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Welcome Letter

Dearest of Delegates!

We are thrilled to welcome you on board of our committee. The upcoming four days of your involvement in World Food Programme will be a challenging, but also an exciting experience, as we give you a chance to debate upon a topics that concern you directly.

We expect you to deliver an unbiased and objective performance that will be consistent with the stance of your country. In return, we promise the same to you. We will assess your work based solely on the accordance with the topics.

We recognize that your personal views and national policies will often be divergent, so fear not, just speak up!

In order to expedite and facilitate your research, we hereby provide you with substantial introduction to the topic. We encourage you to thoroughly examine it and then pursue further analysis on your own.

Last but not least, you are more than welcome to explore the suggested resources and additional readings we included at the very end of this Study Guide - they will point you in the right and credible direction. Also, if you need assistance of any kind - we are here for you! Do not hesitate to address us personally via email or social media.

Therefore - good luck. Since each and one of you was handpicked and allocated accordingly to your motivation and experience, we place our full confidence in you. With a mixture of some debating skills, some knowledge and some sense of humor, we are positive that PragueMUN will make a marvellous and memorable experience for all of us.

Looking forward to seeing you in February!

Your Chairs,

Eyal Tur & Agnieszka Gryz

Introduction to the WFP

The World Food Programme (WFP) is the largest humanitarian organization in the world. It saves lives by providing food assistance in emergencies to an estimated average of 80 million people from 76 different countries every year. It is a branch of the United Nations, which aims to address world hunger and food security.

The World Food Programme's efforts focus on emergency assistance, relief and rehabilitation, development aid and special operations. Most of its work is based in conflict-affected countries. In emergencies, the WFP is often the first on the scene, providing food assistance to the victims of war, civil conflict, drought, floods, earthquakes, hurricanes and natural disasters. When the emergency elapses, the WFP helps communities rebuild shattered lives and livelihoods.

The WFP committee is in charge of setting short-term and long-term food assistance policies, review and decide upon the approval of programmes, manage budget plans and report annually on WFP's programmes to the FAO and ECOSOC.

The WFP Executive Board, which is also referred to as the "WFP Committee" is comprised of 36 UN member states, of which 18 are elected by the Economic and Social Council (ECOSOC) and 18 by the Food and Agriculture Organization (FAO). Each member state serves a three-year term and is eligible for re-election. In addition, the European Union is a permanent observer in the WFP.

The organization is headed by an Executive Director, who is appointed jointly by the UN Secretary-General and the Director-General of the Food and Agriculture Organization of the United Nations. The Executive Director is appointed for fixed five-year terms and is responsible for the administration of the organization as well as the implementation of its programmes, projects and other activities. Since 2017, the post has been held by David Beasley. WFP relies entirely on voluntary contributions for its funding. Its principal donors are governments, but the organization also receive donations from the private sector and individuals.

Topic A: Measures to Tackle and Prevent Food Waste

Food Security Definition

At the 1996 FAO Rome World Food Summit, food security was defined as a condition that exists when all people, at all times have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life. Therefore, the key dimensions of the household food security construct are as follows: physical availability of food, economic and physical access to food, and adequate food utilization that is a function of the ability of the body to process and use nutrients as well as of the dietary quality and the safety of the foods consumed. Because of the central role that food security plays in human development, it is recognized as a universal human right that is currently unmet for billions of individuals globally.

Food Security, Nutrition and Sustainable Agriculture

As the world population continues to grow, much more effort and innovation will be urgently needed in order to sustainably increase agricultural production, improve the global supply chain, decrease food losses and waste, and ensure that all who are suffering from hunger and malnutrition have access to nutritious food. Many in the international community believe that it is possible to eradicate hunger within the next generation, and are working together to achieve this goal.

World leaders at the 2012 Conference on Sustainable Development (Rio+20) reaffirmed the right of everyone to have access to safe and nutritious food, consistent with the right to adequate food and the fundamental right of everyone to be free from hunger. The UN Secretary-General's **Zero Hunger Challenge** launched at Rio+20 called on governments, civil society, faith communities, the private sector, and research institutions to unite to end hunger and eliminate the worst forms of malnutrition.

The Zero Hunger Challenge has since garnered widespread support from many member States and other entities.

