



VET4FOOD

VET Training for Food Sustainability

PR2 Food sustainability VET Teachers' Training (Leader: IDG) **NUTRITIONAL AREA – UNIT 1**



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- Topic 2: Understanding consumer's food choices and their implications.
- Topic 3: Novel foods as an alternative to be more sustainable and profitable.
- Topic 4: One health and planetarian diet approach as a model of sustainability



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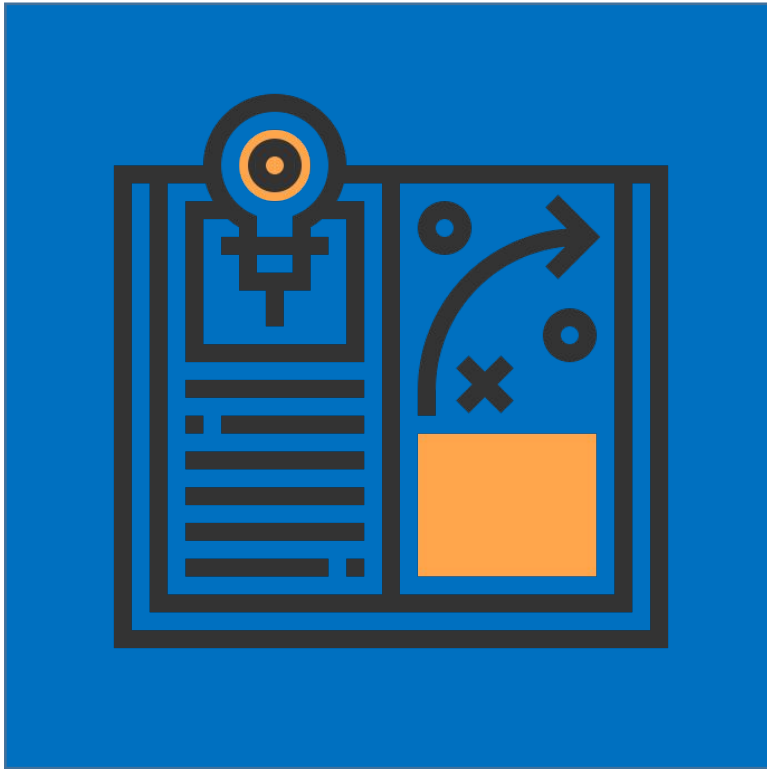
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Brief introduction about the Unit and its objectives and competences

- The nutritional area of sustainable food systems takes into account the implication that different foods have for our health in a long – term period.
- In this unit we explore the concept of sustainable diets and the implication of our food behaviours. It would like to be a tool to recognize proper information about health and nutritional food. Nutritional recommendations are integrate tools for sustainability that can contribute to increase health and reduce global warming at the same time.
- **Important!:** The contents of this module are for educational purposes and are not intended to offer personal medical advice. You should seek the advice of your physician or other qualified health provider with any questions you may have regarding a medical condition. Never disregard professional medical advice or delay in seeking it because of something you have read on this module.

OBJECTIVES



1. To recognize factors, habits and food choices influencing our health, our planet and our community.
2. To be informed about alternative ingredients and unconventional food.
3. To recognise well balanced diets according to nutritional needs.
4. To recognise proper information about health and nutritional food.

Topic 1: How to eat healthy and save the planet

- 828 million in 2021 number of people affected by hunger (FAO, 2022)
- 80% increase in global agricultural greenhouse gas emissions by 2050 if we keep the current dietary trends
- Adopting plant-rich diets would **use less land, produce less greenhouse gas, require less water and improve animal welfare**. It would also make available more cropland, crucial with the global population set to hit 9 billion people in 2050.

THE KEY COMPONENTS OF A SUSTAINABLE DIET

To advance towards healthy and environmentally friendly dietary patterns, it is necessary to **promote changes in consumption**, incorporating sustainability in the diet-based guidelines based on food in each country, proposing dietary recommendations for those who wish to adopt diets based on food of vegetable origins.

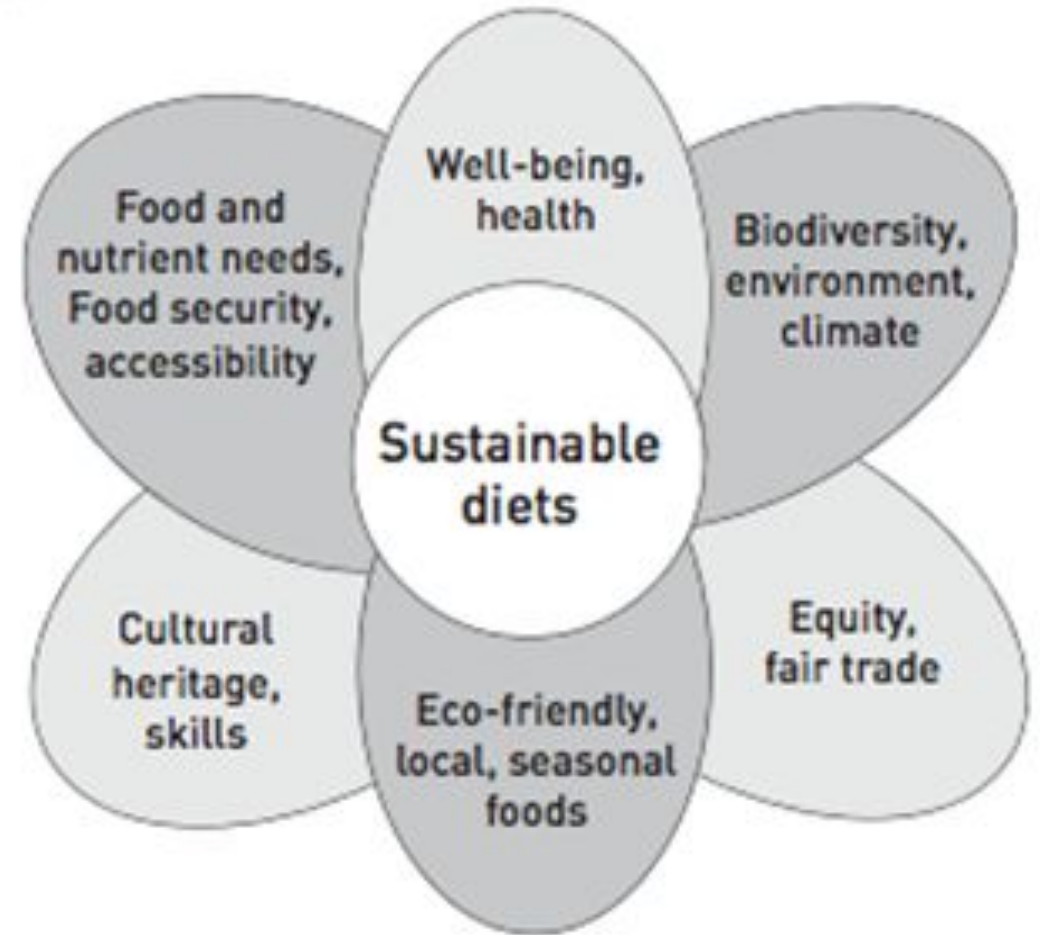


Figure 1. Schematic representation of the key components of a sustainable diet.

*What does we mean
with healthy diet?*

European Food Dietary Guidelines

Main European food dietary guidelines give similar messages, but we can find differences in details depending on the country specific diet-related problems and food consumption patterns.

One of the Italian guidelines main messages are, for example, to choose quality and limit the amount of fats, while the Danish Guidelines recommend to choose low fat dairy products and less saturated fat and eat more fish.

Most countries have developed a graphic representation of Food Based Dietary Guidelines to illustrate the proportions of different foods with similar characteristics that should be included in a balanced diet, although they may have a list of messages or tips as well.

Graphic formats provide a consumer-friendly framework so that if foods from the main groups are eaten each day, an important first step is taken towards achieving a healthy diet, without specific knowledge of nutrients.

HEALTHY EATING PLATE

Use healthy oils (like olive and canola oil) for cooking, on salad, and at the table. Limit butter. Avoid trans fat.



The more veggies – and the greater the variety – the better. Potatoes and French fries don't count.

Eat plenty of fruits of all colors.



STAY ACTIVE!

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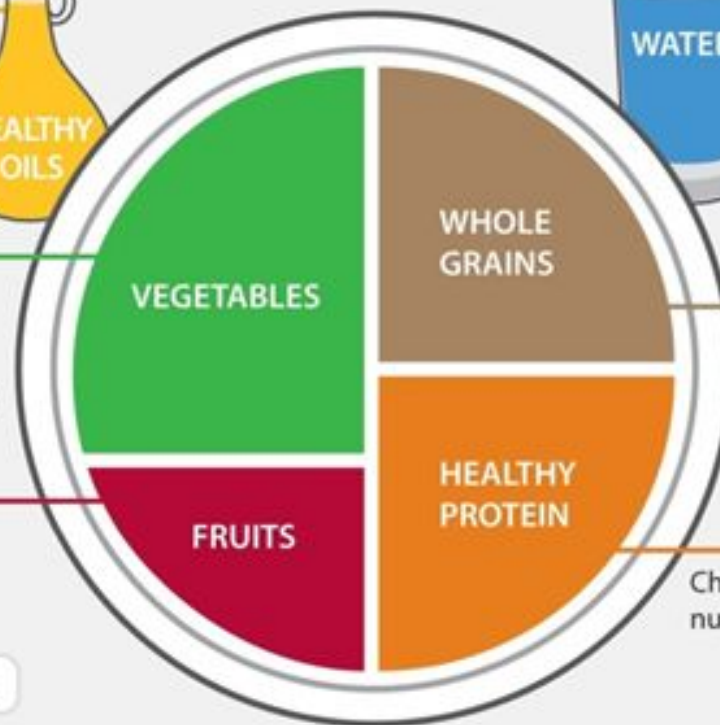
Harvard T.H. Chan School of Public Health
The Nutrition Source
www.hsph.harvard.edu/nutritionsource



Drink water, tea, or coffee (with little or no sugar). Limit milk/dairy (1-2 servings/day) and juice (1 small glass/day). Avoid sugary drinks.

Eat a variety of whole grains (like whole-wheat bread, whole-grain pasta, and brown rice). Limit refined grains (like white rice and white bread).

Choose fish, poultry, beans, and nuts; limit red meat and cheese; avoid bacon, cold cuts, and other processed meats.



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Topic 2: Understanding consumer's food choices and their implications.

- People's food choices and nutrition-related practices are determined by many factors: biological and personal experience with food, their perceptions, beliefs, values, emotions and personal meanings.



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Diet and lifestyle

Dietary recommendations should be integrated with others linked to lifestyle, such as:

- Knowledge of where to buy and how to cook unprocessed foods
- Find time for food-related activities in a social or family context
- Practice of regular physical activity, possibly in the open air

Activities such as these help to maintain a balanced life in terms of physical, mental and emotional health. The true purpose of a healthy lifestyle is not only to live longer, but also to do so in health and enjoyment.

Finding scientific based evidence

- Another challenge for consumers is to find scientific based evidence in a over-informed world.
- We find very often all kind of **claims** on food packaging and this may cause some confusion.



What is a "Health Claim"?



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Health Claims

- A health claim is any statement about a relationship between food and health. The European Commission authorises different health claims provided they are based on scientific evidence and can be easily understood by consumers.
- We can have two types of claims:
 - Nutritional claims. The nutritional indications given on food products, such as "low in fat", "without added sugar", "rich in fiber", are set and not therefore at the discretion of the food company.
 - Health claims: any statement that the consumption of a given food can be beneficial to health, such as the claim that a food product can help to strengthen the body's natural defences or improve learning skills.

Health claims

Do the food or ingredients have a health benefit?

Is the claimed effect defined?

What is the evidence?

The whiteboard contains a mind map centered on 'Health claims'. It features three main branches: 1) 'Do the food or ingredients have a health benefit?' with a pill icon; 2) 'Is the claimed effect defined?' with a glass of milk icon; and 3) 'What is the evidence?' with a magnifying glass icon. A fourth branch points to a list of questions: 'What is the evidence?', 'What is the source of the evidence?', 'What is the quality of the evidence?', and 'What is the relevance of the evidence?'.

Health Claims

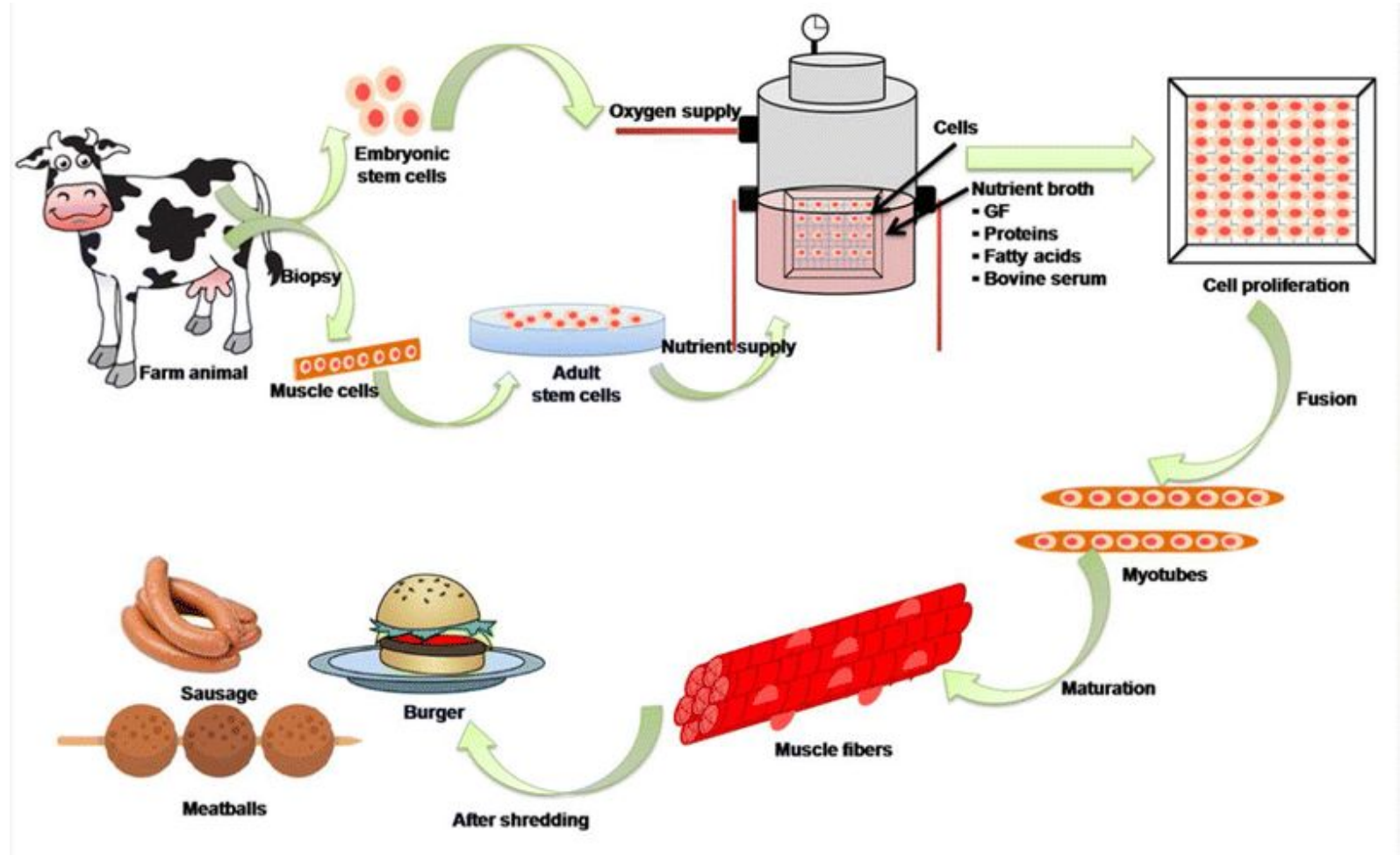
- Among the information present on the labels of food we find more and more the expression "without ...". This practice has been increasing in recent years due to some scientific studies that have provided information on the dangerousness of some substances contained in food or in their packaging. Among these substances we find:
 - Acrylamide in products that have been cooked at high temperatures
 - Glyphosate and other pesticides in cultivated foods
 - Mercury in fish
 - Bisphenol A (and other substances) in food plastics
 - Nitrites and nitrates in processed meats

Topic 3: Novel foods as an alternative to be more sustainable and profitable

- Novel Food is defined as food that had not been consumed to a significant degree by humans in the EU before 15 May 1997, when the first Regulation on novel food came into force.
- 'Novel Food' is the newly developed, innovative food, food produced using new technologies and production processes, as well as food which is or has been traditionally eaten outside of the EU.
- Novel Foods must be:
 - Safe for consumers
 - Properly labeled, in order to avoid misleading consumers
 - If novel food is intended to replace another food, it must not differ of the original one in a disadvantageous way the consumer.

Four examples of Novel Foods emerging in Europe: cultured meat

1. **Cultured meat** or 'lab-grown meat', by removing the need for animal slaughter and resource and land-intensive farming, could provide a sustainable alternative to conventional meat products.



Four examples of Novel Foods emerging in Europe: edible insects

2. **Edible insects** have been one of the major trends in the last decade. But are they safe? Do insects taste good? Let's take a look to this video to learn more about it:



Four examples of Novel Foods emerging in Europe: fungi

- Fungi, which includes organisms such as yeasts, moulds and mushrooms, are considered important for the health of both people and planet.
- Mushrooms are considered a good source of iron, copper, riboflavin, niacin and dietary fibre and, when cooked, can release essential nutrients that contribute to a healthy diet, such as protein, vitamins B, C and D, and selenium. The recent application of a vitamin D2 mushroom powder is an example of how fungi are entering the European market in novel forms.

