World Food Programme (WFP)

Dear Delegates,

In roughly three months, we will come together to draw conclusions on humankind's main and ever-lasting concern: food. WFP, founded in 1961, have been striving for saving people's lives by providing them this very fundamental need. In particular, we will be focusing on two very interesting point:

Genetic Patent Laws. We will delve into how to overcome problems related to genetic patents and focus on the implications of policies relating to global genetic patent laws. The focus on developing policy is to allow for the responsible use of Intellectual Property held on GMOs. There are countries that currently do not allow the use of GMOs, but this does not mean they are unaffected. These policies affect global food production which directly impacts all nations.

Drought and famine in conflict zones – yet another problem that takes the lives of thousands of people every year. After we discuss the current approach of how these very fundamental problems are evaluated, we try to come up ideas to extend WFP's function more than just directly providing food and we will consider social and political approaches.

Throughout the conference, two MIT students will be there to energize you and maybe even bring a smile to your faces once in a while. Yet, we are coming from very striking backgrounds and countries. Hopefully, our unique cultural and social backgrounds will make our session more interesting.

Efe, who is majoring in Electrical Engineering and Computer Science grew up in Istanbul, Turkey. Efe graduated from a German High School in Istanbul and got a Best Delegate Prize at a Trilingual MUN before showing up here. Efe's biggest accomplishment is to be able to move her right eyebrow independently from the left one.

Brook, who is majoring in Chemical Engineering, grew up in Ethiopia. During high school, she attended three MUN conferences in Ethiopia, Kenya and USA and served as the Secretary General of her high school's MUN club. One interesting fact about her is that she can recite the alphabet backwards.

Welcome to taste the fire hose during the MITMUNC!

PS: “An education at MIT is like drinking from a fire hose.”

Brook Eyob

Mehmet Efe Akengin

Topic A: Drought Mitigation and Food Providence in Conflict Zones

Introduction

A drought is considered to be "a period of abnormally dry weather sufficiently prolonged for the lack of water to cause serious hydrologic imbalance in the affected area[1]occurring in dry lands or places without proper reach to clean water. On the other hand, a famine is a widespread scarcity of food which is in most cases followed by starvation and increased mortality. In conflict zones where communities experiences various shortcomings as a result of political and military rivalries, people lose their reach to indispensable resources such as water and food, resulting in famine. Well-known current examples of conflict zones include Syria and Nigeria.

Compared to other zones of drought or famine on the world, conflict zones distinguish themselves with the challenge of overcoming both natural and political problems. Conflict zones are dangerous places for foreign interventions because of the zones' chaotic nature. As a result, many relief organizations are unable to effectively provide the necessary assistance due to conflict. Conflict can make it harder to provide immediate relief or implement long-term rehabilitation plans.

The goal of this topic will be to develop both long term and short-term drought mitigation plans that would be effective in overcoming political constraints and improving the existing programs to serve conflict zones better.

WFP's Mission on Drought and Famine

- To overcome long term problems, WFP has instituted Protracted Relief and Recovery (PRRO) programs that renovate and repair vital infrastructure such as bridges or irrigation systems. The program also presents relief for refugees by providing food and camping assistance.[2]

[1] "Definitions of Drought." *USGS*, n.d. http://md.water.usgs.gov/drought/define.html.

[2] "Protracted Relief and Recovery." *WFP*, n.d. https://www.wfp.org/operations/relief.

