far from being resolved. Due to the conflicting views of developed and developing countries on effectively compromising between economic development and forest management, we have repeatedly failed to reach a legal binding agreement similar to those on climate change, biological diversity, and illegal logging.[15] However, studies have shown that "countries that reach a certain economic development state are able to stabilize the area of their forests."[16]

Deforestation and forest degradation have direct consequences on other important

[13]"Global Forest Resources Assessment 2005: Progress towards Sustainable Forest Management." FAO, Web. 04 Jan. 2015.
[14]"GEO5 Global Environment Outlook-5." Global Environment Outlook. UNEP, Web. 04 Jan. 2015.
[15]"Vital Forest Graphics". UNEP. Web. 04 Jan. 2015
[16]"State of the world forests", FAO, Web. 04 Jan. 2015.

environmental issues, like climate change, loss of biodiversity, and air pollution. Forests serve as carbon sinks and stabilize global climate, regulate water cycles, and provide habitats for biodiversity while hosting a wide variety of genetic resources.[17]

The 2013 UNEP Emission Gap Report showed that the world's efforts to reduce greenhouse gases (GHG) emissions are not strong enough to keep the rise in global temperature below the "safe level" of 2°C this century.[18] Climate change is not only caused by oil and gas combustion; according to the FAO, 25-30% of GHGs released into the atmosphere each year—1.6 billion tons—is caused by deforestation.[19] Trees have the capacity to absorb GHGs responsible for climate change, and forests contain more than half of the carbon that is stored in terrestrial vegetation. Deforestation means that the vital role forests play in carbon storage and sequestration is no longer possible. This leads to increases in the amount of GHGs entering the atmosphere and, consequently, the speed and severity of global warming.[20]Developing countries such as Chile, Vietnam, China, India, Costa Rica, and El Salvador working towards restoration of forests within their vicinity are dealing with increased demands for agricultural resources and timber, defeating the purpose of restoration as the demands for wood and supplies are being met by other countries.

Industrial logging has sever effects on climate change and is another reason why deforestation must be taken seriously. Forest clearance is not just elimination of a natural reserve of CO2, but through industrial logging, wood burning, and the deforestation of large portions of areas, large amounts of GHGs are suddenly released into the atmosphere, worsening the problem

[17] "Global Environment Outlook 3: past, present and future perspectives", UNEP. Web. 04 Jan. 2015.
[18]"The Emissions Gap Report 2013", UNEP, Web. 04 Jan. 2015.
[19]"Deforestation Causes Global Warming." FAO. Food and Agriculture Organization, 6 Sept. 2006. Web. 4 Jan. 2015.
[20]"Global Environment Outlook 3: past, present and future perspectives", UNEP. Web. 04 Jan. 2015.

of climate change.[21] Trees are integral cog in the water cycle machine and forest degradation leads to disruption of water cycles. When there a only a few number of trees, sufficient water vapour cannot be returned to the atmosphere which lead to many former forestlands quickly become deserts. In turn, this leads to more extreme temperature variations, which can be harmful for plants and animals.[22]

Forests are incredibly valuable in part because of the services and products they provide. Forest products constitute important natural assets for a large number of households across the world.[23] Statistics show that there are at least 350 million people living inside or close to forests and depend on them for subsistence. Furthermore, there are over 60 million indigenous people who are entirely dependent on forests.[24] The FAO estimates that "the forest industry contributed approximately USD 468 billion or 1% of global gross value added to global GDP," which suggests that forests can generate substantial income and provide employment. Furthermore, as estimated by the Centre for International Forestry Research (CIFOR), "families living in and around forests derive an average of one-fifth to one-fourth of their income from forest based resources."[25]

In addition to legal commercial and industrial logging, people frequently subject forests to unplanned development and illegal logging. There is no single definition of illegal logging; generally, “illegal logging takes place when timber is harvested, transported, bought or sold in