Four examples of Novel Foods emerging in Europe: algae

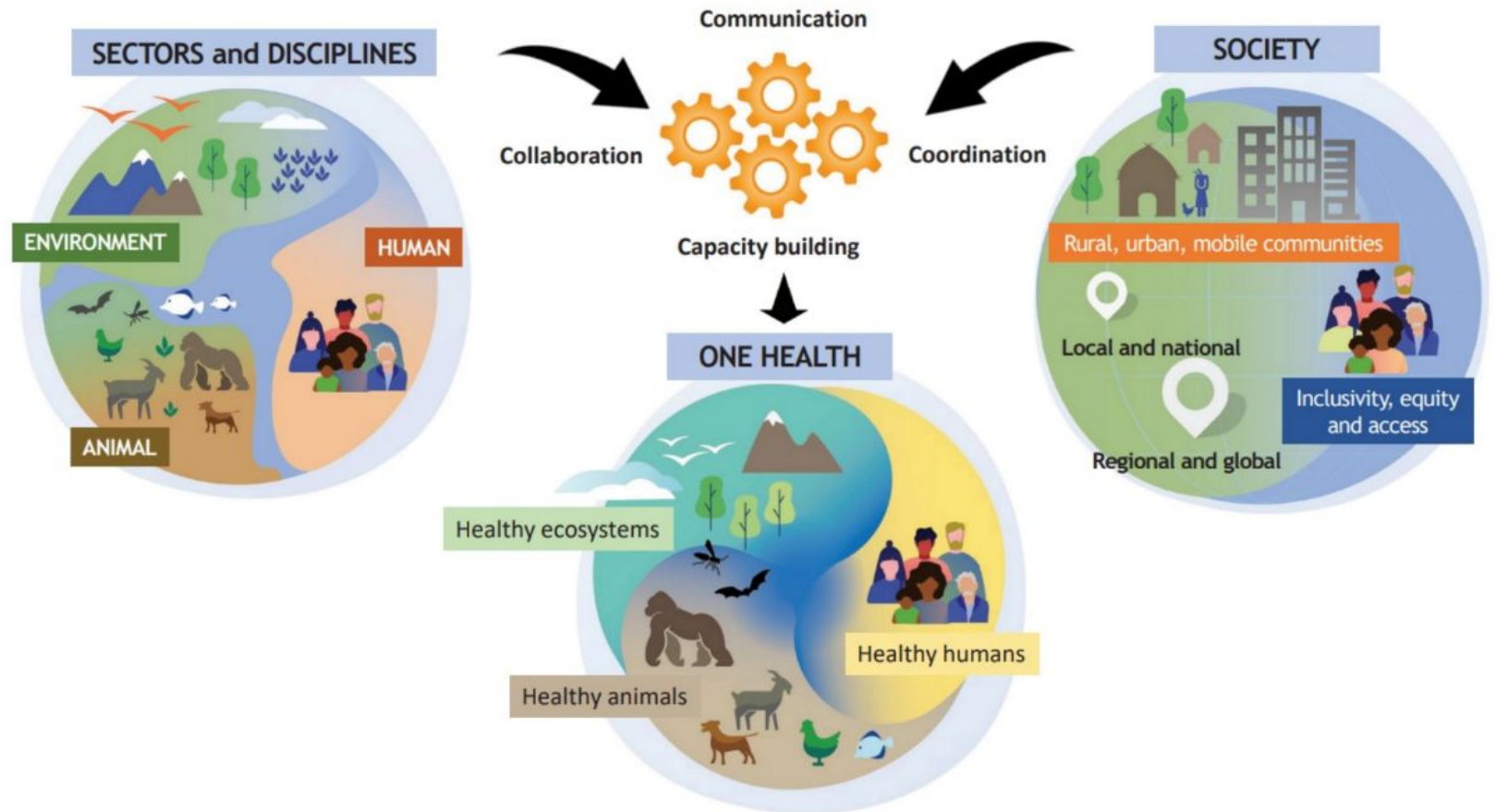
- Rich in dietary fibres, micronutrients, bioactive compounds, and protein content, algae are considered beneficial for human health. If farmed or cultivated in ocean environments, algae can also:
 - Regulate marine ecosystems by capturing solar energy for photosynthesis and forming organic food molecules and oxygen as by products, providing a valuable life-line for marine species.
 - Conserve valuable freshwater thanks to algae being able to grow in salt-water environments.
 - Form part of the circular bio-economy due to algae's efficient carbon capture; some fast-growing algae can capture carbon more quickly than trees.

Topic 4: One health and planetarian diet approach as a model of sustainability.

- **One Health** is an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems. It recognizes the health of humans, domestic and wild animals, plants, and the wider environment (including ecosystems) are closely linked and inter-dependent.
- The approach mobilizes multiple sectors, disciplines and communities at varying levels of society to **work together to foster well-being and tackle threats to health and ecosystems**, while addressing the collective need for **clean water, energy and air, safe and nutritious food, taking action on climate change, and contributing to sustainable development**. (OHHLEP One Health definition, 2021) .

One health and planetarian diet approach as a model of sustainability.

- The figure represents the need for practical action to put the One Health approach into practice, using the “4Cs”: communication, collaboration, coordination, and capacity building.



EU Green Deal and Farm to Fork'

- Launched on 20 May 2020, the **Farm to Fork'** strategy , as part of the EU Green Deal, put forward the EU's ambition for making the whole food system a model of sustainability at all stages of the food value chain from the farm to the fork. The strategy included not only the agricultural aspects but also the themes related to create healthy retail, restaurant, urban and school environments; and to invest in consumer education.

EU Green Deal and Farm to Fork'

- The strategy takes into consideration healthy and sustainable food production as well as healthy and sustainable food supply and consumption. This means:
 - Ensuring that the food chain, covering food production, transport, distribution, marketing and consumption, has a neutral or positive environmental impact
 - Ensuring food security, nutrition and public health
 - Preserving the affordability of food, while generating fairer economic returns in the supply chain

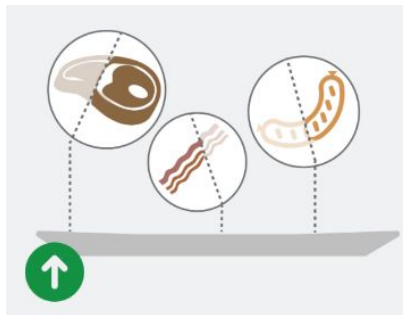
Planetary Health Diet

- The planetary health diet —characterized by a variety of high-quality plant-based foods and low amounts of animal-based foods, refined grains, added sugars, and unhealthy fats—is designed to be flexible to accommodate local and individual situations, traditions, and dietary preferences.



Strategies to reduce meat consumption

Take a look at some strategies to reduce meat consumption:



Eat a little less red meat, any way you can

Assess how often you eat red meat, and see if one of these strategies can help you find a way to cut back a bit.




Consume less meat, enjoy more variety

This approach boosts healthy plant-based foods like beans, nuts, whole grains, and other veggies, while still providing ways to incorporate some of your favorite animal-based foods.



Swap out red meat for healthier meats

If you're thinking of a meal that features red meat, see if you can replace it with a better option, like poultry or seafood.



Prioritize hearty and savory plant-based preparations

Simple strategies for creating filling, delicious, and even budget-friendly plant-based dishes.

DESCRIPTION OF THE ASSESSMENT SYSTEM

Continuous assessment is an evaluative method where different activities or tests are established throughout a subject, thus assessing the student's learning process. The permanent focus of attention is established on the student and on his/her teaching-learning process.

The VET4FOOD evaluation system is based on different types of pre-established tools in order to guarantee the systematic collection and analysis of the results. In this way it is possible to offer to students and self-learners feedback about the acquired knowledge and competences, their level of learning and, at the same time, offer a stimulus to the teacher to redirect and/or adapt the training.

- Every learning activity receives a score out of 10 points and represents a percentage of the total score of that block of the assessment. The weighted average of learning activities' scores represents 50% of the score of the unit. The result of the Unit's Quiz represents the remaining 50% of each unit's assessment score.
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PR2 Food sustainability VET Teachers' Training (Leader: ISIS De Gennaro)

BIODIVERSITY, SEASONALITY AND CLIMATE CHANGES - UNIT 2



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- Topic 2 - The impact of food production on climate changes in global industrial food production and local sustainable food production
- Topic 3 - Organic food production and its labelling
- Topic 4 - Gastronomy contributes to biodiversity preservation



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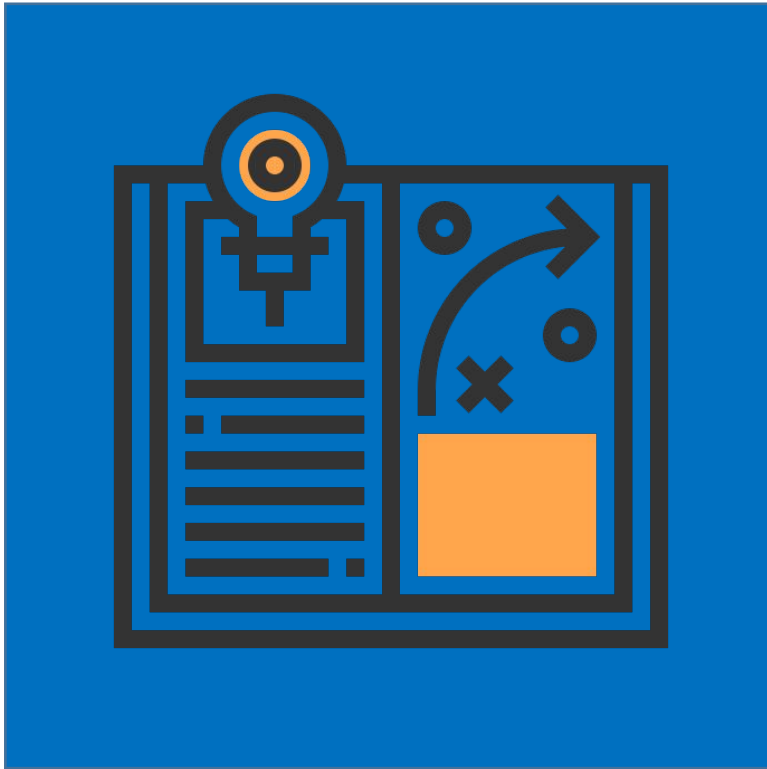
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Brief introduction about the Unit and its objectives and competences

- This module focuses the attention on the importance of biodiversity, seasonality and climate changes in reference to food; the module highlights how food production impacts on climate changes and how an organic food consumption can help environment (Ex. reduction of CO2 emissions).
- Starting from the definitions of the three concepts we will understand how they are related and how food choices are important to guarantee sustainable choices.

OBJECTIVES



1. Know how food consumption impacts the environment and biodiversity.
2. Know how climate changes and societal challenges influence food production.
3. EU and national labeling on organic food.
4. How gastronomy contributes to biodiversity preservation or loss

Topic 1 - Importance of biodiversity at multiple levels

- Biodiversity is a term used for the first time in the middle of 80' by an entomologist Eduard O. Wilson to describe the enormous variety of life on Earth.
- Biodiversity refers to every living thing starting from small part like genes to plants or animal species, up to the most complex levels as ecosystems from including plants, bacteria, animals, and humans.
- It is important to emphasize the balance in the various ecosystems and the close interrelations of the various elements such as plants, animals, climate. If one of these elements undergoes changes, the others will also suffer the consequences of those changes.

Topic 1 - Importance of biodiversity at multiple levels

- In addition to biodiversity, it is important to reflect on the concept of seasonality.
- Seasonal food is referred to **each type of fruit and vegetable grown in the ideal conditions for growth and quality**. For this, fruit and vegetables are grown and harvested in different locations and in different seasons throughout the year. (Source EUFIC 1) Seasonality can be global or local.
- **Global seasonality refers to where foods are grown**: foods that are produced in season but not necessarily consumed where they were locally harvested, for example eggplants are produced in Italy during summer but are eaten in Germany.
- **Local seasonality refers to where the food is produced and consumed**. In this case eggplants are grown and consumed in Italy during summer.

Topic 1 - Importance of biodiversity at multiple levels

GLOBAL VS LOCAL SEASONALITY



EUFIC : European Food Information Council

www.eufic.org/en/healthy-living/article/are-seasonal-fruit-and-vegetables-better-for-the-environment



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Topic 2 - The impact of food production on climate changes in global industrial food production and local sustainable food production.

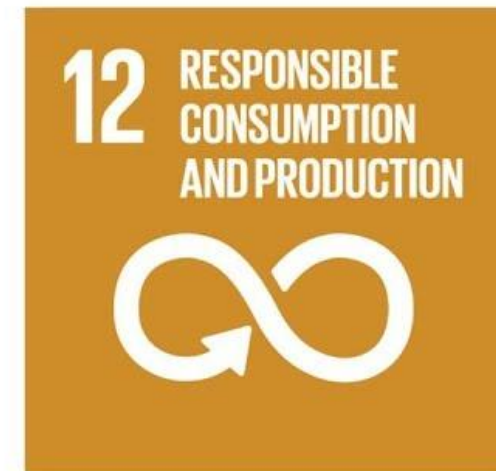
- According to United Nations 'Climate change refers to long-term shifts in temperatures and weather patterns. These shifts may be natural, such as through variations in the solar cycle. But since the 1800s, human activities have been the main driver of climate changes, primarily due to burning fossil fuels like coal, oil and gas'.
- The changes in climate are not only the rising of temperature, but also intense drought, increasing fires, catastrophic storms, scarcity, rising sea levels, melting polar ice, catastrophic storms, water scarcity, declining biodiversity.

Topic 2 - The impact of food production on climate changes in global industrial food production and local sustainable food production.

But, what is the impact of food and agriculture on the environment?

Environment and Food Consumption

SUSTAINABLE DEVELOPMENT GOALS



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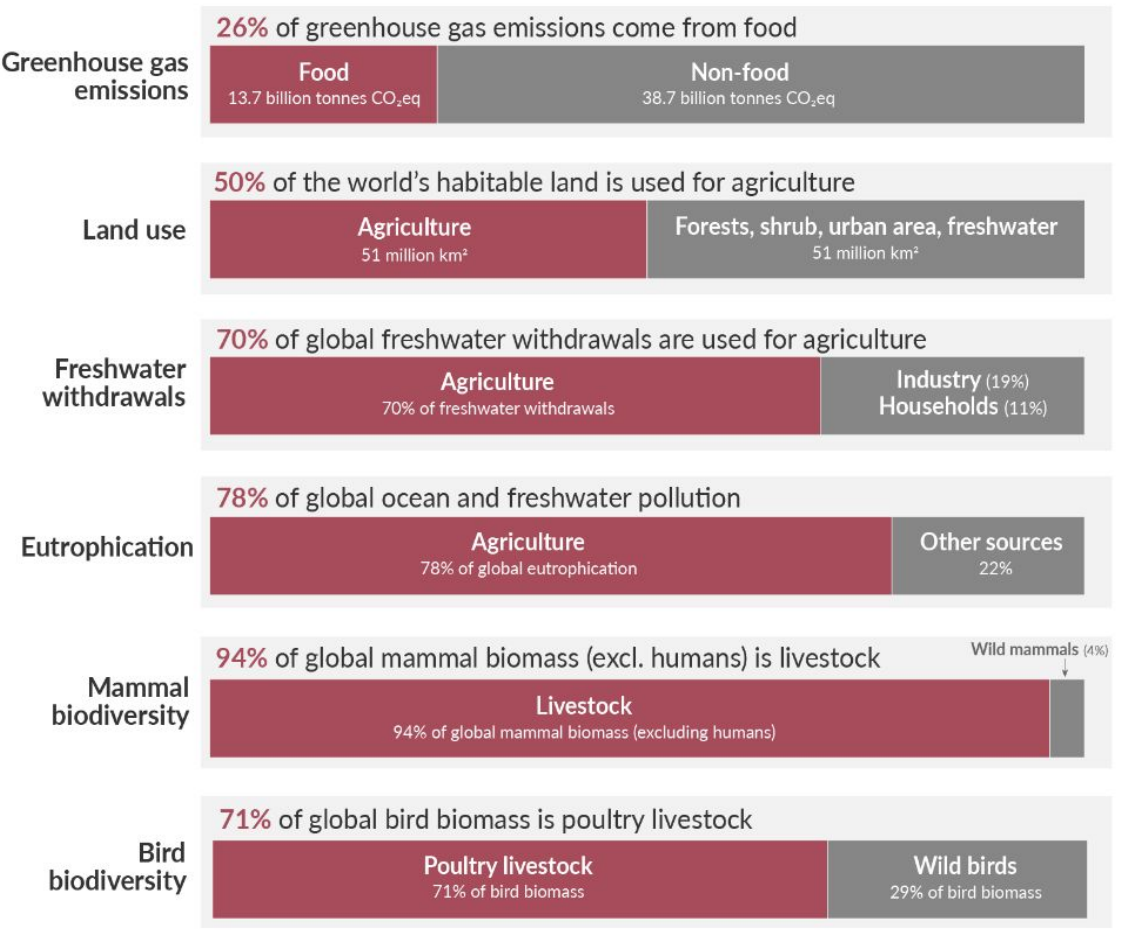


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According to Our World in Data the impact is heavy:

- The following chart shows the environmental impacts of food and agriculture.
- Tackling what we eat, and how we produce our food, plays a key role in tackling climate change, reducing water stress and pollution, restoring lands back to forests or grasslands, and protecting the world’s wildlife.

The environmental impacts of food and agriculture 



Data sources: Poore & Nemecek (2018); UN FAO; UN AQUASTAT; Bar-On et al. (2018). OurWorldinData.org – Research and data to make progress against the world’s largest problems. Licensed under CC-BY by the author Hannah Ritchie. Date published: November 2022.

Topic 2 - The impact of food production on climate changes in global industrial food production and local sustainable food production.

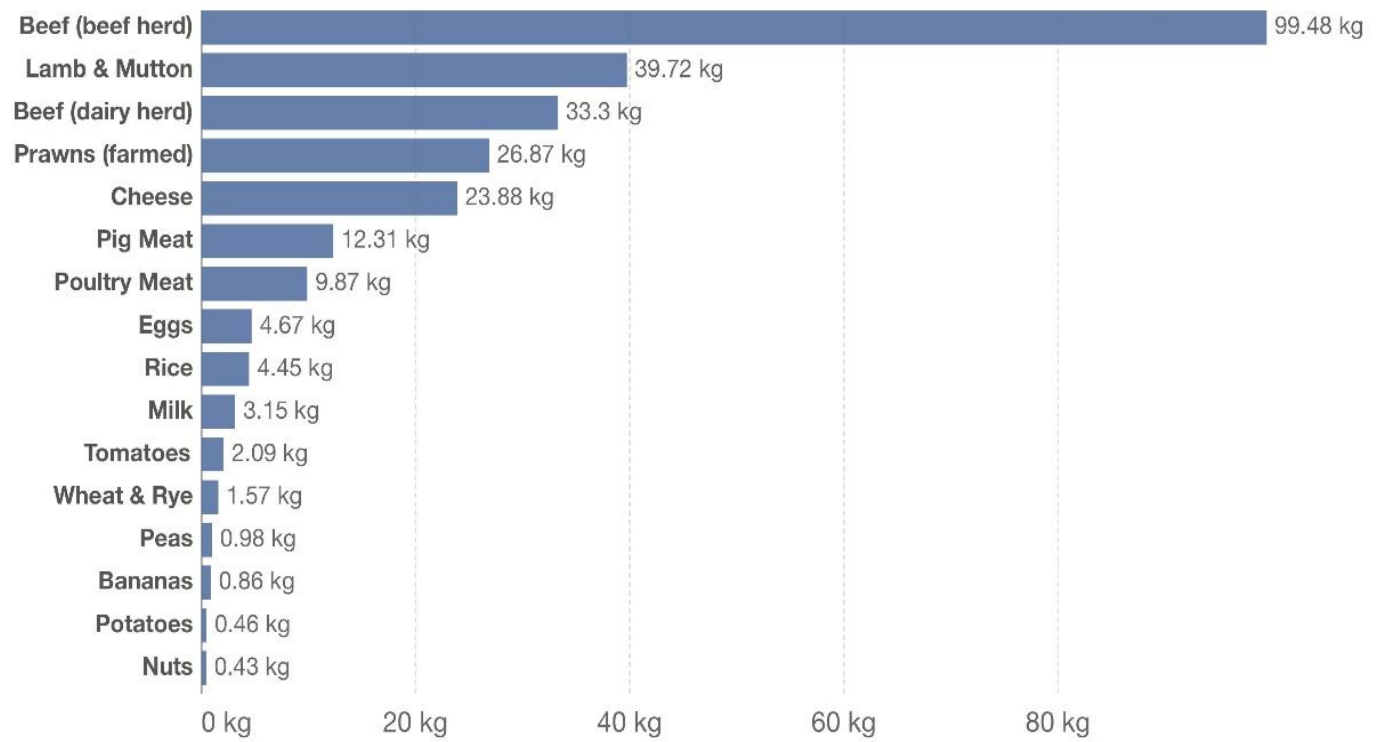
Greenhouse gas emission

- The growing request of food has as consequence an impressive higher greenhouse gas emission.
- The following chart shows the greenhouse gas emission per kilogram of food product measured in carbon dioxide equivalents (CO2eq).

