National Strategy and Action Plan to Combat Food Waste

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CNCDA | Comissão Nacional de Combate ao Desperdício Alimentar CNCDA | National Commission for Combating Food Waste

Zero food waste: Sustainable production for responsible consumption

CNCDA | National Commission for Combating Food Waste

Order No. 14202-B/2016, published in the Official Journal (DR), 2nd series, No. 227, of November 25

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ACRONYMS AND ABBREVIATIONS

AHRESP	Portuguese Association of Hospitality, Restaurants and Related Services
ANAFRE	Portuguese Parish Association
ANMP	Association of Portuguese Municipalities
APA	Portuguese Environment Agency
APED	Portuguese Association of Retail Companies
APN	Portuguese Association of Nutritionists
ASAE	Authority for Food and Economic Safety
CAP	Confederation of Portuguese Farmers
CAP	Common Agricultural Policy
CNA	Portuguese Confederation of Agriculture
CNCDA	National Commission for Combating Food Waste
CNJ	Portuguese Confederation of Young Farmers
CONFAGRI	Portuguese Confederation of Agricultural Cooperatives
DGAE	Portuguese Directorate-General for Economic Activities
DGAL	Portuguese Directorate-General of Local Authorities
DGAV	Portuguese Directorate-General for Food and Veterinary
DGC	Portuguese Consumer Directorate-General
DGE	Portuguese Directorate-General for Education
DGENV	Directorate-General for the Environment of the European Commission
DGSANTE	Directorate-General for Health and Food Safety of the European Commission
DGRM	Portuguese Directorate-General for Maritime Natural Resources, Safety and Services
DGS	Portuguese Directorate-General for Health
DGSS	Portuguese Directorate-General for Social Security
DR	Diário da República – Portuguese Official Journal
EC	European Commission
ECA	European Court of Auditors
EEA	European Environment Agency
EIP	European Innovation Partnership
ENCDA	National Strategy to Combat Food Waste
ESIF	European Structural and Investment Funds
EU	European Union
EUROSTAT	Directorate-General for Statistics of the European Commission
FCAN	Food Chain Analysis Network
FAO	Food and Agriculture Organization of the United Nations
FIPA	Federation of Portuguese Agrifood Industries
FPBA	Portuguese Federation of Food Banks Against Hunger
FUSIONS	Food Use for Social Innovation by Optimising Waste Prevention Strategies
GHG	Greenhouse gases
GPP	Office for Planning, Policy and General Administration
HORECA	Hotel/Restaurant/Café (on-trade) sector
IAPMEI	Agency for Competitiveness and Innovation
IFAD	International Fund for Agricultural Development (UN)
INE	Statistics Portugal

10	International Organisations
IPSS	Private institutions of social solidarity (social welfare organisations)
MA	Portuguese Ministry of Environment
MAFDR	Portuguese Ministry of Agriculture, Forestry and Rural Development
MM	Portuguese Ministry of the Sea
MDG	Millennium Development Goals (UN - by 2015)
MS	Portuguese Ministry of Health
MS	EU Member States
NGO	Non-governmental organization
OECD	Organization for Economic Cooperation and Development
UN	United Nations Organization
PA	Public Administration
PACDA	Action Plan to Combat Food Waste
PERDA	Study and Reflection Project on Food Waste
GDP	Gross Domestic Product
RGGR	General Waste Management Regime
SDO	Sustainable Development Objectives (UN - by 2030)
UNEP	United Nations Environment Program
WFD	Waste Framework Directive (2008/98/EC)
WFP	World Food Program
WG	Working Group

1. BACKGROUND

According to the ministerial Order No. 14202-B/2016 of November 25¹, the National Commission for Combating Food Waste (CNCDA) has the mission of "*Promoting the reduction of food waste through an integrated and multidisciplinary approach*" and is in charge of drafting the National Strategy to Combat Food Waste (ENCDA) and the Action Plan to Combat Food Waste (PACDA) and submitting them to the Minister of Agriculture, Forestry and Rural Development.

The CNCDA is composed of 18 entities. This includes the Autonomous Regions and 13 public administration bodies, under 9 different ministries, 2 associations (ANAFRE and ANMP) and one federation (FPBA).

The CNCDA has also the power to "Monitor, evaluate and identify the ENCDA and PACDA adaptation needs, and to prepare quarterly reports to be submitted to the Minister of Agriculture, Forestry and Rural Development."

The ministerial order establishing the CNCDA sets six objectives, namely:

- Diagnose, assess and monitor food waste at the national level;
- Identify existing good practices both at national and international level in the fight against food waste;
- Systematize food waste measurement indicators at the different stages of the food chain, according to EU and OECD methodologies;
- Promote the involvement of civil society entities with initiatives already launched in this field;
- Promote the setting-up and development of an electronic platform to ensure the interactive management of food products at risk of waste;
- Propose measures to reduce food waste that include objectives in terms of food security, school education, public health, fighting poverty and good practices in food production, processing, distribution and consumption.

The National Strategy and the Action Plan to be implemented in Portugal have been presented within the framework of the development of these six objectives.

Food waste and its large impact in terms of economic, environmental and social sustainability imply that the implementation of this Strategy and its Action Plan should be associated with other national initiatives whose objectives are either complementary or coincident, namely the National Strategy for Environmental Education (ENEA 2020) or the Roadmap for Carbon Neutrality, while contributing to the objectives and goals defined in the Portuguese Action Plan for the Circular Economy (PAEC).

¹ https://dre.pt/web/guest/pesquisa/-/search/105263193/details/normal?g=Despacho+n.%C2%BA%2014202-B%2F2016

2. DIAGNOSIS AND ASSESSMENT

2.1. Food waste and its challenges

The State of Food Insecurity in the World 2015², published jointly by the Food and Agriculture Organization of the United Nations (FAO), the International Fund for Agricultural Development (IFAD) and the World Food Program (WFP), estimates that although hunger has been declining and the first Millennium Development Goal³ has been almost reached, and even though food production is currently sufficient to feed the world's population, there are still about 800 million undernourished people.

One of the problems is the unequal distribution of food in the world, combined with another problem concerning social behaviour in relation to food and food waste. According to the European Environment Agency (EEA), every year about 1/3 of the food produced is wasted⁴.

Food waste, a global problem that has become a public and political priority in recent years, will tend to gain even more importance in view of the need to feed a growing world population. Indeed, the UN estimates that by 2050 the world's population will reach about 9 billion⁵, a 34% increase from 2009. "In order to feed this larger, more urban and richer population, food production (net of food used for biofuels) must increase by around 70%"⁶.

This inefficiency in food management has important economic, social and environmental consequences, as highlighted in the recent study on Food Systems and Natural Resources by the International Resource Panel of the United Nations Environment Program (UNEP)⁷. It represents not only a missed opportunity for the economy and for food security, but also a waste of the natural resources used in food cultivation, processing, packaging, transport and marketing.

Food waste occurs along the whole food supply chain (during production, processing and distribution, in stores, restaurants, establishments supplying prepared foodstuffs and in households), which greatly complicates the task of quantifying it.

Food losses and food waste cost the world economy some US\$ 990 billion annually and contribute to increasing food insecurity and malnutrition. In addition, food that is lost or wasted consumes about a quarter of all the water used for agricultural purposes, and it is estimated to account for 8% of global greenhouse gas emissions, as well as to contribute to the loss of biodiversity.

The European Commission (EC) conducted a study⁸ in 2010 in which Member States (MS) provided an estimate for food waste in various sectors along the food chain (in production and processing, in distribution and sales, and at consumer level), using simultaneously EUROSTAT data and available

² SOFI 2015 - The state of food insecurity in the world: <u>http://www.fao.org/3/a-i4646e.pdf</u>

³ The Millennium Development Goals (MDGs), adopted by the UN in 2000, included in Goal 1 target 1.C: "Halve, between 1990 and 2015, the proportion of people who suffer from hunger". The 8 MDGs were replaced in 2015 by the 17 Sustainable Development Goals (SDG). SDG 2 aims to end hunger by 2030 and SDG 12 seeks to ensure sustainable consumption and production patterns (see point 2.2).

⁴ Food Waste (EEA): <u>https://www.eea.europa.eu/signals/signals-2012/close-ups/food-waste</u>

⁵ World agriculture towards 2030/2050: the 2012 revision: <u>http://www.fao.org/docrep/016/ap106e/ap106e.pdf</u> ⁶ How to Feed the World in 2050 (FAO):

http://www.fao.org/fileadmin/templates/wsfs/docs/expert paper/How to Feed the World in 2050.pdf ⁷ Food Systems and Natural Resources (UNEP/PNUA - IRP), 2016 -

http://apps.unep.org/publications/index.php?option=com_pub&task=download&file=012067_en

⁸ Preparatory study on food waste across EU 27: <u>http://ec.europa.eu/environment/eussd/pdf/bio_foodwaste_report.pdf</u>

national data: it estimated that 89 million tonnes of food are lost each year in the EU, representing 179 kg per capita.

At the national level, the PERDA (Food Waste Study and Reflection Project⁹), using the same methodology used in a 2011 FAO study¹⁰, estimated that about 17% of the edible parts of all foodstuffs produced for human consumption in Portugal are lost or wasted along the food chain until reaching the consumer. This represents 1 million tons per year.

Simultaneously, other initiatives are underway at various levels, including:

- The "Zero Hunger Challenge"¹¹, launched in 2012 in Rio de Janeiro by then UN Secretary-General, Ban Ki-moon, reflecting several SDG elements and aiming to eliminate food losses and food waste, and to achieve total sustainability in food systems;
- The declaration of 2014 as the "European year against food waste" proposed by the EC through the implementation of a set of measures aimed at reducing food waste by half by 2020. The European Parliament also called for collective action towards the same reduction by 2025;
- Attached to this document is a summary of some initiatives by other MS, highlighting recent legislative initiatives in France and Italy, as well as prevention and reduction initiatives in Spain and the Nordic countries;
- At the national level, the declaration of 2016 as the "National Year to Combat Food Waste";
- Also in Portugal, the interview requested by the CNCDA with the Lisbon City Council made it possible to become aware of the progress made by the municipality, and a structure was set to ensure that the organizational work already done will be perpetuated. The signing of a cooperation protocol between the various entities will also be a decisive factor in this regard, and a solid way of continuing to perform their duty in fighting food waste.

2.2. International framework

In September 2015, the UN General Assembly adopted ambitious targets for reducing food losses and food waste as part of its Sustainable Development Goals (SDG). Indeed, SDG 12.3 calls for "*By* 2030, 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" (and also "substantially reduce waste generation through prevention, reduction, recycling and reuse").

FAO, as the UN food agency, is addressing food waste aiming to respond to SDG 12.3 (in addition to the combined opportunity of through correct information contributing to mitigating GHG emissions, sustainably managing natural resources - soil, energy and water - and responding adequately to the challenge of improving global food security).

Consequently, FAO plans to calculate a food loss index for each country as well as a global aggregate. With regard to the definitions adopted, FAO makes a distinction between food loss and food waste,

⁹ Do Campo ao Garfo – Desperdício Alimentar, PERDA, 2012: <u>http://www.cienciaviva.pt/img/upload/do_campo_ao_garfo.pdf</u> ¹⁰ Global food losses and food waste – extent, causes and prevention, FAO, 2011:

http://www.fao.org/docrep/014/mb060e/mb060e00.pdf

¹¹ http://www.un.org/en/zerohunger/challenge.shtml

considering that the former occurs due to structural issues, especially in less advanced agrifood systems and resulting from management, technology and infrastructure constraints, whereas food waste is characteristic of the most advanced agrifood systems. The methodology is based on the Food Balance estimation model, where the central concept is that resources (total food availability) must be identical in volume to the corresponding uses, considering food loss one of those uses.

The OECD is also developing a work line on food waste. The Food Chain Analysis Network (FCAN) was launched in 2010 by the Trade and Agriculture Directorate to discuss topics related to the functioning, sustainability and productivity of the agrifood system.

The OECD believes that food waste work should be based on three pillars: compilation of available information, modelling and scenario analysis to determine the impact of waste reduction on markets and trade, and inventory of policy instruments that influence food loss and waste. At the latest FCAN meeting, held in June 2016 under the topic *Reducing food loss and waste in the retail and processing sectors*¹², the OECD concluded that the absence of a commonly agreed definition is a constraint on work progress, and identified the need to improve information coverage for the food supply chain.

2.3. European Union framework

2.3.1. Context

The European Commission (EC) is committed to combating food waste. In fact, by reducing food waste, we are simultaneously contributing to reduce resources used to produce food. This greater efficiency implies, in turn, a decrease in costs and a reduction in the environmental impact resulting from food production and consumption.

