

Food loss and waste and the right to adequate food:

Making the connection

Right to Food Discussion Paper

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LIST OF ABBREVIATIONS

APEC Asia-Pacific Economic Cooperation

CELAC Community of Latin American and Caribbean States

CESCR Committee on Economic, Social and Cultural Rights

CO₂ Carbon dioxide

EC European Commission

EU European Union

FAO Food and Agriculture Organization of the United Nations

FLW Food loss and waste
GC General Comment

GDP Gross Domestic Product

GHG Greenhouse gas

Gt Giga tonne

ICESCR International Covenant on Economic, Social and Cultural Rights

MDGs Millennium Development Goals
NGO Non-governmental Organisation

OECD Organisation for Economic Co-operation and Development

PHL Post-harvest losses

PTC Private Transnational Corporations

RTF Right to Food

SDGs Sustainable Development Goals

UDHR Universal Declaration of Human Rights

UN United Nations

UNEP United Nations Environment Programme

UN-Habitat United Nations Human Settlements Programme

ZHC Zero Hunger Challenge

1. INTRODUCTION

In 1999, even though the international community had highlighted the importance of the full realization of the right to adequate food on several occasions, the Committee on Economic, Social and Cultural Rights (CESCR) stressed that its implementation was still lacking. At that time, 840 million people worldwide were chronically hungry - mainly due to enduring poverty - while millions were suffering from outbreaks of famine with natural disasters, civil strife and war being some of the main culprits. The CESCR also noted that the root causes of such hunger and malnutrition - experienced most acutely in the context of developing economies but also affecting developed countries - were not due to a "lack of food but [a] lack of access to available food".1

Today, numbers are still alarming. In 2017, the global population has surpassed seven billion people and is expected to exceed 9.7 billion by 2050, with food demand thought to increase by up to 60 percent over that same period. Chronic hunger is on the rise globally, increasing from an estimated 777 million in 2015 to 815 million people in 2016.² Simultaneously, an estimated one third of all food produced is being lost or wasted along the food supply chain – from production to consumption.³ Current and future food accessibility and availability are directly affected by the squandering of resources, which in turn

increases pressure on the production side. Read all together, it is not sustainable and represents a failure of the food system that ought to be addressed both from a legal and a policy perspective, nationally and globally.

Still, the state of food insecurity in the world is not the only challenge related to food loss and waste (FLW). Current global challenges – such as climate change, poverty, health or trade, to mention but a few – have a direct impact on the realization of the right to adequate food. In turn, each challenge is negatively affected by FLW. For instance, FLW lead to negative externalities that further destabilize precarious climatic circumstances while causing increases in net economic costs for both businesses and households.

The issue of FLW has initiated an international debate on the global food system. As such, discussions ought to tackle the root causes of the issue: not only should the unsustainability of food systems be addressed, but also the relationship between resource-intensive consumption patterns and current global food production and supply systems. Hence, pertinent institutional and legal frameworks should be revised. This paper focuses on the right to adequate food and the need to develop sustainable global consumption and production systems.

BOX 1. A SNAPSHOT OF FACTS AND FIGURES

- Despite the progress in the fight against hunger over the past 25 years,⁴ many countries did not reach
 the Millennium Development Goals (MDGs) target of halving, between 1990 and 2015, the proportion
 of people suffering from hunger. The prevalence of hunger is not solely dependent on food availability
 – as stated by the United Nations (UN) Secretary General in a report from July 2016 but also on
 guaranteeing a better access to food by directing interventions towards fighting food insecurity and
 malnutrition.⁵
- An estimated one-third of the food produced for human consumption equivalent to 1.3 billion tonnes/year or a quarter of calories meant to feed humans becomes FLW.6
- This amount of FLW represents a tremendous quantity of wasted resources: 1.4 billion hectares of agricultural land⁷ or 30 percent of the world's agricultural land area⁸; a global water footprint of 250 km³ in 2007 or 20 percent of freshwater consumption⁹; 4.4 GtCO₂ or about 8 percent of global anthropogenic greenhouse gas (GHG) emissions;¹⁰ and approximately 38 percent of the total energetic consumption of the food supply chain.¹¹ Only considering CO₂ emissions, if FLW were a country, it would be the third major emitter on Earth.¹²
- "FLW impact both food security and nutrition and the sustainability of food systems" by reducing food
 availability and supposing an unsustainable use of natural resources, thus conditioning future food
 production.¹³
- In 2012, the market value associated with FLW was estimated at USD 936 billion slightly larger than
 the GDP of Indonesia or the Netherlands for the same year.¹⁴

CS 1. CURRENT INTERNATIONAL INITIATIVES RELEVANT FOR THE FLW CHALLENGE

- The **Zero Hunger Challenge (ZHC)**, launched by the UN Secretary-General Ban Ki-moon during the 2012 Rio+20 Conference, aims to end hunger and malnutrition as well as to build inclusive and sustainable food systems. The ZHC encompasses five specific elements, one of which strives for the adaptation of all food systems to eliminate FLW. The ZHC is guided by UN core principles as well as the right to adequate food and the fundamental right of everyone to be free from hunger.¹⁵
- The ZHC is aligned with the **2030 Agenda for Sustainable Development**, which builds on the experience of the MDGs and incorporates elements from the Rio+20 Conference. ¹⁶ The 2030 Agenda has been set in 2015 by UN Resolution A/RES/70/1 and establishes 17 Sustainable Development Goals (SDGs), ¹⁷ from which two are of key importance here:
- **SDG 2** aims to end hunger, achieve food security and improved nutrition and promote sustainable agriculture. In order to meet this goal by 2030,¹⁸ the sustainability of food production systems and the resilience of ecosystems are crucial. Fighting climate change and making use of resources responsibly are established in its targets.¹⁹
- **SDG 12** establishes that consumption and production patterns need to be sustainable. Target 12.3 reads "[b]y 2030, halve per capital global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses".²⁰
- The Paris Agreement on Climate Change²¹ is the outcome document of the 21st session of the Conference of the Parties to the UN Framework Convention on Climate Change held in Paris in 2015. During the Conference, reducing global FLW was discussed as it offers an important opportunity to meet climate change mitigation and adaptation objectives.²² While climate change is one driver of poverty and food insecurity, agriculture, forestry and land-use changes (such as conversion of forests to pasture or cropland) account for around one-fifth of global GHG emissions.²³ As such, agriculture and the food sector as a whole are pivotal areas to address when tackling climate change.

2. DEFINING FOOD LOSS AND FOOD WASTE

Key ideas:

- Food loss consists of all the food produced for human consumption that is not eaten by humans. Food waste is considered to be a part of food loss and is understood as food intended for human consumption being discarded or left to spoil as a result of decisions taken by actors along the food supply chain. Food loss and food waste happen at different stages of the supply chain and are caused by different driving forces.
- FLW also vary by product and region.
 In middle and high-income countries, the majority of FLW takes place at distribution and consumption phases while in low-income countries they tend to occur at production and post-harvest stages.
- Per capita FLW varies considerably by region.
 While Europe and North America present volumes of around 280-300 kg/cap/year, it represents around 120-170 kg/cap/year in Sub-Saharan Africa and South/Southeast Asia.²⁴
- As it affects the three pillars of sustainable development, FLW hamper initiatives taking place within the international agenda, such as the SDGs and the Paris Agreement.

Each year, one-third of all food produced for human consumption is lost or wasted across the globe. ²⁵ Still, what exactly is meant by such loss and waste? Food loss is defined as "the decrease in mass (dry matter) or nutritional value (quality) of food that was originally intended for human consumption". ²⁶ Meanwhile, food waste is part of food loss and refers to "food appropriate for human consumption being discarded, whether or not after it is kept beyond its expiry date or left to spoil". ²⁷ Food loss occurs throughout the supply chain – from production to final household consumption. Food waste is differentiated from general food loss due to distinct drivers that generate it, thus requiring different solutions.