Greenhouse gas emissions per kilogram of food product



Emissions are measured in carbon dioxide equivalents (CO2eq). This means non-CO2 gases are weighted by the amount of warming they cause over a 100-year timescale.



Source: Poore, J., & Nemecek, T. (2018). Reducing food's environmental impacts through producers and consumers.
Note: Greenhouse gases are weighted by their global warming potential value (GWP100). GWP100 measures the relative warming impact of one molecule of a greenhouse gas, relative to carbon dioxide, over 100 years.
OurWorldInData.org/environmental-impacts-of-food • CC BY



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Topic 2 - The impact of food production on climate changes in global industrial food production and local sustainable food production.

Some techniques of sustainable agriculture

- *Respect of seasonality*: planting and producing food according the right season.
- *Rotating crops*: planting variety of crops can have benefits for healthier soil and improved pest control
- *Planting cover crops and perennials*. Cover crops such as clover, rye are planted during off-season times when soils might otherwise be left bare, while perennial crops keep soil covered and maintain living roots in the ground year-round. These crops protect and build soil health by preventing erosion, replenishing soil nutrients, and keeping weeds in check, reducing the need for fertilizers and herbicides.
- *Reducing or eliminating tillage*. Traditional plowing (tillage) prepares fields for planting can cause soil loss. No-till or reduced-till methods, which involve inserting seeds directly into undisturbed soil, can reduce erosion and improve soil health.

Topic 2 - The impact of food production on climate changes in global industrial food production and local sustainable food production.



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Topic 2 - The impact of food production on climate changes in global industrial food production and local sustainable food production.

Potential benefits of eating local sustainable food

- **It's a great advantage for the environment** as local food doesn't have to travel as far to arrive on your plate, so it helps reduce greenhouse gas emissions and contributes to improving our carbon footprint.
- **It benefits the local economy**, including supporting local farmers and other producers.
- **It encourages sustainable agriculture**, and facilitates tracking the supply chain back to the point of origin to evaluate ecological practices.
- **It ensures that food has passed some of the highest safety standards** in the world as regulations regarding additives, pesticides, herbicides, are very strict.

Topic 3 - Organic food production and its labelling

It has become clear that one of the winning strategies to initiate and maintain sustainable food choices is the use of organic food. To clear what are the characteristics of organic in EU we can state that it is an overall system of farming management and food production that combines

- best environment practices
- a higher level of biodiversity
- the preservation of natural resources
- the use of higher animal welfare standards
- the use of natural substances and processes.

- So organic food crops help to preserve the ecological balance, increase the soil fertility. That's why countries of different continents are supporting organic food choices.
- In particular European Union has many objective in this sense, the most important of which are European Great Deal and Farm to Fork; the goal of these projects is making 25% of EU farmland organic but also improve organic aquaculture. To achieve the strategy target the EU is helping the organics sectors to reach its full potential.

Topic 3 - Organic food production and its



The characteristics of organic in EU we can state that it is an overall system of farming management and food production that combines

- best environment practices
- a higher level of biodiversity
- the preservation of natural resources
- the use of higher animal welfare standards
- the use of natural substances and processes.

Action plan for organic production in the EU (4)

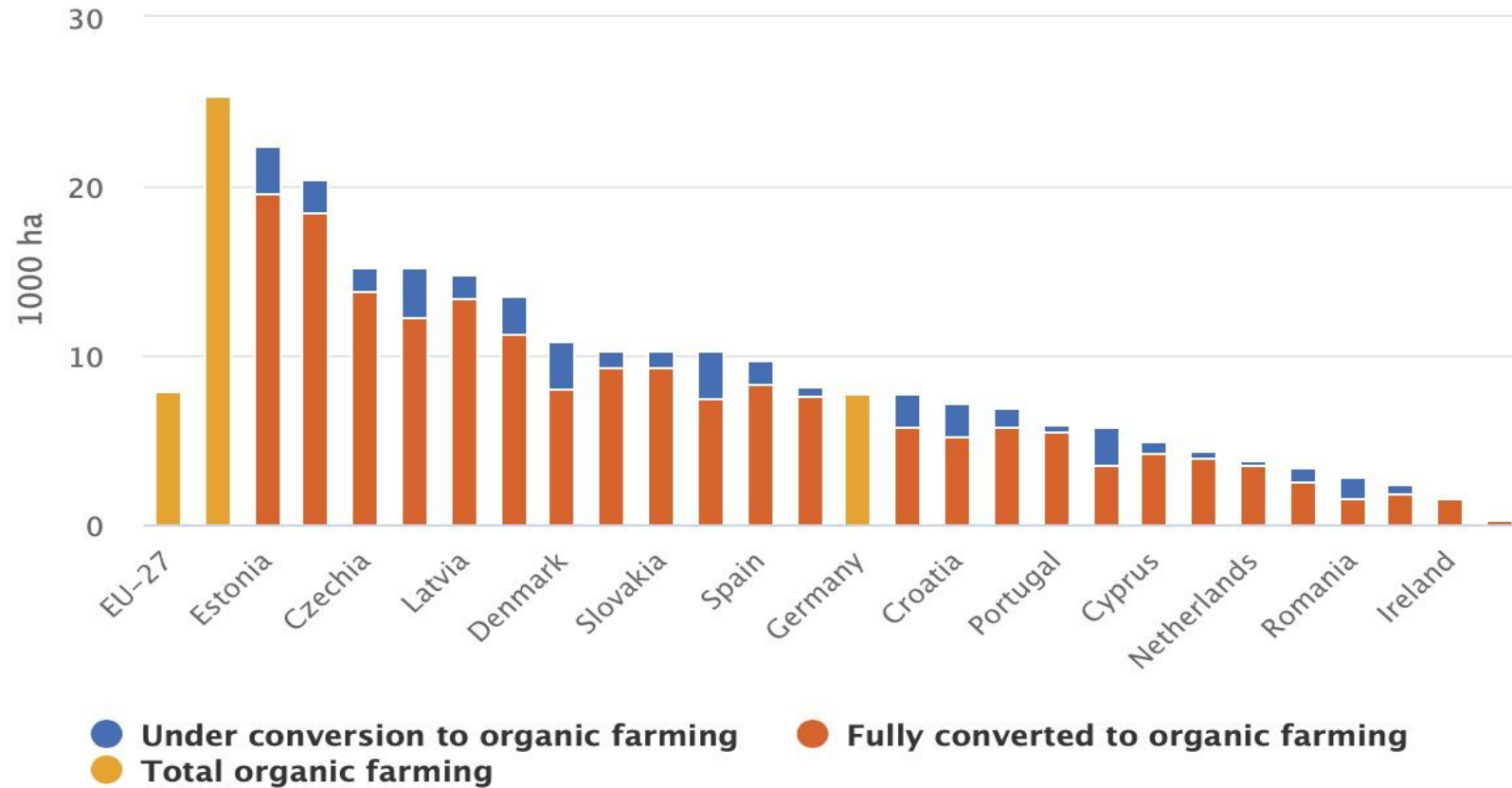


The Commission has set out a comprehensive organic action plan for the European Union. Through it, the Commission will aim to achieve the European Green Deal target of 25% of agricultural land under organic farming by 2030.

Topic 3 - Organic food production and its labelling

Share of organic area in total utilised agricultural area (UAA), by country, 2019

Source: Eurostat (online data codes: org_cropar and apro_cpsh1)



The European Union organic logo



- “The European Union organic logo gives a coherent visual identity to organic products produced in the EU. This makes it easier for consumers to identify organic products and helps farmers to market them across the entire EU.
- The organic logo can only be used on products that have been certified as organic by an authorised control agency or body. This means that they have fulfilled strict conditions on how they must be produced, processed, transported and stored. The logo can only be used on products when they contain at least 95% organic ingredients and additionally, respect further strict conditions for the remaining 5%.

Topic 4 - Gastronomy contributes to biodiversity preservation.

Starting a restaurant with a climate and environmentally-friendly menu requires time and care in choosing quality foods that should meet certain parameters:

- food produced as close to the premises as possible
- fair prices food,
- seasonal fruit and vegetables grown as traditionally as possible (ex. with self-produced seed)
- meat from local and sustainable farms
- fish caught by local fishermen.

Food with the above characteristics would help sustainability, biodiversity, and strengthen the circular economy.

The management of the dining room and restaurant also have a bearing on sustainability and climate food impact:

- water management,
- waste management,
- the type of service chosen (such as the type of tablecloth, washing it locally; not using disposable tableware).

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WATER AND ENERGY MANAGEMENT FOOD AND FOOD'S FOOTPRINTS - UNIT 3



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- Topic 1. The relationship between our food systems and emerging global environmental risks
- Topic 2. Quantification of the different environmental impact of food groups
- Topic 3. Hints and tips for improving resource efficiency in terms of water and energy management



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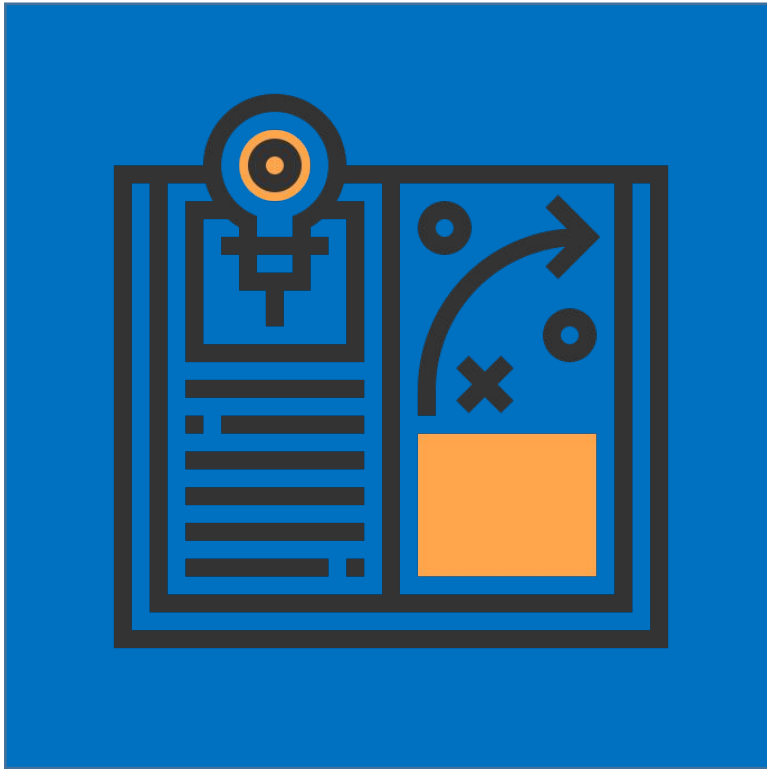
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Brief introduction about the Unit and its objectives and competences

- This learning unit focuses on our food systems and emerging global environmental risks. In particular, the module highlights the different environmental impacts of food, water and energy.
- Starting with a few concepts, we will understand how responsible food choices and the intelligent use of water and energy resources are important in reducing human damage to the environment.

OBJECTIVES

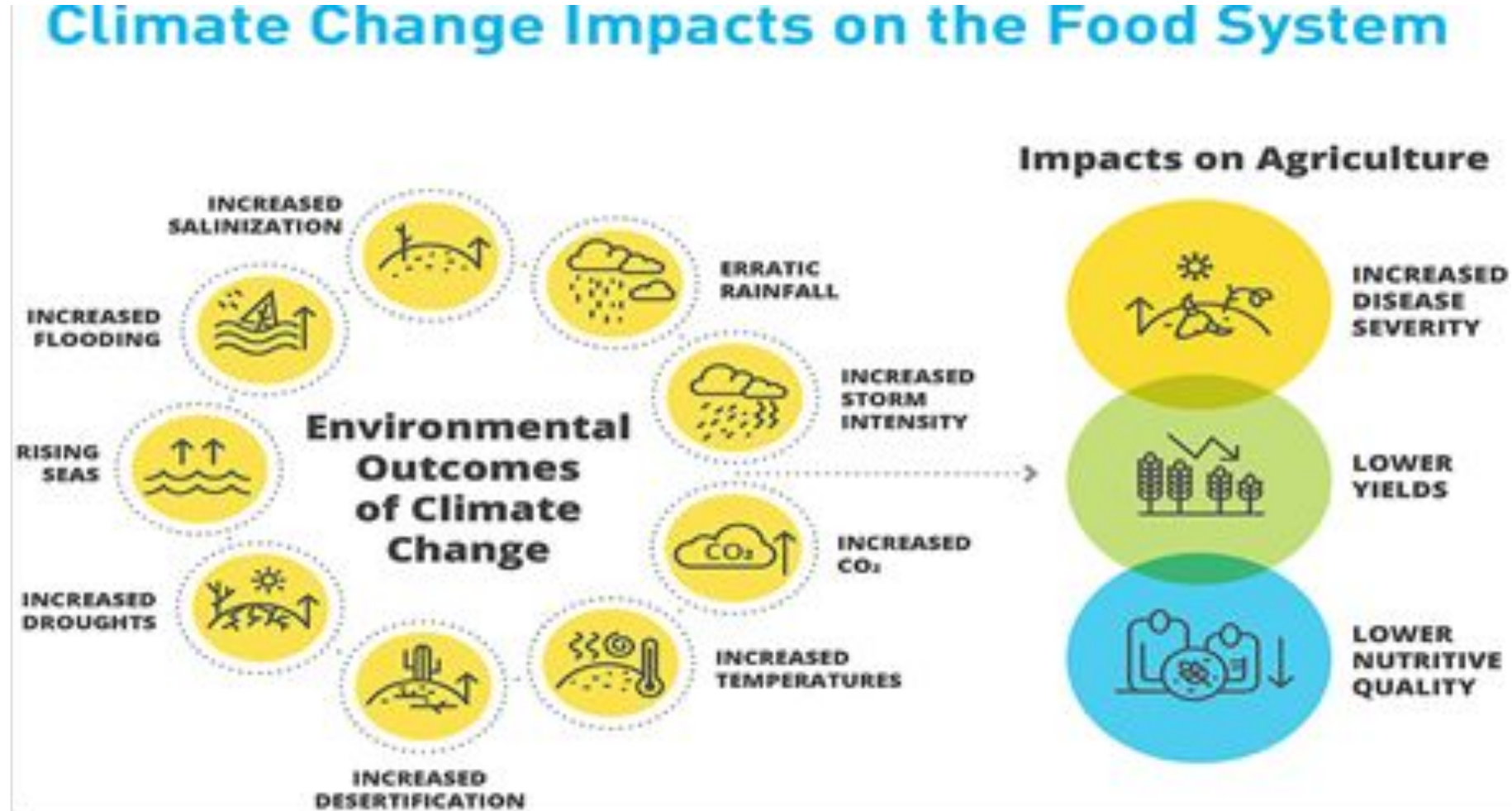


1. The relationship between our food systems and emerging global environmental risks
2. Quantification of the different environmental impact of food groups
3. Hints and tips for improving resource efficiency in terms of water and energy management (ex. IV Range)

Topic 1. The relationship between our food systems and emerging global environmental risks

- **Climate change**, exacerbated by deforestation and overexploitation of land and water resources, **poses a serious threat to humanity's food security** causing huge global environmental risks.
- According to a study conducted by the FAO, **the food sector contributes more than a third of global greenhouse gas emissions, accounting for 34% of carbon dioxide emissions.**
- **Most of the greenhouse gas emissions are methane, pollution caused mainly by intensive livestock farming to meet the demand for meat, particularly beef.**
- In general, every product has a higher or lower ecological footprint, depending on the CO₂ emissions generated by the consumption of natural resources and the entire production, transport and purchasing cycle.
- **Reducing the ecological footprint of the food system requires a diet based on plant-based, free-range and sustainable products.**

Topic 1. The relationship between our food systems and emerging global environmental risks



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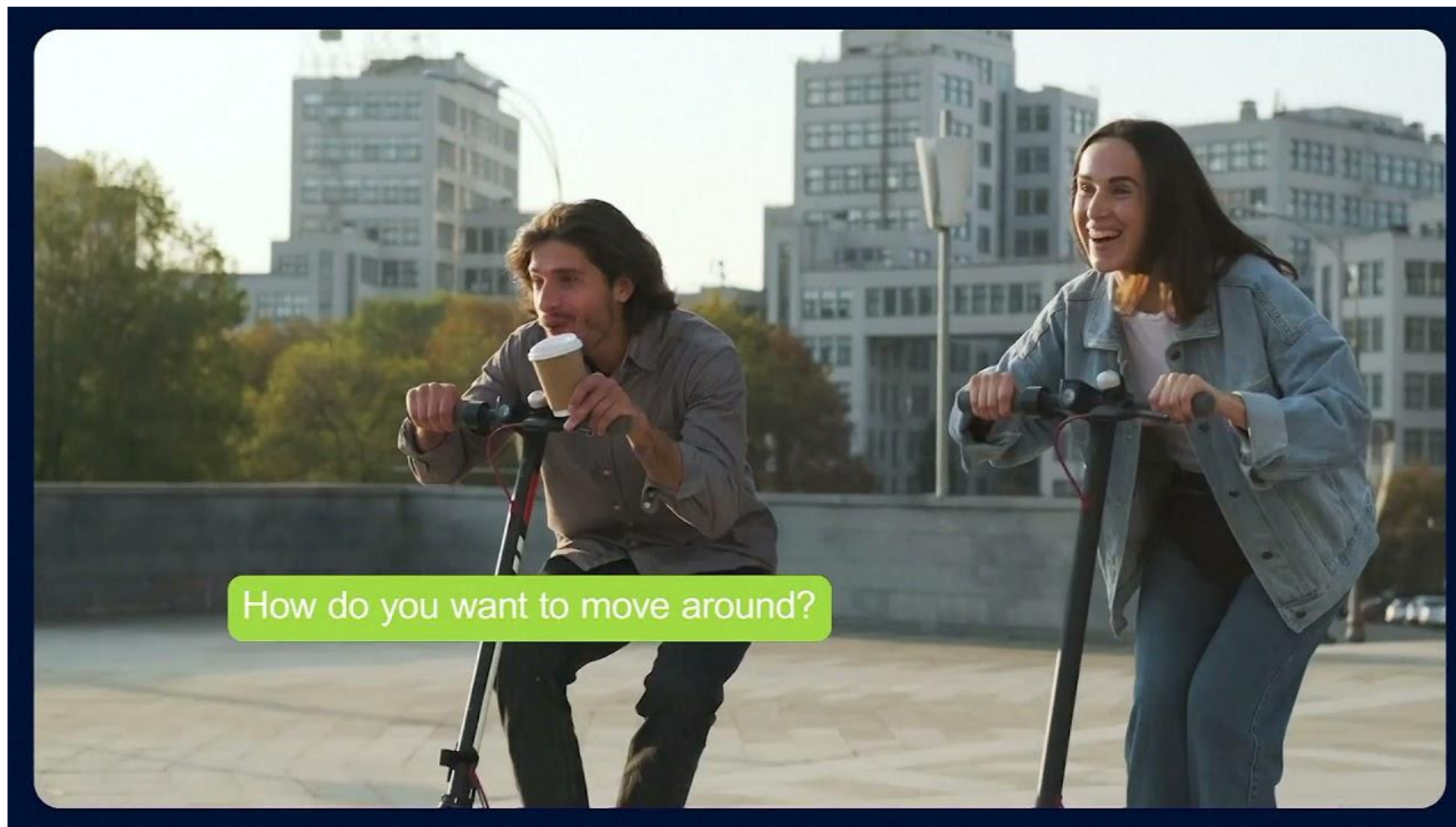
COP27 in Sharm el-Sheikh & Sustainable Development Goals of the 2030 Agenda

Highly topical issues were at the centre of the COP27 in Sharm el-Sheikh held from 6 to 20 November 2022, which led to important decisions shared by all UN member states, such as: a **commitment to limit the increase in global warming to within 1.5o Celsius and greenhouse gas emissions through mitigation, the transformation of energy sources to make them safer and more efficient, and a commitment to use more economic resources.**

The idea of how much impact food has on the environment leads to the principle of healthy eating and relates to seven of the seventeen **Sustainable Development Goals of the 2030 Agenda**, a programme of action for people, planet and prosperity signed in September 2015 by the governments of the 193 UN member states that addresses issues of fundamental importance for sustainable development such as climate change and food sustainability.

