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Goal 2: Zero Hunger

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Forum: Goal 2: Zero Hunger

Issue: The question of eliminating hunger, food insecurity, and malnutrition through sustainable

agriculture

Chairs: Srivatsan Ramaswamy and Sunny Fang

Introduction

Realistically, hunger can be felt anywhere in the world, but comes down to one thing, access to nutrients. The places that lack food and nutrients are generally developing nations. Generally, the poorest, lowest class people feel it the most, as they cannot afford to buy themselves, or their family more than one meal a day, and even that is not enough. Therefore, if hunger and malnutrition is to be tackled, the poorest, must be helped first, as it is a matter of their survival.

This issue is a priority for the United Nations (UN), as it is their second Sustainable Goal to end world hunger. For an issue like this, methods can definitely vary. However, sustainable agriculture is a renewable solution that has worked in the past in certain places. Potential solutions could include collaborating with NGOs and other world organizations to switch to more sustainable farming, providing the people in need with a government subsidized program, and encouraging governments to coordinate with NGOs to educate the low class laborers different skills needed for different job markets, including how to sustainably farm to relocate them in suitable jobs. This is a severe issue that will continue to plague to world if nothing is done to change it. Ultimately, there are a variety of renewable solutions, with sustainable agriculture being the most viable.

Definition of Key Terms

Food security

The most accepted definition approved by the 1996 World Food Summit (WFS) is "food security exists when all people, at all times, have physical, [social] and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life." (FAO, 1996)

Food insecurity

Food insecurity, according to the Food and Agriculture Organization, is a situation where some people do not have access to sufficient quantities of safe and nutritious food and hence do not consume the food that they need to grow normally and conduct and active and healthy life.

Malnutrition

Malnutrition refers to either undernutrition or overnutrition. Undernutrition is when individuals are undernourished, meaning they can no longer maintain natural bodily capacities such as growth, infections resistance and recovery from diseases. Overnutrition is commonly known as overweight. It leads to obesity and other related diseases such as diabetes and could happen in both industrialized and developing countries.

Prevalence of undernourishment

Prevalence of undernourishment refers to the world's population whose food intake is insufficient to meet dietary energy requirements.

Global Hunger Index

The Global Hunger Index (GHI) is designed to comprehensively measure and track hunger globally and by country and region and is calculated each year by the International Food Policy Research Institute (IFPRI). It highlights the success and failures and provides insights in terms of hunger reduction.

Sustainable agriculture

Sustainable agriculture aims to create sustainable food systems. The goal of it is to meet the society's food and textile need in the present. It integrates three main goals, which includes environmental health, economic profitability, and social and economic equity.

General Overview

Key issues

Climate change

Climate change contributes to vulnerability to food insecurity and leads to extreme weathers that includes droughts, floods, and other natural hazards. It amplified the issue of food insecurity seen as it has caused difficulties in food production, distribution, and access. Drought is one of the most catastrophic natural event that causes widespread periodic famine in the region. In Ethiopia, the 1984 drought had affected more than 8.7 million people, causing about 1 million deaths and 7 million livestock deaths. Floods can also afflict regions periodically even in the driest areas. For example, from the 1997 to 1998, severe floods were observed in the Horn of Africa. Floods can affect regions without well-developed infrastructure; even moderately sized ones could lead to disruption in transportations and water supplies.

Climate change and population growth has created a fragile ecosystem. Climate change triggers food insecurity and poverty, especially in countries with 80 percent of the population living in rural areas and depend on agriculture for consumption and economy. For instance, changes in climatic conditions had led to the World Food Crisis in 1972 to 1974. However, it's not impossible to maintain sustainable agriculture. In order to do so, it's essential to build the resilience of people, communities, and ecosystems.

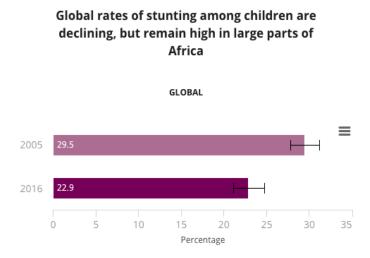
Population growth

Worldwide, even though enough food is produced to feed everyone, food does not always reach to those in need due to the lack of technology. This causes over 400 million to become chronically malnourished. Every year, approximately 11 million children under the age of five die from hunger and hunger-related diseases. Food insecurity is rather the lack of access of food than the insufficiency of food. Although it was said that the amount of food is sufficient to feed the current population, it's a challenge to ensure that the constantly growing global population will have enough food to meet their nutritional needs in the near future. In 2050, it's predicted that there'll be approximately 10 billion humans on Earth, thus food production will need to be increased by 50 percent globally.