On the one hand, it should be noted that some of the main European sector policies are introducing approaches to avoid food waste. This is the case of the Common Fisheries Policy with the obligation of landing catches of species subject to catch limits and, in the Mediterranean, also of species subject to minimum conservation reference sizes, or of the Common Agricultural Policy which gives particular relevance to the concept of resource efficiency and whose most significant instrument, financially speaking, direct payments - now decoupled from production, may support the reduction of food waste. At the same time, in the rural development context, in addition to supporting investments to improve production and processing efficiency, we should consider the potential of the European Innovation Partnership (EIP) network in "reducing post-harvest losses and food waste".

On the other hand, food waste prevention is an integral part of the new EC Circular Economy Package designed to stimulate Europe's transition from a linear to a circular economy that can boost global competitiveness, promote sustainable growth and generate new jobs.

2.3.2. Circular Economy

In December 2015, the EC submitted this Circular Economy Package, consisting of an Action Plan COM(2015) 614 final¹³ with concrete measures covering the entire life cycle of products, from

¹² http://www.oecd.org/site/agrfcn/meetings/8th-oecd-food-chain-analysis-network-meeting-june-2016.htm

¹³ <u>https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52015DC0614</u>

production to waste management and market for secondary raw materials, and including supply and consumption. The plan is supplemented by an annexed timetable describing proposed wasterelated actions and legislative initiatives, including a proposal to revise the Waste Framework Directive¹⁴ (WFD).

CIRCULAR ECONOMY PACKAGE - ACTION PLAN

The Circular Economy Action Plan provides a holistic approach to issues that are crucial to overcome the current paradigm of conceptual linearity, namely by:

- promoting sustainable consumption patterns based on sharing rather than ownership;
- promoting growth through support for eco-industries, eco-design and eco-innovation;
- scaling down the use of critical raw materials and improving resource efficiency;
- promoting waste prevention, by improving product reparability and durability;
- encouraging the re-introduction of materials into the economy through the promotion of reuse and recycling;
- establishing standards that guarantee the quality of products integrating secondary raw materials in their composition, etc.

The importance of each of these issues is known, although they need to be furthered together, thus creating an aspiration in society for their advancement. The degree of involvement of the various parts of society in this common project shall decide its success.

The Circular Economy Package aims to increase the competitiveness of the European economy within the limits of the planet's environmental capacity (the EU 7th Environment Action Programme) and seeks to address the need to integrate the principles of resource efficiency and "circularity" in the production and consumption of materials and products at all stages of their value chain. Its goal is to facilitate the transition from a linear to a circular economy where the value of products, materials and resources remains in the economy for as long as possible and waste is reduced to a minimum.

The evolution towards a circular economy inevitably creates very complex challenges, and it will require unequivocal, multidisciplinary and integrated responses.

The Circular Economy Package consists of an Action Plan containing a set of legislative actions and proposals (including a proposal for the revision of several Waste Directives, namely the Framework Directive), and reflecting in terms of food waste its commitment to SDG 12.3 while requiring MS to:

- Reduce food waste at every stage of the food supply chain (including households);
- Monitor food waste levels;
- Report on food waste reduction developments.

Therefore, the Action Plan proposals support the goal of reducing food waste also called for in the UN SDGs and of maximizing stakeholders' inputs in the food supply chain for that purpose.

The measures contained in the plan are as follows:

- Develop a common methodology and common indicators to measure food waste;
- Create a stakeholder platform to examine achievement of SDG food waste targets, share best practices and evaluate progress;
- Clarify relevant EU legislation on waste, food and animal feed in order to facilitate food donation and the use of food waste in feed production;
- Examine options for the most efficient use of date marking in food and its understanding by consumers, particularly the "best before" label.

The EC Communication presenting the Circular Economy proposes that Member States develop national food-waste prevention strategies and endeavour to ensure a reduction in food waste of at least 30% by 2025 in the manufacturing, retail/distribution, food service/hospitality sectors and households.

¹⁴ https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32008L0098

2.3.3. EU Platform on Food Losses and Food Waste

The EU Platform on Food Losses and Food Waste¹⁵ brings together public and private interests to promote cooperation between all key players in the food value chain and to help accelerate EU progress towards compliance with SDG 12.3. Dedicated to the food waste issue, the Platform is composed of 70 member organizations: 33 public entities (all the MS, together with EU bodies and international organizations) and 37 economic operators representative of the food supply chain, including consumers and other Non-Governmental Organizations.

THE EU PLATFORM ON FOOD LOSSES: MAIN LINES OF WORK

- A **Food donation** with the following objectives:
 - Preparation of EU food donation guidelines:
 - Clarification of the difference between food banks and charities other than food business operators through EU legislation, taking into account the need to always ensure product traceability;
 - Labelling: possibility of food banks and charities being considered as collective catering establishments for the purpose of applying general food law rules (consumer information);
 - Clarification on products that may be donated after the date mentioned on the "best before" label;
 - Taxation: corporate and VAT tax deductions for donations;
 - Identification of good practices in different Member States;
 - Implementation of a Food Donation Pilot Project to evaluate good practices.

B - Food waste measurement, supporting the EC in the following actions:

- Analysis of the conditions for a common EU monitoring and reporting framework to enable proper food waste reporting, as foreseen in the legislative proposal amending the Waste Framework Directive (currently under discussion), and at a later stage in cooperation with FAO;
- Development of food waste indicators, which could be used to monitor the implementation of prevention policies;
- Identification of MS data sets, data collection practices and experiences in measuring food waste in all sectors
 of the food supply chain, and sharing them with Platform members;
- Discussion of the technical feasibility of monitoring food losses and/or flows of resources in EU agrifood industries;
- FUSIONS Project Food Use for Social Innovation by Optimising Waste Prevention Strategies, which will be used as a reference for several works to be developed.

2.3.4. Coordination and other EU initiatives

Cooperation with Member States is also carried out through a group of experts bringing together relevant national organizations to assist the EC and MS in identifying and prioritizing actions to be taken at EU level (*Expert Group on Food Losses and Food Waste*). This working group (WG) is led by the Directorate General for Health and Food Safety (DGSANTE) and has the participation of the Directorate General for Environment (DGENV).

The EC itself contributes to raising awareness on food waste prevention not only by producing communication materials available in all EU languages, but also by compiling good practices on initiatives to prevent and reduce food waste.

As regards the revision of the Waste Framework Directive, the main changes proposed by the EC within a prevention framework are the reduction of food waste production in primary production, in processing and manufacturing, in food retail and other distribution, in restaurants and catering

¹⁵ https://ec.europa.eu/food/safety/food waste/eu actions/eu-platform en

services, as well as in households. The implementation of preventive measures should be monitored and waste must be evaluated, by using appropriate qualitative or quantitative indicators and targets, in particular as regards *per capita* amounts of urban waste disposed of or subject to energy recovery.

In 2018, the EC plans to adopt an implementing act to create indicators to measure the overall application of waste prevention actions and food waste levels. To this end, it shall establish a common methodology to be used, including minimum quality requirements.

This recasting of the Regulation will also include reporting obligations for MS to be met every two years, with the first report covering the period from 1 January 2020 to 31 December 2021.

The EC proposal also foresees the exclusion of feed materials from its scope, since they are already covered by EU legislation (Article 3(2)(g) of Regulation (EC) 767/2009). Nine Working Groups have been created to carry out this review.

In monitoring food waste, the FUSIONS Project¹⁶ should provide a harmonized basis for defining the concept, quantifying it per sector (and consequently along the whole chain), and assessing its social and economic impacts in the EU, in a comparable and consistent way.

FUSIONS follows the hierarchy of resource efficiency, that is: food waste prevention and food donation; valuation and conversion to other value chains (e.g. animal feed); end-of-life waste/treatment (e.g. energy, composting, incineration, landfill).

To this end, the "Food waste quantification manual to monitor food waste amounts and progression"¹⁷ was published on 31 March 2016 to provide a broad working basis to overcome the difficulties arising from establishing indicators.

The manual strikes a balance between harmonization and flexibility, as it contains practical guidelines that do not reflect a rigid methodology, while also allowing non-sequential work on the various subjects. It also guides the dialogue between MS administrations and stakeholders. However, it provides an approach with a high level of detail and ambition in some sectors and it is still not fully compatible with EUROSTAT concepts and methodologies.

EUROSTAT is currently monitoring developments at international level and exploring the possible role of official statistics in informing policies related to the "circular economy". It has been promoting the collection of data in a "special food waste plug in", in conjunction with the "WStatR" - Regulation on waste statistics (Reg. No. 2150/2002), using 2012 as the reference year.

Considering the available results, EUROSTAT recognises a high variability in estimates of per capita waste in all the Member States, ranging from 55 to 1 238 kg, which implies fine-tuning the methodologies, in particular as regards what are considered "edible parts" and "non-edible parts": in their view, only the former should be considered in measuring food waste. This is still a work in progress.

¹⁶ The EU FUSIONS project (Food Use for Social Innovation by Optimizing Waste Prevention Strategies 2012-2016), based on a Dutch methodology (university coordination), aimed to establish a reference framework to enable a harmonized approach at EU level (in particular, in monitoring waste) and to have reliable information on which to build common waste prevention policies. The main result is a manual to support the monitoring of food losses along the chain, as a basis for developing more ambitious methodologies.

¹⁷ <u>http://www.eu-</u> <u>fusions.org/phocadownload/Publications/Food%20waste%20quantification%20manual%20to%20monitor%20food%20waste%20am</u> <u>ounts%20and%20progression.pdf</u>

In its Special Report on Combating Food Waste,¹⁸ published at the end of 2016, the European Court of Auditors (ECA) states the importance of this topic and the need for the EU, through its policies, implementing and monitoring in a more targeted way the actions and initiatives that are contributing to reducing food waste.

2.4. Evaluation and concepts associated with food waste

While food waste prevention can occur without detailed information on the quantities involved, a quantified assessment is necessary to better understand the magnitude and spatial distribution of the phenomenon, as well as to measure the effectiveness of its prevention. Addressing the measurement issue is therefore an important step in ensuring better definition, prioritization and targeting of prevention efforts, as well as in monitoring progress in reducing food waste over time.

Despite the initiatives currently being carried out by the EC, there is no harmonized and reliable method for measuring food waste in the EU, making it more difficult for public authorities to assess its size, origins and trends over time.

The proposed revision of the WFD, while setting forth a framework for food waste, does not include its definition. This proposal, as we have seen, gives MS the responsibility to take measures to reduce food waste at every stage of the food supply chain, to monitor food waste levels and to report on progress. It also provides the legal basis for the adoption by the EC of a methodology for measuring food waste in the EU as soon as the revised Directive enters into force.

WASTE FRAMEWORK DIRECTIVE - POSITION OF THE EUROPEAN PARLIAMENT

The concept contained in the amendments proposed by the European Parliament, adopted on 14 March 2017, is as follows:

Amendment 98

Article 1 – paragraph 1 – point 2 – point f e (new)

(fe) the following point is added:

"20d. "food waste" means food intended for human consumption, either in edible or inedible status, removed from the production or supply chain to be discarded, including at primary production, processing, manufacturing, transportation, storage, retail and consumer levels, with the exception of primary production losses;"

Reference should also be made to Amendment 107 Article 1 – paragraph 1 – point 3 c (new) (3c) The following Article is inserted: "Article 4a Food waste hierarchy:

- 1. The following specific food waste hierarchy shall apply in order of priority in food waste prevention and management legislation and policy:
 - (a) source prevention;
 - (b) edible food rescue, prioritising human use over animal feed and the reprocessing into non-food products;
 - (c) organic recycling;
 - (d) energy recovery;
 - (e) disposal.
- 2. Member States shall provide incentives for the prevention of food waste, such as setting up voluntary agreements, facilitating food donation or, where appropriate, taking financial or fiscal measures."

¹⁸ https://www.eca.europa.eu/Lists/ECADocuments/SR16 34/SR FOOD WASTE EN.pdf

2.4.1. Definitions at EU and international levels

There is currently no agreed definition of food waste at the EU level, nor a general consensus on some of the terminologies used (food losses vs. food waste, edible versus non edible food etc.). Member States use different definitions, just as the UN Food and Agriculture Organization (FAO), the European Court of Auditors and the FUSIONS project have their own definitions as well.

As we have seen, definitions are not included either in the EU Action Plan for the Circular Economy (including the WFD revision) or in the UN Agenda 2030 - Sustainable Development Goals. The EC, in addition to considering that it is not necessary, given that "food" and "waste" definitions already exist in EU legislation, does not consider it is the right time to start a discussion on the different terminologies surrounding the concept, relegating this task to the United Nations agencies and to the EU Platform on Food Losses and Food Waste.