[21]"Vital Forest Graphics". UNEP. Web. 04 Jan. 2015
[22]"Deforestation Facts, Deforestation Information, Effects of Deforestation,"National Geographic.
[23]"Indonesia's Largest Palm Oil Producer Shows the Way." Greenpeace International, Web. 04 Jan. 2015.
[24]"Global Environment Outlook 3: past, present and future perspectives", UNEP. Web. 04 Jan. 2015.
[25]"Forests in a Green Economy", UNEP. Web. 04 Jan. 2015.

violation of national laws."[26] This broad definition includes a number of illegal acts such as "theft or vandalism of trees or other forest resources; violation of harvest or management regulations; civil wrongs, such as breach of contract; fraud; violation of sales or processing regulations; smuggling and illegal transport; violation of import controls," and other associated crimes.[27] The production and trade of timber is regulated at all stages by national laws; however, these laws are often violated in a number of ways. The most common are harvesting wood from protected areas, harvesting more than the permitted quota in unprotected areas, or harvesting protected species.[28] UNEP estimates show that 15% to 30% of wood traded globally has been obtained illegally, and in some areas, illegal logging is more common than the legal variety.[29] The International Tropical Timber Association (ITTO) estimates that the percentage of wood harvested illegally ranges from 34% in Ghana to 90% in Cambodia.[30]

Post 2015: the Role of Forests in Promoting Sustainable Development

With today's world becoming increasingly interdependent, the post-2015 agenda must be truly global, coordinating the efforts of all countries according to the principle of common but shared responsibilities with the idea that the more one country has contributed to destroying or overexploiting a common, the more committed it will have to be to solving the issue. With the 2015 deadline of the Millennium Development Goals (MDGs) fast approaching, discussions are underway in regard to what the post-2015 framework will look like. UN think tanks have agreed

[26]Smith, Wynet. "The Global Problem of Illegal Logging." Forest Program World Resources Institute (2002): 3-5. Web. 4 Jan. 2015.
[27]Kenneth Rosenbaum, "Item 6a: Defining Illegal Logging: What Is It and What Is Being Done About It?" FAO. Web. 04 Jan. 2015.
[28]Smith, Wynet. "The Global Problem of Illegal Logging." Forest Program World Resources Institute (2002): 3-5. Web. 4 Jan. 2015.
[29]"Green Carbon, Black Trade: Illegal Logging, Tax Fraud and Laundering in the Worlds Tropical Forests. A Rapid Response Assessment," UNEP, Web.
[30]Smith, Wynet. "The Global Problem of Illegal Logging." Forest Program World Resources Institute (2002): 3-5. Web. 4 Jan. 2015.

on the fact that the MDGs have been vital to change and that many successes have been achieved.[31] However, there is also widespread agreement on the fact that "a more integrated and inclusive development agenda is needed" in order to effectively respond to pressing global issues. Despite the many successes of the MDGs, the results regarding MDG 7 ["ensuring environmental sustainability"] have been limited.[32]

[31]"Post-2015 Development Agenda." UN News Center. UN, Web. 04 Jan. 2015.
[32]"Forests, Post-2015 and the Rio+20 Outcomes." UN News Center. UN, Web. 04 Jan. 2015.

