Committee/Council: GA 4

Issue: Finding Long Term Solutions to Food Security and the

Restoration of Arable Lands

Student Officer: Lydia Lampiri

Position: Co-Chair

Introduction

In the near future, issues including arable land and food security will be more severe. The issue with arable land is that they are becoming scarce as time goes by due to many factors, some of which include the fact that most of today's arable land is used already but also due to natural phenomena such as erosion. If arable land is not used properly, not only will the ecosystem feel the pain, but also humanity. Arable land is the main source of food for most of us, and by limiting the amount of crops that can be farmed; we are not only causing more widespread hunger but also jeopardizing everybody's food security.

Definition of Key Terms

Land Degradation

Land degradation is a decrease on how productive a piece of land can be. The effects of land degradation can be either permanent or temporary.

Food Security

Food security is a state in which everybody has access to a sufficient amount of nutritious food at an affordable price. Additionally, the four pillars of food security are the following; access, availability, quality, and stability. These four pillars are essential in order to establish any form of food security.

Arable Lands

Arable Lands are those that can be used to grow crops.

Food and Agricultural Organization (FAO)

The Food and Agricultural Organization's main goal is to establish food security throughout the world. In order to achieve food security, the Food and Agricultural Organization has established three goals which include the eradication as well as the elimination of hunger and poverty and the sustainable management of natural resources such as land, water, and air.

Hunger Hotspot

A hunger hotspot is a small area with significant hunger due to an emergency or disaster, causing the area to have food insecurity and thus, not be able to provide for its inhabitants.

World Food Council (WFC)

The World Food Council was established in 1974 by the General Assembly following the World Food Conference. The World Food Council was created in order to coordinate the improvement of malnourishment and hunger as well as the development of new agricultural techniques which in turn would increase food production worldwide (with the assistance of national agriculture ministers). In 1993 however, the activities of the World Food Council were suspended.

Purchasing Power

Purchasing power is the amount of goods or services that can be purchased with one unit of money. This defines the value of a currency.

Sustainable Development Goals

The Sustainable Development Goals were launched as a member state agreement of the Rio+20 conference. These goals were to depend on the existing Millennium Development goals but also work along with the post 2015 development agenda. Furthermore, the member states agreed that the Sustainable Development goals should in fact, contribute and be useful in both achieving sustainable development and the pursuit of it, and implement sustainable development in the entire UN system with focus on priority areas for the achievement of these goals.

Background Information

The Issue of Arable Land

Arable land is mainly used to grow crops; however, it is also used for meadows for either mowing or pasture. Humans rely on arable land to get most of their daily nutrients. However, Arable lands are scarce in the ecosystem. It is rare that there is a piece of land that fits the criteria for "arable". With that in mind, all actions should be taken in order to protect them.

The image below is the division of the hectares of arable land between nations.

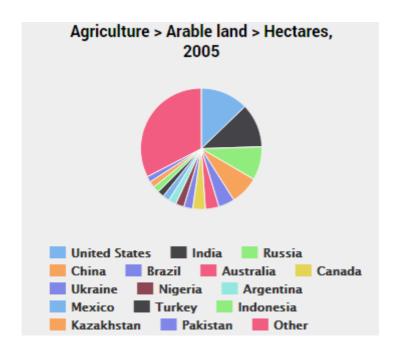


Figure 1.1: "Hectares of Arable Land Compared"

Land Degradation

Deforestation

One of the main reasons arable land is so scarce is due to land degradation. Even though most of the land that is arable has already been used for something, the remaining land is being destroyed rather than enriched. There are many forms of land degradation, ranging from deforestation to overgrazing, yet, all are interconnected. More specifically, countries such as Brazil, Indonesia, the Russian Federation and Mexico face the largest effects of deforestation.

Highest Deforestation Countries in World		
Deforest Rank	Country Name	Forest Area Cut(in Hectares)
1	Brazil	3466000
2	Indonesia	1447800
3	Russian Federation	532200
4	Mexico	395000
5	Papua New Guinea	250200
6	Peru	224600
7	United States of America	215200
8	Bolivia	135200
9	Sudan	117807
10	Nigeria	82000

Figure 1.2: "Top Ten Countries with Highest Deforestation."