- To increase efficiency and speed-up the movement of food aid, WFP has established Special Operations (SOs) that work on repairing roads, railways, bridges and airports (Special Operations).[3]
- To overcome short term problems and react recent developments instantly, WFP has established Emergency Operations (EMOPs) in conflict zones. Using the Immediate Response Account to financing, WFP works together with UN Emergency Assessment Teams to deliver food.[4]
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Mission Statement of the WFP

"WFP is the food aid arm of the United Nations system. Food aid is one of the many instruments that can help to promote food security, which is defined as access of all people at all times to the food needed for an active and healthy life. The policies governing the use of World Food Program food aid must be oriented towards the objective of eradicating hunger and poverty. The ultimate objective of food aid should be the elimination of the need for food aid."[5]

Drought Mitigation:

The most important component of fighting against lacking sources is mitigating drought that also affects food providence. In conflict zones, drought arises as a result of political restrictions on use of water, people changing their places constantly as refugees unable to reach certain water sources, damages at sewage systems during a war and inability to find fresh and clean water.

While the current WFP programs can combat against famine to some extent, providing fresh water for more extreme cases is a harder task that is overlooked. Although transporting fresh water would not be feasible, construction of buildings such as wells for underground water can become a critical focus of PRRO program. New sewage systems

[3] "Special Operations." *WFP*, n.d. http://www.wfp.org/operations/special.

[4] "Emergency Operations." *WFP*, n.d. http://www.wfp.org/operations/emergency.

[5] "Mission Statement." *WFP*, n.d. http://www.wfp.org/about/mission-statement.

could be extended and old and inefficient systems could be renovated to provide water for people living in dry lands under conflict. Moreover, WFP may use financial sources to cooperate with bordering countries to conflict zones to accomplish these goals.

In that sense, conflict in Syria that brought about 6 million people displaced with less reach to water sources might be considered as a current emergency problem that WFP can develop new ideas about.

Rank	Country	Category
1	DR Congo	extreme
1	Somalia	extreme
3	Burundi	extreme
4	Eritrea	extreme
5	Angola	extreme
6	Chad	extreme
7	Ethiopia	extreme
7	Haiti	extreme
9	Afghanistan	extreme
9	Liberia	extreme
11	Comoros	extreme
12	Sudan	extreme
13	C.A.R.	high
14	Djibouti	high
15	Zimbabwe	high
16	Yemen	high
17	Sierra Leone	high
18	Mozambique	high
19	North Korea	high
20	Kenya	high

6

Famine and Food Providence:

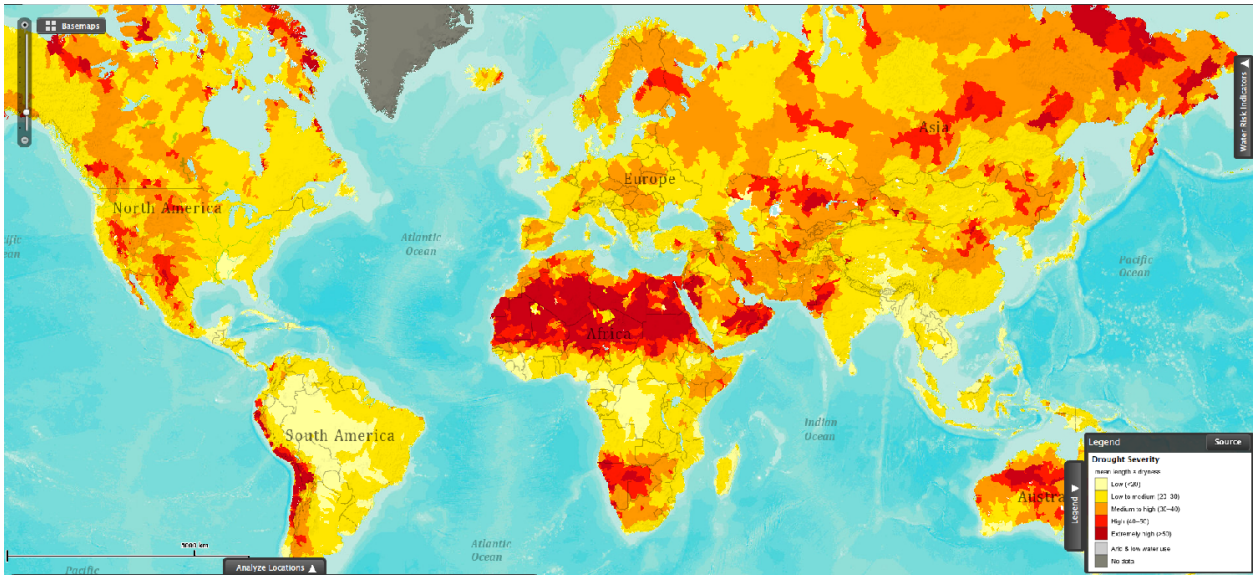
[6] Carrington, Damian. "Food Is the Ultimate Security Need, New Map Shows | Damian Carrington." *The Guardian*. http://www.theguardian.com/environment/damian-carrington-blog/2011/aug/31/food-security-prices-conflict.