The population growth of internally displaced persons (IDPs) is also an issue. The population of IDPs has doubled from 2007 to 2016, marking approximately 64 million people. IDPs are among the most vulnerable in the world. Since they are either refugees, seeking for asylum, or internally displaced, they are experiencing high levels of food insecurity.

Stunting

Stunting is the condition of facing difficulties during growth, which would increase children's risk of impaired cognitive ability, weakened performance in education, and higher rates of dying from infections. The root causes of stunting include factors such as but not limited to multiple forms of malnutrition, either overnutrition or undernutrition. From 2005 to 2016, the prevalence of stunting fell from 29.5% to 22.9% globally. However, approximately 155 million children under five years still suffered from stunted growth in 2016. Nevertheless, the rate of decline does not follow the same pace of population growth, which causes a high amount of stunting children overall.



Caption #1: The Global Rates of Stunting Among Children in 2005 and 2016

Major parties involved and their positions

Food and Agriculture Organization of the United Nations (FAO)

The Food and Agriculture Organization of the United Nations (FAO) is a specialized agency that leads international efforts to defeat hunger. Its goal is to achieve food security for all and make sure that everyone has regular access to nutritional food and healthy lives.

There are currently 194 Member States in the FAO. It works over 130 countries to achieve food security. The FAO helps eliminating food insecurity by supporting policies and political commitments that promote food security and good nutrition. It also provides the most up-to-date information about hunger and malnutrition challenges to ensure available solutions. Besides, it also works on enhancing sustainability by ensuring nature can provide services including pollination, nutrient cycling in soils, and quality water, etc.. It also strives to help families in rural areas to improve farm productivity and aims to increase off-farm employment opportunities for these families to improve their living conditions.

International Food Policy Research Institute (IFPRI)

The International Food Policy Research Institute (IFPRI) is a non-profit organization that was established in 1975. It provides research-based policy solutions to reduce poverty and end hunger and malnutrition in developing countries. The IFPRI research focuses on six areas: ensuring sustainable food production, promoting healthy food systems, improving markets and trade, transforming agriculture, building resilience, and strengthening institutions and governance. It aims to transform agriculture-based economies into more urbanized and industrial service-based ones in hopes of achieving sustainable agriculture. To do so, it strives to provide sustainable research-based policy solutions.

Central African Republic (CAR)

The Central African Republic - having the second-to-lowest level of human development in the world - remains to be the hungriest country in the world due to instability, ethnic violence and conflict has existed since 2012. Widespread conflicts included continuous violence between Christians and minority Muslims. Approximately, 600,000 of its population are internally displaced due to such conflict. In the present, political and religious tension is still high. Due to these internal conflicts, food production has been disrupted and has become a major issue that causes up to 2.5 million people - which is up to 50 percent of its population - to suffer from food insecurity.

Timeline of Events

Date	Description of event
1933	In the 1920s to 1930s, world prices started falling during the Great Depression. As a response, countries such as the US decided to control and regulate the activities in the agricultural sector. For instance, the Agricultural Adjustment Act (AAA) was approved in the US in 1933. This Act aimed to control the agricultural production in accordance to the planted area. The US Grain Stabilization Board then provided direct subsidies for agricultural exports.
1935	The Health Division of the League of Nations conducted a survey and report on "Nutrition and Public Health". The report stressed the acute food shortage in poor countries and the extent of hunger and malnutrition in the world.
1943	During World War II, US president Franklin D. Roosevelt convened a Conference on Food and Agriculture at Virginia. Nations decided to establish the Food and Agriculture Organization of the United Nations.
October 16th, 1945	The Food and Agriculture Organization of the United Nations (FAO) was founded.
December 10th, 1948	The Universal Declaration of Human Rights (UDHR) was adopted, in which Article 25 states, "Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food []."

1952

The FAO established a Committee on Commodity Problems (CCP) in order to solve issues caused by surpluses in food commodities due to increasing agricultural production.

October 27th, 1960

The UN General Assembly passed a resolution on "the provision of Food Surpluses to Food-Deficit people through the United Nations Systems," which calls to implement the World Food Programme (WFP)

1961

The World Food Programme (WFP) was established that aims to utilize surplus food for multilateral development purposes.