II. United Nations Involvement

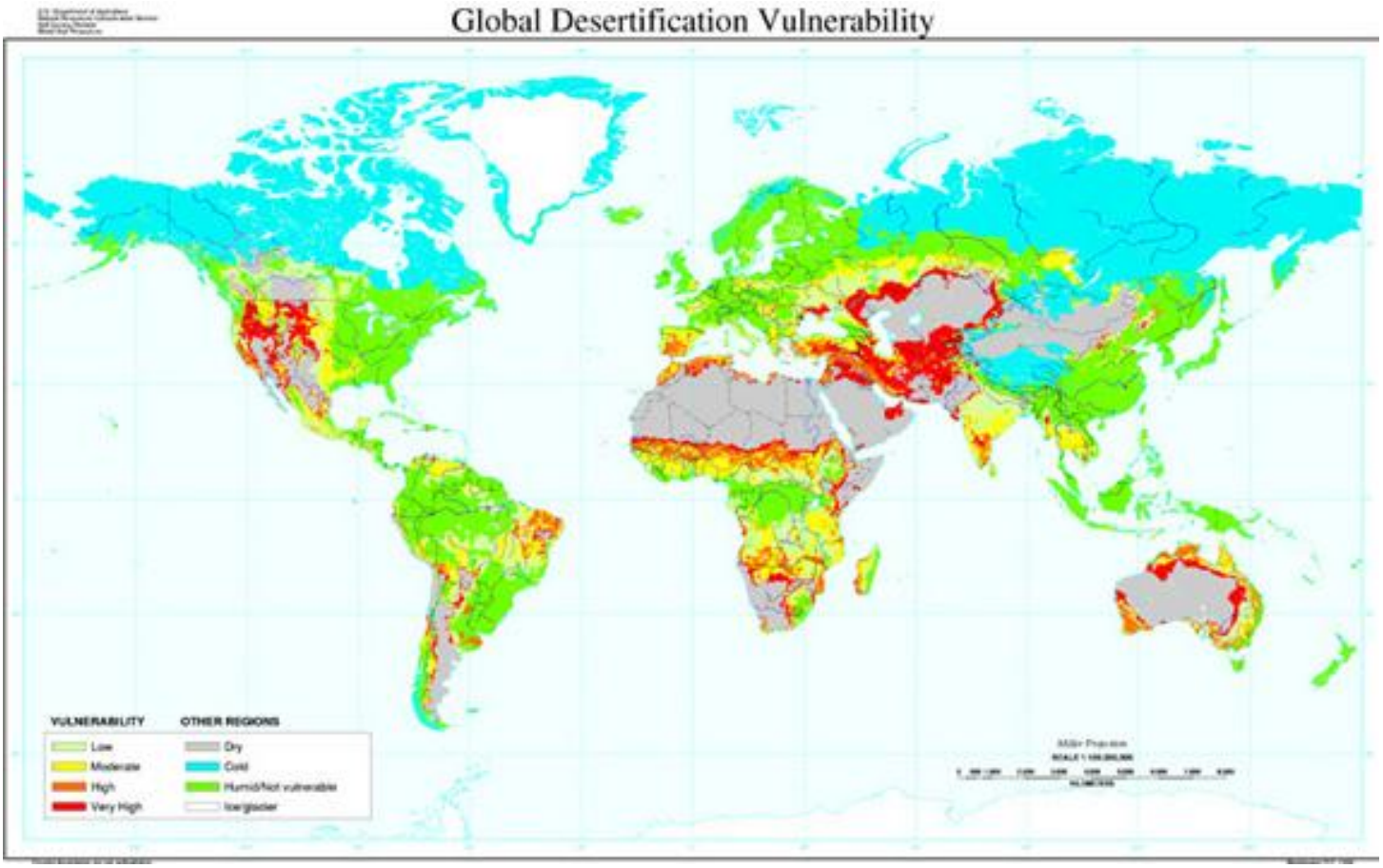
United Nations Framework Convention on Climate Change (UNFCCC)[33]

The UNFCCC is a convention on climate change and has nearly a universal membership. Almost all countries, besides the United States of America have ratified the convention while 84 of them have also signed it. The convention sets international efforts in order to combat climate change. Since deforestation is responsible for approximately 20% of the overall carbon dioxide emissions that are responsible for causing climate change[34], the UNFCCC also fights deforestation.

United Nations Convention to combat desertification (UNCCD)[35]

UNCCD is a convention which aims at combating desertification in countries that face serious droughts or extensive deforestation which may lead to desertification. Those countries are mainly African countries. Concerning its membership, all UN countries, except South Sudan, are members of this convention, whereas Canada has withdrawn from the UNCCD. The main aim of the convention is to substantially decrease the negative effects of droughts in specific areas in order for desertification to be prevented. The convention also addresses the problem of deforestation and thus also aims to decrease the rate of deforestation. The map[36] on the next page indicates the areas which are mostly vulnerable to desertification:

[33]"Newsroom." Climate Change Newsroom from the UNFCCC. UNFCCC, Web. 04 Jan. 2015.
[34]"About REDD+." UN-REDD Programme -- About REDD+. UNREDD+, Web. 04 Jan. 2015
[35]"UNCCD - Home." UNCCD, Web. 04 Jan. 2015.http://www.unccd.int/en/Pages/default.aspx
[36]"Natural Resources Conservation Service." USDA, Web. 04 Jan. 2015.