Overexploitation of Fuel

The overexploitation of fuel and most specifically fossil fuels may help in the short term but not in the long term. By harvesting at a faster rate than that allowed by nature, we tend to harm the ecosystem at a rate that it cannot recover from. The large-scale consumption of fuel harms the environment through the loss of valuable resources and the emission of pollution. This results in the harming of the ecosystem and limits the world's arable land.

Overgrazing

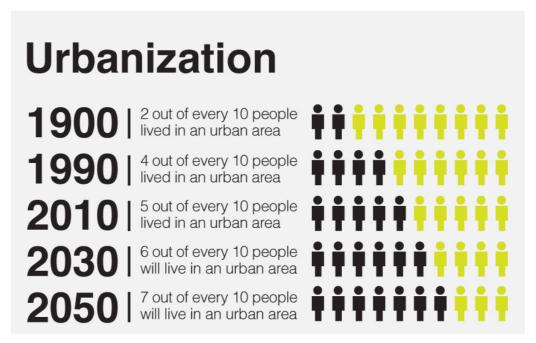
Overgrazing is related to the issue of arable lands due to the fact that it is engaged in them. In this way, many nutrients are lost and the land cannot be restored for farming purposes. Overgrazing also reduces the length of a plant root, thus making the plant weaker and partially destroying the pasture sod. This can result in weaker plants, erosion as well as the allowing of weed seeds to germinate and grow, leading to possible threats for the human diet.

Agricultural Activities

Agricultural activities tend to hurt arable land and lead to biological degradation. Even though they are not taken as seriously as they should be, biological degradation effects can lead to changes in the biodiversity of the ecosystem as well as speed up physical degradation such as erosion.

Industrialization

Based on "How to Feed the World in 2050", "By 2050, more than 70% of the world population is expected to be urban" ("How to Feed the World in 2050"), this means that with the expansion of urbanization, industrialization will also expand. As a result, many arable lands will be lost. The estimated 9 billion people will have a greater demand for food than we do today, however most jobs will be non-agricultural due to the effects of ecological disasters or pollution. This means that with most arable land lost due to the industrialization and urbanization of the planet, governments should find a way so that food security is ensured within their borders.



Defined by UN HABITAT as a city with a population of more than 10 million

Figure 1.3: " URBAN VS RURAL POPULATION BY 2050

Industrialization of Agriculture

The industrialization of agriculture can often be seen as "good" for both the economy and people's lives. The result though, is vile to the environment. The increase of the world's population calls for a greater amount of yield increases in terms of agriculture. However, this can result in pollution as well as hurt humans with chemicals. Additionally, by only farming one type of crop, the soil becomes deprived from many of its nutrients. However, with crop rotation, such an issue does not exist.

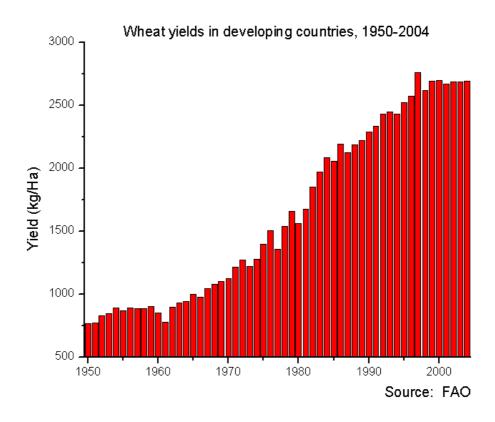


Figure 1.4: "Wheat Yields in Developing Countries."

The Issue of Food Security

In the state of food security, food is at an affordable price for all and has enough nutrients to cover everyone's daily needs. Today, due to not only the economy but also the current demand for food, not all people have food. As a result, this creates hunger hotspots in many Less Economically Developed Countries (LEDCs) nations but also goes against the first millennium development goal: the eradication of poverty and hunger.