Famine is the most common and detrimental problem of conflict zones. Conflicts impair the social life and trade, hampering the ways of exchange of agricultural goods. It can also force hundreds of thousands of people to leave their homes, and result in declining the labor power in agriculture. Drought or damages in irrigation systems further harms natural life and bring about famine.

Although the current WFP programs may manage to come up with short term solutions through EMOPs, long term and permanent solutions face social, economic and political obstacles. As an illustration, Israel does not allow fishermen in Gaza to fish[7]or does not let various primary food sources such as pasta, salt and rice be brought into city through any parties.[8]Such problems causing starvation and increased mortality can only be dealt through collaboration with other programs and councils of UN. Such collaboration may present solutions with political impacts as well. Adequate improvements in current programs to promote agricultural production can also reverse the increasing negative effects. Moreover, other similar approaches presented for drought mitigation may also apply.

[7] "Israel's Control of the Airspace and the Territorial Waters of the Gaza Strip." http://www.btselem.org/gaza_strip/control_on_air_space_and_territorial_waters.

[8] "Putting Palestinians 'On a Diet': Israel's Siege and Blocakde of Gaza." *Institute for Middle East Understanding*, n.d. http://imeu.org/article/putting-palestinians-on-a-diet-israels-siege-blockade-of-gaza.



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Country Blocks:

African, Middle Eastern and some Asian countries, depending on whether they have conflict zones or neighboring countries having conflict zones should be able to put the current problems into a word to establish a fruitful resolution. European Union, American block centered on USA and China should come up with solutions that promote these countries' direct or indirect involvement as well.

Although all countries may be inclined to solve problems of people in conflict zones, countries with conflict zones in Arabic Peninsula and African Union would not be in support of external interventions that might set up some restrictions on their political and military policies.

Conclusion

Drought mitigation and food providence has always been WFP's fundamental function. Our committee will be discussing possible solutions to these two issues in the special case of conflict zones. The discussion will cover political, social and economic

[9]"Drought Severity on the World." *Indexmundi*, n.d. http://www.indexmundi.com/blog/wp-content/uploads/2013/05/drought-severity-world.png.

aspects of the drought and famine and will add onto the already existing operation mechanisms of WFP. These improvements may include the long term construction, cooperation with countries around conflict zone to get local assistance and promotion of agricultural production.

Even though the existing reactions of WFP may seem to be sufficient at the first glance, WFP should expand its functionality through cooperating with other organs of UN to create an international sensitivity and awareness towards the problems people at conflict zones have. By this way, regarding countries of conflict zones may also take necessary precautions to protect innocent individuals' lives. Otherwise, WFP's endeavors may not turn into long term solutions.