1972

Due to worsened climatic conditions, an international food crisis occurred, thus countries such as the Soviet Union and USA became the main food importers. Meanwhile, food aids became more expensive in developing countries.

November 16th, 1974

After the World Food Crisis, member states had recognized how the elimination of hunger and malnutrition should be a common purpose for all nations, thus the UN convened the first World Food Conference in Rome. The Conference proclaims that everyone has the inalienable right to be free from hunger and malnutrition in order to preserve their physical and mental faculties, which was later endorsed in the UN General Assembly resolution 3348 (XXIX) of 17 December 1974.

1992

FAO and World Health Organization (WHO) organized the 1992 International Conference on Nutrition in Rome. The final declaration approved by Member States stated their "determination to eliminate hunger and to reduce all forms of malnutrition".

November 17th, 1996

The World Food Summit, organized by the FAO, took place in Rome in November 1996. It was significant not only because of its continuous contribution to solve the food crisis, but also because it gave the term "food security" a new definition, which recognized the multidisciplinary approach of food security and the interrelated causes of it.

April 17th, 2000

The Special Rapporteur on the Right to Food was established through Resolution 2000/10 of the UN Commision on Human Rights. It was entrusted to promote the realization of the right to food. It has closely cooperated with all states, the

	Committee on Economic, Social and Cultural Rights (CESCR), and other relevant organizations.
September 8th, 2000	The UN General Assembly adopted the Millennium Summit, during which the Millennium Development Goals (MDGs) were declared. The MDGs is a series of time-bound targets with a deadline of 2015. The MDG 1 aims to eradicate extreme poverty and hunger.
October 1st, 2008	The Right to Food Forum took place in Rome from October 1st to 3rd. it was the first global opportunity to share lessons and learned from national experiences on the implementation of the right of food.
October 20th, 2012	The Global Strategic Framework for Food Security and Nutrition (GSF) was adopted by the Committee on World Food Security (CFS). The GSF reiterates the obligations of states towards the fulfillment of the right to adequate food.
September 25th, 2015	The Sustainable Development Goals were established to succeed the Millennium Development Goals in 2016. Food and agriculture is at the heart of the 17 SDGs. With SDG 2 being "End hunger, achieve food security and improved nutrition, and promote sustainable agriculture."

UN Involvement, Relevant Resolutions, Treaties and Events

GA/EF/3442

A resolution on how to end malnutrition, and achieve food security.

• A/RES/62/190 - Agricultural technology for development

A resolution on specific agricultural technology, and how it can be properly implemented.

- A/70/478 Agriculture development, food security and nutrition: Report of the Second Committee
- A report written on the issue of malnutrition, and how it can be solved with sustainable development.
 - A/71/283 Agriculture development, food security and nutrition

This is a Secretary general's Report detailing the current state of food security.

• A/70/298 - Agricultural Technology for Development

This is a Secretary General's Report detailing solutions relating to agricultural development and technology.

A/69/279 - Agriculture development, food security and nutrition

This is another Secretary General's Report detailing the current state of food security.

Possible Solutions

This is a topic of which can have many, many viable solutions. However, it comes down to three key areas that should be revised, the production of more sustainable food, aiding low income citizens (in the form of food), and reduction of the unemployment rate. Firstly, per revising and encouraging the production of sustainable crops, NGOs, MEDCs, and world bodies can begin by collaborating with local farmers in critical areas to educate and equip them with necessary tools. Further, this can be conducted by holding workshops and training farmers, as well as finding a way to equip them with the necessary materials in a way that is cost effective. Secondly, on the subject of providing aid to impoverished citizens, this can be provided by the country in partnership with MEDCs, NGOs, and relevant world bodies. Examples of this would include the subsidization of food and necessary items through a program similar to the 'food stamp' program in the United States, further, prices should be made more affordable, as well as the advertisement of sustainable food as an option. Lastly, a reduction of the unemployment rate in some LEDCs would require the education of unemployed lower income citizens by NGOs or willing MEDCs. This can be done through workshops and training programs, the setup of programs to fund college educations, and teaching them skill sets for particular professions through career practicum programs. Ultimately, there are many viable solutions for such a broad problem as this one, and these are just some examples of the viable solutions that can be implemented for this issue.