The Four Pillars of Food Security

Food security has four pillars. These four pillars are extremely crucial and can be used to determine the status of a country or nation in terms of the food security of its people. The first pillar of food security is "access". "Access" in food security means the ability to produce or purchase food. This however is linked to the purchasing power of each person and therefore may vary. Following "access", the second crucial pillar of food security is "availability". "Availability" can be defined with food production meeting the needs of the people. In some parts of the world, the production is less than the needs of the people causing a lack of food availability and thus, food insecurity. The third pillar of food security is "quality". "Quality" of food however, means food safety, as a result, food quality comes from many points of view such as nutritional, sanitary, sensory, and socio-cultural. Furthermore, food security is integrated directly into food safety. Lastly, the final pillar is "stability". The "stability" part of food security itself depends on both the previously

mentioned three pillars as well as price stability in terms of the income security for vulnerable populations.

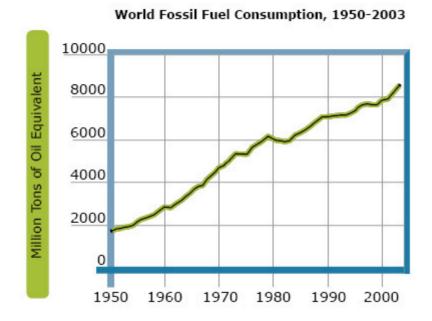


Figure 1.5: "World Fossil Fuel Consumption"

Future Uses of Edible Products

In the years to come, humanity will be faced with a cruel consideration, food versus energy. With the current consumption rate at which we are burning fossil fuels, we will run out soon. This means that humanity should have another way of gaining energy without the use of fossil fuels. Bioenergy is an alternative method of having energy, without hurting the environment as much. However, if bioenergy is derived from the world's feedstock, the food that will remain for the people to use will become less and thus its price will raise higher up.

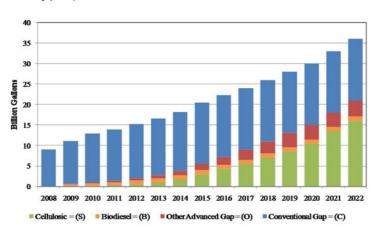


Figure 1: Biofuel Use Mandates Established by the Energy Independence and Security (EISA) Act of 2007

Figure 1.6: Biofuel Usage Mandates

Hunger Hotspots

As stated by the USA World Food Programme "Global Hunger is the world's greatest solvable problem". With the Millennium Development Goals (MDGS) expiring in 2015, we can see that not all goals have been met. More specifically, Goal number 1 on the "eradication of extreme poverty and hunger" has yet to have been met in many regions of the world. The world continues to have multiple hunger hotspots as well as increased amounts of poverty. Hunger hotspots usually occur in rural areas of LEDCS during world emergencies such as those of war, disease (such as Ebola) or general disorder within the borders of a nation. The issue with ensuring food security and hunger hotspots is that we do not know when a hunger hotspot may occur. This means that all nations may be eligible for a hunger hotspot due to an emergency or disaster.

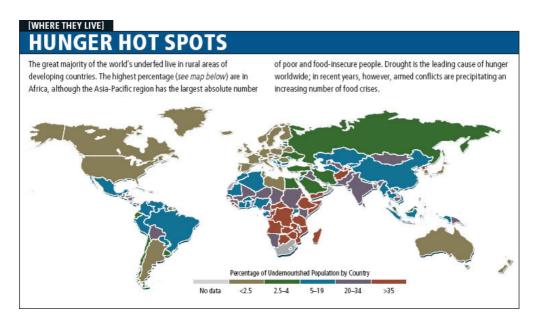


Figure 1.7: "Hunger Hot Spots"

Major Countries and Organizations Involved

The United States of America

Based on the Food Security Index, the United States is the country with the most food security worldwide. The United States has also implemented the Food Stamp Program (Supplemental Assistance Program) from the 1960's that helps impoverished people to purchase food. Additionally, the United States has taken initiative with other nations and G8 members and launched the Feed the Future Program that wants to help the agricultural sector as well as women and small farms of partner countries. As a result, this can help minimize hunger and poverty and promote the agriculture of nations. The United States has previously dealt with land degradation issues due to wind erosion in the 1930's through crop rotation however, land productivity soon returned.