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Topic B: Patent Laws

Introduction

The United Nations defines GMOs "as organisms (i.e. plants, animals or microorganisms) in which the genetic material (DNA) has been altered in a way that does not occur naturally by mating and/or natural recombination" [10]. This implies that GMOs are man-made inventions that can therefore be protected by patent laws. Since the 1980s, when the first patent for a genetically modified organism (GMO) was issued, genetic patenting of crops has become fairly commonplace. Many patents have been taken out and are enforced on genetic material, in particular seeds. Companies holding patents on genetic material have the right to be the sole distributors of this material for a fixed period of time after the patent is taken out. It is considered illegal to use the seeds without the proper licensing, including re-planting second-generation seeds. This can have a deep impact on global food production since there is a rapidly growing trend towards using GM crops

Fig. 1: Amount of land used to grow GM Crops in industrialized and developing nations [11]

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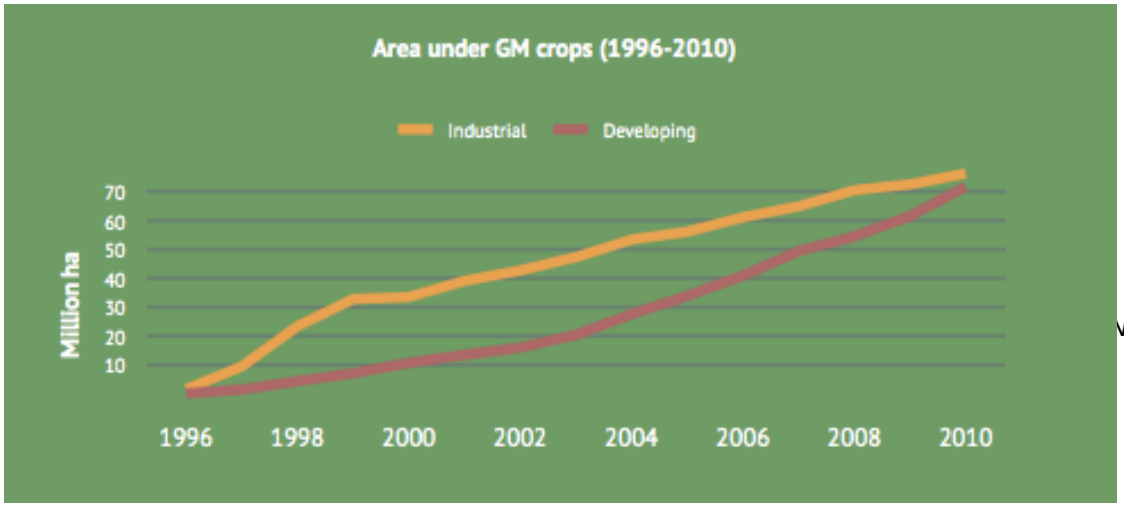

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instruments that can help to promote food security, which is defined as access of all people at all times to the food needed for an active and healthy life. The policies governing the use of World Food Program food aid must be oriented towards the objective of eradicating hunger and poverty. The ultimate objective of food aid should be the elimination of the need for food aid."[12]

Benefits of GMOs

According to the Food and Agriculture Organization of UN (FAO), GMOs are perceived as offering many benefits for the production and consumption of agriculture products. Considered benefits include higher productivity, better pest control, more flexible crop management and higher food quality. An immediate and small-scale advantage is higher yields and/or low costs for farmers – increasing productivity. Meanwhile, broader long-term advantages include more sustainable agriculture, higher food security and improved food quality. Genetic modifications can increase drought tolerance, enabling tropical crops to be grown in dry environments. Taking the rapidly increasing world population into account, GMO products can increase food production yields per unit area. This efficient use of agricultural land can increase food production without diverting land from other purposes like forestry, animal grazing or conservation. GMOs can also lead to an increase in the nutritional value of crops. Genetically altered strain of rice have also been developed that can help combat vitamin A deficiency. Although GMOs provide numerous benefits for farmers, agriculture and possibly consumers, it also comes with certain risks and uncertainties. In this committee, we will be focusing on the social, ethical, economic and political implications associated with the patenting of GM crops [13].

[12] WFP. (n.d.). *WFP Mission Statement*. Retrieved 11 27, 2014, from WFP: http://www.wfp.org/about/mission-statement

[13] Zarrilli, S. (2005). *INTERNATIONAL TRADE IN GMOs AND GM PRODUCTS: NATIONAL AND MULTILATERAL LEGAL FRAMEWORKS.* New York and Geneva: UNCTAD.