Finding a commonly agreed definition is, however, key to measuring food waste in a consistent and comparable way. Several initiatives are currently under way, some with different perspectives and

Source	Definition
ECA - European Court of Auditors ¹⁹	Food waste refers to any product or part of a product grown, caught or processed for human consumption that could have been eaten if handled or stored differently.
FAO - Food and Agriculture Organization of the United Nations ²⁰	"Food" waste or loss is measured only for products that are directed to human consumption, excluding feed and parts of products which are not edible. Per definition, food losses or waste are the masses of food lost or wasted in the part of food chains leading to "edible products going to human consumption". Therefore food that was originally meant to human consumption but which fortuity gets out the human food chain is considered as food loss or waste even if it is then directed to a non-food use (feed, bioenergy). This approach distinguishes "planned" non-food uses to "unplanned" non-food uses, which are hereby accounted under losses.
FUSIONS - Food Use for Social Innovation by Optimising Waste Prevention Strategies ²¹	Food and inedible parts of food removed from the food supply chain to be recovered or disposed (including - composted, crops ploughed in/not harvested, anaerobic digestion, bioenergy production, co-generation, incineration, disposal to sewer, landfill or discarded to sea). Packaging is not included.

others with different objectives. While the multiplicity of such initiatives may be considered a positive factor in promoting the prevention and reduction of food waste, this profusion must not jeopardise future work by producing incompatible results.

2.4.2. Definition of food waste and other CNCDA concepts

Given the absence of stabilised concepts and taking into account the need to have them, in order to be able to measure food waste consistently and reliably, based on evidence and with a solid starting point, the CNCDA agreed on a set of concepts that will serve as a basis for establishing the methodology for food waste quantification, baseline calculations and setting national targets.

Aware that Portugal is working in anticipation of, or in parallel with, the developments taking place at international and EU level, we have tried to adopt sufficiently flexible concepts to be able to undergo future adjustments. At the same time, and taking into account that Portugal participates,

¹⁹ Source: ECA - Combating Food Waste: an opportunity for the EU to improve the resource-efficiency of the food supply chain, 2016, p.9

²⁰ Source: FAO - Global food losses and food waste, 2012, p.2

²¹ Source: FUSIONS - Food waste quantification manual to monitor food waste amounts and progression, 2016, p.13

integrated in different working groups, in the European and international *fora* related to this subject, and that these participating national entities are part of the CNCDA, we will seek to provide an active contribution and to influence the decisions in those *fora* with the results to be achieved within this Commission. The concepts established and agreed within the CNCDA were:

- Food Waste
- By-product
- Food Supply Chain

Food losses were not defined since they were considered as not falling under the WFD and they are not an EC priority. In addition, the discussion of this concept is planned under the UN and within the EU Platform on Food Losses and Food Waste.

It should be noted that the concept assumes that all or almost all of the food intended for human consumption will be used either for its normal use or by redirecting it when it can still be consumed. As a simple example, we may have restaurants that throw away ready-to-eat meals at the end of the day because they have not been sold. This food, when distributed to institutions, associations or families that use them as food, is no longer considered as waste.

Unconsumed food is thus considered *waste* and eventually must be eliminated. Consequently, it falls within the WFD scope, assuming 4 types of subsequent uses: (1) landfill, (2) composting, (3) incineration, and (4) biogas production. On the other hand, the concept of *waste* excluded from the scope of the General Waste Management Regime (RGGR) supposes similar uses as (1) fertilizer production (through composting or anaerobic digestion with biogas production), and (2) energy production through energy recovery/incineration such as direct or indirect burning through the production of pellets.

Waste excluded from the WFD/RGGR scope does not enter into the quantification of food waste production, nor in the quantification of its prevention.

The particular case of food donations: The donation of food fit to be consumed is not considered food waste. For the purposes of the National Strategy and Action Plan to Combat Food Waste, the donation of food, which for exogenous reasons has become surplus, is considered as an additional link in the food supply chain, classified at the same level as production, industry, trade or the end consumer. This assumption stems from the fact that donating food is equivalent to supplying resources intended to be ingested by humans, even though the distribution logistics and flows may differ from wholesale or retail trade.

In order to have a correct definition of food waste, it was necessary to frame the concept of "food" within Community regulations. To this end, we have followed Article 2 of Regulation (EC) No 178/2002, which defines "food (or foodstuff)".

Based on the assumptions mentioned above, we can consider the following definition:

Definition of Food Waste

Concept	It is any substance or product, whether processed, partially processed or unprocessed, intended to be, or reasonably expected to be ingested by humans, which the holder (primary producer, agrifood industry, trade and retail, and households) discards or intends or is required to discard, thus assuming the nature of waste. ²²
Includes	drink, chewing gum and any substance, including water, intentionally incorporated into the food during its manufacture, preparation or treatment.
Excludes	 (a) feed; (b) live animals unless they are prepared for placing on the market for human consumption; (c) plants prior to harvesting; (d) medicinal products within the meaning of Council Directives 65/65/EEC (1) and 92/73/EEC (2); (e) cosmetics within the meaning of Council Directive 76/768/EEC (3); (f) tobacco and tobacco products within the meaning of Council Directive 89/622/EEC (4); (g) narcotic or psychotropic substances within the meaning of the United Nations Single Convention on Narcotic Drugs, 1961, and the United Nations Convention on Psychotropic Substances, 1971; (h) residues and contaminants

This definition of Food Waste has the following **advantages**:

- It directly relates to the *acquis communautaire*;
- Legally, the EC considers that there is no need to introduce a new concept;
- In view of the deadlines set for the presentation of the CNCDA Strategy, it is unlikely that the EC will choose to change the definitions of *food* and *waste* already existing in the *acquis communautaire*.



FOOD LOSSES AND FOOD WASTE

²² Covered by Directive 2008/98/EC - WFD

Definitions ²³				
Food By- product	We have followed the definition of Article 5(1) of Directive 2008/98/EC:			
	A substance or object, resulting from a production process, the primary aim of which is not the production of that item, only if the following conditions are met:			
	(a) further use of the substance or object is certain;			
	 (b) the substance or object can be used directly without any further processing other than normal industrial practice; 			
	 (c) the substance or object is produced as an integral part of a production process; and (d) further use is lawful, i.e. the substance or object fulfils all relevant product, environmental and health protection requirements for the specific use and will not lead to overall 			
	adverse environmental or human health impacts.			
Food Supply Chain	We have adapted the definition in the FUSIONS Project:			
	The connected series of activities used to produce, process and distribute food to the end consumer. It starts when the raw materials for food enter the economic or technical system for food production or home-grown consumption and it ends when food is eaten or consumed, or otherwise removed from the food supply chain.			

2.4.3. Food waste quantification initiatives

At the national level, a Study and Reflection Project on Food Waste (PERDA) was carried out in 2012, pointing to total food losses and food waste of 1 million tons (17% of annual production), which corresponds to 96.8 kg *per capita*, where:

- 32.2% occur in farming and fishing
- 7.5% in the food industry
- 28.9% in distribution
- 31.4% in consumption

At the EU level, the EC²⁴ has estimated annual food waste ranging from 30% to 50% of edible foodstuffs along the food supply chain until the consumer, representing an annual loss of 89 million tonnes in the EU28. In 2012, the EC updated its estimate to 88 million tonnes (according to an estimate of total food production, it should represent 20%) and published it under the FUSIONS project:

Sector	Food Waste*		
Sector	Total (1000 t)	Per capita (kg/inhab/year)	
Primary Production	9,1 ± 1,5	18 ± 3	
Industry	16,9 ± 12,7	33 ± 25	
Trade (wholesale and retail)	4,6 ± 1,2	9 ± 2	
Catering	10,5 ± 1,5	21 ± 3	
Households	46,5 ± 4,4	92 ± 9	
Total	87,6 ± 13,7	173 ± 27	

* Estimate includes a 95% confidence interval

The EC's *Preparatory Study on Food Waste Across EU 27* is yet another attempt to estimate food waste. The report quantifies food waste along the food supply chain in 27 EU Member States,

²³ In these two definitions of food waste and food by-products, some issues remain under the Waste Directive that must be clarified, in particular as regards waste and by-product, as the Directive classifies everything that goes out of the chain as waste, and therefore by-products would have to be disqualified.

²⁴ European Commission (2010), Preparatory Study on Food Waste Across EU 27

excluding the agricultural sector. Unlike the FAO studies, this was based on the quantification of food waste for each country and used the relevant Eurostat data.

The report estimated the generation of food waste in the EU at about 89 million tonnes per year, corresponding to 179 kg *per capita*, where households are the largest contributors, accounting for about 43% of total food waste. However, the exclusion of the agricultural sector, coupled with the lack of reliable information from the agrifood industry and trade, are limitations in reading the results:

Sector	Food Waste*		
Sector	Total (1000 t)	Per capita (kg/inhab/year)	
Primary Production	Х	Х	
Industry	35	70	
Trade (wholesale and retail)	4	8	
Catering	12	25	
Households	38	76	
Total	89	179	

On the other hand, according to 2011 FAO data, food waste was estimated for EU28 and North America at 95-115 kg/inhab./year while in Sub-Saharan Africa and South and Southeast Asia it is around 6-11 kg/inhab./year.

Sector	FAO (Europe)	Foodspill (Finland)	FH Münster (Germany)	Bio Intelligence Service (EU)	Fusions ²⁶ (EU)
Primary Production	23	19-23	22	34,2	11
Industry	17	17-20	36	19,5	19
Distribution	9	30-32	3	5,1	17
Households	52	28-31	40	41,2	53

The following table shows some more results from a selection of studies (in 1000 t)²⁵:

A common element to all these results is the fact that they are estimates where the lack of a common definition associated with distinct methodological approaches leads to sets of data that are not comparable to each other. In any case, there is a lack of organised work to collect statistical data and systematise them.

2.4.4. Data sources

Based on the numerous initiatives underway, our evaluation points to the need for this quantification to become an official statistic, as a guarantee of information quality, consistency and comparability. Inventorying administrative sources and increasing their use in the production of official statistics, with a view to rationalizing resources and reducing the burden on respondents, is one of the lines of action of Statistics Portugal, under the target "Improving the quality of official statistics" of the General Guidelines of National Statistical Activity 2013-2017.

In order to make proper and comprehensive use of available administrative sources, it was necessary to draw up a complete, systematic and well-documented inventory of such sources. The

²⁵ Analysis of the World Resources Institute (WRI) based on the FAO document *Global food losses and waste - extent, causes and prevention*, Rome, 2011; <u>http://www.mtt.fi/foodspill</u>, 2011; <u>https://www.fh-muenster.de/isun/lebensmittelabfall-projekte.php</u>, 2012; ITAS - cálculos baseados na metodologia SIK (Gustavsson *et al.*, 2013); Fusions, *Estimates of European food waste levels*, 2016.

 ²⁶ The study recognises that there is a relatively high uncertainty about this estimate (page 27). Especially for production data, estimates are based on data from only six countries and uncertainties of ±17% are likely to be underestimated (page 21).

Public Administration entities belonging to the CNCDA were considered as covering a large part of the universe able to provide information. However, mapping administrative information sources has proved difficult, given the co-existence in the same organisation of various information systems, the absence of systematised rules in information production, storage and updating and the lack of interoperability between the different information systems, which hinder the inventory and limit access to administrative data.

2.4.5. Indicators for measuring and monitoring

As we have seen, the design of indicators, while necessary, has not yet become an EC concern. The EC efforts are currently directed to the definition of a harmonised methodology for measuring waste and to the approval of the WFD revision by the Council and the European Parliament.

Stabilising definitions will enable us to know what we need to measure, to set the right indicators to monitor the implementation of possible measures to reduce food waste, as well as to quantify the latter.

Indicators for measuring and monitoring were considered a key element in proceeding with work on and the strategy for combating food waste. Consequently, the CNCDA has defined a "food waste dashboard", which when implemented will allow a characterisation of food waste reflecting the Portuguese situation. Chapter 8 provides a first systematic approach to such indicators.

2.5. Diagnosis of the civil society (social economy, economic operators and initiative promoters)

A survey was carried out in order to know public and private initiatives implemented to combat food waste, either in Portugal or abroad, with a view to identifying good practices, ways of working, limitations and obstacles, thus drawing conclusions that may, where appropriate, be translated into recommendations and/or proposals for regulation/action. A total of 128 initiatives to combat food waste have been identified, either in progress or already implemented, 65 of which have enabled a more detailed characterisation of their typology (awareness raising, prevention, reduction), territorial scope and public or private nature (description in Annex II).