France

France has made efforts to improve global food security through the French Agricultural Research and International Cooperation (CIRAD). Additionally, according to Mr Stéphane Le Foll, France has three main goals for its commitment to Global Food Security. First of all, France wants to use the Agricultural Market Information System Initiative, an inter-agency platform which works to strengthen collaboration between producing, importing and exporting countries. Its five pillars, (market monitoring, analysis, statistics, capacity development and policy dialogue and outreach) are aimed to make sure that all consumers gain a better understanding of crops as reserves by having prepositioned food reserves in developing countries. Secondly, France wants to battle food waste, not only through post-harvest loss but also through the loss coming from food distribution and consumers. Finally, France wants to develop agro-ecology, a method that uses ecological concepts to manage, plan, assess and study agricultural systems that are productive but also conserve recourses. This doubles the economic and environmental performance in the sector of agriculture.

Singapore

According to the Food Security Index, Singapore is the second most food secure nation in the world. As a nation, Singapore relies on food imports to a large extent; this means that the Singapore government had to find a way to make sure that all people have access to food at an affordable price. Singapore then diversified its food sources, as well as promoted local production where more food is grown but less land and labour are required. Finally, in addition to reducing food waste, Singapore has also created a stockpile in order to stabilise prices of items at times of short-term storages, which applies mainly to rice.

Hunger Hotspot Nations

Nations with hunger hotspots (currently Syria, South Sudan, Iraq, Central African Republic, Nepal, and Yemen) are nations that struggle due to the fact that they are in a food crisis. This does not mean that the countries are not able to provide food security for their people at all; however, it does mean that these nations are temporarily food insecure.

Food Insecurity

A nation becomes food insecure when it cannot provide nutritious food to all its people due to economic means or lack of resources. Food insecurity can be both permanent and temporary, considering the extent at which the country is suffering from damage. In order to respond to emergencies, organisations such as the World Food Program (WFP) assess how much food is needed in the hunger hotspot region and for how long, after they receive the answers they create an action plan and budget for the assistance which includes method of transportation for the food, the amount of food required as well as the rations for those who will receive it. Due to the budget and purchasing power of the

organisations, many rely on donations in order to purchase food aid. Even though many people donate to these causes, the biggest donations come from governments. Following a food crisis or in order to prevent future hunger, organisations such as the WFP have a fourfold task; these organisations pay the hungry with food, use food to help those with HIV/AIDS, buy the food from developing countries in order to bring larger markets to farmers and focus on women, to ensure that they have equal access to food.

World Food Program (WFP)

As a part of the UN, the World Food Program was created in 1981 to solve hunger crises throughout the world. They are the ones delivering food to victims of war, or natural disaster. Their main goal is to rebuild lives and help people through food, by working close with four main objectives. These four objectives are the following; saving lives and protecting them in emergencies, supporting food security and nutrition as well as rebuilding lives in fragile settings or after emergencies, the reduction of risk and enabling of all people or communities to be able to meet their nutritional or food needs and finally the reduction of under nutrition and breaking of the hunger cycle. In addition to the four main objectives, the WFP has numerous programs to assist food insecurity such as the "Centre of Excellence" program which works with school feeding as well as food and nutrition security programs. The "school meals" program provides school meals and supports education, the reduction of malnutrition and promotes development. The "Purchase for Progress" program supports agricultural and market development in developing countries by purchasing their agriculture. In this way, farmers can become more competitive and the nations can develop. The "Food Assistance for Assets" program uses food and cash vouchers for "attracting" communities to participate in activities such as building or repairing infrastructure. The "HIV, TB, Food Insecurity and Malnutrition" program aims to properly nourish those living with HIV-AIDS or Tuberculosis which require a larger and more nutritious daily caloric amount. Finally, the "Cash and Vouchers" program aims to provide food to those who cannot afford it, these vouchers can be spent in local and selected shops and in return benefit both the economy and the people.

Food and Agriculture Organization of the United Nations (FAO)

The FAO has three goals, which essentially circulate around its main goal: achieving food security for all. The FAO's main goals are the following, "the eradication of hunger, food, insecurity and malnutrition" (FAO), the "elimination of poverty and the driving forward of economic and social progress for all" (FAO), and finally, the final goal is "the sustainable management and utilization of natural resources including land, water, air, climate and genetic resources for the benefit of present and future generations" (FAO). In terms of the restoration of land however, the FAO has assisted Niger with the Keita project. This has resulted in the formation of a green patch in the desert. Additionally, along with

the United Nations Development Programme (UNDP), the FAO assisted China on the Mizhi County on the Loess Plateau in 1979.