Global Patent Laws (TRIPS)

According to the WTO, one of the main ways that patent laws are maintained globally is through the WTO's TRIPS Agreement, which calls for countries to provide a certain level of protection when it comes to the protection for certain intellectual property rights. The TRIPS agreement protects Intellectual Property, which includes patentable invention. However, TRIPS does not protect discoveries since they are not considered Intellectual Property[14]. Presently, the TRIPS agreement does not technically require nations to accept patents for plants and animals. However, it does require countries to protect plant varieties. Such legal loopholes are used to get Intellectual Property protection based on a countries context. Revisions to the TRIPS have been proposed, but they haven't been agreed upon yet due to a lack of consensus among member countries. After a product is granted a patent, governments still maintain the right to control or prohibit sales of the product. Specifically regarding GMOs, TRIPS allows for temporary exemption from patent requirements when it is essential for guarding the well being of humans, animals or the environment [15].

Changes in the Agricultural Industry

Over the last 40 years the global commercial seed industry has seen a remarkable number of mergers and acquisitions by transnational corporations. Since the transgenic crops first became available to the public in the 1990s, these transnational corporations have mainly controlled the sale of these seeds. Some notable names include Monsanto, DuPont and Syngenta [16]. As a result of Genetic Patenting Laws these companies control

[14] WTO. (n.d.). *Genetically Modified Organisms (GMOs)*. Retrieved 11 27, 2014, from WTO: http://www.wto.org/english/tratop_e/sps_e/sps_agreement_cbt_e/c8s1p1_e.htm

[15] Zarrilli, S. (2005). *INTERNATIONAL TRADE IN GMOs AND GM PRODUCTS: NATIONAL AND MULTILATERAL LEGAL FRAMEWORKS.* New York and Geneva: UNCTAD.

[16] Phillip, H. H. (2009). *Visualizing Consolidation in the Global Seed Industry: 1996–2008. Sustainability.* 1266-1287.

large shares of the certain GM market. For example in 2008 Monsanto had a 65% share of the GM corn and soybean market, it also controlled 45% of the GM cotton market[17].

Possible Concerns & Benefits to consider

Many social, ethical, economic and political concerns have been raised regarding both halting and continuing GMO patenting.

Concerns with continued GMO patenting

- Many believe that if corporations continue to patent GMOs – especially GM seeds – some patented products may become too costly to use in developing countries [18].
- If private sector producers are only concerned with financial returns associated with patents they may focus more on developing products for wealthier markets while putting less stress on poorer markets [19].
- Patenting staple foods can change how the food production system works. Allowing a few organizations to have control over staple foods can intensify food insecurity as a result of inequality, poverty and concentration of food production. Issues relating to fair competition and antitrust laws can also arise [20].
- Governments fear that transnational corporations controlling the distribution of certain crop varieties can decrease their chance to reach or produce such crops, impairing the development of their countries [21].

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[17] Economist, T. (2009, 11 19). *The debate over whether Monsanto is a corporate sinner or saint* . Retrieved 11 27, 2014, from The Economist : http://www.economist.com/node/14904184

[18]

[19] Zarrilli, S. (2005). *INTERNATIONAL TRADE IN GMOs AND GM PRODUCTS: NATIONAL AND MULTILATERAL LEGAL FRAMEWORKS.* New York and Geneva: UNCTAD.

[20] Zarrilli, S. (2005). *INTERNATIONAL TRADE IN GMOs AND GM PRODUCTS: NATIONAL AND MULTILATERAL LEGAL FRAMEWORKS.* New York and Geneva: UNCTAD.

[21] Zarrilli, S. (2005). *INTERNATIONAL TRADE IN GMOs AND GM PRODUCTS: NATIONAL AND MULTILATERAL LEGAL FRAMEWORKS.* New York and Geneva: UNCTAD.