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Forum: Goal 2: Zero Hunger

Issue: The question of improving nutrition for children under ten years of age in the

Asia region

Chair: Cindy Li, Kai-Wayne Liu

Introduction

Lack of sufficient nutrition for children is a serious and ongoing problem, especially in Asia, which twothirds of the population in constant hunger. Globally, this issue has caused a significant 45% of deaths in children under the age of five, which is equivalent to 3.1 million children per year. Since foods in high fat and sugar are more accessible and affordable in general due to the increased access to processed foods, it is harder to obtain foods with a variety of nutritious values such as proteins or fresh vegetables. The gravity of this issue has to be acknowledged and not undermined, seeing as it could lead to immediate deaths or potential deficiencies such as stunting or underweight.

Nutritional values are determined on three levels: food, health, and care. Since children under the age of ten are within the range of their development years, they especially need adequate care and attention on the food they consume and the healthcare they receive. Access to healthcare systems are in increasing demand in the Asian region, therefore it is key to address possible ways to reform them in the most accessible and affordable way. Another possible solution could be placing emphasis on the providing of mandatory education supported by governments, which would include school lunches that have to achieve the basic nutritional values regarding food and care.

Definition of Key Terms

Malnutrition

Malnutrition is defined as the imbalances (in this case deficiencies) in a person's intake of nutrients. It covers two groups of conditions, one of which is discussed in the topic at hand: undernutrition. This includes stunting (low height for age), wasting (low weight for height), underweight (low weight for age) and micronutrient deficiencies or insufficiencies (a lack of important vitamins and minerals).

Stunting

Stunting is defined as growing to a height that is below average for the age group due to poor intake of nutrition. It is set to two different standards (moderate and severe stunting) by the World Health Organization Child Growth. Moreover, a severely stunted child faces a four times higher risk of dying compared to a nourished child. The World Health Assembly has set the goal of achieving a 40 percent reduction in the number of stunted children under 5 years old globally by 2025. Globally, countries such as Ethiopia, Haiti, and Nepal are committed to achieving progress through better allocation of resources.

Wasting

Wasting is when a child has an extremely low weight for its height. Although wasting and stunting are closely related, wasting is caused by a short period of malnutrition, while stunting is caused by constant malnutrition. According to the WHO, wasting indicates a recent and severe process of loss of weight, which is associated with acute starvation and the result of a chronic condition.

Micronutrients

Micronutrients are nutrients such as vitamins and minerals that are needed in small quantities to maintain basic physiological functions. According to WHO, they enable bodies to produce enzymes, hormones, and substances that are essential to proper growth and physical development. Some of the most significant micronutrient deficiencies in Asia are zinc, iron, and vitamin A.

General Overview

Underlying Causes of Hunger and Lack of Nutrition

The undernourishment of children in Asia is a result of various factors, including insufficient healthcare systems that are unaffordable and inaccessible, poor sanitation, and inadequate hygiene maintenance. Also, there is a problem as to the lack of breastfeeding, which is especially essential for newborns.

Inadequate Socio-Economic Factors

Due to inadequate socio-economic factors (i.e. lack of consistent and dependable income or deficient quality of household environment), children have high chances of suffering from malnutrition. Households generally have a basic need to provide sufficient quality and quantity of resources, such as food, access to education, and a stable flow of income. Socio-economic factors take a significant role in preventing the potentiality of malnutrition, which leads to physical disabilities, mental deficiencies, and high child mortality rates.

Insufficient Healthcare Systems

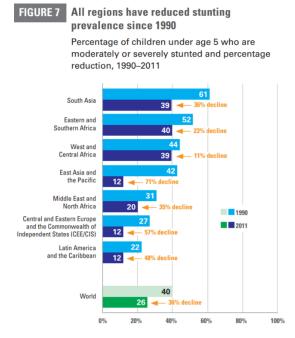
1 in 3 people enters the hospital malnourished or at risk of malnutrition. In developing countries, there are less accessible and affordable healthcare systems in place, which leads to an oversight in the care for children during their development years. There is also increased pressure placed upon governments in Asia for the installment of better quality healthcare systems due to a relatively more educated population. However, future sustainability of these healthcare systems relies on the continuance of a reliable tax system and effective control of healthcare agencies, which are responsible for the construction of public hospitals.