<u>High Level Task Force on Global Food and Nutrition Security (HLTF) Coordination</u> Organization

The High Level Task Force coordination association was created in April 2008 after the large price increase of food. Its 23 members (mainly UN agencies, funds and programs) try to provide support to countries dealing with food insecurity issues. More specifically, the HLTF focuses on four result areas; supporting incountry action in order for the improvement of food and nutrition security, investment mobilization to support urgent action as well as both regional and national food and nutrition security plans, the engagement as well as partnership of stakeholders in levels ranging from local to global so that contributions to improve food security are improved and finally the supervision of international community efforts along with tracking the Comprehensive Framework of Action (CFA) results.

International Fund for Agricultural Development (IFAD)

The International Fund for Agricultural Development is a specialized UN agency that was founded in the World Food Conference (1974). The IFAD finances agricultural development projects in LEDCS and developing countries that are primarily related to food production. The IFAD's goal is to eradicate rural poverty in developing countries, empower men and women and achieve higher food security. The IFAD manages to do so by working with governments, people, donors and NGO's and through focusing on country-specific solutions.

United Nations Convention to Combat Desertification (UNCCD)

The United Nations Convention to Combat Desertification was established in 1994. Since then, its core goal has been to legally bind the agreement that links the environment and development to sustainable land management. What makes the UNCCD different from other conventions is that the UNCCD relies on locals due to its bottom-up approach. This means that the UNCCD encourages locals participate in the combating the land degradation and desertification. On the other hand, though, the secretariat of the UNCCD also promotes a partnership between developed and developing countries (especially in terms of knowledge and technology) for sustainable land management.

<u>United Nations Environment Program (UNEP)</u>

The United Nations Environment Program is the authority that assesses environmental conditions and trends in a global, regional and national scale. It

also develops both national and international instruments and strengthens institutions in order for them to manage the environment wisely. In terms of land degradation, the UNEP has created multiple Governing Council decisions such as decision 20/10, which requests the Executive Director to assist, promote, and support as well as maintain the UNEP response to global degradation issues. Additionally, the UNEP along with the Global Environment Facility (GEF) have launched projects such as the Land Degradation Assessment in Drylands (LADA), which assesses as well as quantifies land degradation impacts in terms of nature, degree, severity, and effect. LADA also builds capacity for design, analysis, planning and implementation of interventions in order to establish sustainable land usage as well as proper land management practices as well as sets up efforts for the mitigation of land degradation.

<u>United Nations Development Program (UNDP)</u>

The United Nation Development Program's (UNDP) goal is to eradicate poverty and hunger as well as reduce inequality and exclusion. The UNDP currently has a partnership with Global Environmental Facility (GEF), in order to provide countries with technical service as well as assist nations with the formulation of projects, oversight in project implementation and manage or evaluate results. The UNDP assists countries in the achievement of their MDG/SDG targets as well as publishes reports on Human Development. An example of a Human Development report relating to the issue is the 2012 Africa Human Development Report, which claimed that food security in Africa must be achieved prior to 2050 because a food-insecure Africa cannot provide to its estimated two billion residents. The main goals of the report suggest an increase and maintenance in agricultural productivity, a reduction of malnutrition, the ability to resilience from shocks/crises and the implementation of empowerment and social justice throughout the entire continent.