Concerns with halting GMO patenting

- If patents are not effectively safeguarded, private sector organizations will not have the incentive to develop new biotechnology which may present novel solutions to a host of global problems [22].
- Individuals and corporations that are not allowed to protect intellectual property may raise ethical issues, since the genetic makeup of these crops are their inventions.

Country Blocs

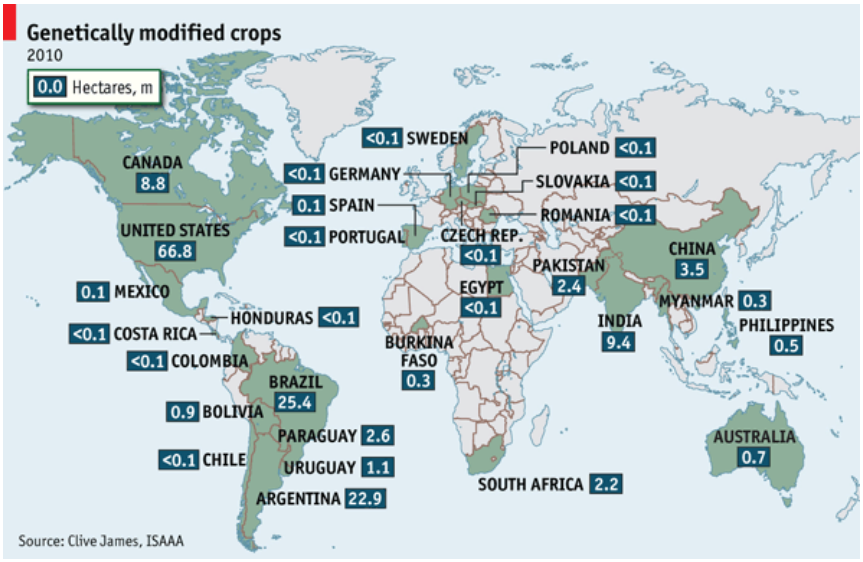

Fig 2: Amount of land used to grow GM crops in 2010[23]

For many years the largest farmer of GM crops has been the US but a growing number of developing countries have increased their production of GM crops. The effects of GM patenting are becoming more and more important in South America and Asia. However, many of the transnational corporations holding Genetic Patent are still western firms. The European Union allows the import of GM crops but it generally restricts the farming of GM

[22] Zarrilli, S. (2005). *INTERNATIONAL TRADE IN GMOs AND GM PRODUCTS: NATIONAL AND MULTILATERAL LEGAL FRAMEWORKS.* New York and Geneva: UNCTAD.

[23] Economist, T. (2011, 2 23). *Where genetically modified crops are grown* . Retrieved 11 27, 2014, from The Economist: http://www.economist.com/blogs/dailychart/2011/02/adoption_genetically_modified_crops

crops in Europe. GM crops haven't yet penetrated the African market however; policies on patent laws can have an effect on how they may enter the African market in the future.

Conclusion

The main focus of this topic will be on the social, ethical and economic and political implications associated with the patenting of these GM crops. The WFP's main goal is to eradicate world hunger, so policies should be geared towards making this a reality without harming other parties evolved. The main challenge you will face will be juggling the interests of both sides.

The use of GMOs and the benefits that they presumably pose are debatable. The goal of this topic is not to simply justify using or not using GMOs. The focus is on developing policy to allow for the responsible use of Intellectual Property held on GMOs. There will be countries that currently don't allow the use of GMOs but this doesn't mean they are unaffected. These policies will affect global food production, which directly impact all nations.

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[3] WTO. (n.d.). *Genetically Modified Organisms (GMOs)*. Retrieved 11 27, 2014, from WTO: http://www.wto.org/english/tratop_e/sps_e/sps_agreement_cbt_e/c8s1p1_e.htm

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