Food loss is mainly caused by inefficiencies along the food supply chain, such as poor infrastructure, lack of adequate technology or access to markets, as well as insufficient knowledge and management skills or capacities by actors involved. In turn, food waste is mainly discarding either by choice or spoilage and is closely related to retailers' and consumers' behaviours – oversupply due to market forces or consumers' shopping and eating-related habits. ²⁸ This may happen at the post-harvest stage although it is more noticeable at the end of the food chain – retail and final consumption stages. ²⁹ For instance, food waste may be the result of a looming "best by" date (see CS 4) or a product that does not comply

BOX 2. LACKING A COMMON DEFINITION FOR FLW

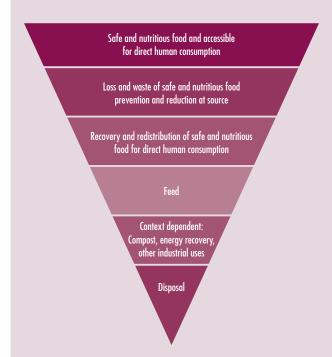
The perception of what FLW stand for depends on the definition of more than one concept as well as the terminology employed. It has proven difficult to establish a common definition amongst stakeholders whether at national or supra-national levels.

For instance, the European Commission (EC) does not provide a "food waste" nor a "food loss" definition. The EC maintains that there is a food definition in Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 (General Food Law) and a waste definition in the Directive 2008/98/EC on waste (Waste Framework – under revision in December 2017). Therefore, the EC is bound to follow the definitions of food and waste, as established in the General Food Law and the Waste Framework Directive respectively.

At global level, SDG 12.3 has driven discussions concerning the definitions of post-harvest losses (PHL) as well as food loss and food waste. The question is mainly how to differentiate food waste (addressing food waste from a food perspective) from organic waste (addressing it from a waste perspective). The inclusion of the term "food" – defined as any substance intended for human consumption³⁰ – has an effect on the potential uses of food before it constitutes waste from a legal standpoint, if the waste hierarchy is selected as the framework of reference or if the food-use-not-loss-or-waste hierarchy is prioritized.³¹

The Committee on World Food Security (CFS) 2014 Policy Recommendations Food Losses and Waste in the Context of Sustainable Food Systems³² recommends the food-use-not-loss-or-waste hierarchy, which fosters a consumption and production perspective in line with SDG 12.3.

FOOD-USE-NOT-LOSS-OR-WASTE HIERARCHY³³



So far, the existence of different definitions has resulted in different estimations regarding the volume, current impact and potential solutions to the challenges posed by PHL, food loss and food waste.

The lack of consensus made it difficult to establish comparisons and hampered communication in the process of addressing the issue, limiting the basis for shared strategies.

At global level, the CFS 2014 Policy
Recommendations highlighted the need to improve
the collection, transparency and sharing of data –
disaggregated when appropriate – on FLW at all
stages of the food chain as well as the sharing of
experiences and best practices on reducing FLW
in food systems. Within the European Union (EU),
this issue has been highlighted by the EU Court
of Auditors,³⁴ which makes it difficult for member
countries to implement measures in this regard.³⁵

with certain aesthetic criteria – marketing standards related to size, shape or accepted appearance – whether through consumer preferences, wholesalers, or retailers. While not based on safety standards, such criteria are used to discard edible goods.

In the case of the EU, the legislation governing the size and shape of many fruits and vegetables ceased to exist on 1 July 2009, when specific marketing standards for 26 types of fruits and vegetables were repealed by the EC Regulation No 1221/2008.36 Standards were eliminated when the produce is intended for processing or animal feed, transferred by the producer to consumers for their personal use, of a given region and intended for traditional local consumption, and already trimmed and cut and classified as "ready to eat" or "kitchen ready". For ten types of fruits and vegetables³⁷, marketing standards remain in place. However, for those types, member countries of the EU can allow shops to sell produce that do not meet the standards as long it is labelled to distinguish it from 'extra', 'class I' and 'class II' fruits. EU rules allow national authorities to permit the sale of all fruits and vegetables, regardless of their size and shape. Nevertheless, operators may have maintained their practices after marketing standards were repealed and may apply private standards that lead to safe and nutritious food being discarded for direct human consumption or becoming waste.

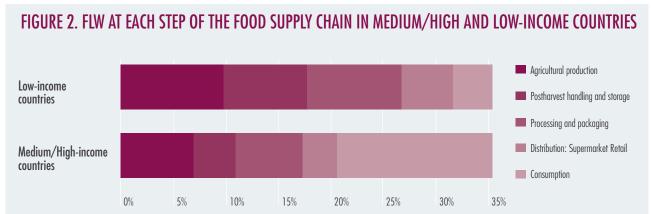
Moreover, there are distinct differences with the contexts in which loss and waste take place. While referring to the share of FLW along the phases of the food supply chain per territory, food loss is as high in industrialised countries as in developing countries, but 40 percent of food loss in the latter occurs at the post-harvest and processing stages. Meanwhile, food waste mostly happens in developed contexts, where it represents around 40 percent of the overall general food loss, 38 as illustrated in Figure 2.

Figure 3 shows the share of FLW along the food supply chain per region. For instance, per capita FLW in sub-Saharan Africa is 170 kg/year. Concretely, PHL for grains in this region in terms of volume can range from 10 to 20 percent, which is estimated to be the amount of food needed to feed 48 million people while representing around USD 4 billion per year.39 In Eastern and Southern Africa, those losses represent about 13.5 percent of the total value of grain production (USD 11 billion). Losses have a direct effect on food prices while grain crops are the basis of food security in the region – accounting for around 37 percent of typical incomes.⁴⁰ In the Near East and North Africa, quantitative FLW are estimated to range between 14 and 19 percent for grains, 26 percent for roots and tubers, 16 percent for oilseeds and pulses, 45 percent for fruits and vegetables, 13 percent for meats, 28 percent for fish and seafood, and 18 percent for dairy products. In those regions, FLW are generally due to poor farming systems and deficient infrastructure and practices – causes that have an effect on the safety and quality of food.41

Meanwhile, more developed contexts do not present more favourable FLW data. Per capita food loss in Europe and in North America is 280 and 300 kg/year respectively, the highest in the world. Food wasted by consumers represent 95 and 115 kg/year respectively, in stark contrast with consumers' food waste in sub-Saharan Africa that amounts to 6-11 kg/year. In the United States of America, approximately 31 percent of the overall food available to retailers and consumers is lost or wasted, representing the largest component of disposed municipal solid waste. As for the EU, a recent report highlighted that a reduction in its FLW could have beneficial effects on global and local food prices in sub-Saharan Africa.

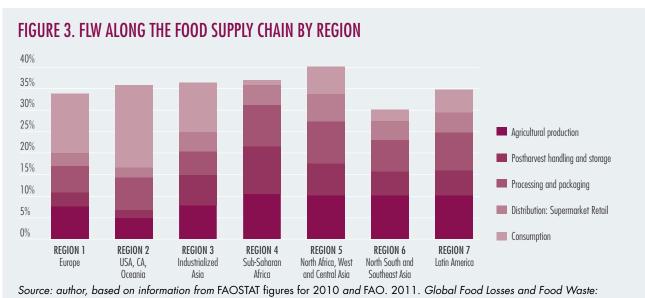


Source: adapted from Lipinski B. & al. 2013. Reducing Food Loss and Waste. Installment 2 of "Creating a Sustainable Food Future". World Resources Institute. Washington, Dc.



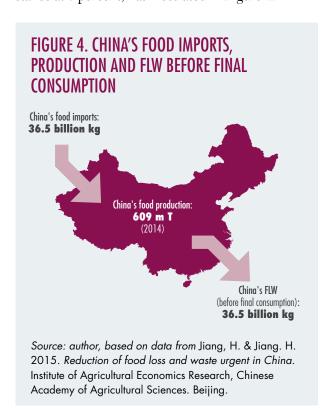
Source: author, based on information from FAOSTAT figures for 2010 and FAO. 2011. Global Food Losses and Food Waste: Extent, Causes and Prevention. Rome. Annex 1-4, pp.26-27.

^{*}Grouping of world regions is based on the classification from FAO. 2011. Global Food Losses and Food Waste: Extent, Causes and Prevention. Rome. Annex 1, p.23. Medium/High-income countries include world regions 1 (Europe), 2 (United States of America, Canada, Oceania) and 3 (Industrialized Asia) while Low-income countries include regions 4 (sub-Saharan Africa), 5 (North Africa, West and Central Asia), 6 (South and Southeast Asia) and 7 (Latin America).