It calls for:

- Zero stunted children under the age of two
- 100% access to adequate food all year round

- All food systems are sustainable
- 100% increase in smallholder productivity and income
- Zero loss or waste of food

The Sustainable Development Goal to "End hunger, achieve food security and improved nutrition and promote sustainable agriculture" (SDG2) recognizes the inter linkages among supporting sustainable agriculture, empowering small farmers, promoting gender equality, ending rural poverty, ensuring healthy lifestyles, tackling climate change, and other issues addressed within the set of 17 Sustainable Development Goals in the Post-2015 Development Agenda.

Beyond adequate calories intake, proper nutrition has other dimensions that deserve attention, including micronutrient availability and healthy diets. Inadequate micronutrient intake of mothers and infants can have long-term developmental impacts. Unhealthy diets and lifestyles are closely linked to the growing incidence of non-communicable diseases in both developed and developing countries.

Adequate nutrition during the critical 1,000 days from beginning of pregnancy through a child's second birthday merits a particular focus. The Scaling-Up Nutrition (SUN Movement has made great progress since its creation nine years ago in incorporating strategies that link nutrition to agriculture, clean water, sanitation, education, employment, social protection, health care and support for resilience.

Extreme poverty and hunger are predominantly rural, with smallholder farmers and their families making up a very significant proportion of the poor and hungry. Thus, eradicating poverty and hunger are integrally linked to boosting food production, agricultural productivity and rural incomes.

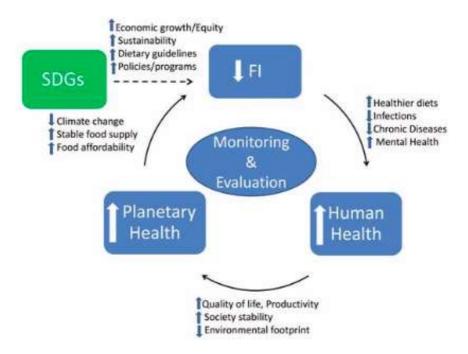
Agriculture systems worldwide must become more productive and less wasteful. Sustainable agricultural practices and food systems, including both production and consumption, must be pursued from a holistic and integrated perspective.

Land, healthy soils, water and plant genetic resources are key inputs into food production, and their growing scarcity in many parts of the world makes it imperative to use and manage them sustainably. Boosting yields on existing agricultural lands, including restoration of degraded lands, through sustainable agricultural practices would also relieve pressure to clear forests for agricultural production. Wise management of scarce water through improved irrigation and storage technologies, combined with development of new drought-resistant crop varieties, can contribute to sustaining drylands productivity.

Halting and reversing land degradation will also be critical to meeting future food needs. The Rio+20 outcome document calls for achieving a land-degradation-neutral world in the context of sustainable development. Given the current extent of land degradation globally, the potential benefits from land restoration for food security and for mitigating climate change are enormous. However, there is also recognition that scientific understanding of the drivers of desertification, land degradation and drought is still evolving.

There are many elements of traditional farmer knowledge that, enriched by the latest scientific knowledge, can support productive food systems through sound and sustainable soil, land, water, nutrient and pest management, and the more extensive use of organic fertilizers.

An increase in integrated decision-making processes at national and regional levels are needed to achieve synergies and adequately address trade-offs among agriculture, water, energy, land and climate change.



Given expected changes in temperatures, precipitation and pests associated with climate change, the global community is called upon to increase investment in research, development and demonstration of technologies to improve the sustainability of food systems everywhere. Building resilience of local food systems will be critical to averting large-scale future shortages and to ensuring food security and good nutrition for all.

Conceptual framework of FI and the SDGs: from human to planetary health. FI, food insecurity; SDGs; UN Sustainable Development Goals.

Causes of Food Insecurity

Household food insecurity (HFI) is the result of poverty, poor health of the household member or members, and suboptimal livelihood and household management strategies (6). Food security is closely related to, but not synonymous with, nutrition security and health. Nutrition security is attained by individuals when the body tissues are exposed to optimal amounts of nutrients and other essential substances. Nutrition security results from the combination of household food security, health care access security, and access to other basic human needs including adequate sanitation.

Food security and the other determinants of nutrition security are linked with each other. For example, a household with limited economic access to food may decide to not seek medical care for a child or to not purchase prescribed medications. For food security to be a reality, households need to have unrestricted access to a healthy and nutritious diet. Access to healthy diets, in turn, depends on having adequate economic resources and for foods to be readily available in the country, region, and communities in which the households are located. National food availability is a function of the balance between foods grown in the country plus foods imported minus foods exported, spoiled, or fed to animals. Therefore, the maintenance of an affordable and sustainable healthy food supply at the global level is paramount for achieving household food security and nutrition security worldwide. For this reason, it is crucial to understand and address climate change, agricultural commodity price policies, armed conflicts, and ultimately, the health of our planet from a household food security perspectiveⁱ in the context of the UN Sustainable Development Goals (SDGs), which specifically call for ending hunger, achieving food security and improved nutrition, and promoting sustainable agriculture globally.