Topic 1. The relationship between our food systems and emerging global environmental risks

European Green Deal



Topic 1. The relationship between our food systems and emerging global environmental risks

Paris Agreement signed in 2015

Even the Paris Agreement signed in 2015, and ratified in 2016, by 191 UN states **focuses on elements, common to all countries, to progressively reduce global greenhouse gas emissions.**

The goal is to **limit average global warming to well below 2 degrees Celsius**, aiming for a maximum temperature increase of 1.5 degrees Celsius through financial flows towards low greenhouse gas-emitting development.

And to improve adaptive capacity to climate change, for which each country must update and submit regular plans and adaptation measures through regular reporting.

It also commits all countries to **present and comment on a national emission reduction target every five years** at the international level.

Topic 1. The relationship between our food systems and emerging global environmental risks

UN Food Systems Summit

The aim of the UN Food Systems Summit, held on 23 September 2021 in New York, is to make progress on all 17 SDGs Goals, through an approach that harnesses the link between sustainable food systems and global challenges such as hunger, climate change, poverty and inequality, because, as Guterres (UN Secretary-General) says, **the pandemic has highlighted the links between inequality, poverty, food, disease and our planet.** It is unacceptable that hunger is on the rise at a time when the world wastes more than 1 billion tonnes of food every year.

That is why **we need to change production and consumption patterns** through five actions:

1. adopt nutrition-focused food policies such as school feeding programmes;
2. supporting local markets and food supply chains;
3. increase agricultural funding to 20 per cent of expenditure;
4. encourage farmer cooperatives and ensure women's access to productive inputs; and
5. expand social safety net programmes and invest in climate early warning systems

Topic 2. Quantification of the different environmental impact of food groups

- Environmental impact is the footprint left by every object, food and/or human behaviour on nature that can be traced back to the emission of CO₂.
- However, along with the amount of CO₂ emitted as a result of a certain practice, the consumption of natural resources such as water and energy consumption must also be taken into account.

Topic 2. Quantification of the different environmental impact of food groups



Food Climate Partnership



AgMIP The Agricultural Model Intercomparison and Improvement Project



NEW YORK UNIVERSITY



COLUMBIA | SIPA
Center on Global Energy Policy

Topic 2. Quantification of the different environmental impact of food groups

BASIC INDICATORS OF FOOD ENVIRONMENTAL IMPACT

Three basic indicators are used to determine the environmental impact of food:

- the **water footprint**, to quantify consumption and use of water resources;
- the **ecological footprint**, for the amount of land needed to provide resources;
- the **carbon footprint**, to measure greenhouse gas emissions.

In particular:

- land use, i.e. how much land or sea has to be occupied;
- the water required for production (water footprint);
- any soil eutrophication caused by fertilisers;
- the acidification of seas and oceans caused by the absorption of CO₂ released by human activity;
- the impact of individual foodstuffs, in particular meat, which has the greatest impact in terms of climate-altering gas emissions and land use.

APPROPRIATE DIET REQUIREMENTS

An appropriate dietary choice requires:

- **reduce meat consumption** in favour of foods of plant origin;
- **limit consumption of energy-rich foods**, which often satiate little and encourage constant access to food;
- **limit food waste**: do your shopping by buying only what you need and prepare fair portions of food; ensure proper storage of leftovers so that they can be reused in other preparations;
- **being informed of the climate emergency and taking action** to protect the environment and our health.

Topic 2. Quantification of the different environmental impact of food groups

POSSIBLE SUSTAINABLE CHOICES

So, at the table we can make sustainable choices and follow an eco-friendly diet based on sustainable food, i.e. food that is healthy, nutritious and has a low environmental impact in terms of land use, water resources used and carbon and nitrogen emissions, such as:

- Local 0 km products, sourcing directly from producers avoiding transport costs and a high environmental impact;
- Fresh, seasonal fruit and vegetables and plant-based foods;
- Olive oil as a source of fat;
- Cheese and/or yoghurt, with daily consumption but in limited quantities.
- Food produced by farmers and producers who produce food in a more sustainable way;
- Organic eggs from free-range and free-range hens;
- Dairy products and cheeses from small-scale producers who respect the earth;
- Organic food, grown without GMOs and pesticides;
- Meat from sustainable, non-intensive livestock farms, respecting animal welfare;
- Local fish and products from sustainable fisheries;
- Products in bulk or with recyclable packaging that preserves the food over time.

Topic 2. Quantification of the different environmental impact of food groups

Quantification of the different environmental impact of food groups – “GOOD, CLEAN AND FAIR”

These sustainable choices are the thread running through **Slow food's slogan: 'Good, clean and fair'** and encapsulates the whole concept of sustainable food because it respects the environment, animal and human health and the criteria of naturalness.

However, good information is always needed, so it is important to read the labels and ask the retailer what you are buying.

To choose sustainable food one must:

- buy locally sourced products
- sourcing directly from producers;
- choose bulk products that do not use packaging;
- choose seasonal fruit and vegetables.

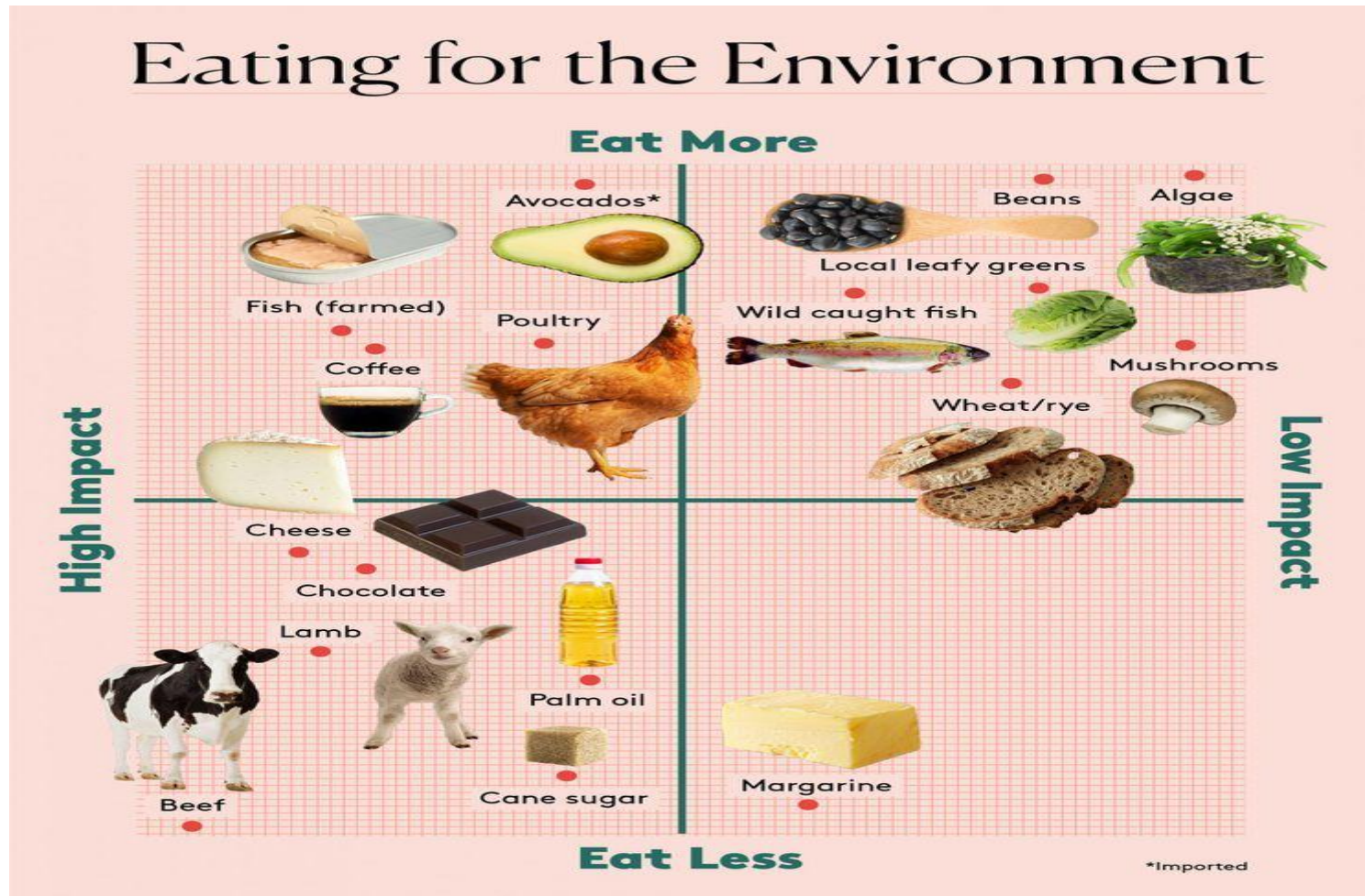
Topic 2. Quantification of the different environmental impact of food groups

SOME NON-SUSTAINABLE FOODS

In practice, they are unsustainable foods:

1. **Meat and dairy products** because of the land, water and energy consumption involved in its production, but also because of the waste substances and emissions from the animals themselves. Those who choose not to eliminate it can reduce their consumption to one or two portions per week by trying to buy from ecological and possibly local farms.
2. **Fish** because it is the result of overexploitation leading to imbalances in marine ecosystems and intensive and illegal fishing. Among the least sustainable fish are salmon, bluefin tuna, swordfish and shellfish. By contrast, mackerel, skipjack, sardines, mullet and amberjack have a smaller environmental impact.
3. **Quinoa**, which, because more and more land is being exploited to cultivate it to the detriment of local populations and the natural habitat, arrives in Europe from the Andes, resulting in huge CO2 emissions.
4. **Soya**, produced mainly in Brazil and Argentina, for which there is the major problem of deforestation. But in recent years it has also been cultivated in Europe, so if you decide to buy soya products, it is best to make sure of their origin.
5. **Palm oil**, increasingly present on food labels, is mainly produced in Indonesia and Malaysia, and is also the cause of massive deforestation with the consequent imbalance of local flora and fauna.
6. **Bananas** whose negative environmental impact is due to their export from Ecuador, the Philippines, Costa Rica, Colombia and Guatemala to the rest of the world.
7. **Chocolate** which comes from a plant that only grows in certain areas around the equatorial forests and, due to increased demand, small producers are planting cocoa deforesting and destroying local biodiversity. Not to mention the environmental impact of the many

Topic 2. Quantification of the different environmental impact of food groups



Topic 3. Hints and tips for improving resource efficiency in terms of water and energy management

- The environmental crisis linked to climate change and the recent Covid-19 pandemic have made the strong interrelationships between our health, ecosystems, supply chains, consumption patterns and planetary limits even more evident. This is why a robust and resilient agri-food system that functions under all circumstances and ensures sufficient supplies of affordable, sustainable and healthy food for citizens is crucial.
- Many companies in the **IV Gamma sector** - fresh and washed fruit and vegetables - contribute to the objectives of the strategy towards a sustainable, healthy and fair agri-food system. These products - **packaged and ready to eat** - not only contribute to our health by encouraging the consumption of fruit and vegetables in our daily diet, but also represent **a highly sustainable choice from an environmental point of view** in line with the European Green New Deal commitments and the Farm to Fork strategy.

Topic 3. Hints and tips for improving resource efficiency in terms of water and energy management

- IV range companies have the objective of certifying and guaranteeing food safety with thousands of annual checks on the production chain in order to have a safe product. In Europe, Italy represents one of the excellences on the international market, recognised by the quantity of products sold in Italy and exported. Sales of IV range are also significant in the United Kingdom, France, Holland and Switzerland, while it is still embryonic in Eastern Europe, Spain and Germany.

Topic 3. Hints and tips for improving resource efficiency in terms of water and energy management



Topic 3. Hints and tips for improving resource efficiency in terms of water and energy management

FOOD RANGE CLASSIFICATION

First Range	Products that have not undergone any preservation treatment: vegetables, fish products, meat
Second Range	boxed and preserved products, which have undergone preservation treatments: sterilisation, pasteurisation, freeze-drying,...
Third Range	Frozen and deep-frozen products
Fourth Range	Ready-to-eat fruit and vegetables. These are fresh fruit and vegetables, sold in trays or plastic bags, washed, dried and cut into pieces before packaging
Fifth Range	pre-cooked and pre-frozen, preserved under vacuum or in a controlled atmosphere.



Topic 3. Hints and tips for improving resource efficiency in terms of water and energy management

- The **IV Gamma** focuses on the sustainability of production processes: food waste and reduced energy consumption, being already peeled, washed and portioned is zero waste, as the contents of the package are available for consumption in their entirety.
- **Production waste is then 100 per cent re-used**, mainly for animal feed, in a perfectly circular way, without being thrown away as is the case with domestic cleaning of first range products.
- From the consumption point of view, thanks to technological innovations, **there is a conspicuous reduction in water and energy requirements**. In any case, the company's process is considerably more efficient because the washing process consumes around **90 % less water** than the domestic process for the same product.

Topic 3. Hints and tips for improving resource efficiency in terms of water and energy management

- Since **40% of the plastic disposed of in Europe is related to packaging** and only **9% is recycled**, the European Union is looking for innovative solutions to limit the use of plastic in packaging.
- Some of the main importing countries of Italian IV Gamma products, such as France and Spain, have chosen to apply the European directive on the use of single-use plastic (EU Directive No. 904/2019) with the aim of promoting the sale of fresh produce without packaging, allowing customers to bring their own reusable containers to be filled with clean and washed fruit and vegetables on site.

Topic 3. Hints and tips for improving resource efficiency in terms of water and energy management

In summary, it can be said that **the IV Gamma is an extremely dynamic and growing sector**, despite the temporary drop in sales induced by the pandemic.

However, the sector is facing some major challenges. This is a far from simple challenge, given the disparities in the social, health and economic spheres; moreover, political actors at local, national and international level are not always in agreement.

To meet this challenge, **it is necessary to identify and promote innovative solutions** that offer the right tools to tackle it by transforming what is currently experienced as a threat into an opportunity.

DESCRIPTION OF THE ASSESSMENT SYSTEM

Continuous assessment is an evaluative method where different activities or tests are established throughout a subject, thus assessing the student's learning process. The permanent focus of attention is established on the student and on his/her teaching-learning process.

The VET4FOOD evaluation system is based on different types of pre-established tools in order to guarantee the systematic collection and analysis of the results. In this way it is possible to offer to students and self-learners feedback about the acquired knowledge and competences, their level of learning and, at the same time, offer a stimulus to the teacher to redirect and/or adapt the training.

- Every learning activity receives a score out of 10 points and represents a percentage of the total score of that block of the assessment. The weighted average of learning activities' scores represents 50% of the score of the unit. The result of the Unit's Quiz represents the remaining 50% of each unit's assessment score.
- So, the final mark of each Unit will be composed by:
 - **50% of the final score of the learning activities.**
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FOOD LOSS AND FOOD WASTE - UNIT 4



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LIST OF CONTENTS

- Topic 1- The issues related to food waste and losses occurring along the food-supply chain, with particular focus on logistics.
- Topic 2- Distribution, money savings and final consumption.
- Topic 3- Strategies and/or best practices could be developed to reduce food waste and losses and/or donate leftovers.
- Topic 4- Proper packaging for prevention.
- Topic 5- National rules and laws on food waste to leftovers donation.



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Brief introduction about the Unit and its objectives and competences

- Food loss most often occurs at the production, post-harvest, and processing stages of the food chain. Whilst food waste occurs at the end of the food chain. Food waste is the food which was originally produced for human consumption but then was discarded or was not consumed by humans.

Brief introduction about the Unit and its objectives and competences

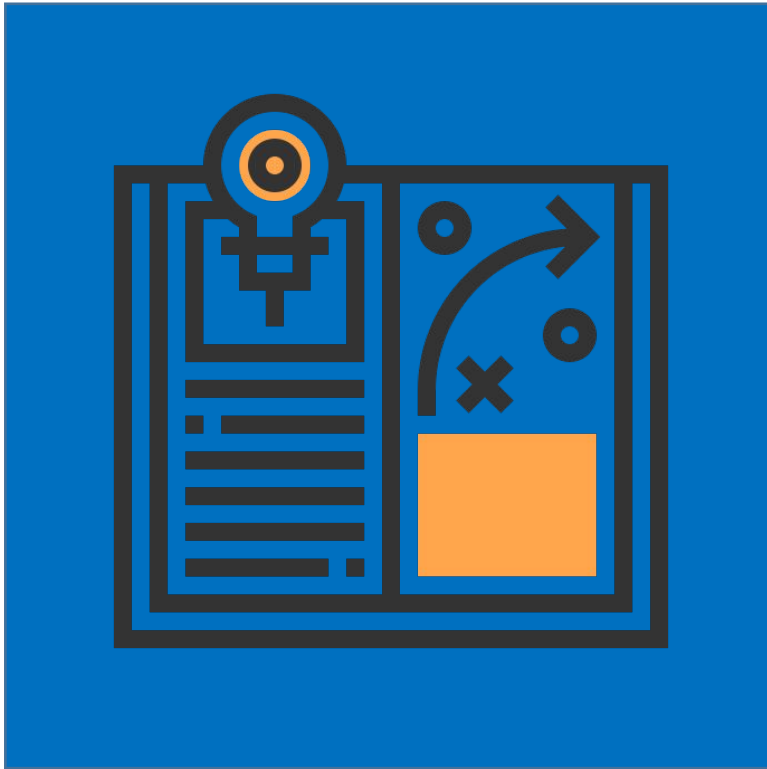
Skills:

1. General understanding of food loss and food waste in the food chain.
2. Preservation technique to reduce food waste.
3. Design specific actions (e.g. menus) aiming to reduce waste.
4. Organize their work more efficiently to avoid improper behavior. Low impact packaging solutions.

Competences:

1. Plan and implement ecological strategies to reduce food loss.
2. Plan and implement ecological solution to reduce food waste.
3. Use packaging format and materials to maximize shelf life and minimize food waste.
4. Design a strategy towards reduction of food waste.
5. Implement storage technique. Implementing practices for a circular economy.