There was a predominance of public initiatives (51%), mainly in the school environment, the most significant area of activity of the initiatives developed (46%). Many of these have a one-off nature, aiming at reducing food waste by providing food in the school to students or donating it to households in need.

In terms of area of activity, in addition to the school initiatives mentioned above, it is worth noting the relevance of initiatives promoted in the catering sector (18%), whereas primary production and trade are less representative (10% and 8%, respectively). By contrast, it is noteworthy the food industry's low performance (1.5%).

Initiatives are carried out predominantly at the local (35%) and national (32%) levels, with the latter having, as a rule, well organized structures and continuity, aiming at not only combating food waste but also meeting different social needs. These are mostly initiatives to prevent food waste by collecting uneaten meals and directing them to charities that donate them.

As for the type of action, most initiatives are aimed at prevention (37%), followed by raising awareness about, reducing and monitoring food waste.

To complement this information, the CNCDA interviewed institutions representing the agrifood and social sectors and promoters of some of the initiatives that directly or indirectly aim to combat food waste in Portugal.

This allowed us to conclude that consumer information must be a priority, for instance to raise awareness on the different labelling particulars, namely food expiry dates and correct conservation and handling. On the other hand, we also concluded that the inclusion of food waste in school curricula is a crucial measure.

As regards the actors in the food supply chain, the Good Practices Codes developed by ASAE and DGAV are considered to be very valuable instruments in the fight against food waste and therefore should be updated and widely disseminated.

We also concluded that it is important to ensure specific training for the different segments of the food supply chain and to foster better connections between all actors and participants involved in combating food waste.

Based on the contributions and comments received, and on the good practices identified, we were able to diagnose a set of needs, laid down in Chapter 4, which may be aggregated as follows:

- Information, awareness campaigns and better communication;
- Training and qualification/accreditation;
- Mobilisation of civil society;
- Innovation and technological development;
- Evaluation of the regulatory framework and potential barriers.

2.6. Food Safety in Portugal

MS must ensure the implementation of food laws and verify compliance with relevant requirements by operators at all stages of the food supply chain. Regulation (EC) No 882/2004 of 29 April 2004 is the EU document laying down guidelines for official controls performed to ensure the verification of compliance with food law.

The implementation of hygiene and food safety rules in food donation makes it possible to guarantee the safety of foodstuffs at all stages of the process from production to donation, in accordance with legal requirements and good hygiene practices. ASAE and DGAV²⁷ are public entities with an active role in this field, collaborating in the development of technical procedures that allow the donation of safe food (procedures to be adopted from the donor to the recipient).

In this regard, it is essential that donors make an appropriate choice of foodstuffs to donate, as well as of the recipients of donated products, and that they establish appropriate procedures during reception, sorting, packaging and conservation of received foodstuffs before forwarding them to their final destination. These procedures may even be included in Good Practice Guides adapted for that purpose.

²⁷ In the food sector, the mission of ASAE is to monitor and assure compliance with the legislation regulating economic activities in the food sector, as well as assessing and communicating risks in the food supply chain. DGAV's mission is, *inter alia*, to establish, implement and evaluate food safety policies, as it is in charge of managing the national Food Safety System.

Accordingly, minimum hygiene rules must be complied with, both for personnel handling foodstuffs and for facilities and equipment, in particular taking into account the following principles:

- **Transport** performed with the proper hygiene care, respecting temperatures appropriate to the product, so as to avoid contamination and alteration thereof;
- Transport vehicles kept in good conditions; must be cleaned and sanitized with appropriate frequency;
- Non-perishable food stored in fresh, dry, odour-free places, preventing direct sunlight exposure;
- Perishable food requiring cold chain stored in refrigeration or freezing chambers, ensuring the appropriate cold chain;
- **Traceability** must be maintained, particularly with regard to the origin and quantity of donated food products; the receiving entity must keep an updated record of donations;
- Stock management the first food to be stored must also be the first to be consumed in a First-in, First out (FIFO) basis, or for pre-packaged food First-Expired, First-Out (FEFO), so that the first products to be at the end of their useful life are consumed in the first place;
- Identification all stored products must be duly identified with either name and date of receipt, or expiry date, in the case of labelled products;
- Formally established food companies in the case of direct food donation by formally established food companies, they must ensure that at all stages of production, processing and distribution under their control, food complies with the relevant hygiene requirements laid down in Regulation (EC) No 852/2004 of 29 April 2004 and with the specific provisions of Regulations (EC) No 853/2004 and (EC) No 854/2004.

It should also be noted that the following technical standards, established with ASAE's support, are available on the FAO website²⁸: (i) Technical Note on Food Donations; (ii) Procedures for food donation in the catering sector; (iii) Procedures for food donation by large establishments; (iv) FAQs on food donation.

²⁸ <u>http://www.fao.org/platform-food-loss-waste/food-waste/food-waste-reduction/country-level-guidance/en/</u>

3. SWOT ANALYSIS

The analysis sought to take into account the knowledge acquired during the CNCDA operation period until now, as regards both the public administration and private entities, and their interconnection. It was also intended to integrate this analysis into the existing economic and organizational context, both at national and European level.

S (STRENGTHS)	W (WEAKNESSES)
 Awareness raising and mobilisation of public and private agents regarding food waste 	 Eating habits of segments of the population and resistance to change
Diversity and scope of initiatives on the ground	Starting point not well studied nor characterised
 Multidisciplinary school programmes and involvement of the younger generations 	 Difficulty of establishing a coordinated model centralising information and endeavours
• Existence of good practices (for sharing)	 Deficiency in stakeholder training and qualification / accreditation
 Reduction of the environmental impact associated with the production of organic waste 	 Legal responsibilities of donors regarding
• Priority to reduce food waste production, according to the waste management hierarchy	donated foodsIncompatibility between information systems,
 Innovative capacity of economic operators 	methodologies and concepts in the public administration
	Scarce human and financial resources
O (OPPORTUNITIES)	T (THREATS)
 Creation of the CNCDA as a platform for public- private institutional interconnection 	 Risk of lack of predictability and coordination in volunteer-based initiatives
Possible changes in taxation on donations	Modern consumer habits
 European and international policy framework (Circular Economy Package, Common Fisheries 	 Nutritional imbalances in deprived populations receiving donated food
Policy, SDG, etc.)	Administrative barriers
 The European decision-making process may lead to an increase in funding 	 Coordination between the various entities already involved and to be involved and
 Recent crisis has created a favourable economic environment (family thrift culture) 	complexity of implementation
 Innovation in the food industry 	 Lack of sensitivity and preparation for reducing food waste in particular regarding retail, the
 Targets to reduce the amount of waste sent to landfill 	HORECA channel and consumersInadequate interpretation of legislation on food
Greater efficiency in the food circuit	quality and safety by operators
• Development of the social economy and increasing corporate social responsibility	 Inadequate interpretation of waste legislation by operators
Creation of alternative marketing channels	 Excessive media coverage on the subject
Media sensitive to food waste	Fiscal Policy
 New consumption trends that take into consideration sustainability and nutritional issues 	

4. NEEDS

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The following needs arise from the combination of the main relevant elements identified during the diagnosis by the CNCDA (Chapter 2) with the SWOT analysis (Chapter 3).

1.	Improving the information provided to potential donors in the different segments of the supply chain	There is evidence that there are new potential donors, including large companies, who have not yet implemented food donation actions, in particular of prepared meals, for fear or lack of knowledge concerning applicable rules (e.g. leftovers from canteen meals).
2.	Improving the information provided to consumers and economic operators	There is a need to increase consumer information levels on conditions for food conservation or the concepts of date of minimum durability (best before) and use-by date. Likewise, good practices in stock management of food products nearing their use-by date should be made available to economic operators, e.g. the timely freezing of food in order to increase its shelf life, thus allowing for donation.
3.	Knowing the exact starting point of food waste at the different stages of the supply chain	This knowledge will allow the measurement, monitoring and communication of data and its institutional and social dissemination. To this end, it is also necessary to stabilise the definition of food waste at the national and EU levels.
4.	Knowing and disseminating the potential of European funds and other support tools	Identifying funding sources that can directly or indirectly support projects aimed at raising awareness and reducing food waste.
5.	Replicating or boosting existing good practices	Some initiatives already underway may achieve further results in terms of a wider range of recipients or of food waste awareness-raising/reduction, if greater access is granted to possible support or partnerships. On the other hand, given the resistance to change in consumption habits, the HORECA channel can play a relevant role in raising awareness and acting to reduce food waste.

Information needs, awareness-raising campaigns and better communication

Training and qualification/accreditation needs

6. Improving the	Proper handling is one of the aspects to be improved, according to
training and	permanent and volunteer staff who receive donations regardless

	qualification of those receiving food at risk of waste	of whether they are the final or intermediate recipient organisation. The implementation of good practices in this respect can extend the food's shelf life.
7.	Increasing the role of schools	Provide or enhance the framework for this topic and for different fields of action under food waste (up to and including the university level; promoting knowledge, innovation and entrepreneurship), as well as including projects developed in other areas, such as extra-curricular activities.

Need to mobilise civil society

8.	Encouraging synergies with Universities	Synergies should be explored both for pilot monitoring projects and for research linked to innovation in this field.
9.	Improving the interconnection of Public Administration (PA) bodies	Improve interconnection within the PA and between the PA and both professionals and economic operators, including European and international components, in a medium and long-term perspective. This need was also felt within the CNCDA itself in order to better promote the coordinated follow-up of EU-wide discussions and negotiations involving food waste and related matters (validity dates, definitions and measurement, food bank rules).

Innovation and technological development needs

10. Disseminating good practices related to food waste innovations	Regardless of whether or not they are already being applied in Portugal, there are several good practices and innovations that contribute in a positive way to reducing food waste. Examples include packaging materials and bar codes, packaging size and properties (biodegradable, food conservation functions, etc.).
11. Disseminating and encouraging computer applications	Applicable in the various dimensions of food waste reduction, since technological solutions with various uses already exist on the market.

Need to assess the regulatory framework and potential barriers

12. Encouraging	The	importance	of	short	marketing	chains	(geographical
mechanisms for the	prox	imity) has also	bee	en ment	ioned, as we	ere specif	fic, exclusive or
expeditious	in-st	ore selling poi	nts v	where c	onsumers ca	in find fo	od nearing the

marketing of products at risk of waste	"best before" date in compliance with the applicable food and nutrition safety standards.
13. Improving the match between supply and demand	This generic proposal is in line with what was laid down in the order establishing the CNCDA, regarding the creation of an electronic platform to promote matching supply and demand.
14. Assessing regulatory mechanisms and technical and administrative barriers	 Several issues or needs have been raised, some of which will require further assessment: Stabilisation of the food bank definition; accreditation of food waste experts, also to ensure good use downstream; Dissemination, where appropriate by means of legislation, in order to harmonise both public and private procedures and practices; Studying the creation of labour (and/or fiscal) benefits for volunteers; Taxation (local level) inducing good behaviour in directing food at risk of waste to the industry, retail and HORECA channel; Use of by-products as food; Linking tax benefits to food validity date (value of the product for fiscal purposes); Shipping documents for donated food to ensure traceability; Raising awareness to rationalise purchases from suppliers based on the pace of consumer buying; Raising awareness for stock management that promotes the reduction of food returns, as well as a timely withdrawal of products prior to end of validity.

5. STRATEGY

The vision of the National Strategy to Combat Food Waste (ENCDA) aims to translate the CNCDA's goal of concerted action, without overlapping or conflicting approaches, by maximizing synergies so as not to jeopardise initiatives already launched, aiming at "*Zero food waste: Sustainable production for responsible consumption*".

This vision has as its starting point the CNCDA's mission of **Combating food waste, a shared responsibility from the producer to the consumer**, with a view to reflecting what was laid down in the order establishing the CNCDA, that is, "*Promoting the reduction of food waste through an integrated and multidisciplinary approach*".



5.1. Strategic goals

The ENCDA architecture is based on the diagnosis, the identified needs and the SWOT analysis, building on three strategic goals.

STRATEGIC GOAL1: PREVENT	The prevention of food waste as a tool to mitigate the problem, i.e. to generate less food waste, thus decreasing the downstream need for its reduction and consequently the propensity for food to reach the residue stage.
STRATEGIC GOAL2: REDUCE	Despite the current lack of a harmonised and reliable method for measuring food waste in the EU, it is expected that a harmonised methodology will be in place at European level in the short/medium term. Meanwhile, work in Portugal will proceed in order to develop a methodology for calculating food waste at the different stages of the supply chain. By knowing the starting point, it will then be possible, at all times, to know how much and where food waste is being reduced.
STRATEGIC GOAL3: MONITOR	Disseminating information to direct and indirect actors and to the entire civil society will be crucial to raise awareness of each and everyone to the central goal of preventing and reducing waste, and this can only be achieved through effective monitoring and frequent reporting.