Timeline of Events

Date	Description of event
1930	USA faces wind erosion and destruction of land
1974	November 5 th -6 th : World Food Conference is held in Rome, Italy
	Establishment of the Committee on Food Security
1977	IFAD is established

1979	UNDP and FAO launch project to restore Mizhi County in China
1992	June 3 rd – 14 th : Rio Earth Summit
1994	March 21 st : Convention on Climate Change put into effect
1996	November 13 th -17 th : First World Summit on Food Security is held in Rome, Italy
1997	December 11 th : Adoption of the Kyoto protocol
2000	September 8 th : Adoption of the UN Millennium Declaration
	September 6 th -8 th : Millennium Summit
2002	June 10 th -13 th : World Food Summit
2008	April: HLTF is created
2009	November 16 th -18 th : Second World Summit on Food Security is held in Rome, Italy
2010	July: Comprehensive Framework for Action (CFA) of High Level Task Force (HLTF) established
2012	June 21 st : Zero Hunger Challenge introduced
	June 20 th -22 nd : Rio+20 conference
	November 26 th -December 8 th :UN Climate Change Convention in Doha
2013	November 11 th -23 rd : UN Climate Change Convention in Warsaw
2014	November 19 th -21 st : Second International Conference on Nutrition November 17 th : Rome Declaration on Nutrition and the Framework of Action endorsed
2015	International year of Soils

Relevant UN Treaties, Resolutions and Events

Millennium Development Goals

The Millennium Development Goals (MDGs) were eight goals that ranged from solving poverty to providing education for all. The MDGs were a 15-year project (2000-2015) which mainly progressed in the areas of poverty, education and child mortality. These goals relate to the issue of food security due to the fact that the first Millennium Development Goal is to "Eradicate extreme poverty and hunger". The results of the first MDG are impressive, (1 billion people are no longer in extreme poverty, the undernourished people in developing regions proportion has dropped by almost 50%) however, there are still conflicts that forced millions of people to abandon their homes by the end of 2014. Additionally, with the seventh Millennium Development Goal, "Ensuring environmental sustainability", the issue of restoration of arable lands is further developed. In fact, due to the 7th MDG and improvements in the management and protection of forests and ecosystems, the situation has started to improve.

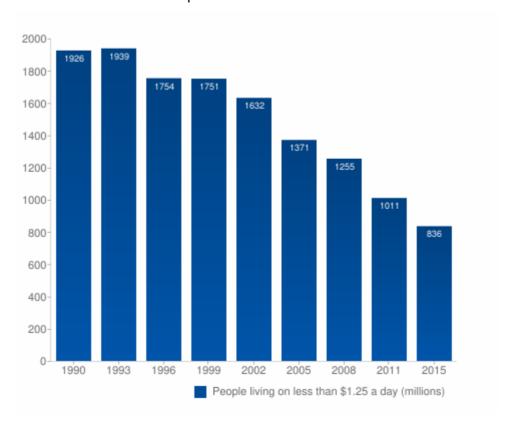


Figure 1.8: People living on less than \$1.25/day (MDG 1)

World Summit on Food Security

The first world summit on food security took place in Rome. During the summit, member states pledged to eradicate world hunger and ensure food security through the "Rome Declaration on World Food Security". In 2009, and following the proposal of the FAO Director-General, the 2nd World Summit on Food Security was held. During this summit, the member states renewed their commitment on the eradication of hunger.

World Food Summit

In the World Food Summit, the members adopted the "Declaration of the World Food Summit" which called for an intergovernmental group to prepare guidelines on implementing the right to food. As a result, the "Right to Food Guidelines" were drafted.

World Food Conference

The World Food Conference took place following the Bangladesh famine. This lead to the establishment of the WFC (which got suspended in 1993), and the "Universal Declaration on the Eradication of Hunger and Malnutrition"

Rome Declaration on Food Security and World Food

The Rome Declaration on Food Security and World food was written during the World Food Summit of 1996. Its goal is to achieve food security for all and eradicate hunger in all countries. It also sets a goal to reduce the undernourished people by one half no later than 2015.

Rio +20 conference

The Rio+20 was a UN conference on sustainable development. The main issues of this conference were of food security and sustainable agriculture. The two main outcomes of the Rio+20 conference were the Sustainable Development Goals (SDGs), which were based on the Millennium Development Goals but could work with the Post-2015 goals as well. Additionally, the Rio+20 declaration was implemented. This declaration proclaimed that the eradication of poverty is the greatest current global challenge and reaffirmed the need to achieve sustainable development.