OBJECTIVES



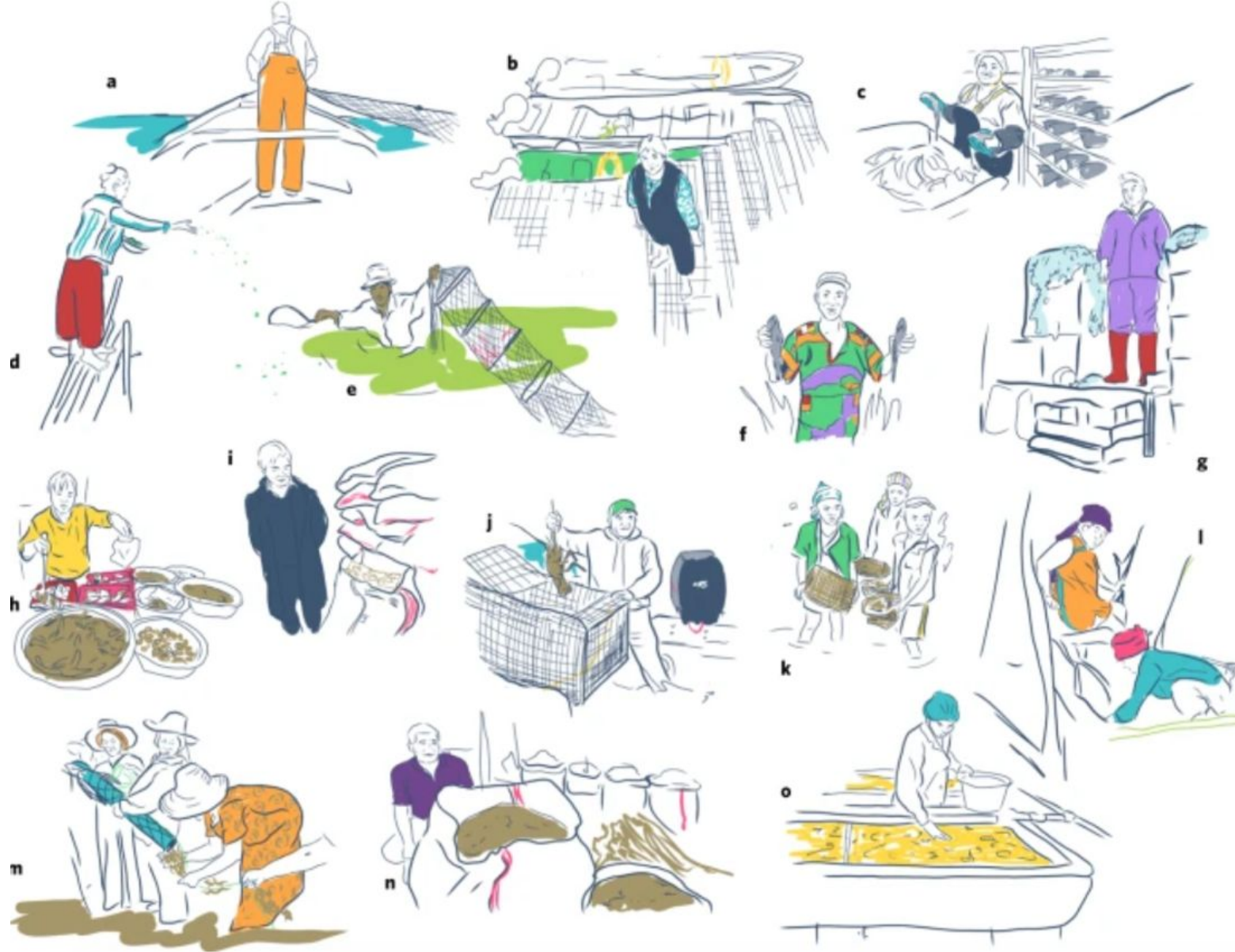
1. The issues related to food waste and losses occurring along the food-supply chain, with particular focus on logistics, distribution, money savings and final consumption.
2. Strategies and/or best practices could be developed to reduce food waste and losses and/or donate leftovers.
3. Proper packaging for prevention National rules and laws on food waste to leftovers donation.

Topic 1 - The issues related to food waste and losses occurring along the food-supply chain, with particular focus on logistics

Nowadays, aesthetics plays a very important role in our lives, both on a personal and social level. It is therefore essential to know how to reduce its waste and its monitoring and evaluation tools.

This can also be extrapolated to the food that the population is currently consuming.

There are many companies dedicated to the world of food, where they carry out a prior classification of the quality and calibres of their food, sometimes disregarding the aesthetic aspect of the materials, often produced by the climate and environmental problems. These preliminary classifications are often carried out directly in the fields in the case of vegetables, in the fish markets in the case of fish and in the slaughterhouses in the case of meat.



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Topic 1 - The issues related to food waste and losses occurring along the food-supply chain, with particular focus on logistics

In the case of fish, consume local fish rather than fish from outside.

If it is wild fish, it is better than farmed fish, the price has an influence and it is more expensive, but it is of better quality, and we are helping the environment.

There is a large amount of food that is not destined for a production line for packaging or distribution, because of its physical appearance.

What happens to it then? Most of them are thrown away or do not make it to the shops, although many of them could be given a second life or another decent destination.

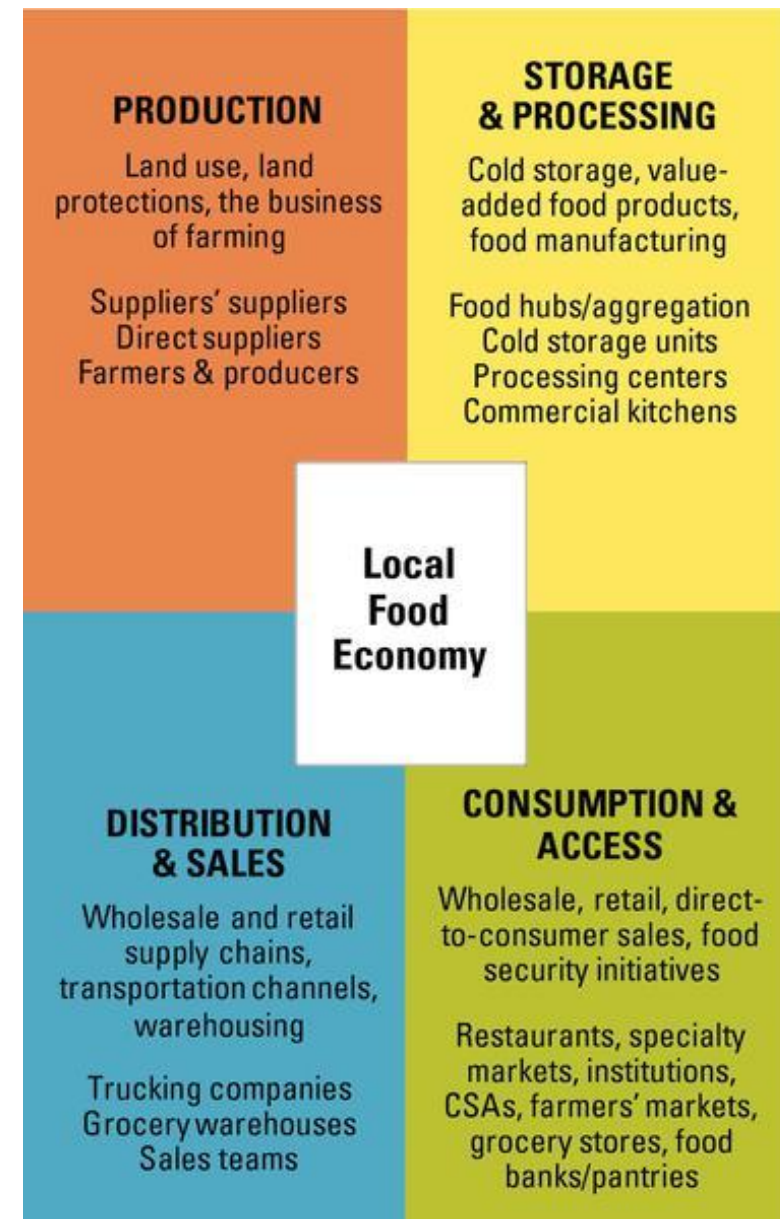
> Watch the video about "Food Waste: The Hidden Cost of the Food We Throw Out I ClimateScience":

<https://youtu.be/ishA6kry8nc>

TOPIC 2 - Distribution, money savings and final consumption.

- Often on the way to the production plant for repackaging or treatment of these foods, they suffer blows, bad preservation due to incorrect transport. This results in a great economic loss which, if it is well managed, could be reused for other purposes.
- As a whole, it influences their reception and cataloguing again in the production plant, turning part of them into disposable raw materials, often reusable but discarded because they do not have a good physical appearance and we do not even know how or where to treat them.
- We must promote the action of buying and selling with local suppliers and producers, looking for raw materials with designation of origin, products of proximity, and enjoying seasonal food. We have to take advantage of the benefits that the land gives us of seasonal foods, such as pumpkins in Winter, and cherries in Summer.

Observe the following characteristics about the local food economy:



TOPIC 3 - Strategies and/or best practices could be developed to reduce food waste and losses and/or donate leftovers.

- As we commented in the previous topic on the economic and energy loss, **we should use zero-kilometre products**, with Denomination of Origin (D.O.) or Protected Designation of Origin (P.D.O.). The journey from the producer to the point of sale would be shorter than if we bought them in a place many kilometres away, thus avoiding excessive fuel consumption in transport.
- Appeals could be made to the population of the locality where the harvesting season takes place, so that they could purchase raw materials for domestic use at cost price and have them transported by their own vehicle.
- Agreements could also be created between production plants where they can collect the second classification of discarded materials to give them a new use, as in the case of fruit: use of fruit with little visual aesthetics in the transformation of that fruit into compotes or jams or juices.
- Turning recovery strategies into actions through education: reuse / reprocessing of food to avoid losses and reuse as much food as possible (vegetable soup, fruit smoothies, etc.), improvements in preservation techniques, recycling and composting.

TOPIC 3 - Strategies and/or best practices could be developed to reduce food waste and losses and/or donate leftovers.

- With food waste in markets or restaurants we could donate leftovers to soup kitchens or for people in need.
- A great example of business and social solutions to reduce food waste are for example: **“Too Good To Go”** or **“ReFood”**...
- Where the user can buy a product in perfect condition that is about to be thrown away or is about to expire. In this way, food waste is avoided. A second chance for the product.



TOPIC 4 - Proper packaging for prevention.

Concern and awareness for the environment is growing and producers are beginning to replace traditional packaging with more sustainable packaging with a lower environmental impact.

Sustainable packaging tends to reduce its volume and weight, and the use of plastic is also lower.

Their life cycle, from their manufacture, transport, recycling and the energy used to make them, is reduced.

They have a high capacity for reutilisation and most of them do not contain chemicals that are hazardous to human and animal health.

Examples of sustainable packaging are cardboard replacing plastic and paper. In some places we can also find bags made from potato starch or customers are encouraged to use reusable containers and buy in bulk.

Other sustainable packaging is currently in use in take-away food shops, using packaging whose main function is for preservation. These products, made from less toxic and often recycled materials, have been produced with lower energy consumption and designs that can be folded and compacted. At the same time they have increased their ability to be recycled, reused or disposed of with low environmental impact.

FOOD MILES

the distance food travels from the producer to the consumer



Our Local FOOD SYSTEM



ECOSYSTEM SERVICES

clean air, pollination, fertile soil, and other benefits of natural cycles



GROW

HARVEST

PROCESS

DISTRIBUTE

EAT

WASTE

13% of agricultural production value is from vegetables, fruits, and nuts.

19 certified organic farms growing flowers, food, and livestock.

26% of residents grow food in a backyard or community gardens.

45 school gardens and 15 community gardens.

50 types of vegetables, over 30 kinds of fruits and nuts, and six species of domesticated animals.

122 commercial fishing boats catch 18,657,893 pounds of seafood annually.

40,000 pounds of honey (3.7% of California's honey).

10% of the county's total manufacturing industry is devoted to food.

We make baked goods, tortillas, seafood and other animal products, dairy products, prepared fruits and vegetables, sugar and confection products, and grain and oil seed.

27 weekly farmer's markets hosted in 18 cities.

16 CSA's deliver within the county.

3 wholesale produce distribution centers.

723 grocery stores.

Each phase of the food system has a carbon footprint.

The drought has decreased food production.

Waste is produced in every phase of the food system

40% of residents report eating fast food once a week.

707 food service establishments in the county, including restaurants, hospitals, schools, and business cafeterias.

34% of low-income households are food insecure.

30% of the national food-supply is lost at the retail and consumer level.

18% of California's waste stream is food (5,591,179 tons annually).

Food waste may be composted and transformed into nutrient rich soil that aids carbon sequestration and water quality.



2016 KEY INDICATOR: FOOD SYSTEMS



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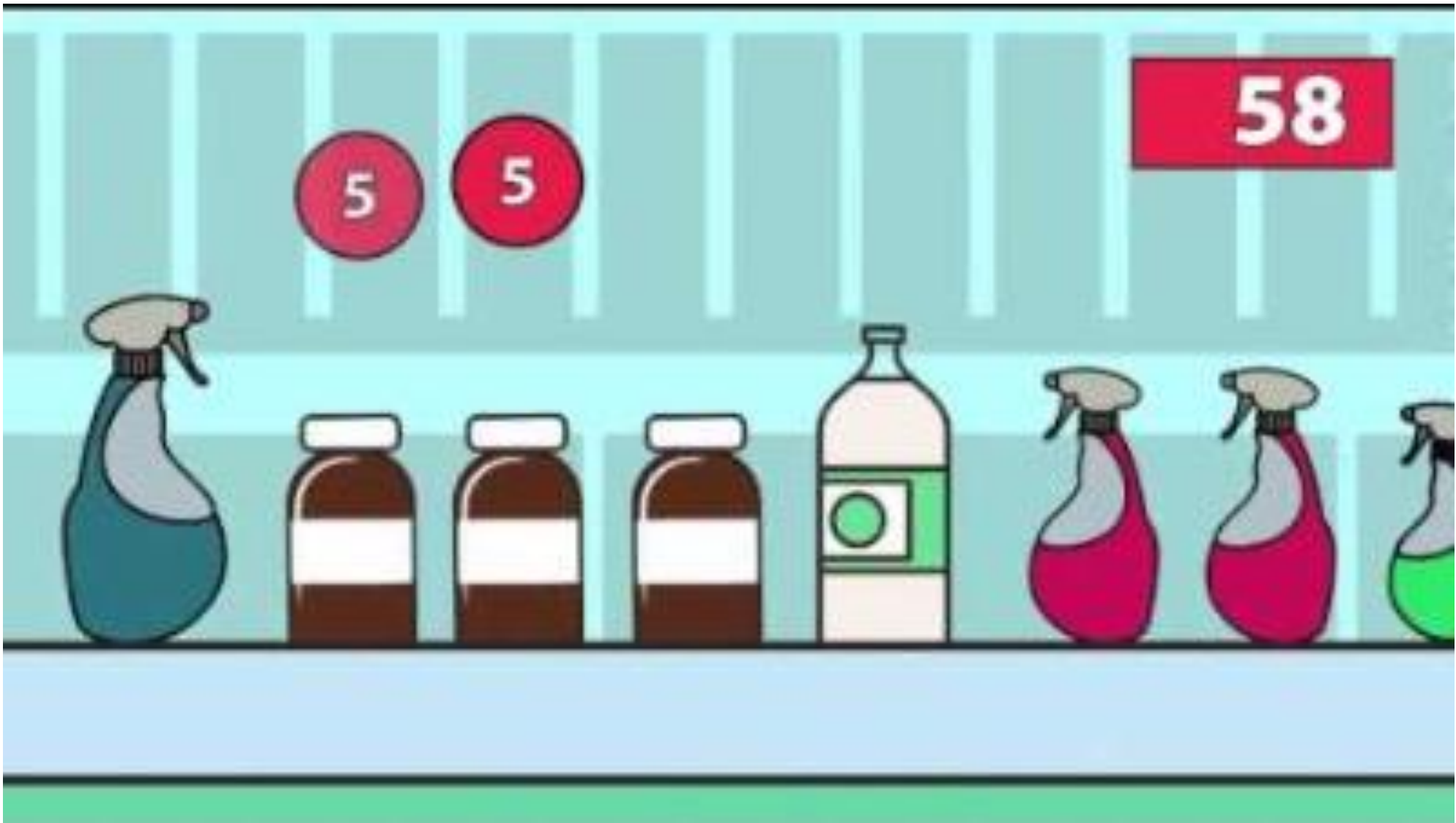
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TOPIC 5 - National rules and laws on food waste to leftovers donation.

- Against the waste of food and the reuse of food, there are non-profit associations in charge of recovering food surpluses fit for human consumption and fighting against food poverty by giving them to people in precarious situations in our environment.
- These are the main objectives of associations such as **Caritas or the Food Bank Foundation.**
- They also use food campaigns at specific times to be able to fill their warehouses for future donations to people in food poverty.



TOPIC 5 - National rules and laws on food waste to leftovers donation.

- It is important, according to the regulations, that the food is well labelled and that the chain of transport from one point to another is correct. There is a risk that the food may spoil on the way and therefore it has to be transported properly in order to avoid any kind of problem.
- Many associations and foundations organise solidarity meals to prevent food waste and mainly to feed people in need.
- On the other hand, there are **demanding platforms or APPs**, which we have mentioned above, that promote the reuse of surplus food, especially in the world of catering.



TOPIC 5 - National rules and laws on food waste to leftovers donation.

- These platforms announce at the end of the day the surplus products available in their establishments. The population of a city where there is a shop that offers these surpluses, through the app can purchase several lots at very low prices and pick them up at the shop by simply showing the payment.
- We can find offers from greengrocers, offering vegetables and fruit, breakfasts offered by hotels that these meals have not been consumed, and above all bakeries - cafes, whose surplus pastries and bread have not been sold.
- It is a way of covering the food needs of the population, helping trade and the environment not to waste food in good condition.
- Also, many restaurants and establishments sell or give their used oil to associations to produce soap. In this way they give a second life to a basic product that is nowadays a luxury.



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HOW TO BUY LEFTOVER FOOD TO REDUCE WASTE

KGW8.



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CIRCULAR ECONOMY AND RESILIENCE - UNIT 5



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LIST OF

- Topic 1: The importance of local economy for sustainable development
- Topic 2: The concept of local food economies and its impact on the community.
- Topic 3: Strategies and best practices of Alternative Food Systems (AFSs) in terms of production, distribution and purchasing.
- Topic 4: Local food commercial value
- Topic 5: Proposing the concept of food sovereignty as an alternative to the concept of food security.
- Topic 6: Circular economy and its role in the promotion of the local economy
- Topic 7: The Economic value and potential benefits of the circular economy.



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Brief introduction about the Unit and its objectives and competences

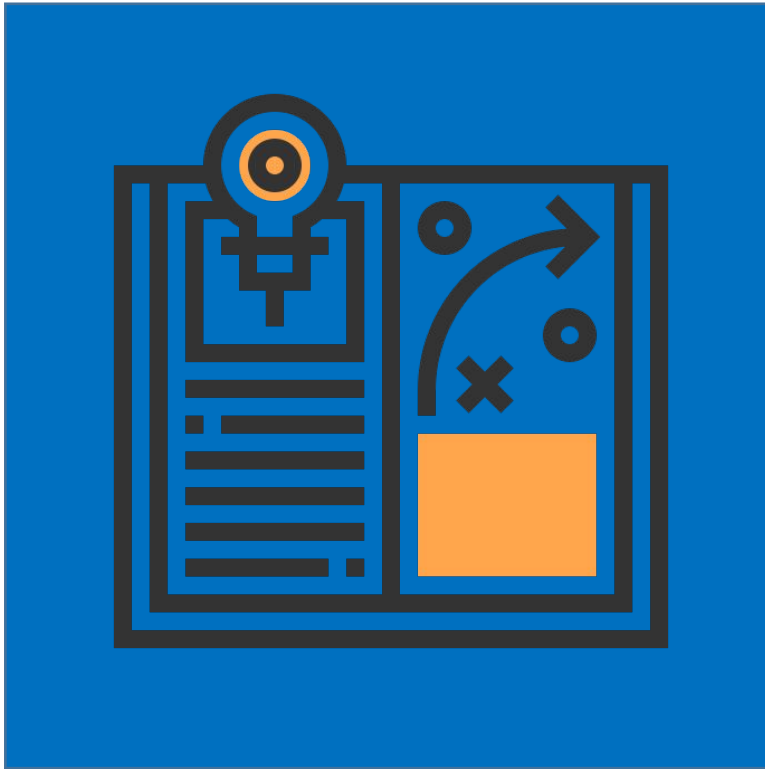
In this module we describe the economic value of the development of local and alternatives food systems such as short food supply chain, their relationship with concept as food security and food sovereignty and some other examples of alternative food systems developed among the Europe.