Poor Sanitation and Hygiene

Lack of hygienic practice and emphasis leads to the increased spread of diseases, which would prove disadvantageous chiefly to young children due to the underdevelopment of their immune systems to overcome these diseases. The criteria for poor sanitation also include impure water and lack of access to sanitation facilities such as toilets and showers. While one may have an intake of nutrients, it causes the nutrients entering the body to not be absorbed efficiently, thus indirectly leading to malnutrition.

Lack of Breastfeeding

A mother's intake of nutrition, especially during times of pregnancy, is essential to the growth and development of her baby. The first part of this problem is that undernourished mothers have a higher chance of giving birth to a disabled child, thus continuing the cycle of malnutrition and poverty. Also, statistics provided by the United Nations Children's Fund (UNICEF) show that early breastfeeding is helpful towards the child's brain development, and that breastfed children have at least 6 times greater chances of survival in the early months as compared to non-breastfed children. Breast milk provides nutrients, vitamins, and minerals that newborn children particularly need, however the lack of breastfeeding in developing countries has posed problematic as to hinder the child's development.



UNICEF, WHO, World Bank, Joint Child Malnutrition Estimates, 2012

Consequences of Hunger and Lack of Nutrition

Child Mortality Rate

As mentioned previously, a severely stunted child faces a four times higher risk of dying, while a severely wasted child faces nine times higher risk. Undernutrition can inevitably lead to higher risk of death through exposure to diseases and underdevelopment of immune system. Global-wise, malnutrition has led to 46% of child deaths under five years of age yearly. According to WHO, a child's risk of dying is highest during their first 28 days after being born, therefore lack of nutrition for babies due to financial limitations or inadequate social environment (i.e. negligence from parents/guardians) can strongly jeopardize their lifestyle.

Increased Exposure to Diseases and Disability

Malnutrition in children causes significant structural damages to the brain and impair normal development. Since a majority of the cognitive development of humans are developed in early stages of life, undernourishment at an early age is especially detrimental. In addition, undernourished children who later is able to gain back to a healthy weight is at an increased risk of chronic diseases. Both factors of unsanitary and poor living conditions and health contribute to the increased chance of exposure to diseases. Some of which affect the intestinal tracts, that will result in the inability to absorb nutrients, leading to undernourishment. This creates a repetitive cycle of malnutrition and disability over time and generations.

Timeline of Events

Date	Description of event
May 18th - June 3rd, 1943	The establishment of UN Conference on Food and Agriculture, with the participation of 44 governments. It was convened by President Roosevelt of the United States and has the objective to ensure global access to food that is suitable to meet health standards.
1961	World Food Programme (WFP), a nonprofit food aid organization was established as a humanitarian branch of the UN. It has the support of the General Assembly and is one of the world's largest organization that addresses food security and hunger.
November 5th - 13th, 1974	The first World Food Conference was held in Rome, in which governments examined the problems concerning food production and consumption.
December, 1992	First International Conference on Nutrition held by the Food and Agriculture Organization (FAO) and the World Health Organization (WHO), aiming to put an end to malnutrition and hunger. It is committed to providing the basic right to the adequate standard of living, as said by the Universal Declaration of Human Rights (UDHR). It also wished to contribute to the increase of literacy and nutritional status of all.
June, 2012	Zero Hunger Challenge launched by UN Secretary-General Ban Ki-Moon. This aims to achieve the gradual elimination of stunting and successfully brought more attention as to the reviewing and integration of programmes related to the providing of food and nutrition.
April 25th, 2012	The Food Assistance Convention (FAC), an international treaty, was adopted to address nutritional problems. It was created with the intention to respond to emergency food situations, especially in developing nations.
September 25th-27th, 2015	The Sustainable Development Goals (Goal 2: Zero Hunger) was created, which aims to dissolve hunger issues by 2030. The subsets of its goal include eliminating malnutrition and hunger, promoting sustainable agriculture, and achieving food security.

UN Involvement, Relevant Resolutions, Treaties and Events

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- World Food Programme, 1961 (A/RES/1714)
- Universal Declaration on the Eradication of Hunger and Malnutrition, 16 November 1974 (3180)
- Declaration of World Food Day, 1981 (A/RES/35/70)
- Report of the World Commission on Environment and Development, 4 August, 1987 (A/42/427)
- The World Food Summit, 20 December 1995 (A/RES/50/109)
- High Level Task Force on Global Food and Nutrition Security, 2008
- Millenium Development Goals, September 2010 (Eradicate extreme poverty and hunger)
- The Right to Food, 21 December 2010 (A/RES/65/220)
- Sustainable Development Goals (Goal 2), 25-27 September, 2015