Consequences of Food Insecurity

HFI represents a strong biological and psychosocial stressor that may increase the risk of poor mental, social, and psycho-emotional development of individuals across the life course through different pathways. A biological pathway involves the potential links between HFI, poorer dietary intakes, nutritional status, and overall well-being. A case in point is a current study from the United States that documents the very poor dietary quality of low-income individuals at risk of food insecurity. Their diets were characterized by exceedingly low intakes of whole grains, fruit, vegetables, and fish. This indeed is a dietary pattern that has been strongly linked to an increased risk of obesity, metabolic syndrome, chronic diseases such as diabetes, and premature death. A psycho-emotional pathway involves the worry and anxiety; feeling of exclusion, deprivation, and alienation; distress; and adverse family and social interactions among individuals experiencing food insecurity.

Magnitude of the Problem

Approximately 800 million individuals do not have access to enough foodⁱⁱ and >2 billion individuals experience key micronutrient deficiencies (e.g., iron, vitamin A, iodine, and zincⁱⁱⁱ.) Poor dietary quality in the context of the obesity epidemic has now become a major determinant of the global burden of disease. Furthermore, the recent application of the FAO's Food Insecurity Experience Scale, which that takes into account both the amount of food and dietary quality that individuals have access to, in 134 countries has documented that the percentage of individuals living under overall food-insecure conditions ranged from 10.8% in high-income countries to 56.5% in low-income countries.

The corresponding values for severe food insecurity were 3.1% and 29.5%, respectively. Many food-insecure individuals consume excessive amounts of calories as part of dietary patterns that are heavily based on starches and a high amount of added sugars as part of ultra-processed food products, including sugar-sweetened beverages, which explains why both undernutrition and infectious diseases and obesity and chronic diseases coexist in low- and middle-income countries, a phenomenon known as the double burden of malnutrition.

Food Security Governance in a Globalized World

Sound food security governance is key for ensuring the right of food security for all citizens^{iv}. Food security governance is indeed essential for the stability of nations. According to the FAO "food security governance" relates to formal and informal rules and processes through which interests are articulated and decisions relevant to food security in a country are made, implemented, and enforced on behalf of members of society. Adequate food security governance relies heavily on the following: 1) multisectoral participatory decision making, 2) transparency and accountability, 3) equity in resource allocation and service delivery, and 4) multisectoral and multilevel policies and corresponding programs. Brazil is highlighted in this perspective because it has been identified as an exemplary country when it comes to food security governance, because it has strived to meet all of the criteria outlined above at the same time that it has shown major reductions in severe HF. Specifically, between 2004 and 2013, severe food insecurity declined in all states (except for one), with rates of decline ranging from -2.5% to -75.2%. It is important to mention, however, that even in the case of Brazil there is much more work to do as shown by the very high rates of HFI recently documented in Quilombolas or slave-descendant communities.

Ways to Cut Food Waste

a) Reducing Food Loss Close to the Farm

Improving Storage Methods

Simple, low-cost storage methods can drastically cut food loss, especially for small-scale farmers in the developing world, who frequently loose food to factors like pests, spoilage, and transportation damage. For example, a system developed by researchers at Purdue University in which grain is stored in three interlocking plastic bags locks out pests and keeps grain fresh for months. The Food and Agriculture Organization has built more than 45,000 small, metal storage silos—just big enough for use by a single farmer—in 16 different countries. These silos have cut food loss during the storage phase to almost zero. Even using a plastic crate instead of a plastic sack during transport can cut loss dramatically by preventing bruising and squashing.

Redistributing Food

Some perfectly good food just never gets eaten. It might be because a farmer can't afford to harvest an entire field, or because a grocer has ordered too much of an item and can't sell it all. One way to reduce this type of food loss and waste is to simply redistribute food by giving it to food banks and similar outreach groups. An Australian organization called SecondBite, for example, redirected to community food banks 3,000 metric tons worth of food in 2012 that would otherwise have been thrown away.

b) Reducing Food Loss Close to the Fork

More Accurate Food Labeling

Confusion around "use-by," "sell-by," "best-before," and other date labels can lead people to throw out food that is still perfectly good to eat. For example, one survey conducted by the Waste and Resources Action Programme (WRAP) in the United Kingdom found that one-fifth of food thrown out by households was incorrectly perceived as being out of date due to confusing labels.