5.2. Operational goals

The strategic goals outlined above tried to take into account a number of operational goals both limited and consistent, in order to maintain the focus of the following measures, presented in a prevent-reduce-monitor sequence.

- 1. Raise awareness to reduce food waste;
- 2. Raise awareness of the school-age population to prevent food waste;
- 3. Increase training of economic agents and operators;
- 4. Develop a proactive communication policy;
- 5. Increase innovation capacity and promote good practices in reducing food waste;
- 6. Reduce administrative barriers;
- 7. Enhance cooperation among actors;
- 8. Develop the waste measurement system at the different stages of the food supply chain;
- 9. Develop the waste reporting system at the different stages of the food supply chain.

Interaction between strategic and operational goals

INTERACTION BETWEEN GOALS

OG1	Raise awareness to reduce food waste		
OG2	Raise awareness of the school-age population to prevent food waste	SG1	Prevent
OG3	Increase training of economic agents and operators		
OG4	Develop a proactive communication policy		
OG5	Increase innovation capacity and promote good practices in reducing food waste		
OG6	Reduce administrative barriers	SG2	Reduce
0G7	Enhance cooperation among actors		
OG8	Develop the waste measurement system at the different stages of		
	the food supply chain	SG3	Monitor
OG9	Develop the waste reporting system at the different stages of the food supply chain		
	Main Interaction Secondary Interaction		

STRATEGIC GOAL1: PREVENT

- 1. Raise awareness to reduce food waste addresses the information needs of economic operators, potential donors and in particular consumers, despite the various campaigns already implemented in this domain and the current initiatives in progress. In this context, disseminating good practices, guidelines and technological applications will contribute to raising awareness to reduce food waste.
- **2.** Raise awareness of the school-age population to prevent food waste underlines the importance of forming habits from the earliest ages. This has often repercussions at home within the family, through the development of school projects.
- **3.** Increase training of economic agents and operators, that is, build capacity of technical staff and volunteers for the proper handling of food in the donation circuit, in order to reduce the risk that food may no longer be donated. It is important to train both who donates and who receives, so as to improve efficiency in logistics and food conservation.
- **4. Develop a proactive communication policy** so that civil society in general and, in particular, economic and associative stakeholders and public administration entities may objectively know the level of food waste in each segment of the supply chain, from producer to consumer, and its changes over time.

STRATEGIC GOAL2: REDUCE

- **5.** Increase innovation capacity and promote good practices in reducing food waste; to this end, it is important to promote synergies with universities and to develop campaigns to disseminate good practices with a view to ensuring a replicating and entrepreneurial effect on innovation and the use of information technologies. In parallel, although this is not a core area of public support, namely the European Structural and Investment Funds, this goal can be better achieved if information on sources of funding including Horizon 2020, the EU Research and Innovation programme, is systematised.
- **6. Reduce administrative barriers**. This is a core goal for the public administration, in order to contribute to a regulatory environment as minimal as possible but that induces agents' behaviour to reduce food waste and simplifies the circuits and procedures of those who work in the donation of food, the surplus of which could not be prevented.

7. Enhance cooperation among actors is of particular relevance at two levels: (i) in the private and social sectors, by creating conditions promoting a match between supply and demand for food at risk of waste; (ii) in the public sector, by improving coordination within the administration in an area where responsibilities and obligations are increasing, in part due to Portugal's commitments under the United Nations and the EU. In the EU, there is also an active role to play not only in the creation of the European regulatory environment deriving (though not exclusively) from the revision of the WFD, which will set out the main guidelines for food waste in the Union, but also in the discussion on the future financial framework - in 2017, the European Parliament already addressed food waste in depth. Enhanced cooperation among all actors will be completed with the partners' involvement in the monitoring and evaluation of the ENCDA.

STRATEGIC GOAL3: MONITOR

8. Develop the waste measurement system at the different stages of the supply chain is crucial in order to know, in the first place, the starting point, as there is yet no harmonised and reliable method for measuring food waste in the EU, which makes it more difficult for public authorities to assess its magnitude, origins and trends over time. Once the methodology is established and the starting point is known, it will be possible to assess the level of food waste at the different stages of the supply chain. The involvement of universities can support this aim, especially in a transitional phase until the establishment of the measuring system.

9. Develop the waste reporting system at the different stages of the supply chain will not only create a critical mass for the internal and external evaluation of Portugal's performance, but will also enable the release and dissemination of a set of data and information that can be used by companies and universities in research and development.

Interaction between needs and operational goals ("++" corresponds to higher degree of intensity)

	Avallar mecanismos de regulação e barreiras técnicas e administrativas	Melharar a articulação dos arganismos da administração pública	Melhorar o encontro entre a oferta e a procura	Fomentar mecanismas que permitam comercializar expeditamente produtos em risco de descerdicio	Conhecer e divuigar o potencial dos fundos europeus e outros apolos	Replicar ou oumentar dimensão de boas práticas já existentes	Da r a conhecer e incentivar apps informáticas	Divulgar boas práticas ao nivel de inovações ligadas ao desperálicio alimentar	Fome ntars in ergi as com Universida de s	Aumentar a papel das escolas	Aumentar a formação e qualificação	Conhecer com rigor o ponto de partido do desperticio alimentar nas diferentes fases do cadeia alimentar	Melhorar a informação ao consumidor e agentes e conómicos	Melhaw a informação aos potenciais doadares nos diferentes segmentos da cadela		Necessidades / Objetivos Operacionais	
	•		-		-	:	:					•	:	:	140	Aumentor o sensibilização para reduzir o desperdício alimentar	
	1									:					072	Aumentor o sensibilização do população em idade escolar para a prevenção do desperdício alimentar	OE1: PP
						•		•			:				640	Incrementor o formação dos agentes e operadores	OE1: PREVENIR
		•							•			3			OP4	Desenvolver uma política proactiva de comunicação de resultados	
,					:	•	:	•	:						OPS	Aumentar a capacidade de inavação e potenciar os baos próticos no redução do desperdício olimentor	0
;	2	•	•		•										990	Reduzir borniros odministrativos	OE2: REDUZIR
		:	:	•	-				-			•			097	Reforçor a cooperação entre agentes	R
									:			:			840	Desenvolver sistema de medição do desperdicio nas diferentes fases da cadeia	OE: MON
		•	•			•			:	•		Ŧ			OPS	Desenvolver sistemo de reporte do desperdicio nas diferentes fases do cadeio	OE: MONITORIZAR

6. ACTION PLAN

The mission assigned to the CNCDA provided for a proposal for a National Strategy to Combat Food Waste (ENCDA) and an Action Plan to Combat Food Waste (PACDA).

This document combines in a single text the strategy and the plan of action that implements it, through a set of measures aimed at meeting the operational goals outlined above.

6.1. Measures

The following are 14 measures included in the Action Plan (please see measure sheets in Annex III) that, together with the schedule in Chapter 10, allow actions to be implemented by at least 2021, resulting from the implementation of the ENCDA, in compliance with the objective of preventing and reducing food waste in Portugal.

- 1. Review and disseminate food safety guidelines to combat waste;
- 2. Promote awareness-raising actions for the consumer;
- 3. Develop awareness-raising actions for the school-age population;
- 4. Develop specific training actions for different segments of the chain;
- 5. Regularly publish a statistics panel on levels of food waste, including the establishment of an area dedicated to this topic on the official statistics portal;
- 6. Disseminate good practices (guidelines and success stories);
- 7. Promote the development of innovative processes;
- 8. Facilitate and encourage the system of food donation;
- 9. Improve the interconnection and involvement of the State administration in European and international regulation;
- 10. Create and stimulate a collaborative platform to identify availability by type of food;
- 11. Promote specific locations for the sale of food products at risk of waste;
- **12.** Develop a methodology for the calculation of food waste at the different stages of the supply chain;
- 13. Develop pilot projects in the field of health and nutrition;
- 14. Prepare periodic reports for general presentation and dissemination.

Interaction between operational goals and measures ("++" corresponds to higher degree of intensity)

OP9	OP8	OP7	OP6	OP5	OP4	OP3	OP2	OP1		
Desenvolver sistema de reporte do desperdicio nas diferentes fases da cadeia	Desenvolver sistema de medição do desperdício nas diferentes fases da cadeia	Reforçar a cooperação entre agentes	Reduzir barreiras administrativas	Aumentar a capacidade de inovação e potenciar as boas práticas na redução do desperdício alimentar	Desenvolver uma política praactiva de cam unicação de resultados	incrementar a formação dos agentes e operadores	Aumentar a sensibilização da população em idade escolar para a prevenção do desperdício alimentar	Aumentar a sensibilização para reduzir a desperdício alimentar		ENCDA - Quadro Estratégico Objetivos Operacionais / Medidas
		+	+	+		ŧ		ŧ	M1	Rever e difundir guidelines de orientação de segurança alimentar com vista ao combate ao desperdício
		+		+	+		‡	ŧ	M2	Promover ações de sensibilização junto do consumidor
		+		+	+	‡	ŧ	‡	M3	Desenvolver ações de sensibilização para a população em idade escolar
		+		+	+	ŧ	+	+	M4	Desenvolver ações de formação específicas para diferentes segmentos da cadeia
+	+	+			ŧ	+			M5	Publicar regularmente painel de estatísticas dos níveis de desperdício alimentar, incluindo a criação no portal das estatísticas oficiais de uma área dedicada
+		+	+	+	ŧ	+	+	+	M6	Divulgar Boas Práticas (guidelines e casos de sucesso)
+		+	+	‡	+	+			M	Promover o desenvolvimento de processos inovadores
+		+	‡	+		+		+	8M	Facilitar e incentivar o regime de doação de alimentos
+	+	+	ŧ	+	+	+			M9	Melhorar a articulação e envolvimento da administração do Estado na regulação europeia e internacional
+	+	ŧ		+	+	+			M10	Implementar plataforma colaborativa que permita identificar disponibilidades por tipo de alimentos Promover locais específicos para venda de produtos em risco de
+	+	ŧ	+	+		+		+	M11	Promover locais específicos para venda de produtos em risco de desperdício Desenvolvimento da metodologia para o cálculo do desperdício
+	ŧ	+		+	+				M12	alimentar nas diferentes fases da cadeia Desenvolver projetos piloto na área da saúde e nutrição
+	‡	+		+	+	+	+	+	M13	Elaborar relatórios periódicos para apresentação à tutela e
‡	‡	+			+	+			M14	divulgação geral

1. Review and disseminate food safety guidelines to combat waste

It aims to improve knowledge in all links of the food chain in order to reduce the waste generated and improve the safety of donated food.

The objective is to provide to all links of the supply chain guides to existing good practices and procedures, in order to better combat waste and to increase safety in donations of surplus food. In parallel, practices and procedures implemented in the field will be reviewed at the level of the entities involved.

This is directed to all the links in the intervening chain: food operators, social welfare organisations (IPSS) and competent authorities in the various intervention areas, and it must be coordinated with measure 8 in terms of indicators and targets to be achieved.

2. Promote awareness-raising actions for the consumer

It aims to increase consumers' knowledge about shelf-life, expiry dates, food conservation methods, types of production, etc.

Promote dissemination actions in order to inform and alert consumers to the importance of complying with food label indications, in particular regarding the different notices about shelf-life ("best before" and "use by"), the various types of conservation, care in food handling, and the impact that compliance with such indications may have on reducing domestic food waste.

3. Develop awareness-raising actions for the school-age population

Its objectives are to make the school population aware of the need to prevent and combat food waste by developing projects in schools that promote the involvement in civic activities within the community and thus expand the skills laid down in the Health Education Reference Book on this topic.

The schools involved may, through their websites, reveal the teaching methods developed in this area and disseminate these initiatives with the involvement of the corresponding Parents Association.

4. Develop specific training actions for different segments of the chain

Its aim is to improve the knowledge of all links in the food chain in order to reduce the waste generated and to improve the safety of donated food.

Promote technical training actions for the different links in the chain, in order to increase their technical knowledge in terms of food safety. These training actions should be done in the classroom and on-the-job or via e-learning for a better application of the knowledge acquired. Training materials and technical guidelines will be published on the CNCDA website.

They are directed to food operators, food donors and IPSS.

5. Regularly publish a statistics panel on levels of food waste, including the establishment of an area dedicated to this topic on the official statistics portal

This measure will implement an information system dedicated to food waste, which will include, in addition to its quantification, correlated information (e.g. waste, food balance, donations, etc.), regularly publishing a panel of statistics on food waste levels, including the creation of a dedicated area in the official statistics portal.