Possible Solutions

One of the possible solutions to improving nutrition for children under ten years of age in the Asia region is to provide a mandatory education. The idea behind enforcing mandatory education especially for children during their developing ages is to allow them to receive a wholesome environment of learning and provided school meals. This would thereby satisfy the conditions of the keys to nutritional values: food and care. However, in order to achieve this, seeing as this is a problem that persists mostly in the rural and developing areas of Asia, the funding and incentive for families to send children to school must be determined. Problems arise along as some Less Economically Developed Countries (LEDCs) lack the economic support to fund public schools, therefore it is indefinitely crucial to provide the funding to schools and ensure that money is set aside for school meals.

Another solution to this long-term issue is to provide nutritional support. Nutritional support can take many forms such as conditional cash transfers for food, or government supplied micronutrient supplements that can be given to make up for the lack of the necessary micronutrient in a daily diet. It has already been previously shown that by simply providing iodine supplements are able to reduce offspring death during infancy and early childhood by a significant amount. As mentioned before, high child mortality rates in especially developing nations are primarily caused by the lack of adequate nutritional intake, thus nutritional support is particularly significant in young age.

As mentioned before, the mother's intake of nutrition, especially during times of pregnancy, is essential to the growth and development of her baby. And the breast milk provides for the essential nutrients, vitamins, and minerals that newborn children particularly need. Therefore the lack of breastfeeding poses a significant problem. Programs can be implemented to teach and spread awareness of the positive effects that breastfeeding may have, and the essential nutrition a mother should intake into their body during pregnancy.

Overall, the question of improving nutrition for children under ten years of age in the Asia region has been a persisting problem and endless cycle over time, so permanent and effective solutions must be planned to be taken into action immediately. The root of the problem lies in good governance and reliable institutions that can react responsibly to tackle hunger and lack of food security.

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Forum: Goal 2: Zero Hunger

Issue: The question of responsible consumption and disposal of resources.

Chairs: Anna Chang, Teddy Hwang

Introduction

Sustainable Development Goals (SDGs) are 17 global goals set by the United Nations. These cover poverty, hunger, health, education, climate change, gender equality, water, sanitation, energy, environment and social justice. Based off of the principles of UN resolution A/RES/66/288 titled "The Future We Want", these goals target issues such as protecting the planet and ensuring peace and safety for all. SDGS were implemented on January 2016 with the help and support of the lead UN development agency, the United Nations Development Program (UNDP).

The issue of responsible consumption and disposal of resources is part of the Zero Hunger SDG, outlined in Goal 12. The transition to responsible consumption is crucial in reducing the negative impact of climate change and improving general health. Here the issue not only relates to responsible consumption of resources, but also to an efficient socioeconomic system that serves to increase competitiveness, develop economies, and reduce poverty. One must consider ways to sustainably use resources while monitoring consumer behaviors for a healthy economy. As responsible consumption suggests the responsible use of resources, the disposal of waste complements this issue. Waste management can limit the impact of dangerous chemicals or hazards, which will, in turn, protect the environment and improve health. Both issues go hand in hand, and one cannot tackle the first issue without solving the second.

Definition of Key Terms

Responsible Consumption

According to the Oslo Symposium in 1994, sustainable consumption and production (SCP) is about "the use of services and related products, which respond to basic needs and bring a better quality of life while minimizing the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardize the needs of further generations".

Zero Hunger Challenge

The Zero Hunger Challenge, launched by UN Secretary General Ban Ki-Moon in 2012, includes five elements from the SDGs. The challenge aims to end hunger and malnutrition, while building sustainable food systems. As part of the 2030 Agenda on Sustainable Development, the challenge utilizes an integrated approach and follows a set of core principles: Universality, Inclusiveness, Transparency, Integrity, Accountability, Sustainability, Human Rights-Based, Country Led, Gender Sensitive and Partnership Driven.

Resources

According to the Organisation for Economic Co-operation and Development (OECD), natural resources include mineral and energy resources, soil resources, water resources, and biological resources such as food. In a broader sense, the term resources refer to a source that has utility, limited availability, and can be depleted. Resources are categorized into renewable and nonrenewable resources.

Waste

Waste is characterized by unwanted or unusable materials, substances, or by-products. The management of waste is directly linked to responsible consumption.