Extent, Causes and Prevention. Rome.

Latin America and the Caribbean's FLW per capita amounts to roughly 223kg/year, which makes it the fourth highest ranked region in the world. 45 Asia represents the most diverging shares of FLW, as shown in Figure 3 by its three divisions based on the level of economic development of countries. As such, a differentiation is required between Industrialized Asia - the third highest ranked region, with a level of per capita FLW amounting to 240 kg/year - and South/Southeast Asia – with the lowest level of per capita FLW at 120 kg/year, from which waste represents only 11 kg/year. 46 In the case of China, which is included in the region of Industrialized Asia, the annual amount of FLW before final consumption is nearly equal to the level of imported food, which stands at 6 percent, 47 as illustrated in Figure 4.



As shown in Box 3, the three pillars of sustainability are negatively affected by FLW. From a social standpoint, such loss is at odd with the amount of people suffering of hunger worldwide. From an

economic perspective, current population growth predictions imply that the global demand for food will exceed the supply, leading to tighter food markets and increases in market prices. Meanwhile, an estimated one third of food bought ends up in the trash – the estimated food waste in the EU member countries in 2012 was of 88 million tonnes⁴⁸ – with the impact being twofold. On the one hand, the cost of lost or wasted good is added to the final consumer price, creating a barrier for individuals with limited economic resources to access markets. On the other hand, it represents an inflated demand that pushes the supply side to produce more than what is necessary, contributing to an inflated and unsustainable food system.

Moreover, the consequences are not only social and economic; they are also environmental. Food production is a major cause of GHG emissions; from its first stage - industrialized agriculture is responsible for one third of global GHG emissions - through its commercialization and transportation to its disposal on landfills where it rots, generating methane that has a global warming potential 23 times higher than that of CO2.49 According to the Waste & Resources Action Programme, if the United Kingdom was to solve its food waste issue, which accounts for 16 million T of CO2 emissions per year and USD 28.4 million per year, the environmental benefits would be comparable to removing one of every four cars from its roads.⁵⁰ In sum, a number of factors leading to FLW produce negative externalities for the environment.⁵¹

The challenge posed by FLW is *not a recent matter* of concern. At global level, the reduction of PHL has been part of the UN agenda since the food crisis of the 1970s, when part of development investments aimed to prevent it. However, once real commodity prices stabilized, the focus moved to food security

through economic liberalization and trade.⁵² It was not until the most recent food and financial crises that FLW rose to prominence again. Today, the issue has not only attracted attention of international organisations such as the Food and Agriculture Organisation of the United Nations (FAO)⁵³ and the United Nations Environment Programme (UNEP)⁵⁴ but also of States and local governments, some of which have launched initiatives to prevent it as shown by CS 2.

As will be explored hereafter, there are many reasons why attention should be drawn to the relationship between FLW and the right to adequate food. Among those reasons is the necessity to: ensure that FLW prevention measures are taken

in due compliance with international human rights law; take steps towards the creation of an explicit international legal basis for combating FLW; further clarify the obligations related to the right to adequate food; draft more integrated policies; enhance legal clarity; and improve institutional coordination of actors involved in the food system and consumers.

In sum, coordinated multi-sectoral food and agriculture policy frameworks are needed both vertically and horizontally. In those frameworks, actions strengthening consumer food use capacities as well as food waste prevention and reduction should be integrated to ensure the sustainability of a global nutrition-sensitive food system.⁵⁵

BOX 3. SUSTAINABILITY, FOOD SYSTEMS AND FLW

When introduced in the 1987 report "Our Common Future", sustainable development was defined as the capability of humanity to meet its present needs without compromising the ability of future generations to meet their own. ⁵⁶ It was further developed on the basis of three interdependent pillars: social, economic and environmental. A food system builds on those three pillars – including activities linked to production, processing, distribution, preparation and consumption of food aimed at ensuring food availability and accessibility – and has an impact on each one of them. Consequently, a sustainable food system would be one capable of ensuring food security and nutrition for all without compromising the future economic, social and environmental bases that ensure such security for future generations. ⁵⁷

As a result of the current global food system, FLW have an effect on food security and nutrition in the same threefold way. First, it represents a reduction of food availability. Second, it has a negative impact on food access for food producers, post-harvest operators and consumers, since FLW contribute to tightening the food market and food prices. Third, PHL compromise the long-term food security and nutrition, as it also represents a loss and waste of natural resources used for food production, processing, preservation, distribution and end consumption.

BOX 4. THE EXTENT OF FLW

FLW represent approximately one-third of the food produced for human consumption. Such an extensive problem would indicate that it does not merely happen by accident, but is rather an integral part of the food system; a result of its functioning, technically, culturally and economically.⁵⁸ As such, identifying the causes and adopting solutions to reduce FLW is critical. While eliminating completely FLW is not plausible, actions to prevent the majority of FLW are feasible and required at all levels (micro, meso and macro).

CS 2. LOCAL GOVERNMENTS' COLLECTIVE INITIATIVES AGAINST FLW

Aware of the challenge that FLW represent, local governments promoted a number of collective initiatives on the matter, such as the **2015 Milan Urban Food Policy Pact**. ⁵⁹ With the Pact, mayors and representatives of local governments commit to develop sustainable food systems that minimize waste and provide healthy and affordable food to all people under a human rights-based framework. The Pact promotes coordination amongst actors within the food system as well as between municipal and community levels to integrate urban food policy considerations into sustainable development policies – social, economic and environmental. Coherence with policies and programmes at the national level is sought.

Launched by the Municipality of Milan on the occasion of EXPO 2015 "Feeding the Planet, Energy for Life", the Pact proposes a voluntary framework for action for local governments that want to establish more sustainable food systems. Signed by over 160 cities as of 2017, the Pact supports coherence and coordination. Since cities host around half of the global population, efforts at the urban level has the potential to make a significant impact, especially as cities are focal points of economic, social and environmental changes while being uniquely positioned to help reduce FLW.

In 2016, the UN Conference on Housing and Sustainable Urban Development (UN-Habitat III) that took place in Quito, Ecuador, led to the adoption of the **New Urban Agenda.**⁶⁰ This Agenda sets a common 20-year roadmap for cities to end poverty and ensure equal rights and opportunities as well as food security and nutrition for all while promoting sustainable use of resources, consumption and production patterns. In this regard, paragraph 123 of the document specifically refers to promoting the "coordination of sustainable food security and agriculture policies across urban, peri-urban, and rural areas to facilitate the production, storage, transport, and marketing of food to consumers in adequate and affordable ways to reduce food losses and to prevent and reuse food waste."

3. NATURE AND NORMATIVE CONTENT OF THE RIGHT TO ADEQUATE FOOD

Key ideas:

- The right to adequate food was first recognized in the 1948 Universal Declaration of Human Rights. Moreover, article 11 of the International Covenant on Economic, Social and Cultural Rights (ICESCR) establishes the obligations for States Parties.
- As the UN body with the mandate to oversee the implementation of the ICESCR, the CESCR has interpreted the right to adequate food in its General Comment 12 (GC12).
- Amongst essential elements of the right to adequate food are: adequacy, which refers to the quantity and quality of food, is conditioned by several factors and includes the notion of cultural or consumer acceptability; availability and accessibility of food, both socioeconomically and physically; and sustainability, which implies that food is accessible for both present and future generations.
- Understanding the multidimensional nature of the right to adequate food is necessary to

establish sound and coherent policies and norms to put the right into practice. Policies focusing on socio-economic and cultural norms and values need to be consistent in the short, medium and long terms. Actions need to be multi-faceted to ensure efficiency for the end consumer as well as the actors along the food supply chain. ⁶¹

The right to adequate food originally appeared in article 25 of the 1948 Universal Declaration of Human Rights. 62 Meanwhile, it is the 1966 ICESCR 63 that provides the legal obligations for the right to adequate food, setting out specific obligations for its States Parties.