Retailers can alleviate confusion by removing certain date labels, such as "sell-by" dates in the United States, which only convey information to the retailer. Tesco, for example, has piloted a program in which "display until" dates are removed from packages, leaving only a "use by" date. The grocer found that this change has been well-received by customers and also leads to less waste at the store level.

Reducing Portion Sizes

Huge portion sizes at restaurants and buffets can lead to large amounts of food waste, as people are unable to finish the meals they order. Restaurants can reduce this type of waste—and their own operating costs—by offering smaller sizes of menu items.

There are also some more creative ways to cut this type of waste. For example, Michigan's Grand Valley State University introduced a tray-less system in its cafeterias. Because students could no longer load up trays with food, the University found that over the course of a year, each student was wasting about 56 pounds of food fewer than the year before, or about 28,000 fewer pounds overall.

Launching Consumer Awareness Campaigns

Consumer awareness campaigns reveal how much food people actually waste and provide simple solutions for cutting down on that waste. Grocers can play a part in these initiatives. For example, stores run by The Co-operative Group in the UK print storage tips for fruits and vegetables directly on their plastic produce bags. Initiatives such as cooking classes and information displays sponsored by local governments and community groups can also provide consumers with information that helps reduce waste.

Case Study - Denmark as a Champion in Food Waste & Security Revolution

According to statistics from Danish Trade Magazine (Dansk Handelsblad) and Danish Agriculture & Food Council, Denmark's food waste has fallen by 25 per cent since 2010 – the equivalent of DKK 4.4 billion. This makes Denmark the European leader in the fight against food waste.

Today, far too many valuable resources end in waste incineration plants or landfills around the world. This calls for a transformation of the way waste is managed. In Denmark this transformation has already begun, aiming to build a society in which the 700,000 tonnes of food currently wasted each year in Denmark is not just thrown away. The recent result from Danish Trade Magazine (*Dansk Handelsblad*) and Danish Agriculture & Food Council makes Denmark the leader for waste reduction in the EU, followed by the United Kingdom at 21 per cent, and are a tribute to the efforts of organisations like Stop Wasting Food (Stop Spild Af Mad), a Danish NGO that has been leading a "fight against food waste in Denmark".

This is a fantastic result of our work. However, we have not reached our goal yet – but we are on the right track, said NGO founder Selina Juul.

Waste – a valuable resource

Denmark calls for a global transformation of the mindset of waste management, where focus is placed on resources rather than waste.

In the future, Denmark will not just be separating waste already separated today, such as paper, cardboard and glass; focus will also be on other household waste, including food waste. The Danish Government has set a goal that 50 percent of Danish household waste is recycled by 2022.

By reusing or recycling waste, the resource efficiency is increased, thereby saving the environment from pollution and harmful emissions. This is also the case for food waste where an estimated 14 percent of the world's CO2 emissions are caused by food waste.

New store will sell food waste

A new initiative contributing to reducing food waste is the store <u>WeFood</u>, which is planned to open at the end of 2015. WeFood will be a store located in Copenhagen and be realised by help from the citizens having the possibility to buy shares in WeFood. Also, the store will be run by volunteers and will sell food at prices that 50-70 per cent less that of traditional supermarkets.

WeFood will sell food that cannot be sold due to wrong labelling, damaged packaging or a supposedly critical expiration date. The food will be delivered from *Dansk Supermarked*, *Fødevarebanken* and many other suppliers.

Danchurchaid is behind WeFood, meaning that all profit will go to humanitarian work by *Danchurchaid*.

<u>Fødevarebanken</u> – literally the food bank – is another initiative equally dedicated to minimise the waste of food by collaborating with the industry and receiving food that otherwise would be wasted. They try to fill the gap between the huge waste of food in some sectors and the need for food for socially marginalised people.

Denmark leading food waste initiatives

According to Danish Trade Magazine, Denmark is the European country with most initiatives against food waste.