Brief introduction about the Unit and its objectives and competences

Competences:

1. Apply private and public programs that promote the development of local food projects/business.
2. Working in collaboration with the local business community and building bridges among complementary partners.
3. Communicating local food added value and promoting local food offer.
4. Developing business ideas based on the principle of circular economy.

OBJECTIVES



1. To better understand how local foods influence our lives and economy.
2. To explore how innovation encourages sustainable food system.
3. To recognize the critical role of local partnerships.
4. To recognize the economic value of short supply chain in food business

Topic 1: The importance of local economy for sustainable development

- With two billion people facing food insecurity globally and approximately a third of all food going uneaten, the current structure of the food system is fragmented. Preventing food loss and food waste at scale would offset huge amounts of environmental damage and biodiversity loss as well as increase the accessibility of food for food insecure populations.
- In 2015 the United Nations adopted the 17 Sustainable Development Goals (SDGs), setting the global agenda for the coming decade to end poverty, protect the planet and ensure prosperity for all. Although the SDGs were not designed by and for local and regional governments, they provide a universal ambition and valuable framework for all levels of government to align global, national and sub-national priorities within policies striving to leave no-one behind.

SUSTAINABLE DEVELOPMENT GOALS



Topic 1: The importance of local economy for sustainable development

- Although the SDGs provide a global framework to drive better policies for better lives, the opportunities and challenges for sustainable development vary significantly across and within countries. For example, regarding SDG 13 on Climate Action, some cities and regions are more vulnerable to climate change impacts than others. The global warming at 1.5°C may expose 350 million more people to deadly heat by 2050 (IPCC, 2018), exacerbated by local heat island effects. In Europe, 70% of the largest cities have areas that are less than 10 meters above sea level (OECD, 2010), thus exposed to higher risks of flooding.
- But local communities are also part of the solution. For example, while transitioning from linear to circular economy, cities contribute to keeping the value of resources at its highest level, while decreasing pollution and increasing the share of recyclable materials.
- The varying nature of challenges related to sustainable development within countries calls for place-based solutions that are tailored to territorial specificities, needs and capacities now and in the future.



Topic 2: The concept of local food economies and its impact on the community

- Growing, producing and buying food presents opportunities to build resources, wealth and resilience in local communities, and to balance power more evenly across the supply chain. Resources can include jobs, skills, capital and natural assets like soil, water, fish, and ecosystem services. Food production or farming methods which degrade our natural environment undermine the opportunities for, and resilience of, communities.
- Using food to build local power and economic opportunity can bring a number of benefits:
 - **Reduced emissions** from refrigerated transport, storage, and in-store refrigeration for fruit and vegetables
 - **Reduce waste:** The long supply chain model for fresh produce generates a high percentage of post-farm loss, estimated at between 3 and 10% from over-ordering, grading, storing and packing loss.
 - **Tackling food insecurity overseas:** A recent study highlighted that the UK imports much of its fruit and veg from climate stressed countries, and unless it is produced with fairtrade principles, it is likely to be produced by workers paid significantly less than a living wage.

Topic 2: The concept of local food economies and its impact on the community

Local food purchases can be twice as efficient in terms of keeping the local economy alive even because local food systems (where production, processing, trading and consumption of food take place across a relatively small geographical area) have been described as an important source of employment opportunities with positive multiplier effects: a huge part of the money spent to buy local food remains in the local community. Hence, local food systems have the potential to positively influence the local economy.

Topic 3: Strategies and best practices of Alternative Food Systems (AFSs) in terms of production, distribution and purchasing

- It is difficult to present a unified definition of alternative food systems for all EU countries; the term of AFSs can be considered an umbrella term that includes different models with some specific characteristics to go beyond the conventional food systems. AFSs are emerging with the aim of reconnecting producers and consumers and relocating agricultural and food production. AFSs have their roots in organic farming.
- Historically organic farming has been characterized socioeconomically as being: local or community controlled, embedded economically into the local community/region (i.e. most products are grown and consumed locally), and structured to promote the interaction of producers and consumers (locally) in ways that familiarize each with the wants and needs of the other so that they promote cooperation, trust and social cohesion (e.g. cooperatives) .

Topic 3: Strategies and best practices of Alternative Food Systems (AFSs) in terms of production, distribution and purchasing

The main characteristics of AFSs are based on:

1. The redefinition of the relationships between producer and consumers showing clear signals as to the origin of food.
2. The development of new relationships for new types of supply and demand with new requirements that link price with quality criteria. Usually, this food is defined by the place and the farm where it has been produced, and serves to enhance the image of the farm and the territory as a source of quality foods.
3. Emphasis on the relationship between producer and consumer to build values and meaning, rather than solely the type of product itself, and all these are summarized in the ability to engender some form of connection between the consumer and the food produce.
4. Alternative food system initiatives also strive to improve environmental conditions by promoting on-farm biodiversity, natural resource conservation, carbon footprint reduction by minimizing 'food miles', while promoting greater consumer awareness on the origins and quality of their food.

Topic 4: Local food commercial value

According to recent researches, the production of sustainable, locally grown foods is key to providing long-term food security for communities. Local food production reduces the economic and environmental impact of transporting food, increasing the availability of local and seasonal foods, such as fruits and vegetables and enables people to avoid processed, unhealthy foods.

But, what does food security mean? "Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences in order to lead a healthy and active life." This definition includes: "the availability of food, access to food, biological utilization of food, and stability ."

Topic 4: Local food commercial value

- Short supply chains in local markets have been shown to increase income for producers, generate greater autonomy for farmers, and to strengthen local economies by supporting more small businesses. This can improve the viability of small farms, reduce the carbon footprint from food distribution, and enhance household food security by giving people on low-income access to good food and healthy diets.
- Buying directly from the farm or from street markets can sometimes be cheaper than buying from supermarkets and can also help stop shoppers from buying too much and having to throw food away.
- **The European Farm to Fork Strategy** also underlines the untapped economic and environmental benefits of the circular bio-based economy for farmers.
- By embracing opportunities to use bio-fertilisers, protein feed, waste streams and renewable energy, for example, the Strategy explains that farmers can create jobs as well as increase revenues⁹. The Strategy gives the example of the potential for farmers to install solar panels on barns, which are often perfectly placed to absorb sunlight and produce cost-efficient renewable energy.

Topic 4: Local food commercial value

- Climate change threatens the steady supply of food globally, and local production therefore contributes to self-sufficiency, as it is more resistant to supply chain shocks.
- To be less dependent on foreign supplies and to mitigate the risks from disruption or natural disasters, this approach to producing locally (food, energy etc.) could be critically important. Shorter supply chains are also part of the climate adaptation strategy

Topic 5: Proposing the concept of food sovereignty as an alternative to the concept of food security

- In contrast, the concept of food sovereignty is focused primarily on small-scale agriculture (including livestock, forestry and fisheries) of a non-industrial nature, preferably organic, mainly using the concept of agro ecology.
- Whereas food security comprises mainly the concept of affordable and accessible food for all, food sovereignty is respectful to cultural diversity and the environment.
- The latter is concerned with issues such as production, land distribution, international trade system, and biodiversity conservation.
- Food sovereignty embraces a moral understanding of the economy, and questions the ethical basis for our economic decisions and our current legal system.
- *"Food sovereignty is the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems."*



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The seven pillars of food sovereignty:

1. Focuses on food for people: Puts people's need for food at the center of policies; insists that food is more than just a commodity.
2. Builds knowledge and skills: Builds on traditional knowledge; uses research to support and pass this knowledge to future generations; rejects technologies that undermine or contaminate local food systems.
3. Works with nature: Optimizes the contributions of ecosystems; improves resilience.
4. Values food providers: Supports sustainable livelihoods; respects the work of all food providers.
5. Localizes food systems: Reduces distance between food providers and consumers; rejects dumping and inappropriate food aid; resists dependency on remote and unaccountable corporations.

The seven pillars of food sovereignty:

6. Puts control locally: Places control in the hands of local food providers; recognizes the need to inhabit and to share territories; rejects the privatization of natural resources.
7. Food is sacred: Recognizes that food is a gift of life, and not to be squandered; asserts that food cannot be commodified.

Food sovereignty highlights the need for a democratic food system, one that involves inputs from citizens as well as producers

Food security is concerned with the protection and distribution of existing food systems.

Thus, how local initiatives contribute to global food sovereignty and how can urban food systems contribute to a socially fair transition towards a more sustainable world that includes all social groups of the population?



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Topic 6: Circular economy and its role in the promotion of the local economy

- The circular economy is a model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible. In this way, the life cycle of products is extended.
- In practice, it implies reducing waste to a minimum. When a product reaches the end of its life, its materials are kept within the economy wherever possible. These can be productively used again and again, thereby creating further value.
- This is a departure from the traditional, linear economic model, which is based on a take-make-consume-throw away pattern. This model relies on large quantities of cheap, easily accessible materials and energy.

Topic 6: Circular economy and its role in the promotion of the local economy

- Also part of this model is planned obsolescence, when a product has been designed to have a limited lifespan to encourage consumers to buy it again. The European Parliament has called for measures to tackle this practice.
- In a linear economy traditionally follows a 'take, make, use, dispose' system, where products are created and used once and then disposed of as waste.
- With this comes a decrease in the value of materials and products, volatile prices due to resource scarcity, and an unstable supply of raw materials due to overconsumption.
- This also generates huge levels of waste and greenhouse gas emissions from consistent resource pooling and production, contributing to environmental degradation and climate change.

Topic 6: Circular economy and its role in the promotion of the local economy

- Measures such as waste prevention, ecodesign and re-use could save EU companies money while also reducing total annual greenhouse gas emissions.
- Currently, the production of materials we use every day account for 45% of the CO2 emissions.



Image: European Parliament

Topic 6: Circular economy and its role in the promotion of the local economy

- Cities are adopting circular models based on a healthy circulation of resources, and principles of sharing, re-use and restoration, with an emphasis on limiting municipal waste volumes and on producing locally – for instance, urban farming.
- Cities may also increasingly encourage a 'produce local' approach to food and energy.
- Local sourcing can allow cities, for example, to reduce food miles and their associated carbon footprint as well as increase the resilience of their food supply by relying on a more diverse range of suppliers⁸. It also helps to reconnect consumers with farmers, who may then demand more sustainable and healthy practices as a result.

Topic 7: The Economic value and potential benefits of the circular economy

- Overall, measures to promote a greener economy will result in the loss of 6 million jobs. However, these losses will be offset by the creation of 24 million jobs in the economy as a whole.
- According to the various reports produced on the subject, sectors engaged in recycling, maintenance and repair activities will be among the fastest growing sectors – and these reports also agree that local jobs will receive a boost.
- The circular economy is a proposal for a new, more sustainable, and durable economy model. As a consequence, this pro-environmental economic model induces visible changes in the labour market which are Green Jobs. The Green Jobs creation is associated with a new approach to business management, aiming to prevent environmental degradation and reduce unemployment.
- Therefore, they are essential for protecting the environment and the labour market, combining sustainability principles.

Topic 7: The Economic value and potential benefits of the circular economy

- Among the solutions emerging from the local level in a variety of countries worldwide, particularly on the issues of employment and access to essential services, the social and solidarity economy (SSE) arises as a viable way forward, for inclusive and sustainable growth.
- SSE is increasingly used as an umbrella concept, referring to the production and exchange of goods and services by a broad range of organizations and enterprises that pursue explicit social, and often environmental objectives
- These enterprises and organizations are guided by the principles and practices of cooperation, solidarity, ethics and democratic self-management and can take the form of cooperatives, mutual benefit societies, associations, foundations, social enterprises, among others.

Topic 7: The Economic value and potential benefits of the circular economy

- The circular economy and the social economy, whose respective merits are no longer to be demonstrated, are complementary.
- As the cornerstone of the social economy, re-use is also a key concept in the circular economy: recycling, energy, agriculture, etc. Territorial anchorage and cooperation between stakeholders are also key components of both economic models.
- The models are similar but also complementary: the circular economy seeks to minimize waste production and human impact on the environment, while preserving economic benefits; and the social economy guarantees these benefits on a social as well as environmental level. Furthermore, the collaborative economy, an important dimension of the social economy, provides alternatives to traditional consumption behaviors, for instance by providing a service instead of a direct product purchase.

REGENERATE 	<ul style="list-style-type: none"> • Shift to renewable energy and materials • Reclaim, retain, and restore health of ecosystems • Return recovered biological resources to the biosphere 	    
SHARE 	<ul style="list-style-type: none"> • Share assets (e.g. cars, rooms, appliances) • Reuse/secondhand • Prolong life through maintenance, design for durability, upgradability, etc. 	    
OPTIMISE 	<ul style="list-style-type: none"> • Increase performance/efficiency of product • Remove waste in production and supply chain • Leverage big data, automation, remote sensing and steering 	    
LOOP 	<ul style="list-style-type: none"> • Remanufacture products or components • Recycle materials • Digest anaerobically • Extract biochemicals from organic waste 	       
VIRTUALISE 	<ul style="list-style-type: none"> • Books, music, travel, online shopping, autonomous vehicles etc. 	      
EXCHANGE 	<ul style="list-style-type: none"> • Replace old with advanced non-renewable materials • Apply new technologies (e.g. 3D printing) • Choose new product/service (e.g. multimodal transport) 	    

Source: Company interviews; Web search. S. Heck and M. Rogers, *Resource revolution: How to capture the biggest business opportunity in a century*, 2014.

Topic 7: The Economic value and potential benefits of the circular economy

- One of the main challenges of the circular economy is that there is a considerable amount of work to do as regards advocacy work and public awareness raising.
- Indeed, the circular economy is not only about waste management and food waste, it is also about the way a product is made, about where its components come from and about the management of the workforce.
- Hence, for the circular economy to become a credible alternative to the current production ethos, there is a crucial need for cooperation between the different sectors which intervene in the supply chain.
- Collaboration across industries and sectors such as food, packaging, hospitality, education and policy is key to creating a truly circular economy.
- This type of cooperation is still insufficient.

DESCRIPTION OF THE ASSESSMENT SYSTEM

Continuous assessment is an evaluative method where different activities or tests are established throughout a subject, thus assessing the student's learning process. The permanent focus of attention is established on the student and on his/her teaching-learning process.

The VET4FOOD evaluation system is based on different types of pre-established tools in order to guarantee the systematic collection and analysis of the results. In this way it is possible to offer to students and self-learners feedback about the acquired knowledge and competences, their level of learning and, at the same time, offer a stimulus to the teacher to redirect and/or adapt the training.

- Every learning activity receives a score out of 10 points and represents a percentage of the total score of that block of the assessment. The weighted average of learning activities' scores represents 50% of the score of the unit. The result of the Unit's Quiz represents the remaining 50% of each unit's assessment score.
- So, the final mark of each Unit will be composed by:
 - **50% of the final score of the learning activities.**
 - **50% of the unit's quiz test score**



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Thank you!



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ETHIC AND INCLUSIVE FOOD BUSINESS - UNIT 6



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LIST OF CONTENTS

- Topic 1 - Fair trade principles and diversity inclusion equity jobs practices.
- Topic 2 - Knowledge about change makers in the relationship between economy, ecology and society through a multilevel approach to sustainable development.



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Brief introduction about the Unit and its objectives and competences

In this module we will develop the concept of Decent Work, fair prices for producers, the World Fair Trade: the value-based food supply chain.

The social economy as a business model to develop sustainable food activities (economic growth and socially inclusive local development). We will also learn about the development of the concept of green social entrepreneurship in a practical way (Triple Layer Business Model Canvas).

Brief introduction about the Unit and its objectives and competences

Knowledge:

1. Fair trade principles and diversity inclusion equity jobs practices.
2. Knowledge about change makers in the relationship between economy, ecology and society through a multilevel approach to sustainable development.

Competences:

1. Set CSR in a food enterprise
2. Identify the fair price of food products.
3. Set diversity inclusion equity plan.
4. Communicate the link between prices and value to consumers.

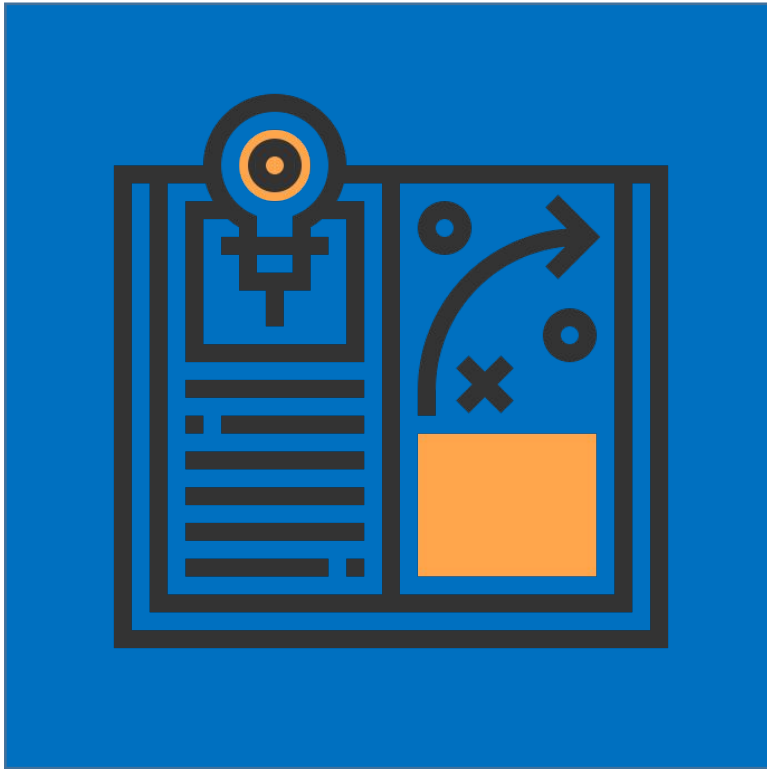


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OBJECTIVES



1. Recognise the importance of fair trade and equity at work.
2. Set up strategic partnerships to have an impact with your business.
3. Develop critical and design thinking.
4. Build a common vision regarding product quality, partner relationships and customer service.

Fair trade principles and diversity inclusion equity jobs practices.

- Fair Trade is a trading partnership, based on dialogue, transparency and respect, that seeks greater equity in international trade. It contributes to sustainable development by offering better trading conditions to, and securing the rights of, marginalized producers and workers – especially in the South.
- Fair Trade Organizations, backed by consumers, are engaged actively in supporting producers, awareness raising and in campaigning for changes in the rules and practice of conventional international trade.



Fair trade principles and diversity inclusion equity jobs practices.

- The Fair Trade movement shares a vision of a world in which justice, equity and sustainable development are at the heart of trade structures and practices so that everyone, through their work, can maintain a decent and dignified livelihood and develop their full human potential.
- **Fair Trade ticks many boxes in the achievements of the SDGs (Sustainable Development Goals).** The Fairtrade system is a ideal partner to achieve the SDGs, Fair Trade enterprises integrate sustainability in their business models. Fair Trade is also a great way for local authorities to localise the SDGs.
- **This is good, but it is not enough.** After all, SDG 17 on partnerships actually supports liberalisation of trade as the way to achieve the SDGs, without any nuance, and SDG 12 on “sustainable (or responsible) consumption and production” frames the solution as an offer and demand issue.
- On the one hand, improving production practices (for example, farmers growing our food in a more sustainable way) and, at the other end of the supply chain, encouraging consumers and public procurers to choose sustainable or ethical consumption choices, if they can afford it.