Article 11 of the ICESCR contains two components: the right to adequate food and the fundamental right of everyone to be free from hunger. The latter represents the minimum essential level that States Parties must ensure immediately by taking action whereas the former goes beyond and entails the ability of all individuals to provide themselves with regular access to adequate food.⁶⁴

BOX 5. ARTICLE 11 OF THE ICESCR

- 1. The States Parties to the present Covenant recognize the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions. The States Parties will take appropriate steps to ensure the realization of this right, recognizing to this effect the essential importance of international cooperation based on free consent.
- 2. The States Parties to the present Covenant, recognizing the fundamental right of everyone to be free from hunger, shall take, individually and through international cooperation, the measures, including specific programmes, which are needed:
 - a. To improve methods of production, conservation and distribution of food by making full use of technical and scientific knowledge, by disseminating knowledge of the principles of nutrition and by developing or reforming agrarian systems in such a way as to achieve the most efficient development and utilization of natural resources;
 - b. Taking into account the problems of both food-importing and food-exporting countries, to ensure an equitable distribution of world food supplies in relation to need.

BOX 6. WHAT ARE GENERAL COMMENTS?

Issued by treaty bodies, such as the CESCR, General Comments provide an interpretation of key provisions of their respective human rights treaties. Their function is not only to work as an orienting tool but also to contribute to the development of international human rights law by means of setting the criteria for the implementation of the rights by States Parties. Although not legally binding, General Comments are seen as authoritative interpretations of obligations under a specific treaty.⁶⁵

GC12 provides an authoritative interpretation of the nature and content of the right to adequate food, including that "the right to adequate food is realized when every man, woman and child, alone or in community with others, have *physical and economic access* at all times to *adequate* food or means for its procurement".⁶⁶

The adequacy of food refers to food that is available and accessible in quantity that is satisfactory or acceptable and qualitatively sufficient for someone to enjoy a healthy and active life. ⁶⁷ Certain factors - social, economic, cultural, climatic, and ecological, among others – must be considered to determine what food or diets can be deemed appropriate in the present time. Also, as it encompasses criteria such as *consumer or cultural acceptance*, the adequacy standard exceeds dietary needs to include non-nutrient based values for food, such as is the case with expiry dates that determine people's behaviour towards food acceptance – our perception of food adequacy.

The concepts of availability and accessibility of food are, according to the CESCR, implied in the core content of the right to adequate food. Available quantity - the possibility of food being supplied wherever it is needed to satisfy the demand - should be understood both at the individual level and as well-functioning food systems. The notion of access entails both economic⁶⁸ and physical means.⁶⁹ Access to food is not an issue of food supply per se, it is rather about the relationship between people and supplies. Food insecurity and starvation do not only take place when there is not enough food, but also when people cannot access the food. According to the CESCR, hunger and malnutrition do not primarily result from a lack of food but rather from a lack of access to available food.70

Food adequacy is intrinsically linked to the idea of *sustainability*. The right to adequate food requires

food to be available and accessible at all times - both for present and future generations. As stated by the CESCR, "sustainability incorporates the notion of long-term availability and accessibility"⁷¹ while it also serves to assess prevailing factors that determine the adequacy of food today and tomorrow.

As for the implementation of the right to adequate food, relevant articles established by the ICESCR deliberately offer a wide definition. This is mainly due to each State's responsibility to implement international human rights standards according to its own national context. Meanwhile, each treaty usually has a related treaty body that monitors States Parties' implementation of obligations and interpret the content of the treaty. As such, the right to adequate food presents a challenge in terms of implementation that, while being of national scope, can benefit from international clarity.

BOX 7. ACCESS TO FOOD AND SEN'S ENTITLEMENT APPROACH

In 1989, Asbjørn Eide referred to the differential access to food by different population groups through Amartya Sen's concept of entitlement.⁷³ Sen's entitlement approach with regard to food focuses on "the ability of people to command food through the legal means available in society, including the use of production possibilities, trade opportunities, entitlements *vis-à-vis* the state, and other methods of acquiring food".⁷⁴ Not having this ability may be one of the causes of people's starvation, another reason being the impossibility of people to use this ability in order to avoid starvation. Moreover, the entitlement relation appears when one can gain ownership of food by means of another set of previously acquired ownerships that legitimate the former. According to Sen, there are four types of entitlements: based on trade (a person is entitled to a food bundle in exchange of something he/she previously owned with another willing party), based on production (a person is entitled to his/her own food by exchanging the bundle for something he/she produced using one's resources or previously-hired resources of others), based on labour (labour power entitles the person to get trade-based or production-based entitlements) or based on inheritance or transfer (when given ownership by a willing party who previously and legitimately owned them).⁷⁵

CS3 PARLIAMENTARY FRONTS AGAINST HUNGER

"The Parliamentary Front against Hunger in Latin America and the Caribbean (PFH) is a plural group of parliamentarians who seek to eradicate hunger and malnutrition in the region through the formulation of effective legislation and public policies, awareness-raising and alliances with civil society, academia, international organizations, and other key actors". To Established in 2009, the PFH has greatly contributed to national and regional efforts towards the realization of the right to adequate food and counts today around "400 legislators [...] in addition to permanent offices in more than 17 national parliaments, which resulted in more than 21 laws being approved and implemented". To

Key issues for the realization of the right to adequate food such as FLW have been thought of and addressed in some legislations as well as during key regional events.

For instance, Law No 589-16 of July 2016 in the Dominican Republic, which creates the National System for Food and Nutrition Security and aims to contribute to the realization of the right to adequate food, underlines the need to address key issues that are identified herein as causes of FLW.⁷⁸ What is more, the law outlines the rights of specific groups – such as vulnerable populations, women and children – and details its implementation principles, amongst many others pivotal provisions.⁷⁹

Moreover, collaboration and coordination of efforts on key issues for the realization of the right to adequate food and the reduction of FLW are central to regional gatherings of the PFH. For example, at the end of its 8th Regional Forum that took place in Uruguay in October 2017, the PFH adopted a Declaration that foresees increased efforts to adopt and implement human rights-based laws and policies for the justiciability of the right to adequate food in key areas such as FLW.⁸⁰ The will to increase its activities and outreach as well as to improve and enhance collaboration with other regions across the globe also features prominently in the document. As such, recent years have seen an increased interest for such regional and national parliamentary initiatives in other regions, such as in Africa, Asia and Europe.⁸¹

Suitable conditions for the realization of the right to adequate food at national level require an approach indivisible and interrelated with other human rights, which proves key to establishing sound policies and norms integrated with other economic, environmental and social policy areas related to its realization – human health and nutrition, education and food literacy, management

of natural resources, trade, public services and agriculture. See Meanwhile, at the international level, the development of new criteria that further define the content of those obligations, while respecting States' sovereignty, can contribute to the enforceability of the right to adequate food by adapting its scope to current challenges such as those posed by PHL and FLW.

4. OBLIGATIONS OF STATES IN IMPLEMENTING ECONOMIC, SOCIAL AND CULTURAL RIGHTS

Key ideas:

- In article 2 of the ICESCR, States Parties' general obligations are specified with respect to the other articles, including article 11 on the right to adequate food. Moreover, the CESCR has interpreted their nature and content in its General Comment 3 (GC3).
- GC3 on the nature of States Parties' obligations acknowledges a minimum core obligation arising from article 2, whereas States Parties should ensure a minimum essential level for each of the rights contained in the ICESCR, regardless of their level of development. It further calls on States Parties to take an active role in upholding the rights under the ICESCR in other countries by providing the necessary assistance and cooperation when required.

The nature of States Parties' general obligations, as set forth in article 2 of the ICESCR, is interpreted in the CESCR's GC3 of 1990.

The CESCR specifies the types of obligations that States Parties must comply with, which may be differentiated between immediate and progressive obligations. Hence, the ICESCR allows for the progressive realization of certain rights according to constraints that States may face due to limited available resources, while it imposes other rights to be implemented with immediate effect.

