

TAKE THE CHALLENGE AND START THE 3R's

Reduce, Reuse, Recycle.

Promoting zero-waste lifestyle among adults.

This document was developed by Partners of 3R's project, 2021

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SHOPPING AND FOOD



INTRODUCTION

The aim of this module is to raise awareness on sustainability issues and solutions around the topic of shopping and food. This booklet will introduce how sustainability is becoming more and more important both for customers, and stores. We also will look into the food waste issue, and will dig deeper in its causes, consequences and ways of reduction in the amount of wated food, which will lead us to the introduction of a more sustainable food supply chain.

THE TRANSFORMATION TOWARDS SUSTAINABLE SHOPPING

It is becoming more and more important to consumers to shop in a sustainable way. The big supermarket franchises as well as some small ones have already started to recognise the opportunity of attracting consumers by promoting a more sustainable approach and applying changes that leads to a more sustainable packaging and shopping system.

“With consumers increasingly considering and acting on sustainability issues when it comes to patronage and purchases, now is the time for supermarkets to actively examine the opportunities and challenges facing the industry, to best align with these growing consumer feelings,” said Michael Sansolo, research director of CCRRC North America. **“Shoppers want local supermarkets to help them practice sustainability, and not doing so could mean losing shoppers down the road.**

Incorporating sustainability practices and policies into stores will be even more important in connecting with the future consumer in the coming years as Gen Z and the upcoming generations are becoming more passionate about the environment, more so than any other generation.

The most popular sustainability initiatives according to consumers are:

- Providing on-site recycling bins
- Labeling products that are locally made/grown
- Offering points/prizes for waste saved through purchases and/or recycling
- Providing biodegradable bags for produce
- Selling products in a wider variety of sizes to help limit food waste

THE FOOD WASTE ISSUE:

The global volume of food wastage is estimated at 1.6 billion tonnes of “primary product equivalents.” Total food wastage for the edible part of this amounts to 1.3 billion tonnes. ... The direct economic consequences of food wastage (excluding fish and seafood) run to the tune of \$750 billion annually.

Source: Food and Agriculture Organization of the United Nations <https://www.fao.org/news/story/en/item/196402/icode/>

- Roughly one-third of the food produced every year (1.3 billion tonnes) gets wasted.
- Industrialized and developing countries dissipate roughly the same quantities of food - respectively 670 and 630 million tonnes.
- Global quantitative food waste per year is roughly 30 per cent for cereals, 40-50 per cent for root crops, fruits, and vegetables, 20 per cent for oilseeds, meat and dairy plus 30 per cent for fish.
- At the retail level, large quantities of food are wasted due to quality standards that over-emphasize appearance.

- Food loss and waste also amount to a major squandering of resources, including water, land, energy, labor, and capital, and needlessly produce greenhouse gas emissions, contributing to global warming and climate change.
- Even if just one-fourth of the food currently lost or wasted globally could be saved, it would be enough to feed 870 million hungry people in the world.

Global food waste is a far-reaching problem with tremendous financial, ethical and environmental costs. The causes range from bumpy roads to overly-selective customers, but regardless of cause, we can all pitch in to combat this global issue

The amount of food lost or wasted costs [2.6 trillion USD](#) annually and is more than enough to feed all the [815 million](#) hungry people in the world - [four times over](#).

Source: United Nations Environment Programme

<https://www.unep.org/thinkeatsave/get-informed/worldwide-food-waste>

WHAT IS FOOD WASTE?

The history of food waste is closely linked to globalisation. In an ever more networked world, supply chains get longer, and everything is available everywhere the whole year round. On that often-long journey from farm to table, food is lost or wasted at every stage, and fresh foods such as fruits, vegetables, dairy and meat are particularly vulnerable.

“Food waste” and “food loss” are commonly used terms but don't quite mean the same thing.

- “Food loss” typically refers to food lost in earlier stages of production such as harvest, storage and transportation.
- “Food waste” refers to items that are fit for human consumption but thrown away, often at supermarkets or by consumers.