Resolution Adopted by the General Assembly on December 21st, 2012

This resolution is alarmed over the many complex matters which result in many food crises around the world, and thus, food insecurity. By recalling previous

commitments of nations to solve food insecurity such as the first Millennium Development Goal, this resolution asks for all nations to provide help in order for the issue of food insecurity and nutrition to be solved.

Human Rights Council Resolution on "The Right of Food"

This resolution promoted the fact that states should prioritize the right to food in their development strategies due to the fact that all humans are equal and should therefore benefit from nutritious and safe food. It proclaims that currently, the issues related to hunger and food security are no longer national, but rather have global dimensions. Even though this resolution was adopted without a vote and states that food cannot and should not be an economic or political pressure instrument to people, therefore suggesting that all member states should find a strategy based on their individual resources and capabilities which will be aligned with the Plan of Action of the World Food Summit, in order to minimize hunger. Additionally, by claiming that rural areas are the most vulnerable to food insecurity, this resolution asks states to take measures for protecting the rural areas as well as invest in rural development.

<u>Draft Resolution on Agricultural development, food security and nutrition</u>

This draft resolution is essentially a declaration of World Soil Day (December 5th) as well as the Year of Soils (2015). However, throughout this draft resolution, the vice committee chair, Ms Farrah Brown (Jamaica), states that soil is essential to not only sustain life on earth, but for means such as those of food security, agricultural development and the proper function of the ecosystem. She later on claims that due to the fact that the population of the world is rising, the necessary soils to maintain global food security must be sustainable so that they can address the growing population needs as well as good land management is not only important for food security but also the global economy. This draft resolution also mentions three main challenges, desertification, land degradation, and, drought. These three challenges may act as a "barrier" to the sustainable development of all nations, especially the developing ones.

Report of the Secretary General on Agricultural development and food security

This report talks about the challenges of achieving food and nutrition security as well as serves as an update of the sustainable agricultural practices following the implementation of the Rome principles. Furthermore, the main challenges of achieving food and nutrition security are also introduced and can be separated into three groups; smallholder agriculture (Low productivity and investment), agricultural areas (the effects of land degradation, water scarcity) and the climate change effects on agricultural production. All three result in both chronic as well as periodic supply shortfalls. Even though the long-term challenges are beginning to be addressed now,

there has been progress on the issue. More specifically, developing regions in Africa have progressed since 2008 in both agricultural investment as well as strengthening the social protection of vulnerable groups.

Rio Earth Summit

The Rio Earth Summit was the largest environmental conference held. Its main goal was to build based on what the Brundtland Report achieved as well as hoped to achieve and the discussion of global environmental issues which could be resolved through treaties (mainly on biodiversity, climate change and forest management). The Rio Earth Summit had five main outcomes; the Convention on Biological Diversity, the framework of the Convention on Climate Change, the Principles of Forest Management, the Rio Declaration and finally Agenda 21. This summit resulted in covering every sustainable development aspect and committing nations to becoming more sustainable.

UNCCD's 10 Year Strategy

The United Nations Convention to Combat Desertification (UNCCD) created a ten-year plan (2008-2018), which established a global partnership to reverse the effects of desertification and land degradation. Additionally, this ten-year strategy aims to lessen the drought effects in affected areas in order to support the reduction of poverty and hunger as well as promote environmental sustainability. The UNCCD 10 year strategy has four strategic objectives and five operational objectives, specializing in the improvement of the conditions in which affected populations live in, the improvement of the affected ecosystem conditions, global benefit which will be generated through the effective UNCCD implementation and the mobilization of resources in order for the implementation of the convention with the creation of successful and effective partnerships of national and international actors to be supported. Finally, the 10-year strategy provides guidance to UNCCD stakeholders and partners.

Sustainable Development Goals

The Sustainable Development Goals (SDGs) are a new set of goals (resulting as an outcome of the Rio+20 summit) which are expected to frame the both agendas as well as political policies for the next 15 years. Their differences with the Millennium Development Goals (MDGs) are that the MDGs were mainly targeted at poorer countries while they did not address economic developments or human rights. Through the SDGs however, all countries are expected to work for to achieve them. The SDGs want to end poverty and hunger with the achievement of food security and nutrition; they want to ensure that everyone is healthy at all ages and has an education. The SDGs also want to work towards gender equality and the empowerment of women as well as sanitation, affordable energy, peace, and

equality for all. The "sustainable" part of the SDGs is in terms of agriculture, usage of oceans, forest management, consumption and production patterns, industrialisation and water management, energy and economic growth, while efforts are being made for the combatting of climate change (desertification, land degradation, biodiversity loss), productive employment, infrastructure, safety, and the revitalisation of global partnership for sustainable development.