As highlighted by the CESCR, "to take steps" implies an *immediate obligation* to implement measures at the national level that are deliberate, concrete and targeted in the short term in order to progressively achieve the realization of the rights under the ICESCR.⁸³

BOX 8. ARTICLE 2 OF THE ICESCR84

- 1. Each State Party to the present Covenant undertakes to take steps, individually and through international assistance and cooperation, especially economic and technical, to the maximum of its available resources, with a view to achieving progressively the full realization of the rights recognized in the present Covenant by all appropriate means, including particularly the adoption of legislative measures.
- 2. The States Parties to the present Covenant undertake to guarantee that the rights enunciated in the present Covenant will be exercised without discrimination of any kind [...].

Moreover, those steps should be taken "to the maximum of [their] available resources". The CESCR indicates that "available resources" refer not only to those of the State, but also to those available from the international community. Resources from the international community should be provided through international assistance and cooperation and should aim to enable the realization of the rights under the ICESCR, such as the right to adequate food. Starticle 2.1 must be read in conjunction with article 23 of the ICESCR, should be in upholding the right to adequate food in other countries, which includes facilitating and providing the necessary aid when required. The same steps a source of the same steps are such as the right to adequate food in other countries, which includes facilitating and providing the necessary aid when required.

While the full realization of economic, social and cultural rights can only be achieved progressively, article 2.1 establishes an obligation for States Parties to effectively and uninterruptedly move towards such progressive realization. In addition, it foresees flexibility for States to adapt and act within their context and means. Social Consequently, the CESCR outlines the minimum core obligation for which all States Parties ought to ensure minimum essential levels of each of the rights contained in the ICESCR, regardless of their level of development. Social and

BOX 9. THE RIGHT TO FOOD GUIDELINES

Building on the obligations arising from the ICESCR as well as the authoritative interpretation presented in GC12, the Voluntary Guidelines to support the progressive realization of the right to adequate food in the context of national food security were adopted by FAO Member Nations in 2004. A nonlegally binding document, it provides a human rights-based practical guidance to implement a variety of measures towards the realization of the right to adequate food. As such, it offers recommendations in areas such as legal and institutional frameworks (Guidelines 5, 7 & 18); access to resources and assets (Guideline 8); food safety and consumer protection (Guideline 9); nutrition (Guideline 10); education and awareness raising (Guideline 11); support for vulnerable groups and safety nets (Guidelines 13 & 14); monitoring, indicators and benchmarks (Guideline 17), amongst others. 90

5. CLARIFYING THE RIGHT TO ADEQUATE FOOD FOR FLW

Key ideas:

- GC12 includes an analysis of the essential content of the right to adequate food, followed by several considerations regarding the adequacy and sustainability of food.
- The realization of the right to adequate food can be affected by problems in production, preservation or distribution, amongst others, while FLW represent a specific manifestation of such factors. Article 11 of the ICESCR calls for States Parties to ensure that food is properly preserved and distributed, which implies that the minimum amount of food is lost or wasted throughout the food supply chain.
- The notion of sustainability refers to food that has to be accessible at present times as well as for future generations. If sustainability should be a guiding component of the food system, FLW are an evident sign of unsustainability regarding the exploitation of natural resources, threatening the lasting availability of food.
- The right to adequate food imposes three levels of obligations on States Parties: to respect, to protect and to fulfil. Actions against

- PHL and FLW ought to integrate those obligations to ensure the right to adequate food at both national and international levels, considering that national food supply chains are intertwined and interdependent through global trade.
- PHL and FLW should be considered as
 resources that are being lost or wasted due to
 challenges and failures of the food system. PHL
 and FLW should be targeted as critical issues
 to be addressed by specific policies as part of
 national strategies aimed at realizing the right
 to adequate food for all.

In the GC12, the relation between the right to adequate food and the inherent dignity of the human person is exemplified. After recalling the definition of the right to adequate food, GC12 includes an analysis of States Parties' obligations followed by several considerations regarding the adequacy and sustainability of access to and availability of food.

As the right to adequate food is realized when food that is available and accessible is also appropriate according to individual considerations, its realization can be affected by numerous issues. Such issues include production, distribution, pricing, information, discriminatory practices and climate related factors amongst others. ⁹¹ On the one hand, those shortcomings can limit the ability of people to have access to food. In this regard, FLW – as a specific manifestation of some of the aforementioned factors within the food system – negatively impact the realization of the right to adequate food. On the other hand, values and concerns attached to food consumption – such as date labelling – affect the amount of food that is lost or wasted along the food supply chain as well as the possibility of people to enjoy their right to adequate food.

Where adequacy implies food being sufficient, nutritious and acceptable at present times, sustainability translates as food being both available and accessible over the long term. Thus, FLW represent a sign of unsustainability, especially regarding the exploitation of natural resources, as it threatens the enduring availability and accessibility of food. The language used in paragraph 2 of article 11 reinforces this idea by mentioning that "States Parties to the present Covenant [...] shall take [...] the measures,

CS 4. REDUCING FOOD WASTE BY CHANGING DATE LABELLING

In 2015, several initiatives were launched in the United States of America to help consumers understand food date labels and reduce food waste at home. ⁹² Instead of helping consumers make informed choices, "use by" date labels are actually shown to result in more waste, whereas "sell by" labelled products are less likely to end up as waste, as there is no direct instruction given to the consumer. "Fresh by" and "best by" would also raise more concerns amongst consumers, creating confusion about the safety of the product after the indicated date and thus leading to greater waste. Labels are not consistently applied throughout the country, despite playing a crucial role in shaping consumers' behaviour towards food. ⁹³ In May 2016, a bill was tabled in Congress to address the problem of inappropriate date labelling and the aforementioned impact on consumers' waste. The *Food Date Labelling Act* aims to reduce consumers' confusion by establishing a uniform national system for date labelling that distinguishes between food that can be unsafe to eat after a certain date and food that may lose quality but is not a threat for consumption. ⁹⁴

In the EU, around 88 million tons of food are wasted annually, with associated costs estimated at EUR 143 billion. 95 One of the causes of food waste is date marking. The 2015 Flash Eurobarometer interviewed consumers from the 28 member countries of the EU between 1 and 3 September 2015. Some 26 601 respondents from different social and demographic groups were interviewed with results that point to a significant country-level divergence in both awareness and conceptual understanding of "use by" - that indicates the date until when the food can be eaten safely - and "best before" labelling - that indicates the date until when the food retains its expected quality. Just under half of the respondents (47 percent) understands the meaning of "best before" while fewer (40 percent) is aware of the meaning of "use by". % In December 2014, the new Regulation (EU) No 1169/2011 on the provision of food information to consumers⁹⁷ entered into force. This new regulation, which is immediately enforceable as a law in all member countries, aims to provide consumers with clearer and more comprehensive information on food content in order to help them make informed choices. 98 Amongst other changes that also include improved legibility of information, mandatory allergen information or certain nutrition facts, this regulation determines the use of "best before" for food that is still safe to consume after a given date (refrigerated, frozen, dried, tinned and other foods). Alternatively, the "use by" date shall appear on highly perishable food (fresh fish, fresh minced meat, etc.), thus indicating the date until which the food can be eaten safely. The "best before" and "use by" distinction is aimed at preventing food waste within the EU.99

including specific programmes, which are needed: (a) To improve methods of production, conservation and distribution of food [...] in such a way as to achieve the most efficient development and utilization of natural resources". Measures aimed towards an efficient use of natural resources would necessarily seek to ensure access to adequate food over time, meaning without compromising the ability of future generations to meet their own needs. 100 In sum, current rates of FLW imply a non-efficient use of natural resources that poses a problem for the access to adequate food at present times and in the future, hence to the sustainability of the food system. Consequently, the improvement of methods of production, conservation and distribution of food by "making full use of technical and scientific knowledge, by disseminating knowledge of the principles of nutrition and by developing or reforming agrarian systems" would help reduce FLW and contribute to the realization of the right to adequate food.

While the first paragraph of article 11 refers to the right to adequate food, the second one mentions the fundamental right of everyone to be free from hunger and sets an absolute standard that should be secured for all by States Parties, regardless of circumstances. 101 As it pertains to the fundamental right to be free from hunger, individuals can be seen as recipients of aid to be provided by the institutions. Since hunger usually is not a problem of availability of food but rather of access to it although it can sometimes require increasing the production of food - granting people physical and economic access to available food is fundamental. Moreover, the full realization of the right to adequate food requires that people become central actors able to provide for themselves in dignity.