THE ENVIRONMENTAL IMPACT OF FOOD WASTE

- When edible items are discarded, all the resources required to bring food from the farm to your table: water for irrigation, land for planting, fuel for powering harvest and transport vehicles are wasted as well.
- [70 per cent](#) of fresh water is used for agricultural purposes, including crop irrigation and drinking water for livestock.
- According to the FAO's [Food Wastage Footprint](#) report, 250 km³ of water – three times the volume of Lake Geneva – is used each year to produce food that is ultimately lost or wasted.
- Twenty-eight per cent of the world's [agricultural area](#) is used to produce food that is ultimately lost or wasted each year. Not only does that result in unnecessary degradation of land, but clearing land for agricultural purposes is also a cause of deforestation, which eliminates wildlife habitats and wipes out greenhouse-gas-absorbing trees.
- The FAO estimates the [carbon footprint](#) of food waste is 3.3 billion tonnes of CO₂ equivalent per year. Not only are oil, diesel and other polluting fuels used to power production machinery and transport vehicles, but greenhouse gases are also emitted by food waste itself.
- Discarded waste rotting in landfills gives off methane, a potent greenhouse gas [25 times more efficient](#) at trapping heat than carbon dioxide.

WHAT CAN WE DO ABOUT IT?

According to the [United Nations](#), the world's population is expected to swell from 7.6 billion to 9.8 billion by 2050. As food production struggles to keep up with the rapidly growing global population, food waste is predicted to grow - if we don't do something about it.

- Help reduce loss in handling, storage, processing and transport
- Share, donate the surplus
- Turn waste into worth
- Educate people on food safety
- Change consumer behaviour

REDUCING FOOD WASTE:

Reducing food waste starts with smart shopping. By making a list with weekly meals in mind, you can save money, time and may eat healthier food.

Shopping tips for reducing food waste:

- Make your shopping list based on how many meals you will eat at home. Will eat out this week?
- Check what you have in your fridge and cupboards first to avoid buying food you already have.
- Include quantities on your shopping list to make sure you buy just what you need.
- Avoid marketing gimmicks that encourage you to buy more than you need.
- Buy fresh ingredients in smaller quantities more often so you waste less and enjoy fresher ingredients.
- Choose loose fruit and vegetables over pre-packaged to better control the quantity you need.

THE SUSTAINABILITY OF THE FOOD CHAIN

Food production has a significant impact on the environment. The way we produce and consume food is hurting the planet and ourselves. Issues like: greenhouse gases emissions, the use of land and water resources, pollution, depletion of phosphorus, and the use of chemical products such as herbicides and pesticides are now part of our everyday news.

A number of global trends are influencing food security, poverty and the overall of food sustainability and agricultural systems. Today we are living through the biggest food system failures that we have ever had and this are just a few:

- Population growth
- Climate change
- Hunger and extreme poverty
- Food waste
- Conflicts, crises and natural disasters are increasing in number and intensity.

A World Resources Institute (WRI) report states that global food production would have to increase 50% to feed the world's 10 billion mouths in 2050, requiring a landmass twice the size in India.

The global food production industry is responsible for up to 30% of total green house gases emissions. Today the world is facing the biggest food system failures that we have ever had.

SHORT FOOD SUPPLY CHAIN (SFSC)

SFSCs are the key to re-localized economy but also of a new, more eco-friendly, democratic and social system.

Definition of agro-ecological transition

A systemic transformation about making our agriculture and our food more ecological, impacting multiple stakeholders like farmers, supply chains, or natural resources managers, and which is marked with a deliberate political will to change. It is a political, economic and social process all at once. FAO's (Food and Agriculture Organization of the United Nations) definition of food sustainability. For our food to be sustainable, it must meet five criteria:

- It protects ecosystem biodiversity
- It is accessible and culturally acceptable
- It is economically fair and affordable
- It is safe, nutritionally adequate, and healthy
- It optimises natural and human resource use

Short Food Supply Chains

- Involving a limited number of economic operators, committed to co-operation, local economic development, and close geographical and social relations between producers, processors and consumers.
- Direct sales or short chains (the consumer and the producer contact directly or with one or as few as possible intermediate actors)

Economic benefits

- contribute rural development and economic regeneration
- buying local preserve small farms and sustain rural communities
- via multiplier effect it, strengthens local demand, preserve local jobs, and enhance local economy
- increase tourism due to local branding and recreational shopping opportunities

Social benefits

- strengthen social capital in local communities through the creation of new networks engaging both farmers and consumers
- enhance mutual trust and respect between producers and consumers
- increase the food awareness and culinary education of consumers
- strengthen cultural/regional identity, food provenance, sense of trust and of being food secure

RESOURCES:

1. <https://www.unep.org/thinkeasave/get-informed/worldwide-food-waste>
2. <https://publications.jrc.ec.europa.eu/repository/handle/JRC80420>
3. <https://www.fao.org/family-farming/detail/en/c/415240/>
4. <https://www.fao.org/food-systems/en/>
5. <https://www.fao.org/news/story/en/item/196402/icode/>

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