General Overview

Responsible consumption is key for a sustainable economy and environment. The transition to responsible consumption can reduce climate change, and thus reduce poverty. As responsible consumption promotes the efficient use of resources and quality of life, one must address the related issue of waste disposal, as proper disposal of resources aligns with the principles of responsible consumption. However, developing nations still struggle to make the transition, as they do not have the economic and national stability to achieve these goals.

Challenges of the transition to responsible consumption

The world population is projected to reach 9.5 billion by 2050; coupled with rising incomes and the promotion of a consumer society, humans will continue to degrade and exploit the ecosystem. Irresponsible consumption will lead to water and air pollution, land and forest degradation, and waste generation.

Environmental challenges

One of the greatest environmental challenges to responsible consumption is the scarcity of resources. In the first place, the amount of natural resources present globally is limited. In fact, there is only less than 3% of drinkable water, of which 2.5% is frozen, which means we must rely on the mere 0.5% left. The depletion of

resources due to human use exacerbates this challenge. There is an increase in energy use, but only one-fifth of the total energy use comes from renewable sources. Due to the rapid increase in global population and thus the need for space, natural ecosystems are constantly being converted for agricultural use. Habitats are fragmented, which leads to a loss of biodiversity and the degradation of various ecosystem services. Similarly, the increasing need for resources to sustain population growth leads to the overexploitation of renewable resources, overfishing, and unsustainable agricultural practices. Natural resources are depleting without being replenished; due to irresponsible waste disposal practices, 1.3 billion tonnes of food are wasted every year. These issues are worsened by pollution from chemical waste. Responsible consumption is the only way to ensure a sustainable and renewable supply of natural resources.

Social and economic challenges

Besides environmental challenges, there are several social and economic challenges that can only be solved with the transition to responsible consumption. There is an assumption that economic growth must come at the cost of resource consumption. In support of this idea, statistics show that material consumption rose from 1.2 to 1.3kg per unit of GDP from 2000 to 2010. Rapid economic growth in Southeast Asia over the past four decades has led to an increase in environmental degradation and the use of resources. According to the Japan Environmental Council (JEC), the three characteristics of Asia's environmental degradation are all correlated to economic growth: accelerated industrialization, explosive urban growth, and the rise of a consumer society. It seems as though countries have sacrificed the preservation of resources to expand their economies. This leads to deforestation from population growth, which can be seen in Cambodia, where ¾ of its wildlife habitat is lost due to deforestation, slash-and-burn agriculture techniques, rapid urbanization and pollution, and finally, climate change and global warming due to an increase in carbon emission. At the core of this issue is the rise in a consumerist society, which will lead to an increase in waste generation. According to the Environmental Services Association (ESA), the UK is projected to have generated 6 million tonnes of waste without proper disposal by 2030. Therefore, nations that are adopting consumerist behaviors must establish responsible ones that will not compromise economic development.

Disposal of Resources

Two specific resources come to mind when the phrase "disposal of resources." Food waste in human consumption and energy waste. In the past 2 years, Food waste has accumulated to an astonishing 1.3 billion tonnes. An observation made from UN statistics state that fruits and vegetables have the highest waste rate. This is caused and influenced by economic behaviour, poor stock management, or neglect. In the US alone, roughly \$680 billion worth of food is wasted.

Energy waste causes global warming, as wasting energy produces carbon pollution. The leading country in energy waste is in fact Australia, which wastes 73% of its energy from burning coal and electricity, 13% from gas. Eliminating this issue would allow for more profitable causes such as providing more financial resources to sustainably grow strong economies around the world. Deforestation and farming also play a huge role in reducing global warming. The UN launched Global Energy Efficiency Accelerator Platform at the end of the UN Climate Summit in September 2014, which promoted major scaling of energy efficiency activities and investments through technical assistance, support and collaboration.

Major Countries and Organizations Involved

Greenpeace

Greenpeace is an international NGO that operates in 40 countries. Its main vision is to establish a green and peaceful future. In order to reach this vision, the NGO focuses on reducing climate change, protecting forests and marine life, preventing logging, eradicating the use of toxic chemicals and products, supporting ecofarming food systems, and working to ban industrial waste dump. These goals exemplify responsible consumption of natural resources and proper waste management. Greenpeace achieves its purpose by campaigning, protesting, and putting social pressure on nations.