As with other human rights, the right to adequate food contains three *levels of obligations* for States Parties within their jurisdiction:

- To respect: States Parties have the obligation to ensure that the measures they take within their jurisdiction do not limit the existing access to adequate food. Moreover, some gaps in legal frameworks pertaining to the food system today can lead to inconsistencies with the realization of the right to adequate food as it allows for PHL and FLW to occur. For instance, inadequate standardization and regulations or its interpretation for food safety can be counterproductive. Integrating prevention and reduction of PHL and FLW in these norms could help minimize their levels.
- To protect: States ought to take measures that ensure that a third party does not deprive other persons of their access to adequate food. As mentioned in 2003 by then Special rapporteur on the right to food, Jean Ziegler, an indirect obligation exist for States towards private actors' activities in their jurisdiction, particularly private transnational corporations (PTC) in the food sector, which they must monitor and regulate. 102 As only States are parties to the ICESCR, they are ultimately accountable for compliance with it. Meanwhile, PTC must respect national laws in their home State as well as in countries where they operate. In this regard, the UN Guiding Principles on Business and Human Rights affirm that businesses have a responsibility to prevent, mitigate and remedy human rights abuses caused or derived from their operations (see Box 10). The responsibility to respect applies to all human rights contained in the International Bill of Human Rights, 103 which include the right to adequate food.

BOX 10. UN GUIDING PRINCIPLES ON BUSINESS AND HUMAN RIGHTS

In 2011, the Human Rights Council endorsed the Guiding Principles on Business and Human Rights, a set of guidelines to operationalize the 2008 UN "Protect, Respect and Remedy Framework" and further define the duties and responsibilities of both States and business enterprises on business-related human rights abuses. The Framework starts from the premise that States have the duty under international human rights law to protect everyone under their jurisdiction from human rights abuses by preventing them and ensuring access to an effective remedy when abuses have taken place. The Framework also determines that businesses have the responsibility to respect human rights wherever they operate. Hence, it asserts that corporations have a responsibility to respect human rights independently of the duty of States to protect them since "States and businesses retain these distinct but complementary responsibilities". ¹⁰⁴ Finally, the Guiding Principles maintain that " as part of their duty to protect against business-related human rights abuse, States must take appropriate steps to ensure, through judicial, administrative, legislative or other appropriate means, that when such abuses occur within their territory and/or jurisdiction those affected have access to effective remedy". ¹⁰⁵

CS 5. REGIONAL INITIATIVES PREVENTING FLW AS A MEANS TO FULFILLING THE RIGHT TO ADEQUATE FOOD

In June 2014, African Heads of State signed the Malabo Declaration on Accelerated Agricultural Growth and Transformation for shared Prosperity and Improved Livelihoods. This Declaration includes a specific target to decrease PHL by up to 50 percent by 2025 as part of a strategy to end hunger. ¹⁰⁶ That same year, the Asia-Pacific Economic Cooperation (APEC) Action Plan for Reducing Food Loss and Waste was launched with the aim of improving the efficiency along the food supply chain and making food more affordable and accessible for people of all income levels. ¹⁰⁷

In September 2015, the United States Department of Agriculture and the Environmental Protection Agency, together with the private sector and charitable organisations, launched the Nation's First Food Waste Reduction Goals. This initiative aims at reducing FLW by 50 percent by 2030, which accounts for approximately 31 percent of the overall food supply available to retailers and consumers, by providing food to those in need instead. Moreover, it intends to reduce incidences of food insecurity, conserve national natural resources and combat climate change. ¹⁰⁸

Also in September 2015, the SDGs were adopted by UN Members States. Goal 12 focuses on ensuring sustainable consumption and production patterns with its target 12.3 aiming to "halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses" by 2030.¹⁰⁹ Accordingly, the Community of Latin American and Caribbean States (CELAC) created a Regional Alliance for Food Loss and Waste Reduction, which is both in line with the SDG and the CELAC's 2025 Hunger Eradication Plan.¹¹⁰

In December 2015, the EC launched the Communication on Closing the loop - An EU action plan for the Circular Economy that shows food waste actions at the level of the EC and member countries of the EU. The EC has launched the EU Food Losses and Food Waste Platform (EU FLWP) in support of member countries' actions with three working subgroups in addition to its plenary: food waste measurement, food donations, and action and implementation.

• To fulfil (facilitate and provide): States must have a proactive commitment to progressively implement measures that create the enabling environment that strengthens people's access to adequate food. Finally, when individuals are involuntarily unable to enjoy their right to adequate food, States should provide directly for them. In this regard, CS 5 presents a number of regional initiatives launched to avoid wasting food by providing it to those most in need.

At last, we refer to extraterritorial obligations, as derived from the concept of cooperation found in article 11. Paragraph 1 mentions "the essential importance of international cooperation based on free consent" while paragraph 2 indicates that States Parties shall take measures "individually and through international cooperation". As previously explained in regards to GC3, according to the specific provisions contained in articles 2.1, 11 and 23 of the ICESCR as well as article 56 of the UN Charter¹¹², States Parties should maximise the key role that international cooperation can play towards the realization of the right to adequate food and adopt positive measures in order to respect, protect and fulfil it abroad.

States not only take unilateral but also joint actions to "improve methods of production, conservation and distribution of food [...] to achieve the most efficient development and utilization of natural resources" (article 11, paragraph 2.a). Measures to ensure the efficiency of the food supply chain should not only be read in light of the national context, but also in the context of international cooperation. Thus, States could meet this international obligation through technical assistance, scientific and technological transfer as well as reform of the current agrarian system. This idea is reinforced when the provision is read together with article 2 so that States Parties shall ensure that economic and technical means are applied and

shared in order to make sure that food is properly preserved and distributed. Improving conservation and distribution contributes to the minimum amount of food being lost or wasted throughout the food supply chain. As such, FLW can be traced as a failure of the overall food system that also needs to be addressed by States Parties through international cooperation, according to the provisions of article 2 paragraph 1 and article 11 paragraph 2.

Article 11 paragraph 2(b) also refers to the need to take into account the problems of both food-importing and food-exporting countries in order to ensure an equitable distribution of world food supplies in relation to needs. Under this article, trade should not impede the realization of the right to adequate food nor put an obstacle to an efficient distribution of food according to peoples' needs (i.e. accessibility), on the basis that food exist in a sufficient amount to feed everyone (i.e. availability). As noted by the CESCR, States Parties should pursue this commitment by also taking into account the need to promote the right to adequate food in third countries at the three aforementioned levels:

International obligation to respect: States Parties should not adopt legislation or policies of economic or political nature that negatively interfere with the equitable distribution of world food supplies. Likewise, they should ensure that the conclusion of new trade agreements does not have a negative impact on the right to adequate food in third countries. 113 It led former Special Rapporteur on the right to food, Olivier De Schutter, to propose the Guiding Principles on human rights impact assessments of trade and investment agreements, which aim to provide States with orientation to ensure that foreseen trade and investments agreements are consistent with their obligations under international human rights instruments.114

BOX 11. GUIDING PRINCIPLES ON HUMAN RIGHTS IMPACT ASSESSMENTS OF TRADE AND INVESTMENT AGREEMENTS

In 2011, the then Special Rapporteur on the right to food, Olivier De Schutter, presented the Guiding Principles on human rights impact assessments of trade and investment agreements before the Human Rights Council as a means for countries to ensure the protection of the right to adequate food. More specifically, those principles should guide States in ensuring compliance with their obligations under international human rights law when concluding trade and investment agreements so as to adequately address the outcomes of their negotiations. States should make sure that they respect, protect and fulfil the human rights of individuals under their jurisdiction as well as contribute to the realization of the human rights of individuals on the territory of the other State party to the agreement. This operational tool, which presents a series of key steps for the preparation of a human rights assessment, could also assist companies in the identification, prevention and mitigation of human rights impacts deriving from their activities. 115 More recently, the CFS endorsed the Principles for Responsible Investment in Agriculture and Food Systems in 2014 that aims to "promote responsible investment in agriculture and food systems that contribute to food security and nutrition, thus supporting the progressive realization of the right to adequate food in the context of national food security"116.