Some of the initiatives include:

- All Danish supermarket chains having a food waste reduction strategy
- Over 300 restaurants in Denmark offering doggy bags as members of the REFOOD label against food waste
- Hospitals, catering services and festivals working hard to reduce food waste
- Government putting food waste firmly on the political agenda
- Establishing the world's first international think-tank against food waste^v

If you wish to explore Denmark's case in more depth, we encourage you to examine its Country Report on National Food Waste policy: https://bit.ly/2ERk2tj

Recommendations for National Policy Building

Although these initiatives can all help reduce food loss and waste immediately and costeffectively, the global community will also need to take some bigger, cross-cutting steps to tackle this issue. WRI's new working paper identifies five key recommendations:

Development of a food loss and waste measurement protocol: What gets measured gets managed. A global "food loss and waste protocol" could provide companies and countries with a standardized way to measure and monitor food loss and waste.

Setting food loss and waste reduction targets: Setting time-bound targets inspires action by raising awareness, focusing attention, and mobilizing resources. Targets at the global, national, sub-national, and business levels will help spur action on reducing food loss and waste. For example, the European Union has announced a target of reducing food loss and waste by 50 percent by 2050.

Increasing investment in reducing post-harvest losses in developing countries: A great deal of food loss in developing countries happens "close to the farm," but only about 5 percent of agricultural research funding goes toward minimizing post-harvest losses. Doubling this amount of funding would be a huge step in the right direction.

Creating entities devoted to reducing food waste in developed countries: WRAP is a good model of this sort of entity. The organization is independent of the national government, but works closely with business and governments on waste reduction. For example, it works with manufacturers to minimize waste during factory processes, convenes voluntary agreements with grocery retailers to reduce in-store waste, and conducts consumer awareness campaigns to educate the public about household food waste.

Accelerating and supporting collaborative initiatives to reduce food loss and waste: International initiatives such as SAVE FOOD and Think.Eat.Save bring together a wide range of actors like private businesses, governments, and intergovernmental organizations to tackle food loss and waste. These initiatives provide a space for inspiring action, effective collaboration, and sharing of best practices.

Conclusions and Questions to Consider

There is no doubt that food insecurity is affected by and strongly affects both the health of human beings and also the health and survival of our planet for future generations. Given the enormous magnitude of the problem of food insecurity globally it is important that policy makers and society at large consider engaging strongly with the actions discussed above. We also kindly ask you to ponder upon the following matters:

- 1. What are the ways of reducing income inequality and increase social justice?
- 2. How to promote sustainable agriculture on a wide scale?
- 3. What are the potential ways of minimizing food waste?
- 4. How could Sustainable Development Goals (SDGs) be implemented in practice (with indication to Goal 2: "Zero Hunger".
- 5. How could national nutrition policies be improved?
- 6. Maternal, infant and young child feeding.

- 7. Planetary health.
- 8. To what extent should nutrition education be included in school curriculums?
- 9. What kind of information technologies should be used for monitoring food insecurity?
- 10. How to provide food emergencies to refugee plights?

Further Readings and Suggested Resources

Who are the World's Food Insecure? New Evidence from the Food and Agriculture
Organization's Food Insecurity Experience Scale

Michael D.Smith, Matthew P.Rabbitt, Alisha Coleman-Jensen

https://bit.ly/2SlQUOd

Sustainable Development Goal 2: Zero Hunger

United Nations Development Programme

https://bit.ly/2cAyhEv

2018 Global Report on Food Crises

World Food Programme

https://bit.ly/2CNbBhA

The 2015 Dietary Guidelines Advisory Committee Scientific Report: Development and Major Conclusions

Barbara E Millen, Steve Abrams, Lucile Adams-Campbell, Cheryl AM Anderson, J Thomas Brenna, Wayne W Campbell, Steven Clinton, Frank Hu, Miriam Nelson, Marian L Neuhouser, Rafael Perez-Escamilla, Anna Maria Siega-Riz, Mary Story, Alice H Lichtenstein

https://bit.ly/2AiDyeo

The World Is Headed for a Food Security Crisis. Here's How We Can Avert It

Joseph Hincks

https://bit.ly/2BDmVda

A global food crisis may be less than a decade away

Sara Menker

https://bit.ly/2fP7LaA

Topic B: Ensuring Food Security as a Part of Sustainable Development

Key Terms and Concepts

The Food and Agriculture Organization of the United Nations (FAO) defined "Food Waste" as "the removal from the "Food Supply Chain" of food which is fit for consumption, or which has spoiled or expired, mainly caused by economic behavior, poor stock management or neglect". Another important term is the "Food Supply Chain" (FSC) which is defined as: "The connected series of activities to produce, process, distribute and consume food".