The UN-REDD program[37]

The UN-REDD (United Nations Reduced Emissions from Deforestation and forest Degradation)is a program which was initiated by the United Nations. Precisely speaking, it was presented to the public in 2008 by the Secretary General of the UN Ban Ki-moon as well as by Jens Stoltenberg, the Prime Minister of Norway. The main goal of the program is to help, mainly developing countries, succeed in the reduction of emissions from deforestation and forest degradation. Since its establishment, nine countries have expressed their interest in being assisted by this specific program: Democratic Republic of the Congo, Tanzania, Vietnam, Papua New Guinea, Zambia, Paraguay, Panama, Bolivia and Indonesia.

[37]"UN and Norway unite to combat climate change from deforestation ", UN, Web. 04 Jan. 2015.

III. Bloc Positions

Forest Carbon Partnership Facility (FCPF)

The FCPF has the same main aim as the UN-REDD program (see above), but additionally aims at fostering conservation. The REDD+ goals are for "the sustainable management of forests and the enhancement of forest carbon stocks".[38]

Rainforest Alliance[39]

The Rainforest Alliance is a non-governmental organization which was established to ensure the protection of tropical forests, at an international level. Their main aim is to protect forests by combating deforestation and by ensuring the sustainable livelihood of the people who solely depend on forests. This particular organization strives to combat climate change and deals with poverty, which may lead to the destruction of forests, to preserve wildlife and to keep forests standing, thus fighting deforestation.

Latin America

Overall, between 2001 and 2010, Latin American countries have experienced net deforestation, though individual countries have been successful in combatting deforestation.[40] Both Central America and the Caribbean experienced a net increase in vegetation. In South America, Brazil, Bolivia, Argentina, and Paraguay composed roughly 80% of deforestation, while Venezuela and Columbia gained the most vegetation.[41]Brazil has made enormous progress concerning deforestation by improving the quality of information, which is being gathered as far as forests

[38]"About Us." FCPF, Web. 04 Jan. 2015.
[39]"Home." Rainforest Alliance, Web. 04 Jan. 2015.
[40]Aide, T. Mitchell, et al. "Deforestation and Reformation of Latin Amerca and the Caribbean (2001-2010)."*Biotrpoica*45.2 (2013): 262.271. *Environment Complete.* Web.
[41] Ibid.

and the cutting down of trees is concerned. Specifically, the rate of deforestation in the Amazon forest in Brazil has decreased by approximately 80% from 2004 to 2012.[42] The reduction in the deforestation rate derived from the improved quality of information gathered which became easily and readily available to people and agencies that could take action against illegal deforestation in the area of the Amazon forest.

The European Union

Historically, deforestation has been much more intensive in Western developed countries, characterized by their temperate regions, than in countries with emerging economies, which represent the tropical regions.[43] Up to 50 years ago, Europe was the continent with least amount of original forest.[44] However, over the last century, the situation has changed, and deforestation rates are significantly higher in developing countries.[45] This means that while Europe was originally much more affected by deforestation than Southeast Asia or the Amazon, the situation has now dramatically changed and the latter are those that are currently experiencing the highest deforestation rates in the world. From 1990-2005, forests in Europe and in the US have continued to expand, although at a relatively slow rate.[46] The FAO points out that in the United States, the forest area remains fairly stable while it has expanded in Europe, although at a slower rate than before.[47] Over the past few years, Europe has been taking the lead in the Conferences of the Parties to the UN Framework Convention on Climate Change (UNFCCC), and has