International obligation to protect: States
 Parties should not disregard, but regulate
 the activities undertaken by private natural
 or legal persons under their jurisdiction that
 may impede or interfere with the equitable
 distribution of world food supplies and the
 realization of the right to adequate food in

BOX 12. VOLUNTARY CODES OF CONDUCT FOR CORPORATIONS IN THE FOOD TRADE SECTOR

Different international codes of conduct have been developed to ensure that corporations operate in accordance with ethics and respect for human rights. Adopted by the Codex Alimentarius Commission in 1979 and revised in 1985 and 2010, the Code of Ethics for International Trade in Food¹¹⁷ aims to establish principles for the ethical conduct of international trade in food in order to protect the health of the consumers and ensure fair practices in the food trade, as per its article 1. Likewise, the 2016 FAO/OECD Guidance for Responsible Agricultural Supply Chains¹¹⁸ is a compilation of existing standards for responsible business conduct along supply chains developed to help companies observe such principles in order to mitigate adverse impacts and promote sustainable development. The Guidance aimed at all enterprises, foreign and domestic, operating at all phases of the food supply chain addresses several areas of risk, including respect for human rights, health and safety, food security and malnutrition, land rights and sustainable use of natural resources. It results from the understanding that enterprises operating along agricultural food supply chains can play a significant role in strengthening sustainable development, enhancing food and nutritional security (directly and indirectly) and helping achieve development goals of third countries. All of which is connected to the reduction of FLW.

other States' territories. ¹¹⁹ Furthermore, corporations could also be held accountable for their actions through the development of intergovernmental instruments and voluntary codes of conduct ¹²⁰ such as the *Code of Ethics for International Trade in Food* adopted by the Codex Alimentarius Commission.

 International obligation to fulfil: States Parties should consider developing further national and international legal instruments to facilitate access to food and ensure an equitable distribution of world food supplies in relation to need.¹²¹

As such, article 11 paragraph 2 demonstrates that the right to adequate food can only be realized when obligations are complied with at both national and international levels, especially taking into account that national food supply chains are intertwined with global trade. As De Schutter suggests, national efforts seeking to achieve food security in third countries will often render poor results if there is no synergy with the relevant international actions in place. 122

In its GC12, the CESCR discusses the implementation of the right to adequate food at national level, recommending to States Parties the adoption of national strategies to ensure access to adequate food for all. It indicates a few key elements to include in a strategy, such as to: identify available resources to reach the objectives, plan policy measures to address critical issues concerning all aspects of the food system – with a special attention to all phases of the food supply chain (production, processing, distribution and consumption), and ensure the sustainability of resources used for food production. In addition, it recommends States to consider the adoption of a framework law together with the national strategy.

CS 6. CASE STUDIES ON THE LINK BETWEEN TRADE, THE RIGHT TO ADEQUATE FOOD AND FLW

Food trade can affect the human rights of the suppliers of a commodity in question when imbalances of power or unfair trading practices take place. Instances where major retailers and supermarkets used their market dominance to compete unfairly with suppliers have been reported. This situation can occur both within the national jurisdiction and amongst nationally located PTC's and third countries' suppliers.

Established in 2013 in the United Kingdom¹²³ to regulate the relationship between large supermarkets and their suppliers by means of an independent ombudsman, the Groceries Code Adjudicator provides an example of a national measure.¹²⁴ It has helped address unfair trading practices from large supermarkets at the national level¹²⁵, representing an efficient policy intervention that puts the State's obligation to protect into practice.

In regards to international trade, a recent report by the NGO Feedback shows a case on horticultural export supply chains in Kenya – which is on 2016 FAO's list of Low-Income Food-Deficit Countries. Last-minute alteration or cancellation of orders by retail buyers – mostly foreigners – due to aesthetic specifications or fluctuations in demand and price for instance, leave farmers with large amounts of unsold produce. Farmers tend to be unable to sell such goods on local secondary markets, which cannot accommodate this sudden increase in supply. Consequently, producers carry the burden of the financial risk, contributing to economic instability and eroding living standards, which leads to food insecurity. Those unfair trading practices lead to systemic food waste generation in addition to existing PHL. As such, figures in this report show that 50 percent of produce are never exported. 127

Both cases show how power imbalances within trade agreements can affect suppliers' entitlements with regards to food in very different economic contexts. Better coordination and cooperation between retailers and producers would help reduce FLW. FAO suggests that longer contract periods and contract farming could contribute to addressing such situations.¹²⁸

Hence, FLW should be considered resources that are being lost or wasted due to failures in the food supply chain, which runs contrary to the sustainable management of resources for food production. To prevent it, FLW should be targeted as a critical issue to be addressed by specific policies as part of national strategies aimed at realizing the right to adequate food for all at the national level.

When adapting such a strategy, States Parties should consider the revision of gaps in legislation that lead to the occurrence of FLW as well as the adoption of legal instruments to remedy this situation.

The ability to realize the right to adequate food depends on having economic and physical access to food. In the current global context, widespread hunger and malnutrition are mostly not problems of food availability but rather linked to poverty and inequalities concerning access to food. Those inequalities are amongst the reasons why food is lost or wasted along the food supply chain. Shortcomings in production and distribution phases, market inefficiencies combined with people's lack of entitlements to gain access to available food by their own means, represent obstacles to the realization of the right to adequate food. Meanwhile, the extent of FLW is exacerbated by those same factors. Still, numerous initiatives to fight hunger are implemented everyday worldwide while food is simultaneously being discarded.

CS 7. CIVIL SOCIETY INITIATIVES ADDRESSING FLW REDUCTION

In Denmark, action against FLW began as a bottom-up movement primarily due to a civil society initiative called "Stop Spild af Mad" (Stop Wasting Food) in 2008 to prevent food waste at the consumer level. 129 As the initiative grew by mobilizing private partners and the government, in 2011, the country's Ministry of Environment launched the voluntary "Initiative Group against Food Waste" in order to promote public-private cooperation to reduce FLW. This cooperation led to the "Charter on Less Food Waste" being signed by 19 major stakeholders in the food sector – large retailers, restaurants, hotels - and governmental instances. 130 Today, all Danish supermarkets have a food waste reduction strategy, the use of "doggy bags" became a wide spread practice at restaurants, which have also adopted the "Refood label" 131 against food waste while food waste has been included in the political agenda. 132 As such, the country has reduced food waste by 25 percent over the last five years. 133

In China, the "Clean your plate" campaign also started as a civil initiative to raise awareness about FLW by distributing leaflets and posters in restaurants and using social media. Eventually, the initiative obtained the endorsement of the government that currently promotes it. Nowadays, many restaurants offer smaller portions and encourage the use of "doggy bags".¹³⁴

CS 8. DEVELOPING NATIONAL LEGAL INSTRUMENTS TO TACKLE THE FLW CHALLENGE

In February 2016, France adopted a law¹³⁵ to ban supermarkets from throwing away or destroying unsold food in order to diminish FLW rates. Firms have to either donate it to charities and food banks or for animal feed.¹³⁶ The amount of France's FLW is 7.1 Mt/year, of which 67 percent is binned by consumers, 15 percent by restaurants and 11 percent by shops.¹³⁷ The measure came after a scandal on supermarkets dousing binned food in bleach to prevent "dumpster diving". Other supermarkets deliberately binned food in locked warehouses for this purpose, which brought up cases of criminal action for theft of the disposed food products.¹³⁸ Pressure by social movements put this issue on the political agenda, making France the first country in the world to pass a law for FLW prevention. The hope is now to extend it across EU member countries.¹³⁹

Months later, in August 2016, Italy passed its own bill to encourage supermarkets and farmers to give unsold food to the needy by removing bureaucratic hurdles. ¹⁴⁰ The measure also aims to encourage the use of "doggy bags" at restaurants. According to ministers, FLW in Italy cost more than EUR 12 billion to businesses and households –equivalent to around 5.5 Mt/year. ¹⁴¹