The definition of the FAO to "Food Loss" is "the decrease in quantity or quality of food". Hence, food waste and food loss are considered different concepts.

Food waste is recognized as a distinct part of food loss, because the underlying reasons, economic framework and motivation of the Food Supply Chain (FSC) actors for wasting food are very different from the unintended food loss, and subsequently the strategies on how to reduce food waste are conceived in a different, targeted manner. Although the term 'Food Loss' encompasses "Food Waste", the term 'Food Loss and Waste' (FLW) is often used to emphasize the importance and unique aspect of the waste part of Food Loss'i.

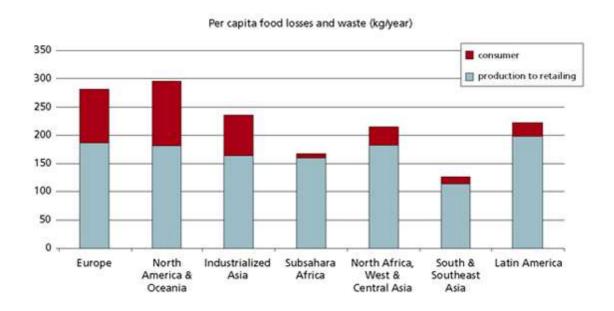
Food Loss and Waste also to refers to a damage in quality, rather than only in quantity. Qualitative Food Loss and Waste is defined as "reduction of nutritional value, economic value, food safety and/or consumer appreciation".

The Extent of the Issue

A large share of the world population is still consuming far too little to meet even the most basic needs. Halving the per capita of global food waste at the retailer and consumer levels is also important for creating more efficient production and supply chains. This can help with food security, and shift us towards a more resource efficient economy^{vii}.

The figures of Food Waste are troubling. 1.3 billion tons of food are wasted every year, while almost 2 billion people are hungry or undernourished. In addition, according to the UN FAO, food losses and waste amounts to roughly US\$ 680 billion in industrialized countries and US\$ 310 billion in developing countries. Furthermore, Industrialized and developing countries dissipate roughly the same quantities of food — respectively 670 and 630 million tons^{viii}.

Per capita waste by consumers is between 95-115 kg a year in Europe and North America, while consumers in sub-Saharan Africa, south and south-eastern Asia, each throw away only 6-11 kg a year. The following graph demonstrates the food losses and waste per capita, in the various region of the world.



Prior International Action

In September 2015, over 150 political leaders met in New York City in the United Nations Headquarters to adopt the new UN Sustainable Development Goals (SDGs). The 17 established goals set the world's sustainable development agenda for the next 15 years. Within Goal 12 there is an international target (12.3) of halving per capita food waste at the retail and consumer level and reducing food losses along production and supply chains until 2030, which is referred to as the 2030 Agenda. SDGs also call for a reduction of global Food Waste by 50% by 2030^{ix}.

In late September, 2017, the world leaders gathered in New York for the 72nd United Nations General Assembly session. Although most attention focused on urgent crises around the world, there were also several sessions on the Sustainable Development Goals (SDGs) and the 2030 agenda for Sustainable Development^x.

Altogether, they highlighted the challenge of global food loss and waste, and the amount of work required to achieve Zero Hunger. We know that global food systems produce enough food to feed the world's 7.5 billion people, however, hunger still exist and is growing. Around 800 million people are underfed, and a third of food produced every year, about 1.3 billion tons, is lost. This translates into a financial loss of close to \$1 trillion, and a nutritional loss of 24% of the total calories produced worldwide. Globally, the total area of land that is used to produce food that is never consumed is equivalent to China.

The UN Development program suggested that the efficient management of the world shared natural resources, and the way the international community dispose of toxic waste and pollutants, are important targets to achieve SDGs goal 12th - responsible consumption and production. Encouraging industries, businesses and consumers to recycle and reduce waste is equally important, as is supporting developing countries to move towards more sustainable patterns of consumption by 2030^{xi}.

Potential Policies to Tackle and Prevent Food Waste

Two famous public policy researchers, Bridgman and Davis, suggest that there are four different instruments to promote any public policy:

- Policy through advocacy arguing a case, educating or persuading; For example, using formal education programs to advocate for a specific policy.
- Policy through money using spending and taxing powers to shape activity; For example, create a tax on tobacco, as an effort to decrease the amount of people who smoke cigarettes.
- Policy through direct government action delivering services; For instance, providing public health insurance.
- Policy through law legislation, regulation and authority.