Previous Attempts to solve the Issue

There have been multiple attempts to solve the issue on food security. The first Millennium Development Goal on Eradicating Poverty and Hunger by 2015 could be seen as a continuation of the Rome Declaration of 1996 or the Universal Declaration on the Eradication of Hunger and Malnutrition. However, the goal is not fully met in all parts of the planet. Additionally, the establishment of organizations such as the Hunger Task Force or programs such as Food for Assets by the WFP has helped many people who have struggled with food insecurity around the globe. These initiatives however, have not fully ended hunger, seeing that there are many people still hungry. Additionally, due to the current food crises because of natural disaster (Nepal earthquake) or war (the issue in Syria), there is an increase of food insecurity in many regions around the world creating larger challenges for organisations working for global food security. Finally, the US initiative "Feed the Future" aims to increase agricultural productivity as well as promote food security in the process. However, it mainly targets to invest in specific regions of nations rather than the entire nation.

A few international attempts to solve the issue of land and its restoration in the future are the Rio Earth Summit, and the creation of the UNFCC, which resulted with the SDGs. We cannot surely say whether the SDGs have been successful or not due to the fact that their deadline is 2030, however goal 7 of the MDGs (sustainable development) has not been met. The Kyoto protocol could be considered an attempt to solve the issue; however, it does not fully focus on the restoration or arable land, but rather environmental sustainability.

Some nations however, have used specified attempts on this issue. The United States for example, used crop rotation in order to fight erosion in the 1930's. China on the other hand, assisted by both the UNDO and FAO, established soil-improving methods that turned slopes into terrace or vegetation. As for Morocco, it has used checkerboard patterns of palm branches to protect its vegetation against prevailing winds.

Possible Solutions

When considering possible solutions on the issue of Food Security, the FAO suggests two things: attainable targets and three core components. The first component is "Broadening opportunities for sustainable livelihoods", therefore suggesting that communities should use their resources to attain their needs. Secondly, the FAO suggests "Protecting the needlest" so governments need to be able to ensure that there is a system dealing with emergencies. Finally, the FAO suggests the creation of an "enabling environment" therefore, one with strong regional cooperation and the building of consensus.

A possible solution for the issue of food insecurity in areas with a food crisis for example would be as suggested by the FAO to "protecting the neediest". This means that those who are affected by a larger extent by the crisis should be the ones receiving the most help. The "neediest" as stated by the FAO could be considered those who have lost their homes, are ill or relatively young or old. These people require immediate assistance due to the fact that they are unable to work. This, however, does not limit the amount of people who can receive help. All people who are in a state of food insecurity must receive help, regardless of age and income; the most vulnerable though, must be the ones who are offered first.

In order to achieve food security in the long term, governments should be able to create a foundation for it. By stockpiling on basic food items such as rice, governments are able to ensure that the needs of all their people can be met. Nonetheless, this should not stop governments from limiting their markets and not taking part in globalized markets and economy. Governments of developing countries should promote world trade, especially in the agricultural industry in order to help not only their people, but their economies as well.

A solution to restoring arable land has two major factors. There are the biological factors of restoration and the physical factors of restoration. The biological factors include matching the crops to their soil and using terrain-farming methods. On the other hand, the physical factors suggest building of terraces and/or dams, controlling the gullies and managing watershed. A solution in the restoration of arable land calls for both factors and calls all nations for the promotion of these methods to farmers in order for them to be appealing and used. Governments could promote the restoration of land through matching the crops to their soil or building of terraces through a reduction of taxation to the farms using them, or in MEDC nations, a financial "reward". Additionally, farmers must learn the effects of land degradation on arable land through various awareness programs (lectures, leaflets etc.) in order to either change their methods of farming or gain insights into the results of "bad" farming to the environment.

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