It is directed to the general public, central public administration, researchers and students.

6. Disseminate good practices (guidelines and success stories)

Its purpose is to promote the dissemination of good practices already implemented both in Portugal and in other countries, by mainly using the CNCDA website and its collection of diagnostic work.

It also aims to encourage economic operators linked to the agrifood supply chain to develop pioneering and creative initiatives to combat food waste.

Based on the Internet dissemination of good practices and guidelines, it is intended for the society as a whole, and is of particular interest to all citizens, businesses, cooperatives and IPSS in any way connected to food donation and committed to reducing food waste. There are two aspects to this
measure: an annual Excellence Award governed by its own regulation to be soon created; and the use of a distinctive symbol for all organisations or structures that voluntarily subscribe the ENCDA code of conduct and values (internal regulation to be created by the structure). Its seal or logo will always be accompanied by a short statement on the Strategy.

7. Promote the development of innovative processes

Its objective is to boost practices that contribute to reducing food waste, by encouraging companies, particularly those in the industry sector (food, packaging and others) to adopt innovative processes, through the promotion of awareness-raising and interface actions with R&D entities, as well as to leverage current or future public policy instruments to, where possible, positively discriminate projects or initiatives in the field of innovation to combat food waste.

It is directed to the food industries, traders, restaurants, packaging manufacturers, etc.

8. Facilitate and encourage the system of food donation

This measure involves two actions:

- Definition of common concepts and harmonised practices: It aims to promote the donation of safe food by establishing harmonised procedures to foster food donations while ensuring that these are carried out in a responsible manner and in compliance with food safety standards. These procedures must include minimum hygiene rules, both for the food handling staff and for the facilities and equipment used. The procedures will be established and disseminated in all the links in the supply chain.
- 2) *Evaluation of food law rules and procedures*: It aims to periodically reassess and update guidelines, with a view to ensuring that the regulatory framework is easily understood by the agents and economic operators involved in donation.

Its target audience is the inspectors and technical staff of ASAE and DGAV, food operators, food donors and IPSS; it should be coordinated with measure 1 in terms of indicators and targets to be achieved.

9. Improve the interconnection and involvement of the State administration in European and international regulation

It aims to promote the contribution of actors with common interests and relevant information to disseminate, by preparing in advance and in a harmonised way national positions for negotiation or discussion within the EU and other International Organisations.

In this context, a specific procedure should be established in the CNCDA for the timely interconnection between entities in order to prepare national positions for international and EU meetings, as well as to ensure their follow-up. In addition, this measure includes assessing the regulatory mechanisms and technical and administrative barriers identified in the diagnosis, thus establishing, at a technical level and in a concerted way, the basis for any required appropriate legislative proposals (including those deriving from EU legislation).

Its target audience is the constituent entities of the CNCDA, in particular the Office for Planning, Policy and General Administration (GPP), the Portuguese Environment Agency (APA), the Portuguese Directorate-General for Food and Veterinary (DGAV) and the Authority for Food and Economic Safety (ASAE).

10. Create and stimulate a collaborative platform to identify availability by type of food

This measure aims to create a collaborative platform between food donors and food recipients (or intermediaries with possible prior accreditation) in order to facilitate the connection between producers of food surpluses and those who need them, thus reducing potential food waste.

This electronic platform should prioritise integration between the various existing information systems (on both sides - supply and demand); allow manual interaction between supply and demand in an easy and intuitive way - if necessary by complementing it with mobile app development; allow the management of goods identified according to standards to be defined; and produce the necessary outputs for proper management of food waste (indicators, listings and necessary documents). It will also be used to provide information related to the ENCDA implementation and food waste monitoring.

Its target audience is food, farm and retail businesses, and naturally IPSS and other social solidarity organisations.

11. Promote specific locations for the sale of food products at risk of waste

It aims to ensure that food close to the expiry date has its own marketing circuit that guarantees its consumption in compliance with the applicable food and nutrition safety standards.

The intention is to encourage the appearance of points of sale recognisable by the consumer, while ensuring food safety conditions and reaching a range of consumers who otherwise would not consume them, due to lack of information/dissemination.

12. Develop a methodology for the calculation of food waste at the different stages of the supply chain

With the aim of disseminating quantified information on food waste (calculation of food waste by type of food supply chain operator), this measure intends to develop a harmonised methodology preferably using information already available, by following the good practice of *"Collect once, use multiple times"*.

In addition, information gaps will be identified that once overcome may improve the implemented information system.

Its target audience is the general public, the central public administration, researchers and students and it should be in force until at least 2030 (the SDG target date).

13. Develop pilot projects in the field of health and nutrition

It aims to raise awareness, in particular of the population who receives donated food or is in the donation circuit, to the importance of a healthy and diversified diet. Likewise, it aims to support the populations receiving food aid on the proper use of the food baskets provided under the Operational Programme to Support the Most Deprived People (POAPMC).

Preventing and combating food waste this way should require the participation of specialised health and nutrition staff in pilot projects to be developed, in particular through manuals produced under the National Programme for the Promotion of Healthy Eating (PNPAS) and the implementation of training actions for the proper use of food baskets.

Its target audience is deprived people, namely those involved in the POAPMC.

14. Prepare periodic reports for general presentation and dissemination

The CNCDA's duties necessarily include the permanent monitoring and evaluation of the Strategy implementation.

The aim of this measure is mainly to allow examining the actions carried out and their impact, as well as to reflect on the goals of the Action Plan from an internal and external perspective, by providing a set of information, including on the ENCDA evaluation, that goes beyond the goal of measure 5.

Its target audience is the authorities in charge of the CNCDA as well as the general public.

7. FOOD WASTE DASHBOARD

The CNCDA established a "food waste dashboard" that, once implemented, will allow a characterisation of the Portuguese situation in terms of food waste. The list below is the result of a conceptual exercise on what should ideally be measured in this area. The previously diagnosed absence of information will surely lead to an adjustment of these indicators and to recommendations on the need to collect additional information.

1 - FOOD WASTE QUANTIFICATION INDICATORS

- Gross food availability (kg/inhabitant/year) per food product group
- Edible food availability (kg/inhabitant/year) per food product group
- Food consumption (kg/inhabitant/year) per food product group
- Total food waste generated (kg/inhabitant/year) per food product group
- Food waste generated by households (kg/inhabitant/year) per food product group
- Food waste generated per company (retail, hotels, food industry) (kg/company/year)
- Importance of food waste in total food supply (%)
- Food waste generated in households per household food expenditure unit (kg/EUR)
- Food waste generated by end users per unit of food consumption per capita (kg/kg)

2 - MONITORING INDICATORS OF FOOD WASTE PREVENTION ACTIONS

- Food waste prevention initiatives (No.) National, Regional and Local
- People/Households/Communities involved in food waste prevention actions (No.)
- Food industry/hotel staff who have completed food waste prevention courses (No.)
- Government budget (central/local administration) spent on food waste prevention activities (EUR)
- Companies actively involved in voluntary food waste prevention agreements (No.)

8. GOVERNANCE AND PARTNERS' INVOLVEMENT

In the first stage, the CNCDA will continue to meet and to monitor and evaluate the implementation of the strategy on a regular basis. This should continue until 2020/2021, when it is estimated that the first measurements of food waste in Portugal will be notified to the European Commission. Until then, the CNCDA shall monitor all the ENCDA measures, involving the entities and organisations already identified in the order that established it.

From that date onwards, the CNCDA duties should fall within the remit of those same entities and organisations, in accordance with the measures set forth in the Action Plan and its schedule.

The implementation of the Strategy and the Action Plan will be ensured within the framework of the management instruments of the entities concerned, in particular their business plans, using their own resources and budget.

The definition of the institutions and public entities responsible for the implementation of the ENCDA and the Action Plan in the Autonomous Regions of the Azores and Madeira shall be carried out by the relevant Government bodies, without prejudice to the implementation of an Action Plan with specific measures for each Autonomous Region.

9. EVALUATION PLAN

The Evaluation Plan is designed to ensure that appropriate activities are carried out to:

- provide the necessary information to monitor the implementation of the Strategy;
- feed quarterly evaluation reports;
- provide information to show progress towards established goals and objectives, in particular taking into account the SDG 12.3 of halving per capita food waste by 2030;
- ensure that the information needed for monitoring and evaluation is available at the right time and in the appropriate format.

The governance of the monitoring and evaluation system is based on the CNCDA entities, under the coordination of the GPP, and has the following goals:

- critically evaluate the progress and results of the ENCDA implementation and the efficiency and relevance of the measures established, and propose appropriate adjustments;
- assess to what extent other national and EU policies, in particular those supported in Portugal by the European Structural and Investment Funds, contribute to preventing and reducing food waste;
- contribute to a better understanding of the initiatives to combat food waste within and without the ENCDA, by promoting the partners' involvement.

The GPP will ensure, in close coordination with the INE, APA and DGC, a secure electronic information system with relevant information for the calculation of indicators regarding the ENCDA goals and measures, accessible to all CNCDA members.

10. SCHEDULE

			2	2017							2	2018									2019)					2020 and following years							
		7 8	39	10	11	12	1	2 3	3 4	4 5	6	7	8	9	10_11	12	1	2 3	4	5	6	7 8	9	10	11 12	2 1	2	3 4	5	6	7 8	9	10	11 12
Public di	scussion on the ENCDA																																	
Adoptior	of the ENCDA																																	
Design ar	nd implementation of the ENCDA measures																																	
M1	Review and disseminate food safety guidelines to combat waste																																	
M2	Promote awareness-raising actions for the consumer																																	
M3	Develop awareness-raising actions for the school-age population																																	
M4	Develop specific training actions for different segments of the chain																																	
M5	Regularly publish a statistics panel on levels of food waste, including the establishment of an area dedicated to this topic on the official statistics portal																																	
M6	Disseminate good practices (guidelines and success stories)																																	
M7	Promote the development of innovative processes																																	
M8	Facilitate and encourage the system of food donation																																	
M9	Improve the interconnection and involvement of the State administration in European and international regulation																																	
M10	Create and stimulate a collaborative platform to identify availability by type of food																																	
M11	Promote specific locations for the sale of food products at risk of waste																																	
M12	Develop a methodology for the calculation of food waste at the different stages of the supply chain																																	
M13	Develop pilot projects in the field of health and nutrition																																	
M14	Prepare periodic reports for general presentation and dissemination			T																														

			20	17					20	018								:	2019								2020 e seg.								
		78	9	10 11	12	1 2	3	4 5	6	7	8	9 10	0 11	12	1 2	2_3	4	5 (<u> 5</u> 7	8	91	0 11	12	1	2 3	4	56	7	8 9	9 10	11 1	12			
Discussã	o pública da ENCDA																																		
Aprovaç	ão da ENCDA																																		
Concept	ão e implementação das medidas da ENCDA																																		
M1	Rever e difundir guidelines de orientação de segurança alimentar com vista ao combate ao desperdício																																		
M2	Promover ações de sensibilização junto do consumidor				ſ																														
M3	Desenvolver ações de sensibilização para a população em idade escolar				×																														
M4	Desenvolver ações de formação específicas para diferentes segmentos da cadeia																																		
M5	Publicar regularmente painel de estatísticas dos níveis de desperdício alimentar, incluindo a criação no portal das estatísticas oficiais de uma área dedicada				T																														
M6	Divulgar Boas Práticas (guidelines e casos de sucesso)																																		
M7	Promover o desenvolvimento de processos inovadores				Â																														
M8	Facilitar e incentivar o regime de doação de géneros alimentícios				ľ														-																
M9	Melhorar a articulação e envolvimento da administração do Estado na regulação europeia e internacional																																		
M10	Implementar plataforma colaborativa que permita identificar disponibilidades por tipo de géneros alimentícios				ľ																														
M11	Promover locais específicos para venda de produtos em risco de desperdício																																		
M12	Desenvolvimento da metodologia para o cálculo do desperdício alimentar nas diferentes fases da cadeia				ľ																											~~~			
M13	Desenvolver projetos piloto na área da saúde e nutrição																																		
M14	Elaborar relatórios periódicos para apresentação à tutela e divulgação geral																																		

11. ANNEXES

Annex I - List of CNCDA entities and appointed representatives

GPP (coordination)	MAFDR/MM	Eduardo Diniz
DGAV	MAFDR	Graça Mariano
INE	MPMA	Carlos Carvalho
DG Local Authorities	Deputy Minister	António Edmundo Ribeiro
DG Education	ME	Rui Lima
DG Social Security	MTSSS	Paula Susana Ferreira
DG Health	MS	Miguel André Telo de Arriaga
DGAE	ME	Carla Pinto
DG Consumer	ME	Ana Catarina Fonseca
ASAE	ME	Maria Salomé Ribeiro
IAPMEI	ME	Etelvina Nabais
АРА	МА	Ana Cristina Carrola
DGRM	MM	Bárbara Duque
ANMP (Valongo Mayor)	-	José Manuel Ribeiro
ANAFRE	-	Pedro Morais Soares
FPBA	-	José M. Simões de Almeida
Autonomous Region of the Azores	Regional Government	Luís Neto Viveiros
Autonomous Region of Madeira	-	-

Annex II – Diagnosis of civil society: Characterisation of initiatives and good practices developed to combat food waste

Distribution of key initiatives identified

• NATURE



• TYPE OF ACTION



• IMPACT ASSESSMENT?