[42]"Forests in Brazil." Mongabay.com. Web. 04 Jan. 2015.
[43] "Vital Forest Graphics"
[44]Ibid.
[45]Ibid.
[46]Ibid.
[47]"World Deforestation Decreases, but Remains Alarming in Many Countries." FAO, Web. 04 Jan. 2015.

increasingly stressed the need for more cuts to GHG emissions.[48] The European Commission emphasized that it will be impossible to reach the target of cutting EU emissions by 40% and limiting global climate change to 2°C by 2020 unless reductions of GHG emissions from deforestation are put forward.[49]

African Countries

The forests of Central Africa, which are second in size only to the Amazon basin forests, have suffered relatively less large-scale forest clearance, compared to forests in the rest of the world.[50] During the 1990-2000s, deforestation rates in this area were very low, ranging from 0.24% per year in the Democratic Republic of the Congo (DRC) to 0.05% per year in Gabon.[51] However, scientists have identified that more than 75% of the forests of Central Africa are potentially exploitable.[52] Because the region, especially in the area of the Congo Basin, is rich in commercially valuable species, logging operations will negatively impact the current state of the forests unless there is a proper regulation in place. This is especially true because there is the potential for untouched lands to be deforested due to logging operations.[53] Studies show that the primary cause of forest clearance in the region is the displacement of people due to conflicts and mining activities.[54] These countries will want to focus on resolutions which take into account the needs.

[48]John Baylis, Steve Smith, and Patricia Owens, *The globalization of world politics: an introduction to international relations*,(Oxford: Oxford University Press, 2014).
[49]SEC(2008) 2620, "Addressing the challenges of deforestation and forest degradation to tackle climate change and biodiversity loss." *Commission of the European Communities.*
[50]"Vital Forest Graphics". UNEP. Web. 04 Jan. 2015.
[51] Ibid.
[52] Ibid.
[53] Ibid.
[54] Ibid.

IV. Questions to Consider

1. Does your country have a problem with deforestation? If so, how has your country addressed the issue?

2. What UN actions have been made and have/have not been effective?

3. What incentives could be given to loggers and farmers to not destroy the surrounding forests?

4. Is your country part of the UN-REDD program? If so, what have the results been?

5. Is your country adopting policies favoring the sustainable management of forests locally (if that is the case) and/or worldwide?

6. What effect does logging have on your country, in terms of forest, building materials, jobs, and global warming?

V. Suggested Sites

http://environment.nationalgeographic.com/environment/globalwarming/deforestation-overview/ - Deforestation

http://www.conserve-energyfuture.com/causes-effects-solutions-of-deforestation.php - Causes, Effects, and Solutions to Deforestation

http://www.un.org/esa/forests/index.html - The United Nations Forum on Forests (UNFF)

http://www.unep.org/Documents.multilingual/Default.asp?DocumentID=52&ArticleID=59&l=en - United Nations Environment Programme (UNEP)

http://www.nature.org/ourinitiatives/urgentissues/global-warming-climate-change/howwe-work/creating-incentives-to-stop-deforestation.xml - The Nature Conservancy and Deforestation

http://archive.unu.edu/unupress/unupbooks/uu17ee/uu17ee06.htm - Deforestation and Desertification in Developing Nations

http://atlas.media.mit.edu/ - Observatory of Economic Complexity

VI. Glossary

Afforestation - The conversion of bare or cultivated land into forest

Biodiversity - The variety of plant and animal life in the world or in a particular habitat, a high level of which is usually considered to be important and desirable.[55]

Deforestation - The clearing or thinning of a forest or stand of trees from land which is normally implied to be a human activity.[56]

Desertification - A type of land degradation in which a relatively dry land region becomes more arid, and loses all its water, vegetation, and wildlife. This can be caused both by climate change and human activities, such as deforestation.[57]

Erosion - The process of removal of surface material from the Earth's crust, primarily soil and rock debris, and the transportation of the eroded materials by natural agencies from the point of removal.[58]

Logging (forestry) - The "process of harvesting trees, sawing them into appropriate lengths […], and transporting them […] to a sawmill. The different phases of this process vary with local conditions and technology".[59]