Japan also addressed the problem of food waste in 2001, yet considering it as organic waste. The *Food Recycling Law* incentivizes recycling of FLW into animal feed, fertilizer, and energy while establishing limits for producers generating over 100 tons of waste per year.¹⁴²

The United Kingdom Parliament is currently considering a legislation to ban food waste in the country. Currently, subsidies are allocated to businesses that reuse unwanted food as energy or fertilizer. 143 In 2007, another initiative targeting households began to prevent food waste. By 2012, it had already achieved a 21 percent reduction compared to 2007 levels. The "Love Food Hate Waste" media campaign to raise awareness amongst consumers was part of the initiative. 144

Brazil is also considering the establishment of a national policy on food waste. The bill proposal – presented in December 2014 – is currently being discussed in the Chamber of Deputies (*Câmara dos Deputados*) of the National Congress of Brazil.¹⁴⁵

6. CONCLUSION

The right to adequate food implies that food be both available and accessible to people. As such, States Parties should ensure that the production, processing and marketing systems of economic operators match food availability with demand. Still, the question of access is complex, requiring not only that food be available, but that people possess the economic and physical means to access it. As oppose to food distribution as the primary solution to hunger and food deprivation, the right to adequate food translates to the right to feed oneself in dignity.

Inefficiencies in production or distribution phases, discriminatory practices by State or non-State actors combined with climate related factors, amongst others, affect the ability to have access to food and infringe upon the enjoyment of the right to adequate food. FLW, as specific manifestations of these factors, further impede the realization of the right to adequate food as do cultural factors that condition the interpretation of adequacy of accessible food. Consumer acceptability being crucial to food waste prevention, cases have illustrated how labelling systems that indicate the nature of accessible food supplies more in line with the definition of adequate food can help prevent food waste.

Mindful of the sustainability component to the realization of the right to adequate food, actions implemented by States Parties cannot be contrary to the durability of agro ecological sources that determine the availability and accessibility of food both now and in the future. As an evident sign of unsustainability, FLW undermine compliance with article 11 according to which States Parties should consider the reformation of the overall food supply chain to achieve the most efficient development and use of natural resources. Consequently, improvements in methods of production, conservation and distribution of food is recommended to both reduce FLW and realize the right to adequate food.

As with other human rights, the right to adequate food entails three levels of obligations for States Parties within their jurisdiction. The obligation to respect implies that States Parties ensure that no policy or norm limits the existing access to adequate food. Although FLW are not the result of the active implementation of a public policy, there are food legislations that affect the generation of FLW. Therefore, the loss or waste of food is inconsistent with the provisions of the right to adequate food as set forth in article 11. A better understanding of the extent and magnitude of the problem is needed to establish what falls within the definition of FLW and how much food is thus lost or wasted. It would enable the revision of legislations to integrate the fight against FLW within its scope and further establish targets to reduce FLW levels.

The obligation to protect translates into States Parties ensuring that no third party infringes upon the access to adequate food of others. Here above, examples have been presented to illustrate how trade can hamper the realization of the right to adequate food while increasing the overall loss of food. As such, States Parties should adopt measures at the national level to ensure the symmetry in the relationship between large food retailers and producers or suppliers. Compliance with the Guiding Principles on Business and Human Rights by States and businesses would also contribute positively towards the realization of the right to adequate food.

With regards to the obligation to *fulfil*, several case studies have highlighted examples of how FLW can be used as a resource to provide access to food in cases where individuals are unable to feed themselves in dignity. Albeit such initiatives, the progressive nature and long-term implications of the right to adequate food should not be overlooked, resulting in everyone's independent and regular access to adequate food by their own means. Moreover, FLW should be effectively tackled together with the improvement of the methods of production, conservation and distribution of food to achieve the most efficient development and utilization of natural resources. In sum, while policies addressing hunger by giving food that would otherwise be wasted to the needy are temporary solutions to the symptoms of hunger and FLW, medium and long-term measures should be aimed at separately tackling those issues at their roots to progressively realize the right to adequate food. To this end, the aforementioned Right to Food Guidelines can provide pertinent guidance.

International cooperation is underscored as essential for the realization of the right to adequate food as article 11 calls upon States Parties to cooperate towards improving the sustainability of methods of production, conservation and distribution of food. International cooperation is vital to ensure an efficient use of resources and end inefficiencies along the food supply chain – such as poor infrastructure, lack of adequate technology or access to markets, insufficient knowledge and management skills or capacity of actors involved – that hamper people's access to adequate food and create the conditions for FLW. What is more, it is particularly relevant for developing countries where PHL are a major concern.

In addition, international cooperation should be enhanced to address distribution problems in both importing and exporting countries to ensure that food supplies are more equitably allocated in relation to needs. To this end, States Parties should consider the revision of allegedly asymmetric trade relations – either concluded by public institutions or private actors under their jurisdiction – that may indirectly impede upon the realization of the right to adequate food in other States' territories.

Finally, in the spirit of articles 2, 11 and 23 of the ICESCR, when implementing their commitment to take joint actions, States Parties should: respect the right to adequate food in third countries, for which they are encouraged to observe the Guiding Principles on human rights impact assessments of trade and investment agreements as well as the Principles on Responsible Investments in Agriculture and Food Systems; protect the right to adequate food globally, which could involve calling upon PTC in the food sector to subscribe to pertinent voluntary codes of conduct, such as the Code of Ethics for International Trade in Food or the FAO/ OECD Guidance for Responsible Agricultural Supply Chains; and fulfil the right to adequate food with the international community providing aid when

necessary, promoting access to adequate food for all, and further developing international instruments to that end.

Having largely discussed the nature, content and obligations arising from the right to adequate food, the issue of implementation remains. Taking into consideration the discretion that States Parties have in deciding how to implement measures to realize the right to adequate food in their jurisdiction, the ICESCR states in no unclear terms that actions shall be taken immediately to ensure freedom from hunger for all while States shall take further steps to ensure the progressive realization of the right to adequate food. To this end, the CESCR recommends the adoption and implementation of a national strategy as well as a framework law on the right to adequate food by each State Party. In doing so, States should identify concrete policy measures adapted to their specific context to address the root causes undermining the food system and impeding the realization of the right to adequate food. This strategy should ensure the sustainable management of resources used for food production.

In sum, it has been argued that PHL and FLW are well-identified, critical issues that add pressure to the finite resources for food production and consumption, thus being inconsistent with the obligations arising from the right to adequate food.

It is therefore recommended that PHL and FLW be specifically addressed through concrete policies and norms at the national level as they represent a loss of valuable resources for food consumption that should not happen due to: gaps; lack of adequate post-harvest, transportation and storage technologies and infrastructures; insufficient management skills; aesthetic criteria; or inaccurate expiry dates or food literacy levels for end consumers, amongst others.

Initiatives aimed at reducing PHL and FLW at regional, national and local levels were shown as examples. Yet, tackling PHL and FLW requires an integrated approach that starts with a thorough analysis of its socio-economic and environmental drivers and costs. Measures should be focused on food and encompass solutions at all levels and foodrelated sectors. The success of such measures will depend on the level of involvement and coordinated participation amongst stakeholders, especially between public authorities and the private sector. In addition, collaboration is also required amongst States at global level, where cooperation is key to establishing solutions along the integrated food system. Finally, such policies and legislations should not lose sight of the obligations laid down by the right to adequate food. The improvement and sustainability of agricultural and food systems should be ultimately aimed at ensuring regular and equal access to adequate food for all.

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Food loss and waste and the right to adequate food:

Making the connection

Right to Food Discussion Paper

This Discussion paper explores the relationship between food loss and waste (FLW) and the right to adequate food. It focuses on the need to develop sustainable global consumption and production systems to contribute to the realization of the right to adequate food while it argues for a human rights-based approach to tackle FLW.

As such, it presents key notions of FLW and expands on their impact for the realization of the right to adequate food. Simultaneously, it looks into the different components of the right to adequate food and offers ways through which its legal obligations could help processes and initiatives aimed at reducing FLW. The Discussion paper argues for a more holistic approach to reducing FLW and guaranteeing the right of each person to feed herself or himself in dignity.

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