Produção Indústria Comércio Restauração Consumo no lar Outros (incluindo escolas) Não identificadas

• SUPPLY CHAIN STAGES WHERE THEY OCCUR

• TERRITORIAL SCOPE



Interview with certain entities and promoters of initiatives

The CNCDA has held interviews with the CAP, CNA, CNJ, CONFAGRI and FIPA confederations, with associations representing the agri-food supply chain, AHRESP, APED, as well as with the Chamber of Nutritionists and the Chamber of Engineers and the Portuguese Association of Nutritionists (APN). The results of these interviews can be summarised as follows:

Questions	Results
Food waste definition	 Importance of stabilised, clear and unique definition Establish clear distinction between "Food waste" and "Food losses"
Hygiene and food safety rules	 Do not ease hygiene and food safety rules Flexibility in "cosmetic" marketing standards (e.g. "ugly fruit") Code of Good Practices developed by the ASAE and DGAV is a good example that can be expanded
Expiry dates	 Consumer awareness deficit, despite progress in this area Importance of young people, schools and distribution in the promotion of food literacy Possible prolongation of expiry dates for some products Raise awareness in retail to lower prices by the end of validity
Training of human resources	 Training deficit in schools (teachers), canteens, donation circuit, agricultural production
Taxation of donations	 No need for major changes Increase maximum ceiling in corporation taxes Inducing taxation more effective than punitive taxation
State intervention	 Encourage short circuits and sale in bulk
Innovation	 Small doses, packaged together and biodegradable packaging Sustainability in the selection of raw materials "Smart" bar codes, technological solutions / apps
Platform	 Importance of credibility Properly identify who the stakeholders are / can be

In order to continue to work, it was also deemed necessary to obtain additional information regarding certain initiatives to combat food waste. To this end, the promoters of the following initiatives were interviewed:

Initiative	Territorial scope
Alimentação inteligente	National
Greenchef	National
Dar e receber	National
Restolho	National
Fruta feia + flaw4life	National
Melhorar as condições de vida	National
Não desperdice, leve o que é seu	Inter-municipal

Initiative	Territorial scope
Missão Continente	National
Aliança contra a fome e a má-nutrição – Portugal	National
Federação Portuguesa dos Bancos Alimentares + Ideias que alimentam	National
Dariacordar + zero desperdício (Vieira & Almeida)	National
Municipality of Lisbon	Municipal

With the following results:

Questions	Results
Hygiene and food safety rules	 Initiatives comply with hygiene and food safety rules and guarantee traceability Possibility suggested of freezing products for donation, in store, in order to facilitate logistics Training of volunteer teams Importance of informing consumers about how to store/conserve food Fear on the part of some canteen suppliers of donating surplus meals
Expiry dates	 Consumer information and awareness-raising Elderly need information Education of those who receive and consume donated food
Human resources	 More human resources required Versatility of volunteers as a success factor
Specialised training	 Need of training in purchase planning/home economics management Distance learning with chefs Training before harvest and in handling fruits and vegetables Donor training
Taxation of donations	 Volunteer framework (tax or labour benefits) Benefits for initiatives that include awareness-raising actions in schools Italian legislation cited as a good example
State intervention	 State intervention to guarantee the correct distribution of donations Mapping best practices at national level Awareness-raising campaigns for the general public Better interconnection between government, local authorities and the social sector Identification of goals Facilitation of logistics/transport (shipping documents) through a simplified transport scheme for donations Promotion of the Circular Economy package
Funding/Budget	 Funding is a limiting factor Maximise the economic value that would otherwise be lost
Other	 Electronic platforms are an obstacle to some products/donors Difficulty in rapidly disposing of the most perishable food when there are peaks in donations Need for inspection and certification of receiving entities

Questions	Results
	 Development of platform able to manage several networks

Annex III – MEASURE SHEETS

MEASURE 1	M1 - Review and di	sseminate food safety guidelines	s to combat waste									
Objectives	Improve knowledge in all links of the food chain in order to reduce the waste generated and improve the safety of donated food.											
Description	 Provide to all links of the supply chain guides to existing good practices and procedures, in order to better combat waste and to increase safety in donations of surplus food Review practices and procedures implemented in the field at the level of the entities involved 											
Target audienceAll the links in the intervening chain: food operators, social welfare organisations (IPSS) and competent authorities in the various intervention areas, either directly or through their representative associations												
Targets Indicators Duration												
 By 2021, reach ei their representati 	ther directly or through ive associations:	 % of operators, by link in the food supply chain, who received either 	From January 2018									
90% of primary p 90% of agribusine	255	directly or through their representative associations, guides	Promoter	Executor								
	CA channel implemented practices target to be considered	to good practices and procedures – No. of reviews of practices and procedures implemented (indicators to be considered together with M8)	ASAE, DGAV	ASAE, DGAV								
Legislation	Legislation Regulation (EC) No 178/2002, of 28 January, Regulation (EC) No 852/2004, of 29 April, and Regulation (EU) No 1169/2011, of 25 October											

MEASURE 2	M2 - Promote awar	M2 - Promote awareness-raising actions for the consumer											
Objectives	Increase consumers' knowledge about shelf-life, expiry dates, food conservation methods, types of production, etc.												
Description	particular regarding the c	Dissemination actions to inform and alert consumers to the importance of complying with food label indications, in particular regarding the different notices about shelf-life ("best before" and "use by"), the various types of conservation, care in food handling, and the impact that compliance with such indications may have on reducing domestic food waste.											
Target audience	Consumers in general												
-	Targets	Indicators		Duration									
 Reach by 2021: 		 % of the Portuguese adult population 	From January 2018										
65% of consumer	s (of the population)	that came into contact with awareness-raising actions	Promoter	Executor									
DGC DGC and partner entities													
Legislation	Legislation Regulation No 1169/2011 of the European Parliament and of the Council of 25 October 2011 on the provision of food information to consumers												

MEASURE 3	M3 - Develop awareness-raising actions for the school-age population
Objectives	Make the school population aware of the need to prevent and combat food waste.
Description	 Develop pilot projects in schools that promote the involvement in civic activities within the community and then develop curriculum content on this topic The schools involved may, through their websites, reveal the teaching methods developed in this area and disseminate these initiatives with the involvement of the corresponding Parents Association. Make the entire educational community aware of the food waste issue. Enhance the issues of prevention and combat against food waste foreseen under the Food Education programme and laid down in the Health Education Reference Book. Include in the new guiding document on food supply in school canteens recommendations aimed at preventing/reducing food waste. Schools should create strategies to combat food waste, namely in school meals, as established in article 4 of Order No. 5296/2017, of June 16. These strategies should be included in the internal rules and procedures of each school.
Target	School-age population
audience	

MEASURE 3	M3 - Develop awar	eness-raising actions for the scho	ool-age populatio	n						
	Targets	Indicators	Duration							
- 20% of schools w	here specific actions	Percentage of:	From September 20	18 and following years						
	pped under the ENCDA; tudents covered per	 schools involved in each school year; students involved in each school 	Promoter	Executor						
school; – average 20% stud	lents covered in the	year.	DGE	School Groups, DGEstE, Municipalities						
country.										
(increase of 4 p.p	./year)									
Legislation	Order no. 8452-A/2015,	of July 31 and Order no. 5296/2017, of Ju	ne 16							

MEASURE 4	M4 - Develop specific training actions for different segments of the chain				
Objectives	Improve the knowledge of donated food.	of all links in the food chain in order to re	educe the waste gener	rated and to improve the safety	
Description	Training actions for the different links in the chain, in order to increase their technical knowledge in terms of food safety. These training actions should be done in the classroom and on-the-job or via e-learning for a better application of the knowledge acquired. Training materials and technical guidelines will be published on the CNCDA website.				
Target audience	Food operators, food donors and IPSS, either directly or through their representative associations				
-	Targets Indicators Duration				
 By 2021, reach ei their representat 	ther directly or through ive associations:	 % of operators, by link in the food supply chain, who followed either 	From January 2018		
70% of farmers 70% of agribusine	255	directly or through their representative associations specific	Promoter Executor	Executor	
70% of food retail 70% of the HORECA channel 70% of IPSS		training actions – No. of specific training actions carried out	DGAV/ASAE	DGAV/ASAE/DOCAPESCA – Portos e Lotas, S.A.	
	10 specific training actions carried out by segments of the food supply chain				
Legislation	Main applicable legislation: Regulation (EC) No 178/2002, Regulation (EC) No 852/2004 and Regulation (EU) No 1169/2011				

MEASURE 5	M5 - Regularly publish a statistics panel on levels of food waste, including the establishment of an area dedicated to this topic on the official statistics portal				
Objectives	Publish statistical inform	ation on levels of food waste			
Description	Implement an information system dedicated to food waste, which will include, in addition to its quantification, correlated information (e.g. waste, food balance, donations, etc.), regularly publishing a panel of statistics on food waste levels, including the creation of a dedicated area in the official statistics portal.				
Target audience	General public, central public administration, researchers and students				
	Fargets	Indicators	1	Duration	
	on the official statistics stics Portugal (INE) of	 Number of food waste statistics publications by segment of the food 	From January 2019		
an area dedicated to food waste; - By 2030, halve food waste.		supply chain, from 2020 onwards; – Level of food waste variation by	Promoter	Executor	
segment of the food supply chain. Statistics Portugal Statistics Portugal			Statistics Portugal		
Legislation			•		

MEASURE 6	M6 - Disseminate good practices (guidelines and success stories)
Objectives	Promote the dissemination of good practices already implemented both in Portugal and in other countries, by mainly using the CNCDA website and its collection of diagnostic work Encourage economic operators linked to the agrifood supply chain to develop pioneering and creative initiatives to combat food waste.
Description	In order to develop pioneering practices, it aims to grant a distinctive seal or logo distinguishing companies that may use it in initiatives or actions carried out to combat food waste, by voluntarily subscribing to a declaration/agreement accepting the CNCDA principles. There are two aspects to this measure: an annual Excellence Award governed by its own regulation to be soon created; and the use of a distinctive symbol for all organisations or structures that voluntarily subscribe to the ENCDA code of

MEASURE 6	M6 - Disseminate good practices (guidelines and success stories)				
	conduct and values (internal regulation to be created by the structure). Its seal or logo will always be accompanied by a short statement on the Strategy.				
Target audience	Society as a whole, and of particular interest to all citizens, businesses, cooperatives and IPSS in any way connected to food donation and committed to reducing food waste				
	Targets Indicators Duration			Duration	
 Regulatory frame quarter of 2018; 	ework by the second	 Publication of legal texts; Number of companies (and other 	From July 2018		
 In the first year, 350 companies participating. Envisage annual 20% 		entities) applying each year.	Promoter	Executor	
increases in subsequent years.			CNCDA (GPP/DGC)	GPP/DGC	
Legislation		•	•	•	

MEASURE 7	M7 - Promote the development of innovative processes				
Objectives	• • •	particularly those in the industry sector te to reducing food waste.	r (food, packaging an	nd others) to adopt innovative	
Description	Boost practices that contribute to reducing food waste through the promotion of awareness-raising and interface actions with R&D entities, and leverage public policy instruments to, where possible, positively discriminate projects or initiatives in the field of innovation to combat food waste.				
Target audience	Food industries, traders, restaurants, packaging manufacturers, etc.				
T I	Targets Indicators Duration				
	nce of 80% of SMEs in and interface actions	 % of SMEs present in awareness and interface actions to be carried out to 	From July 2018		
to be carried out to combat food waste; – Annual 20% increase in the number of – % of SMEs that include forms of Promoter			Executor		
SMEs that include forms of positive discrimination for actions aimed at raising awareness to or reducing food waste.		positive discrimination for actions aimed at raising awareness to or reducing food waste.	IAPMEI, I.P.	IAPMEI, I.P.	
Legislation			•	•	

MEASURE 8	M8 - Facilitate and encourage the system of food donation				
Objectives	Facilitate and encourage	e the system of food donation			
Description	Action 8.1. Definition of common concepts and harmonised practices: It aims to promote the donation of safe food by establishing harmonised procedures to foster food donations while ensuring that these are carried out in a responsible manner and in compliance with food safety standards. These procedures must include minimum hygiene rules, both for the food handling staff and for the facilities and equipment used. The procedures will be established and disseminated in all the links in the supply chain. Action 8.2. Evaluation of food law rules and procedures: It aims to periodically reassess and update guidelines, with a view to ensuring that the regulatory framework is easily understood by the agents and economic operators involved in donation.				
Target audience	Inspectors and technica	I staff of ASAE and DGAV, food operators,	food donors and IPSS		
т	argets	Indicators		Duration	
 10 harmonised pr 	ocedures adopted;	 Harmonised procedures adopted; 	From January 2018		
 1 annual review o 	1 annual review of the guidelines. - Rate of periodic review of guidelines. Promoter Executor		Executor		
(Target to be consid	arget to be considered together with M1) (Indicator to be considered together ASAE/DGAV ASAE/DGAV with M1)				
Legislation	Regulation (EC) No 178/2002, Regulation (EC) No 852/2004, Regulation (EC) No 854/2004 and Regulation (EU) No 1169/2011				

MEASURE 9	M9 - Improve the interconnection and involvement of the State administration in European and international regulation
Objectives	Improve liaison channels between the state administration and international regulators, and therefore promote the
	contribution of actors with common interests and relevant information to disseminate, by preparing in advance and in
	a harmonised way national positions for negotiation or discussion within the EU and other International Organisations.
Description	A specific procedure should be established in the CNCDA for the timely interconnection between entities in order to
	prepare national positions for international and EU meetings, as well as to ensure their follow-up in the food waste
	area.