Rainforest - Forest with high rainfall (180 centimeters) and a hot and steamy climate.[60]

Subsistence farming (agriculture) - A "form of farming in which nearly all crops or livestock raised are used tomaintain the farmer and the farmer's family, leaving little, if any, surplus for sale".[61]

Sustainable Development - An approach to economic planning that attempts to foster economic growth while preserving the quality of the environment for future generations.[62]

[55]"Biodiversity | Biology." Encyclopedia Britannica Online. Encyclopedia Britannica, Web. 10 Jan. 2015.
[56]Pimm, Stuart L. "Deforestation." Encyclopedia Britannica Online. Encyclopedia Britannica, Web. 04 Jan. 2015.
[57]Pimm, Stuart L. "Desertification | Ecology." Encyclopedia Britannica Online. Encyclopedia Britannica, Web. 04 Jan. 2015.
[58]"Erosion | Geology." Encyclopedia Britannica Online. Encyclopedia Britannica, Web. 13 Jan. 2015.
[59]"Logging | Forestry." Encyclopedia Britannica Online. Encyclopedia Britannica, Web. 13 Jan. 2015.
[60]"Rainforest." Encyclopedia Britannica Online. Encyclopedia Britannica, Web. 04 Jan. 2015.
[61]"Subsistence Farming | Agriculture." Encyclopedia Britannica Online. Encyclopedia Britannica, Web. 13 Jan. 2015.
[62]"Sustainable Development." Encyclopedia Britannica Online. Encyclopedia Britannica, Web. 04 Jan. 2015.

VII. Bibliography

"About REDD+." UN-REDD Programme -- About REDD+. UNREDD+, Web. 04 Jan. 2015. http://www.un-redd.org/aboutredd/tabid/102614/default.aspx

Aide, T. Mitchell, et al. "Deforestation and Reformation of Latin Amerca and the Caribbean (2001-2010)." *Biotrpoica*45.2 (2013): 262.271. *Environment Complete.* Web.

Baylis, John, and Steve Smith. The Globalization of World Politics: An Introduction to International Relations. Oxford: Oxford UP, 2001. Print.

"Biodiversity | Biology." Encyclopedia Britannica Online. Encyclopedia Britannica, Web. 10 Jan.2015.<http://www.britannica.com/EBchecked/topic/558672/biodiversity>.

Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. {SEC(2008) 2620}. Addressing the Challenges of Deforestation and Forest Degradation to Tackle Climate Change and Biodiversity Loss. Brussels: n.p., 2008. Print.

"Deforestation Causes Global Warming." FAO. Food and Agriculture Organization, 6 Sept. 2006. Web. 4 Jan. 2015.<http://www.fao.org/newsroom/en/news/2006/1000385/>

"Deforestation Facts, Deforestation Information, Effects of Deforestation," National Geographic.http://environment.nationalgeographic.com/environment/globalwarming/deforestationover-view/?rptregcta=reg_free_np&rptregcampaign=20131016_rw_membership_r1p_intl_ot_w#nojump.close

"The Emissions Gap Report 2013", UNEP, Web. 04 Jan. 2015. <http://www.unep.org/pdf/UNEPEmissionsGapReport2013.pdf>

"Erosion | Geology." Encyclopedia Britannica Online. Encyclopedia Britannica, Web. 13 Jan. 2015.<http://www.britannica.com/EBchecked/topic/191809/erosion>.

"Forests in a Green Economy", UNEP. Web. 04 Jan. 2015. http://www.unep.org/pdf/PressReleases/UNEPForestsGreenEco-basse_def_version_normale.pdf

"Forests in Brazil." Mongabay.com. Web. 04 Jan. 2015.<http://rainforests.mongabay.com/20brazil.htm>

"Forests, Post-2015 and the Rio+20 Outcomes." UN News Center. UN, Web. 04 Jan. 2015. <http://www.un.org/en/development/desa/usg/statements/mr-wu/2013/04/forests-post-2015-and-the- rio20-outcomes.html>