SUSTAINABLE DEVELOPMENT GOALS



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The World Fair Trade Organization sets out the 10 international principles that Fair Trade organisations must follow in their daily work and ensure compliance with:



1. Creating opportunities for economically marginalised producer organisations

One of the core objectives of the organisation is poverty reduction through trade.

The organisation supports economically marginalised producers and workers, whether they are members of associations, cooperatives or companies, whether they are employed in family businesses committed to Fair Trade, or whether they are self-employed, informal or home-based workers.

It aims to enable them to move from income insecurity and poverty to social and economic empowerment. The organisation has an action plan to achieve this.

2. Transparency and accountability

The organisation is transparent in its management and business relations. It is accountable to all stakeholders and respects the sensitivity and confidentiality of business information.

The organisation establishes appropriate and participatory ways to involve its members, producers and contracted staff in decision-making processes. It ensures that relevant information is provided to all its business partners. Communication channels are adequate and open to all links in the supply chain.

3. Fair Trade Practices

Purpose

- The organisation trades for the social, economic and environmental well-being of economically marginalised producers and workers and does not maximise profits at their expense.

Establishment of business commitments

- The organization is responsible and professional in fulfilling its commitments in a timely and professional manner. Suppliers of Fairtrade products respect contracts and deliver products on time and to the agreed quality and specifications.

Payment and pre-financing

- Fairtrade buyers, recognising the financial disadvantages faced by producer and supplier organisations, ensure that orders are paid upon receipt of documentation or as mutually agreed. For handicrafts and other non-food products, if requested, an interest-free prepayment of at least 50% will be made.

3. Fair Trade Practices

Cancellation and problem resolution

- Purchasing entities consult with producing or supplying organisations before cancelling or rejecting orders. When orders are cancelled or modified at short notice, and without a reason attributable to the producing or supplying entities, adequate compensation for work already done is ensured.
- Supplying and producing organisations consult with purchasing entities if there are any problems with delivery and agree to review terms when quantities and qualities delivered do not match those ordered or when products are delivered late.

3. Fair Trade Practices

Long-term business relationships

The organisation maintains long-term trading relationships based on solidarity, trust and mutual respect that contribute to the promotion and growth of Fairtrade. It maintains effective communication with its trading partners. The parties involved seek to increase the volume of trade between them and the value and diversity of their product offer as a means of growing Fairtrade for producers in order to increase their income.

3. Fair Trade Practices

Fair competition

The organisation works in cooperation with other Fair Trade organisations in its country and avoids unfair competition. It does not copy the designs or patterns of other organizations without permission.

Cultural identity and respect for traditional knowledge

Fairtrade recognizes, promotes and protects cultural identity and traditional skills reflected in indigenous craft designs, food products and other related services.

4. Fair payment

A fair payment is one that has been negotiated and mutually agreed upon by all parties through continuous dialogue and participation, that provides fair remuneration to male and female producers, and that can be sustained by the market, taking into account the principle of equal pay for equal work for women and men.

The objective is the payment of the locally established living wage.

Fair payment is made up of fair prices, fair wages and local living wages.

4. Fair payment

Fair prices

- A fair price is freely negotiated through dialogue between the buying and selling entity and is based on transparent price setting. It includes a fair wage and a fair profit. Fair prices imply an equitable sharing of the final price between all actors in the supply chain.

Fair wage

- A fair wage is an equitable wage, freely negotiated and mutually agreed upon, and implies the payment of at least the locally established living wage.

Local living wage

- A local living wage is the remuneration received for a standard working week (no more than 48 hours) by a worker in a particular place, sufficient to provide a decent standard of living for that person and his or her family.

5. Ensuring freedom from child labour and forced labour

Child labour

The organisation adheres to the ONU Convention on the Rights of the Child and national and local legislation on the employment of children.

Organisations purchasing from Fairtrade producer organisations or Fairtrade companies ensure that they comply with the United Nations Convention on the Rights of the Child and national and local legislation on the employment of children.

Any involvement of children in Fairtrade production (including learning a traditional art or craft) is always communicated and monitored and does not negatively affect children's welfare, safety, educational obligations and need for play.

5. Ensuring freedom from child labour and forced labour

Forced labour and trafficking

The organisation ensures that there is no forced labour or human trafficking in its workforce and/or by those belonging to producer organisations or home-based workers.

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6. Commitment to non-discrimination, gender equality and women's economic empowerment, and freedom of association.

Non-discrimination and equal pay

The organisation does not discriminate in hiring, remuneration, access to training, promotion, dismissal or retirement on the basis of race, caste, nationality, religion, disability, gender, sexual orientation, union membership, political affiliation, HIV/AIDS status or age.

Women employed in the organisation, even in informal employment situations, receive equal pay for equal work. The organisation recognises the full employment rights of women and is committed to ensuring that they receive all employment benefits to which they are legally entitled. The organisation takes into account the special health and safety needs of pregnant and breastfeeding mothers.

6. Commitment to non-discrimination, gender equality and women's economic empowerment, and freedom of association.

- Gender equality

The organisation has a clear policy and plan to promote gender equality to ensure that both women and men have the ability to access the resources they need to be productive, and that they have the ability to influence the broader political, policy and institutional environment that shapes their lives and livelihoods..

The statutes and by-laws of organisations allow women to become active members of the organisation in their own right (where it is a membership-based organisation) and to hold leadership positions in the governing body, regardless of their status in relation to ownership of assets such as land and real estate.

6. Commitment to non-discrimination, gender equality and women's economic empowerment, and freedom of association.

Freedom of association

- The organisation respects the right of all workers to form and join trade unions and to bargain collectively.
- Where the right to join and bargain collectively is restricted by law and/or the political environment, the organisation shall provide independent and free means of association and bargaining.
- The organisation ensures that workers' representatives are not subject to discrimination in the workplace.

7. Ensuring good working conditions

Health and safety at work

The organisation provides a safe and healthy working environment for workers and producers. It complies, as a minimum, with national and local laws and ILO (International Labour Organization) conventions on health and safety.

Working hours and conditions

Working hours and working conditions of hired staff and/or producers (including homeworkers) comply with the conditions set by national and local laws and ILO conventions.

7. Ensuring good working conditions

Safe working conditions for producer and supplier organizations

Fairtrade organizations are aware of the health and safety conditions of the producer groups they buy from.

They continuously work on raising awareness on health and safety aspects and on improving the health and safety practices of producer groups.

8. Promoting capacity building

The organisation seeks to improve the development of economically marginalised producers and workers through Fair Trade.

The organisation supports the development of the skills and capacities of its staff and producer entities.

Organisations working directly with producer groups develop specific activities to help them improve their management skills, production capacity and access to local, regional, international, Fairtrade and/or conventional markets, as appropriate.

Fairtrade buyers help their suppliers to strengthen their capacity to support the producers they work with.

9. Promoting Fairtrade

The organisation raises awareness of the objectives of Fair Trade and the need for greater fairness in world trade. It advocates Fair Trade objectives and practices in its field of work.

The organisation provides its buyers, customers and other interested parties with information about itself, the products it trades, the producer groups and the people who produce or grow the products. The organisation always uses honest advertising and marketing techniques.

10. Climate action and environmental protection

Care for the environment is an essential part of Fairtrade.

This includes sustainable sourcing and production, waste minimisation, packaging and transport and, most importantly, helping people to tackle the climate crisis.

The climate crisis is a global phenomenon. But the so-called "Global South", i.e. less developed countries with weak economies and poor populations, are much more affected by the consequences of the climate crisis than the "Global North" and have fewer resources to develop mitigation programmes.

It is also important to consider that increased pollution and greenhouse gas emissions affect all parts of the world, regardless of where they originate.

10. Climate action and environmental protection

Climate action and greenhouse gas emission reduction

Fairtrade organisations support and promote production, agriculture, services and trade activities that preserve natural resources, are culturally sensitive, socially just and economically viable.

They work on adapting and building resilience to climate change among their producer organisations and on reducing greenhouse gas emissions from their activities.

When working with agricultural producer groups and indigenous peoples, they help preserve the ecosystem and develop production models that contribute to building resilience to climate change.

Where possible, Fairtrade producer organisations **encourage and promote local production and sourcing of local raw materials.**

They choose the most sustainable shipping companies, if they are in a position to do so.

10. Climate action and environmental protection

Sustainable production and waste management

Fairtrade organisations grow, produce and market their products or services

minimising greenhouse gas emissions (see above), damage to natural ecosystems, wildlife and biodiversity.

The organisation seeks to reduce unsustainable energy use.

The use of solar, wind, hydro and other alternative energies is encouraged.

Water use, water pollution and air pollution are minimised.

Fair Trade organisations **manage their waste responsibly**, according to the principles of reduce-reuse-recycle, in order to minimise waste significantly.

10. Climate action and environmental protection

Product and packaging design

Wherever possible, raw materials, ingredients, components and elements of Fairtrade products, or materials needed for services, are sourced from Fairtrade or sustainable suppliers, or are made from recycled or reused material.

Products are designed to facilitate recycling, reuse or organic decomposition as much as possible. As far as possible, only recycled materials are used for product packaging. The use of plastics is kept to a minimum.

WHY CHOOSE FAIR TRADE?



FAIR PAYMENT
A fair price covers the cost of production, pays workers fairly, and still leaves enough profit to reinvest.



TRACEABILITY AND TRANSPARENCY
Open communication and fair contracts are the building blocks of fair trade.



CAPACITY BUILDING
Support for local, community-led development. Fair trade premium funds are one way that buyers can support those efforts.



EDUCATION
Learning is key to empowerment. Fair trade organizations raise awareness about the structural inequities of the global trade system.



NO FORCED OR CHILD LABOR
Labor exploitation is forbidden. Standards go beyond prohibition to address the root causes of forced and child labor.



RESPECT FOR THE ENVIRONMENT
Additional premiums are paid for organic farming, recognizing the additional work required and valuing environmental stewardship.



ENSURING GOOD WORKING CONDITIONS
Organizations are committed to following worker protection laws, reasonable work hours, and healthy conditions for all.



DEMOCRATIC AND TRANSPARENT ORGANIZATIONS
Democracy is central to fair trade, empowering small-scale producers and workers with a voice and a vote.



CREATING OPPORTUNITIES FOR DISADVANTAGED PRODUCERS
Small-scale producers are often the most marginalized by colonialism and the current systems of trade.



LONG-TERM DIRECT TRADING RELATIONSHIPS
The fewer steps between small-scale farmers and artisans and the end user, the more money can return to the producer.



BUILDING POWER AND PROTECTING THE MOST VULNERABLE
Organizations are committed to non-discrimination. They actively support gender equity, equal pay, and access to resources. Workers have the right to organize and bargain collectively.



While there are many certifications with different levels of credibility, the fair trade movement generally agrees on a few key principles. Applied together all along supply chains, these principles can guide us towards building a more just solidarity economy.



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Knowledge about change makers in the relationship between economy, ecology and society through a multilevel approach to sustainable development

Long-term business relationships

The Charter of Principles presents the values that characterise the Solidarity Economy for REAS (Red de Redes de Economía Alternativa y Solidaria - Network of Alternative and Solidarity Economy Networks).

It includes the features that guide the vision and practice of Solidarity Economy organisations.

Do you want to know the 6 principles of the Solidarity Economy Charter?

Equity	Decent Work	Cooperation	Ecological Sustainability	Fair Wealth Sharing	Commitment to the Environment
					

Equity in the Solidarity Economy

- Faced with a system that is characterised by multiple inequalities and oppressions, the Solidarity Economy proposes a transition towards new models in which equity is a central element in relations between individuals, communities and peoples, as well as with the planet. Horizontal relationships that positively recognise and integrate diversity.
- Equity incorporates the complementary perspectives of justice and diversity with the goal of equality. It involves recognising and considering equality of opportunity, conditions and treatment, while establishing a fair distribution of obligations, resources and responsibilities. It is a necessary value to recognise and guarantee the right of every person to live a good life based on the principles of universality and uniqueness, as well as their vital interests and needs.

Equity in the Solidarity Economy

- Promoting equity implies **guaranteeing the right of all people not to be subjected to relationships based on domination**, whatever their socio-economic status, gender, sexual orientation and identity, age, culture, origin, beliefs, languages, legal status, abilities, etc., as well as any other characteristic subject to discrimination.
- Incorporating the principle of equity in Solidarity Economy initiatives means strengthening their transformative and inclusive nature, as well as prioritising the task of building habitable spaces where privileges are questioned and in which anyone can participate based on the recognition of their diversity.

Equity in the Solidarity Economy

- The commitment to the principle of equality involves all the structures and all the people who, in one way or another, form part of the organisations and networks of the Solidarity Economy, but also their relations with other people and social entities.
- It is also a criterion of relationship with society as a whole and with the different territories, rural and urban, geographically close or distant, and particularly with those people and communities that suffer the greatest levels of inequality and discrimination.

In order to develop this principle it is proposed:

- Promote reciprocal relationships between people that facilitate co-responsibility based on values and the practice of mutual support.
- Ensure an equitable distribution of all productive, reproductive and care tasks.
- To value goods and services ethically and fairly, facilitating their availability and access for all people.
- Articulate spaces and practices that consider people in situations of vulnerability and social disadvantage throughout the process.
- Rethink and transform governance structures and practices in which exclusionary and often invisible power dynamics can occur: decision-making processes, management of emotions, distribution of tasks, conflict management, etc.
- Guarantee the right to free, horizontal and equitable participation in all organisational spheres and ensure that information is accessible, clear and frequent.

Decent Work in the Solidarity Economy

- Much more than a job or an occupation, work is all human activity that makes it possible for life to be sustained, treated with care and reproduced, both in the present and in the future. For this reason, the Solidarity Economy recognises work in the plural: productive and reproductive, professional and voluntary, paid and free.
- Likewise, **work is understood as a tool for collective action at the service of the needs of the community and the sustainability of life**, oriented towards the development of capacities and individual and collective empowerment.
- **Interdependence and eco-dependence** are assumed as basic and necessary processes for our survival, which is why, in particular, care work between people, communities and with the planet is a priority for social organisation. Sharing responsibility and equitably distributing its provision is indispensable for promoting the quality of life of people, the community and its environment, as well as for the development of fair social and economic relations.

Decent Work in the Solidarity Economy

- For this reason, the **Solidarity Economy promotes dignified, healthy and emancipating employment, based on cooperation and wage balance, on the right to participate in the ownership of the means of production and in decision-making.** Employment aimed at producing socially useful goods and services in an equitable and sustainable way.
- As a way of overcoming the dynamics of chronic impoverishment and life precariousness, the experiences of the Solidarity Economy offer people the resources and time necessary to enjoy lives worth living. To this end, they promote cooperative, self-managed, participatory and transparent initiatives that meet needs and contribute to individual and collective well-being. These initiatives must guarantee the development of personal skills, the sharing of all jobs, as well as the creation of stable and quality employment that facilitates social and economic inclusion in an environment of equal opportunities.

In order to develop this principle it is proposed (1/2):

- To promote the sharing of all work (paid or unpaid), the equalisation of the social and economic value of productive and reproductive work, and the equitable distribution of income as a guarantee of a good life.
- Promote a new social organisation of care that guarantees its provision based on shared responsibility and the sharing of work in the private, community and public spheres.
- Defend and guarantee the fundamental right for all people to access the labour and social opportunities necessary to obtain resources.
- To encourage community organisation and participation in order to promote social initiatives that foster economic solidarity, the satisfaction of social needs and the promotion of well-being, with or without the intermediation of money.

In order to develop this principle it is proposed (2/2):

- To develop decent, emancipating and inclusive employment capable of managing diversity and incorporating people who suffer any type of discrimination into the labour market and society.
- To build organisations that are liveable and co-responsible for the sustainability of life, taking into account both the social, environmental and community dimensions of care, and the capacity of people to choose their work based on their skills and desires.
- Promote horizontal, diverse and democratic companies that encourage participation, cooperative leadership and critical thinking, paying attention to processes and relationships, incorporating emotional health and the need to give and receive care into the organisational culture.

Cooperation in the Solidarity Economy

- Faced with the individualism and competition prevailing in capitalism, **the Solidarity Economy understands cooperation as a proposal for self-organisation based on mutual support and solidarity, aimed at satisfying needs and achieving the common good.** To this end, it weaves cooperation networks that promote a transformative collective agenda and become spaces that promote direct democracy and the ethics of participation, horizontality and respect for autonomy, the empowerment of those who participate and the redistribution of power.
- From this perspective, cooperation processes favour co-responsibility, collaborative work, collective deliberation, shared knowledge and mutual learning. These values and practices are necessary for the construction of alternative organisations and initiatives, as well as for the development of a solidarity-based, egalitarian and diverse socio-economic model.

Cooperation in the Solidarity Economy

- The Solidarity Economy promotes a **culture of cooperation and interdependence between organisations to overcome the model of competition that isolates people and communities.** Heir to the historical legacy of mutualism and cooperativism, shared with other critical social movements and other transformative economies, cooperation promotes the development of collective and plural strategies based on sharing knowledge, networking and pooling efforts and resources. This facilitates mutual enrichment and the expansion of more democratic, solidarity-based, equitable and sustainable forms of intervention and management.
- The cooperative culture enables organisations to share vision and values. Its educational dimension, moreover, favours a better understanding of the diversity of the territory and of community life. Ultimately, **the Solidarity Economy promotes cooperation as a central element for the construction of collaborative, democratic and transparent economic relations.**

In order to develop this principle it is proposed (1/2):

- Favour cooperation rather than competition, both within and outside organisations.
- Promote democratic governance models that respect autonomy as a principle of freedom, guarantee the exercise of co-responsibility and self-management, and develop tools that enable empowerment, equal opportunities, respect and co-responsible involvement.
- Generate spaces for participation in the organisations themselves for all the people involved: members, workers, beneficiaries of services, etc.
- Encourage networking relationships based on mutual trust, respecting the autonomy of the organisations and promoting their strengthening.
- To collectively attend to and accompany the different needs of people and entities, as well as the different situations of vulnerability and fragility.

In order to develop this principle it is proposed (2/2):

- To design and share inter-cooperation tools in the cooperative production of products and services, in the collective support of ethical financing instruments, in the deployment of the Social Market or in the promotion of cooperative consumption in areas such as food, energy, housing, culture, etc.
- Promote strategies to encourage and channel inter-cooperation between entities, reinforcing the economic dimension of cooperation, understood as a collaborative business strategy based on joint strengthening.
- To promote the networking of organisations for their deployment at all levels (local, regional and international), as well as to promote public-social-community cooperation for the development of policies that develop the Solidarity Economy, both locally and internationally.
- Promote and participate in campaigns, projects and common initiatives that broaden the advocacy capacity and the impact of transformative initiatives.

Ecological Sustainability in the Solidarity Economy

- **All human activity is eco-dependent**, so from the perspective of ecological sustainability we recognise its environmental limits and promote a commitment to positive coexistence with the natural environment and the maintenance of its richness in the present and in the future.
- The Solidarity Economy recognises nature as a subject of rights, which is why it places living beings and the reproduction of life at the centre of all social and economic processes. Therefore, it assumes the biophysical limits of the planet, promotes the sustainability of ecosystems and is committed to their care. In this sense, it considers ecological sustainability as a central principle in its commitment to the health of the planet and the sustainability of life, assuming the need to ensure the survival of all living beings.