Marrakech Task Force on Sustainable Public Procurement (MTF on SPP)

The Marrakech Task Force on Sustainable Public Procurement (MTF on SPP) promotes progress on the implementation of Sustainable Consumption and Production (SCP) plans. The task force follows the Johannesburg Plan of 2002 and the 10 Year Framework of Programmes on SCP. Its main purpose is to develop guides, research policy, provide training and assistance, and facilitate dialogue between stakeholders and countries on SCP and SPP.

United Nations Development Program (UNDP)

One of the three main focuses of the United Nations Development Program is sustainable development, which includes economic growth and sustainable environments such as forest and ecosystems. The UNDP set the 2030 Agenda for Sustainable Development, and is guided by the 17 SDG goals.

US and Europe

Leading in food waste, the US wastes approximately 222 million tonnes per year, while the amount of food wasted in Europe is enough to feed 200 million people.

Australia

Leading in energy waste, with approximately 73% of energy wasted from burning coal and electricity, and 13% from gas.

Timeline of Events

Date	Description of event
1999	UN General Assembly revised the <i>United Nations Guidelines on Consumer Protection</i> to include sustainable consumption in the Objectives and General Principles
2002	The concept of sustainable consumption and production was recognized in the Johannesburg Plan of Implementation at the World Summit on Sustainable Development (WSSD)
June 2012	The 10- year framework of programme (10YFP) on sustainable consumption and production was adopted at the Rio+20 Conference,

UN Involvement, Relevant Resolutions, Treaties and Events

The UN has five main purposes, one of which is to promote sustainable development. It is constantly updating its subgoals of sustainable development, first from Millenium Development Goal to the current 2030 Agenda for Sustainable Development.

- Johannesburg Declaration on Sustainable Development, 4 September 2002 (A/CONF.199/20)
- Implementation of Agenda 21, the Programme for the Further Implementation of Agenda 21 and the outcomes of the World Summit on Sustainable Development and of the United Nations Conference on Sustainable Development, 26 July 2016 (A/71/212)
- Follow-up and review of the 2030 Agenda for Sustainable Development at the global level, 26 July 2016 (A/70/L.60)

Previous Attempts to Solve the Issue

In terms of energy consumption, several nations have set energy efficiency standards for household appliances by using mandatory labels. For example, Canada amended its Energy Efficiency Act in 2006 so that 80% of the energy used in homes will soon be regulated, while Australia aims to phase out less efficient light bulbs in order to promote the responsible use of energy. Likewise, some governments have chosen to tax or charge products that are less energy efficient by imposing a fuel or electricity tax. However, most of these taxes are not set high enough to discourage consumers from using less energy efficient sources. Another common method to promote responsible consumption is through the use of awareness raising campaigns and related education. Some nations have adopted the use of eco-schools, or the use of environmental approaches in the building of these schools. Most commonly, NGOs worked with governments to create media advertisement. The problem with past campaigns is that they need to be more specific to responsible consumption, and not simply with a broad goal of protecting the environment. Additionally, other organizations dedicated to preventing energy waste are the Global Energy Efficiency Accelerator Platform and Sustainable Energy for All.

Possible Solutions

An important solution to promote responsible consumption that often gets overlooked is to gain a better understanding of consumer behavior. By looking for patterns in consumers, governments will better understand where and how consumers are using up resources and ways to either discourage the use of less efficient products or introduce renewable sources. These patterns will also provide the means to regulate resource use and establish dialogue between the public and the government. Things to consider include income, age, gender, and personal biases.

Another solution is to combine sectors and policies. For instance, nations should consider combining mandatory labeling with an energy tax, or combining reward-based methods with restrictive ones, such as taxing cars according to its carbon dioxide emission while simultaneously reducing taxes on cars that use an alternative source. When combining sectors nations must include all relevant stakeholders and a legal framework.

Additionally, an effective solution to both responsible consumption and the disposal of waste is to increase the use of recycling. Statistics show that the 10% reduction in paper and paperboard consumption in North America and Europe is equal to 1 year of paper consumption in Africa and South America combined. Clearly, there is a massive amount of paper being consumed globally, and if they are properly recycled the strain on the amount of natural resources available will be greatly reduced. This applies to many other natural

resources as well. Ultimately, it is up to the delegates to explore other possible strategies to promote the transition to responsible consumption.

Furthermore, another effective solution to disposal of resources would be increased collaboration and development of the Global Energy Efficiency Accelerator Platform, and the prevention of deforestation, as carbon dioxide would be harder to be absorbed.

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