"GEO5 Global Environment Outlook-5." Global Environment Outlook. UNEP, Web. 04 Jan. 2015. <http://www.unep.org/geo/geo5.asp>

"Global Environment Outlook 3: past, present and future perspectives", UNEP. Web. 04 Jan. 2015. http://www.grida.no/geo/geo3/english/pdfs/prelims.pdf

"Global Forest Resources Assessment 2005: Progress towards Sustainable Forest Management." FAO,Web. 04 Jan. 2015.ftp://ftp.fao.org/docrep/fao/008/A0400E/A0400E09.pdf

“Green Carbon, Black Trade: Illegal Logging, Tax Fraud and Laundering in the Worlds Tropical Forests. A Rapid Response Assessment,” UNEP, Web. 04 Jan 2015. http://www.unep.org/pdf/RRAlogging_english_scr.pdf

"Indonesia's Largest Palm Oil Producer Shows the Way." Greenpeace International, Web. 04 Jan.

2015.http://www.greenpeace.org/international/en/news/Blogs/makingwaves/indonesias-largest-palm-oil-producer-showsth/blog/44310/

Kenneth Rosenbaum, “Item 6a: Defining Illegal Logging: What Is It and What Is Being Done About It?” FAO. Web. 04 Jan. 2015. http://www.fao.org/docrep/006/y4829e/y4829e07.htm

"Logging | Forestry." Encyclopedia Britannica Online. Encyclopedia Britannica, Web. 13 Jan. 2015.http://www.britannica.com/EBchecked/topic/346171/logging

"Natural Resources Conservation Service." USDA, Web. 04 Jan. 2015. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/use/?cid=nrcs142p2_054003>

"Newsroom." Climate Change Newsroom from the UNFCCC. UNFCCC, Web. 04 Jan. 2015. http://newsroom.unfccc.int/

Pimm, Stuart L. "Deforestation." Encyclopedia Britannica Online. Encyclopedia Britannica, Web. 04 Jan. 2015. <http://www.britannica.com/EBchecked/topic/155854/deforestation>.

Pimm, Stuart L. "Desertification | Ecology." Encyclopedia Britannica Online.Encyclopedia Britannica, Web. 04 Jan. 2015. <http://www.britannica.com/EBchecked/topic/159114/desertification>.

"Post-2015 Development Agenda." UN News Center. UN, Web. 04 Jan. 2015. <http://www.un.org/en/development/desa/policy/untaskteam_undf/report2.shtml>

"Rainforest." Encyclopedia Britannica Online. Encyclopedia Britannica, n.d. Web. 04 Jan. 2015.<http://www.britannica.com/EBchecked/topic/939108/rainforest>.

Smith, Wynet. "The Global Problem of Illegal Logging." Forest Program World Resources

Institute (2002): 3-5. Web. 4 Jan. 2015.

"State of the world forests", FAO, Web. 04 Jan. 2015.
<http://www.fao.org/docrep/016/i3010e/i3010e.pdf>

"Subsistence Farming | Agriculture." Encyclopedia Britannica Online. Encyclopedia Britannica, Web. 13 Jan. 2015.<http://www.britannica.com/EBchecked/topic/570994/subsistence-farming>.

"Sustainable Development." Encyclopedia Britannica Online. Encyclopedia Britannica, Web. 04 Jan. 2015.<http://www.britannica.com/EBchecked/topic/765435/environmentallaw/224618/Sustainable-development>.

"Vital Forest Graphics".UNEP. Web. 04 Jan. 2015.<http://www.unep.org/vitalforest/>

"UNCCD - Home." UNCCD, Web. 04 Jan. 2015.
<http://www.unccd.int/en/Pages/default.aspx>

"UN and Norway unite to combat climate change from deforestation", UN, Web. 04 Jan. 2015.<http://www.un.org/press/en/2008/envdev1005.doc.htm>

"World Deforestation Decreases, but Remains Alarming in Many Countries." FAO, Web. 04 Jan. 2015. <http://www.fao.org/news/story/en/item/40893/icode/>