Policy through advocacy

One approach to tackle and prevent food waste is through creating awareness to the issue. An example for a campaign that use such instrument to address food waste is #RecipeForDisaster, which is a social media movement, supported by the WFP, that aims to spotlight food waste and highlight simple solutions people can take to prevent it. The awareness doesn't have to be only for the public in general, but it could target specific sectors or groups, as well as trying to receive the support of elected officials.

Another example is educational campaigns to teach consumers what are the strategies to minimize wasted food and the importance of minimizing the magnitude of this problem. Many consumers believe that discarding food is not a problem if they compost it; education can help address this misconception.

Policy through money

The idea behind this type of a tool is that if you provide economic incentives to people, they will be more likely to do it, because people make rational decisions. Some general guidelines for developing approaches to incentivizing wasted food reduction, especially further up the hierarchy, include reviewing current policies and economics, such as fees, taxes, contracts, ordinances and permits to identify some changes that could be made to financially incentivize prevention. Another example to incentivize recovery is to offer restaurants and supermarkets tax credits to donate high-quality food to food banks and lower-quality food to farms for animal consumption.

In addition, these policies include providing support to investment projects and programmes in the public and private sector.

Policy through direct government action and through law

Food waste could also be addressed by direct measures, policies and projects implemented by governments. In addition, countries can legislate laws and create regulations and form governmental entities to address Food waste.

For example, the French government, in the past years has created new laws and regulations to encourage food waste reduction. In 2012, it launched a new law that forced the private sector to recycle their organic waste if they produce more than the a specific amount^{xii}.

Challenges in Preventing the Food Waste

The United Nations Secretary-General Ban Ki-moon has launched the Zero Hunger Challenge in 2012. The Zero Hunger vision reflects five elements from within the SDGs - Sustainable Development Goals UN program, which taken together, can end hunger, eliminate all forms of malnutrition, and build inclusive and sustainable food systems^{xiii}.

However, a report by the UN Food and Agriculture Organization, addresses the following challenges in preventing Food Waste:

First, in developing countries and, sometimes, developed countries, food may be lost due to premature harvesting. Poor farmers sometimes harvest crops too early due to food deficiency or the desperate need for cash during the second half of the agricultural season. In that case, the food incurs a loss in nutritional and economic value, and may get wasted if it isn't suitable for consumption^{xiv}.

Second, food that is not safe is not fit for human consumption and therefore is wasted. Failure to comply with minimum food safety standards can lead to food losses and, in extreme cases, impact on the food security status of a country. A variety of factors can lead to food being unsafe, such as naturally occurring toxins in food itself, contaminated water, unsafe use of pesticides, and veterinary drug residues. Poor and unhygienic handling and storage conditions, and lack of adequate temperature control, can also cause insecure food.

Challenges of the WFP Support on the Ground: Yemen Case Study

Since 2015, there is an ongoing civil war in Yemen between the government forces that are supported by Saudi Arabia and other Sunni Arab states and Houthi forces backed militarily by Iran, a Shia regional power^{xv}.

Because of the civil war, there is an astonishing humanitarian crisis in Yemen. According to BBC, about 75% of the population - 22.2 million people - need humanitarian assistance, including 11.3 million people in acute need who urgently require immediate assistance to survive. Some 17.8 million people do not know even where their next meal is coming from and 8.4 million are considered at risk of starvation. In addition, severe acute malnutrition is threatening the lives of almost 400,000 children under the age of five.

"Even if the war ended tomorrow, the levels of malnutrition it has caused would cast a long shadow into the country's future," warns Gwenaelle Garnier, Nutrition in Emergency and preparedness and response consultant with WFP^{xvi}.

"The conflict further exacerbated an already alarming situation," Garnier explains, pointing out that currently 1.8 million Yemeni children are acutely malnourished and about 400,000 of whom severely so. Malnutrition also affects 1.1 pregnant and breastfeeding women, with detrimental effects on the physical growth and brain development of their babies.

Malnutrition is taking a heavy toll on Yemeni children. 19-months-old Angham survived cholera a few months ago, but her brother did not make it. "It breaks my heart to stand helpless, watching her suffer from one disease after the other," says her father Fares Ahmed, as he sits with her in Hajjah hospital. Unfortunately, malnutrition is making children like Angham more vulnerable to diseases.