MEASURE 9	M9 - Improve the interconnection and involvement of the State administration in European and international regulation				
	In addition, this measure includes assessing the regulatory mechanisms and technical and administrative barriers identified in the diagnosis, thus establishing, at a technical level and in a concerted way, the basis for any required appropriate legislative proposals (including those deriving from EU legislation)				
Target audience	Constituent entities of t	he CNCDA, in particular GPP, APA, I.P., IN	E, I.P., DGAV, ASAE		
T	Targets Indicators Duration				
	nged meetings/year; with arranged follow-	 Number of previously arranged meetings; 	From January 2018		
up; – Evaluate by 31 March 2018 the needs for		 % of evaluated barriers / regulatory mechanisms. 	Promoter	Executor	
action on the regulatory mechanisms and the technical and administrative barriers identified in the diagnosis.			CNCDA (GPP/APA)	CNCDA (GPP/APA/Statistics Portugal/ DGAV/ASAE/DGRM)	
Legislation					

MEASURE 10	M10 - Create and s	timulate a collaborative platforn	n to identify availa	ability by type of food	
Objectives	Create a collaborative accreditation)	platform between food donors and foo	od recipients (or inter	rmediaries with possible prior	
Description	It aims to facilitate the connection between producers of food surpluses and those who need them, thus reducing potential food waste. This electronic platform should prioritise integration between the various existing information systems (on both sides - supply and demand); allow manual interaction between supply and demand in an easy and intuitive way - if necessary by complementing it with mobile app development; allow the management of goods identified according to standards to be defined; and produce the necessary outputs for proper management of food waste (indicators, listings and necessary documents). It will also be used to provide information related to the ENCDA implementation and food waste monitoring.				
Target audience		isinesses, and IPSS and other social solida	rity organisations		
1	argets	Indicators		Duration	
 Launch date: July Status report on I 		 Completion date of the functional requirements document: Jan 18; 	To start in 2019		
demand, levels of integration with other systems, quantities involved, estimates process: Mar 18; Promoter			Executor		
and trends).		 Pilot project implemented by October 2018; Estimation of quantities involved. 	CNCDA (GPP, APA)	GPP/APA	
Legislation					

MEASURE 11	M11 - Promote specific locations for the sale of food products at risk of waste				
Objectives	Ensure that food close to	o the expiry date has its own marketing ci	rcuit that facilitates it	s consumption.	
Description	The intention is to encourage the appearance of points of sale recognisable by the consumer, while ensuring food safety conditions and reaching a range of consumers who otherwise would not consume them, due to lack of information/dissemination.				
Target audience	Consumers and economic operators in food distribution				
	Targets	Indicators		Duration	
0,	ework by July 2018; m by December 2018.	 Publication of a regulatory framework / guidelines; 	From 2019		
		 Monitoring of quantities. 	Promoter	Executor	
			CNCDA (DGAE/DGAV)	DGAE/DGAV, with agri-food retail partners, Municipalities	
Legislation		•		•	

MEASURE 12	M12 - Develop a methodology for the calculation of food waste at the different stages of the supply chain				
Objectives	Disseminate quantified i	nformation on food waste (calculation of	food waste by type of	food supply chain operator).	
Description	This measure aims to develop a harmonised methodology preferably using information already available, by following the good practice of "Collect once, use multiple times". In addition, information gaps will be identified that once overcome may improve the implemented information system.				
Target audience	General public, the central public administration, researchers and students				
1	Targets Indicators Duration			Duration	
 Dissemination of document and ce 	the methodological rtification of the	– Quantified information on food As of July 2017 and it s waste made available to the CNCDA 2030 (SDG time target)		t shall be in force until at least et)	
statistical study b System in 2020;	y the National Statistical	from the second half of 2020 (*).	Promoter	Executor	
publicly available from 2021 (*).		(*) Safeguarding possible delays in the implementation of the amendments to the "Waste Directive"	CNCDA (Statistics Portugal and other PA entities)	Statistics Portugal	
Legislation					

MEASURE 13	M13 - Develop pil	ot projects in the field of health a	and nutrition		
Objectives		articular of the population who receives	donated food or is	in the donation circuit, to the	
	importance of a health				
		ns receiving food aid on the proper use	of the food baskets p	rovided under the Operational	
Description	<u> </u>	t the Most Deprived People (POAPMC)	Presidente de la construction de la construction		
Description		bod waste with the participation of specia			
		ar through manuals produced under the e implementation of training actions for th	•	•	
Target audience		namely those involved in the POAPMC		565Ket5.	
	Targets Indicators Duration				
	ownloads of the book igente: coma melhor,	 Nº of downloads of the book "Smart Food: eat better, save more"; 	From July 2018		
poupe mais" (Smai Save More) produc	rt Food: Eat Better, ced in 2012;	 Date of production of the "Handbook on the use of food baskets"; 	Promoter	Executor	
	, production of the	 Number of training actions and 	DG Health/ISS	Nutritionists in PNPAS	
	use of food baskets";	trainees involved;			
	s actions on the adequate use – Number of people who have seen				
	of food baskets to be carried out in 2018 the Handbook and attended training				
to involve at least 500 people; courses. By 2021, handbook and training actions					
on the proper use of food baskets should					
	reach at least 300,000 people.				
Legislation	Ordinance no. 51/2017	7, of February 2, Order No. 8230-A/2017, o	of September 20		

MEASURE 14	M14 - Prepare periodic reports for general presentation and dissemination			
Objectives	The aim of this measure is mainly to allow examining the actions carried out and their impact, by providing a set of			
	information, including on the ENCDA evaluation, that goes beyond the goal of measure 5.			
Description	Prepare and disseminate periodic ENCDA monitoring and evaluation reports.			
Target audience	Authorities in charge of the CNCDA as well as the general public			
Targets		Indicators	Duration	
 Quarterly submission of monitoring and evaluation reports (4 each year). 		 Number of reports submitted yearly 	In force; permanent	
			Promoter	Executor
			CNCDA (GPP)	GPP
Legislation		•		

Annex IV - Initiatives by other Member States

FRANCE

The French model (Law no. 2016-138, of February 11, 2016²⁹) derives from a study published in March 2011 by FAO, "*Global food losses and food waste – Extent, causes and prevention*", which identified the stages associated with greater waste, in particular the HORECA channel.

From February 2016, the French State, by means of the above law and involving producers, industry, distribution and consumers, adopted a punitive approach, unlike the Italian model (please see below), based on a system of fines on retail stores with an area above 400 m² (supermarkets).

French supermarkets that fall within this typology must donate "good quality" food approaching the end of its shelf life to solidarity institutions and food banks. They should establish cooperation agreements on food donation with humanitarian organisations and are prohibited from marketing products near the end of their shelf life at prices lower than usual.

France is also investing in consumer awareness campaigns, and in strengthening the ongoing dialogue with the industry, in order to rationalise purchases so that only what is needed is actually bought. The aim is again to encourage unit purchase and stimulate deferred promotions, so that in "3 for 2" offers, the third unit can be taken home at a later time. It is also recommended to improve stock management, to timely remove products from shelves before the expiry date and to develop pilot programmes in canteens in order to adjust the "right dose".

ITALY

Bill no. 2290 approved by the Chamber of Deputies on March 17, 2016, and published in the GAZZETTA UFFICIALE as "LEGGE 19 agosto 2016, n. 166" is designed to reduce taxes on garbage in proportion to the quantity of food donated by each establishment. Likewise, it calls for simplification of donation processes (bureaucratic burden) for food worth up to 15,000 euros for each assignment made in the previous month. It also proposes the collection of agricultural products that remain in the field and their delivery free of charge. The Italian model also provides for a tax incentive scheme, such as VAT refunds according to the quantity of goods delivered, and the reduction of the Ecotax (in view of the lower volume of waste generated).

SPAIN

Unlike the French and Italian initiatives, which have chosen the legislative route, Spain does not have a law to combat food waste. Rather, it has launched a strategy, "*Más alimento, menos desperdício*³⁰" (More food, less waste) where it challenges the different actors and economic operators involved in the various stages of the food supply chain.

Preventing and reducing food waste involves a multi-sectoral and multidisciplinary approach. The Spanish strategy is bound via recommendations, voluntary agreements and self-regulation, although some measures may be accompanied by regulatory initiatives aimed at correcting inefficiencies in the food supply chain.

The strategy of the Spanish Ministry of Agriculture, by adopting criteria of transparency, sustainability and solidarity, aims to limit food losses and waste and to reduce environmental pressures, by means of 5 programme axes:

²⁹ <u>https://www.legifrance.gouv.fr/eli/loi/2016/2/11/AGRX1531165L/jo/texte</u>

³⁰ http://www.mapama.gob.es/es/alimentacion/temas/estrategia-mas-alimento-menos-desperdicio/bloque2.aspx

- Conduct studies to better understand the problem, with some reports having already been published (studies on food waste in households, agricultural production, the food industry; food waste indicators in the confidence barometer for the agrifood sector, 2013);
- Disseminate good practices and promote awareness raising actions; drat good practice guides to reduce food waste among economic operators throughout the food supply chain, including distribution, and among consumers, by training them in practices related to the best way to conserve perishable food;
- Analyse and reassess normative or legal aspects; identify limitations on re-use of non-tradable products; review quality standards such as size or shape; review fiscal policy that facilitates food donation, etc.;
- Collaborate with other actors: promote voluntary compliance agreements; develop protocols with food banks and other charities; promote short supply chains; promote sector or company audits;
- Encourage the design and development of new technologies.

A strategy logo, with its own regulation, was also created in order to increase uptake by the different actors and economic operators along the food supply chain, who may benefit from using the logo by adopting a set of commitments.

NORDIC COUNTRIES

In these countries there is an extensive collaboration between the various levels of stakeholders involved and the public administration. In Norway, the ForMat Project³¹ was developed in 2010, in collaboration with producers, distributors and research institutions, with government support, and was followed up by the MatVett Project³², which developed statistics on waste along the supply chain.

The study carried out under this project aims to provide an overview and an assessment of the redistribution potential in Nordic countries, both by food banks and by direct and local redistribution organisations, and to draw up the legal basis for the regulation and control of food redistribution in these countries, while considering possible ways to increase harmonisation between them. Food Safety Authorities from the following countries are involved in the project: Sweden; Finland; Denmark; Norway.

One of the major concerns was precisely to define what a food bank should or should not be, its role as a food redistribution centre, where food is donated by producers, retailers and other companies/organisations to organisations that serve or distribute food to the needy. Food banks may be national, regional or local, with different levels of coverage and coordination. Key stakeholders (farmers, industry, distribution, charities and public administration) should collaborate in the planning and running of food banks.

³¹ <u>https://ec.europa.eu/food/sites/food/files/safety/docs/fw_lib_format-rapport-2016-eng.pdf</u>

³² https://www.oecd.org/site/agrfcn/meetings/Session%203 Per%20Hallvard%20Eliassen.pdf

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