In addition, malnutrition has effects on children's performance at school, limits their future job opportunities and ability to work, and has a systemic cost in terms of lost productivity and health care expenses. "The lack of nutritious food for mothers and children is threatening a whole generation," Garnier states. "Nutrition support is crucial to save lives now and to ensure the country gets back on its feet when peace comes."

The WFP is working in Yemen with the Ministry of Health and other partners, including national and international NGOs, to treat and prevent moderate acute malnutrition.

Malnutrition treatment happens in local health facilities. WFP provides specialized nutritious supplements—a peanut paste enriched with nutrients for children under 5 and fortified cereals for pregnant and breastfeeding women, assists with the logistics of delivery and supports the training of local staff.

Garnier also explains the difficult situation to provide the best humanitarian solutions the WFP can offer on the ground, when there is a military conflict. "Our ability to reach those in need is hindered by several factors: half of the clinics in the country are no longer functioning and people often struggle to reach them," Garnier says.

"And then, of course, there is the conflict. In some areas, you have to deal with two different sets of authorities in order to get permission for trucks to transit and for partners to operate. And when front lines move (meaning of the military forces), your ability to access one place can change overnight. You have to adapt day by day," she continues.

Furthermore, there is a lack of infrastructures and a lack of human resources. In the clinics that are still working, conditions are dire. Equipment and supplies are scarce, staff are few and often work around the clock. "There are some days when we have more children than beds, so we put three on a bed and lay the rest on mattresses on the floor," says Maika Mohamed Alaslemy, Head Nurse at Aslem health centre in Hajjah governorate.

"The medical workers here have not been paid for over three months and we do not get holidays or time off. We work under so much pressure out of our obligation to save lives and preserve the future of Yemen. It is the only thing that I can do from here," she adds.

As of October 2018, WFP had provided nutrition support to 660,000 children under 5 and 640,000 pregnant and breastfeeding women.

Garnier concludes that "We (The WFP personnel in Yemen) need sustained resources and safe access to all parts of the country to reach all the children who are at imminent risk of death or life-long consequences from malnutrition.

Questions to Consider

While evaluating your country's policy, we ask you to tackle the matters below:

- 1. Which policy instruments and measures should the international community take to prevent Food Waste?
- 2. How does your country believes should and shouldn't the international community encourage Food Security Actors not to waste food, especially when it's more profitable?
- 3. Which policies in regards to the prevention of Food Waste, your country wouldn't support?
- 4. How does your country believe the international community should advance the SDGs and Agenda 2030?
- 5. What does your country think are the main obstacles to implement the goal of the prevention of Food Waste? What measures do you think should the international community take to overcome them?

Further Readings and Suggested Resources

Food Loss and Food Waste

FAO

https://bit.ly/1v3QRWc

Keeping Food Out of the Landfill: Policy Ideas for States and Localities

Harvard Food Law Policy Clinic

https://bit.ly/2IP25L1

Governmental Plans to Address Waste of Food

Johns Hopkins Center for Livable Future

https://bit.ly/2CW0X40

SAVE FOOD: Definitional framework of food loss

FAO

https://bit.ly/25dFGMg

Transforming our world: the 2030 Agenda for Sustainable Development

Sustainable Development Goals Knowledge Platform

https://bit.ly/1Epf648

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- 5 http://www1.wfp.org/governance-and-leadership
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- 7 https://scalingupnutrition.org
- 8 https://sustainabledevelopment.un.org/topics/foodagriculture
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 - 17 http://www.fao.org/hunger/en/
 - 18 https://academic.oup.com/nutritionreviews/article-abstract/60/suppl_5/S46/1896146? redirectedFrom=fulltext
 - 19 https://secure.jbs.elsevierhealth.com/action/getSharedSiteSession?
- redirect=https%3A%2F%2Fwww.thelancet.com%2Fretrieve%2Fpii%2FS2214109X1470381X&rc=0
 - 20 https://www.sciencedirect.com/science/article/pii/S0305750X17300086?via%3Dihub
 - 21 https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(14)70381-X/fulltext
 - 22 http://www.fao.org/righttofood/publi09/y9825e00.pdf
 - 23 http://www.fao.org/righttofood/project_files/goodFSgovernance/
 - FoodSecurityGovernanceWorkshop_backgroundpaper.pdf
 - 24 https://doi.org/10.1016/j.gfs.2017.03.004
 - 25 https://www.ncbi.nlm.nih.gov/pubmed/23795344
 - 26 https://doi.org/10.1016/j.gfs.2017.03.004

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 - 31 http://www.fao.org/3/a-at144e.pdf
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