Ecological Sustainability in the Solidarity Economy

- From this perspective, **Solidarity Economy considers material degrowth as a necessary obligation after a historical process of exploitation of a planet with limited resources.** The commitment to an ecological transition requires degrowth in the processes of extraction of natural resources, in the use of energy sources, in the overexploitation of fertile soils and in the maintenance of current levels of production and consumption that destroy biodiversity and the ecosystems necessary for life.
- In the face of the ecosocial crisis that mortgages natural resources and endangers human existence itself and all expressions of life, the Solidarity Economy promotes a new paradigm focused on feeling and sustaining the life of the planet. To this end, it is committed to not causing further damage and to repairing the environment, learning from the cosmovisions of peoples and cultures that manifest and practice coexistence with nature and respect for its cycles and processes.

In order to develop this principle it is proposed (1/2):

- To develop conscious, responsible, critical and transformative models of production, distribution and consumption that ensure ecological sustainability throughout the economic chain, promoting the development of local and neighbourhood economic circuits.
- Reduce, repair, recover, reuse and recycle the materials and resources produced or used, limiting the environmental impact of economic activities.
- Promote economic relations, commercial agreements or the selection of product and service suppliers based on environmental and social justice criteria.
- Promote a regenerative culture aimed at restoring the planet's ecosystems and natural cycles, as well as recovering and preserving biodiversity and repairing the environmental damage caused.

In order to develop this principle it is proposed (2/2):

- Promote alternative environmental practices in the field of cooperative housing, social urban planning and the decommodification of public spaces and territory.
- Promote balance and integration between rural, urban and natural spaces, with the aim of modulating and curbing the ecological impact of land management.
- To practice agroecology as a model based on production, distribution and consumption practices that respect nature, as well as to promote food sovereignty as a strategy for transforming the unjust and unsustainable food system.
- To promote initiatives that enable a just energy transition towards a sustainable model, as well as to promote energy sovereignty through the development of cooperative models of production, management and consumption of renewable energies.

Fair Wealth Sharing in the Solidarity Economy

- Enabling the ecosocial transition that our planet needs requires questioning hegemonic economic thinking, calling for a real economy at the service of people and the planet, as well as promoting sustainable generation and a fair distribution of wealth.
- Solidarity Economy proposes an alternative and integral consideration of the concept of wealth, as well as calling for its distribution in a co-responsible way. Thus, we understand wealth as the set of material, social, cultural and natural elements that determine the capacity of a community to meet the needs of its members in the short, medium and long term.
- Thus, its fair generation, distribution and conservation becomes a collective strategy necessary for the reproduction and sustainability of life. At the same time, it implies redefining the use and value of money as an instrument for a community-based economy that allows us to build equitable, inclusive and autonomous societies.

Fair Wealth Sharing in the Solidarity Economy

- We assume the collective nature of economic practice and therefore incorporate a set of associative traditions, such as cooperativism, non-profit organisations, fair trade, the care economy and ethical finance, which generate and distribute this wealth in an integral way through autonomous and sustainable initiatives.
- The generation and fair distribution of wealth makes it possible to promote a social and economic impact on the territory that favours good living, through the deployment of circuits that contribute to the construction of fairer and more sustainable socio-economic models. It also makes it possible to generate socially necessary, inclusive and quality jobs that serve people's needs.
- This principle requires Solidarity Economy organisations to recognise the economic dimension of their activity and to accept the responsibility it entails in the generation, reinvestment and distribution of their surpluses.

In order to develop this principle, it is proposed (1/2):

- Reinvest surpluses for the development, consolidation and patrimonialisation of the organisations themselves.
- Promote and support transformative collective initiatives and community solidarity mechanisms.
- To invest with criteria of social and environmental utility.

In order to develop this principle, it is proposed (2/2):

- Use measurement, analysis and evaluation tools to guarantee democratic management and transparency in the redistribution and reinvestment of surpluses.
- Develop and sustain an ethical and solidarity-based financial system, governed by the principles of collective ownership, participation and transparency, oriented towards the real economy, of an integral and inclusive nature, which promotes community solidarity and serves the collective interest.
- Integrate the processes of production, distribution, financing and consumption in the Social Market as a shared strategy to increase the positive impacts and transformative potential of the Solidarity Economy and its organisations.

Commitment to the Environment in the Solidarity Economy

- The recognition of interdependence and eco-dependence, as well as the transformative desire of Solidarity Economy initiatives and organisations, entails an intense relationship between them and the environment in which they operate, as well as a commitment to its improvement. This is a local perspective that is complemented by the necessary understanding of the interrelationship between supra-territorial dynamics that pursue eco-social justice on a global level.
- Commitment to the environment implies knowing and recognising, getting involved, collaborating and articulating with the rest of the agents that make up the socio-economic fabric in which the Solidarity Economy acts and is rooted. It implies the promotion and encouragement of models of production, distribution and consumption centred on the territory, from which to build community proposals for improvement and, through alliances that provoke a multiplier effect, an agenda of eco-social transformation that moves from the local to the global.

Commitment to the Environment in the Solidarity Economy

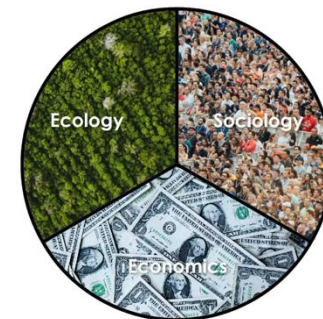
- It also implies a strong commitment to local culture, recognising, in turn, the diversity of existing identities and social and cultural expressions. From this perspective, this commitment implies, in particular, knowing and recognising the people in vulnerable and socially disadvantaged environments in order to be able to articulate responses to their needs and interests, favouring their inclusion through the initiatives of the Solidarity Economy and the transformation of the socio-economic model.
- To develop this commitment to the environment, it is necessary to care for and strengthen the links and networking between the people and entities of the Solidarity Economy, as well as to establish alliances with other networks with whom to build an economic, social and political subject of solidarity, feminist, anti-racist and decolonial character. Likewise, it is important, assuming plurality and diversity, to establish collaborations with other social and institutional agents that allow the development of policies and strategies for territorial transformation.

In order to develop this principle it is proposed (1/2):

- To establish collaborative, equitable and respectful relationships between Solidarity Economy initiatives and the environment.
- Communicate the reality, objectives and results of the Solidarity Economy entities to the environment through appropriate and accessible communication instruments and channels.
- To value and use the resources, capacities and potential of the territory from an endogenous development perspective.
- Improve the environment with the proposals and actions proposed by the Solidarity Economy, promoting, in particular, the development of alternative and community-based economic relations.

In order to develop this principle it is proposed (2/2):

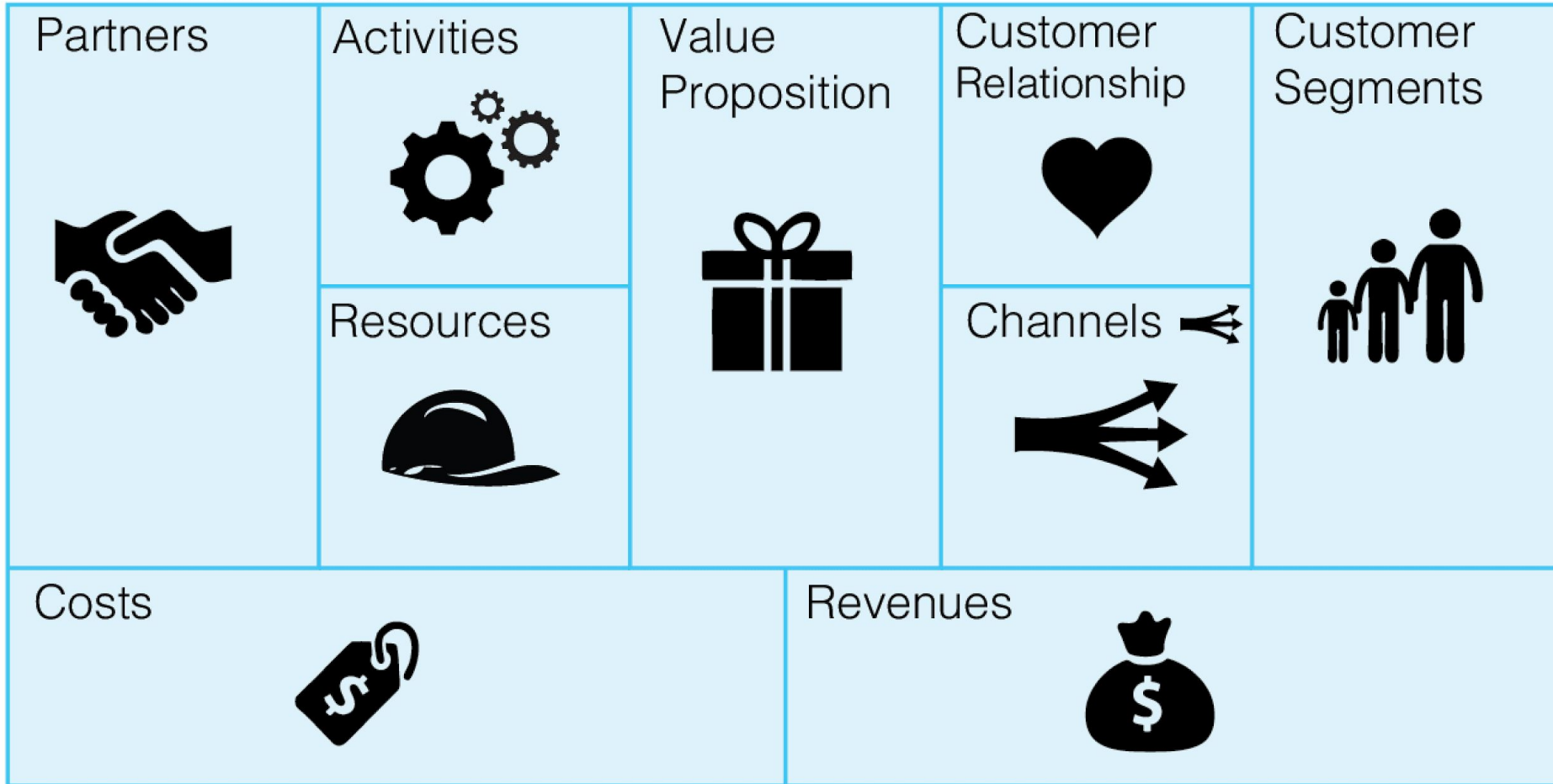
- Identify needs, inequalities and injustices in the territory to promote the development of responses and alternatives.
- Actively participate in local networks and social movements that promote awareness, mobilisation and the development of actions to transform the territory.
- Promote the active and quality participation of people in the community, generating spaces of collective construction, safe and close, based on relationships of mutual care.
- To make visible and develop ecofeminist practices in the territory, in addition to contributing to the construction of non-sexist and non-discriminatory communities.
- Revaluing the rural sphere and connecting it on an equal footing with the urban sphere and supporting more resilient ways of organising territories.
- To influence public policies in order to build strategies for the development of territories from the perspective of good living.



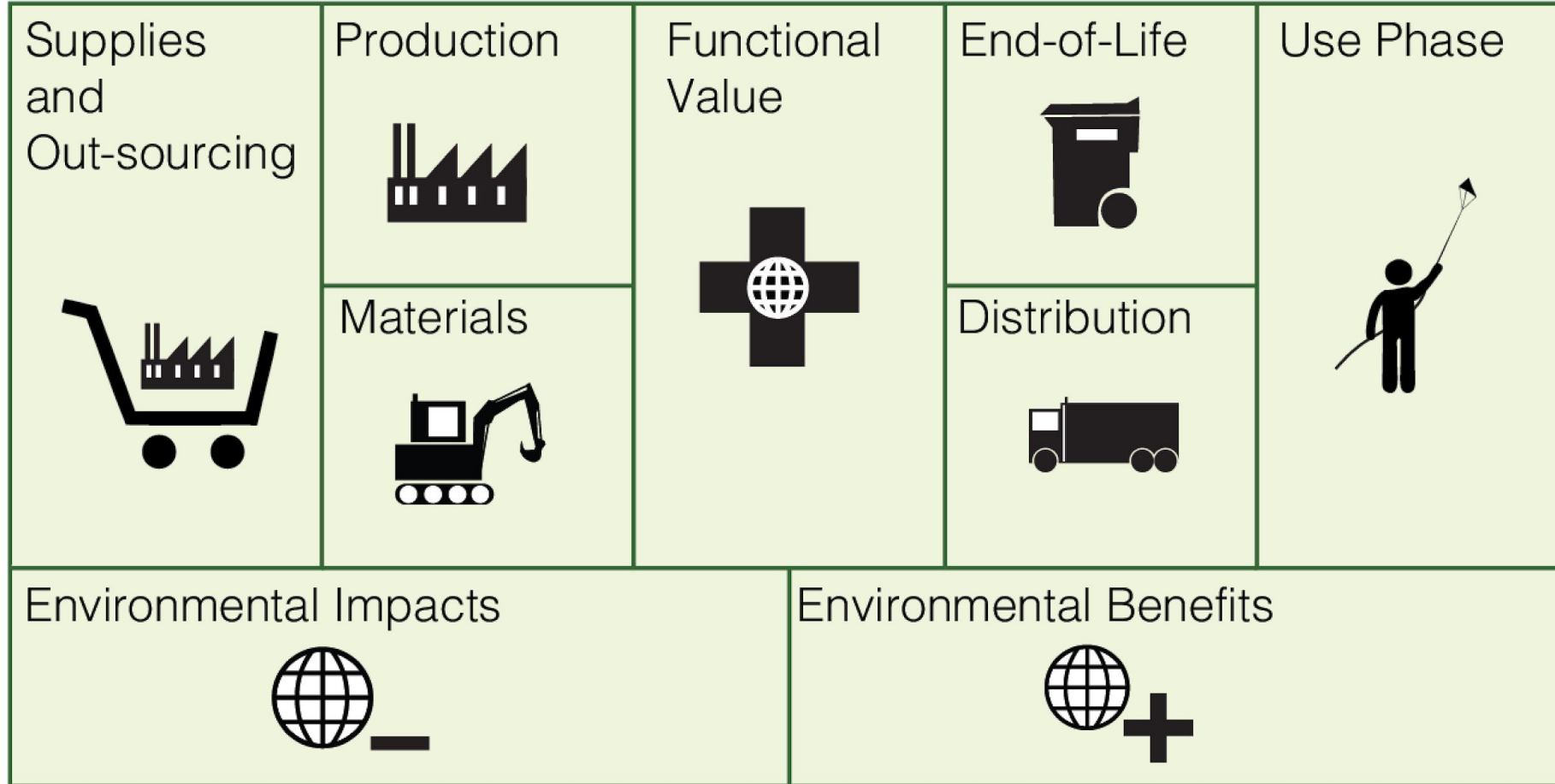
Commitment to the Environment in the Solidarity Economy

- The Green CSR (Corporate Social Responsibility) is the recognition of obligation or the waste-reduction practice of firms' operation to maximize the efficiency of their inputs and minimize the means of negatively influencing the future generations of the country.
- The four main types of the CSR are: environmental responsibility, ethical responsibility, philanthropic responsibility and economic responsibility.
- The **Triple Layered Business Model Canvas** is a tool for exploring sustainability-oriented business model innovation. It extends the original business model canvas by adding two layers: an environmental layer based on a lifecycle perspective and a social layer based on a stakeholder perspective.
- This canvas aims to ensure that the full life cycle of a product or service is considered when a new business is launched, with an accent on environmental impacts.

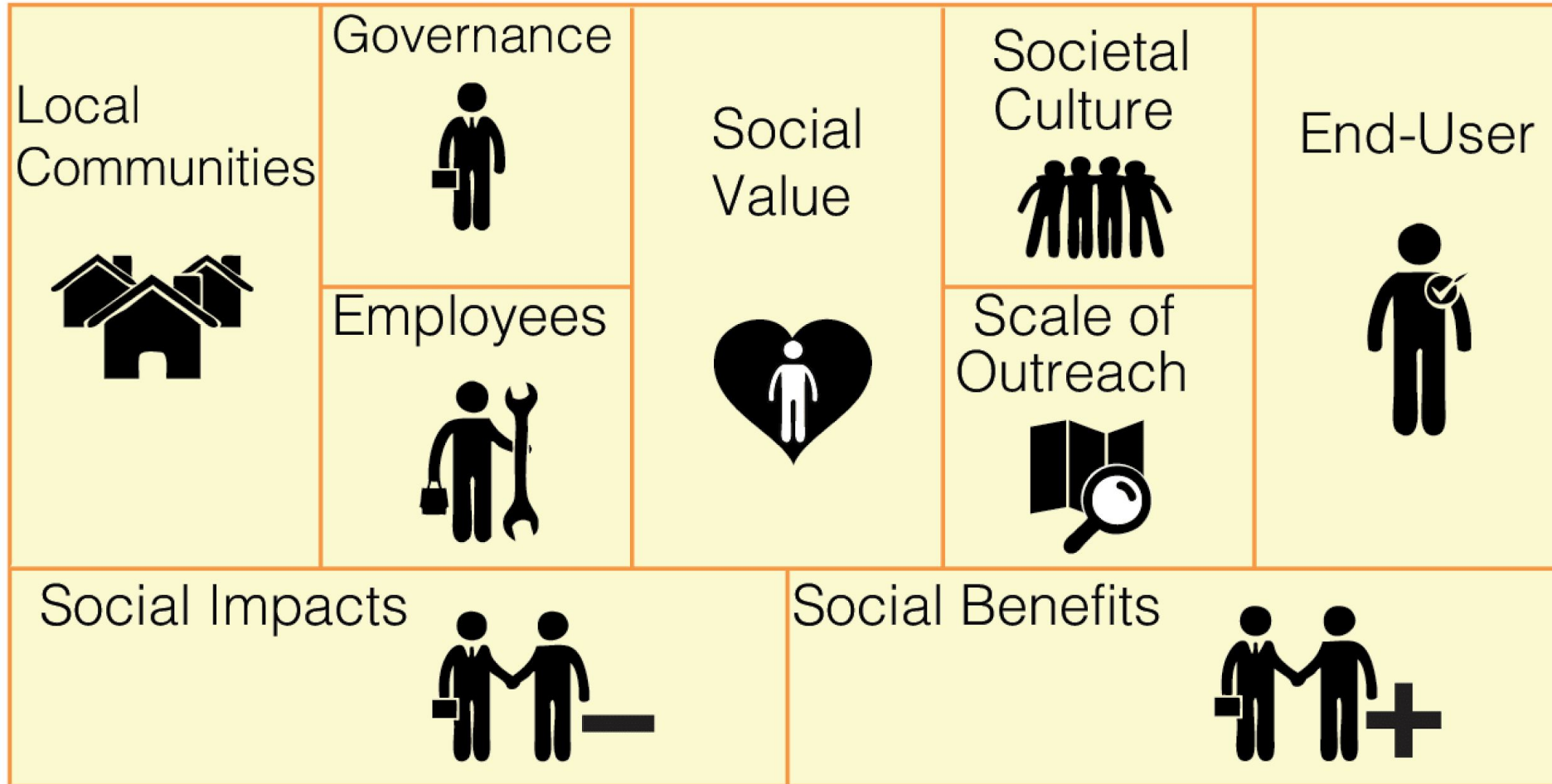
Economic Business model Canvas

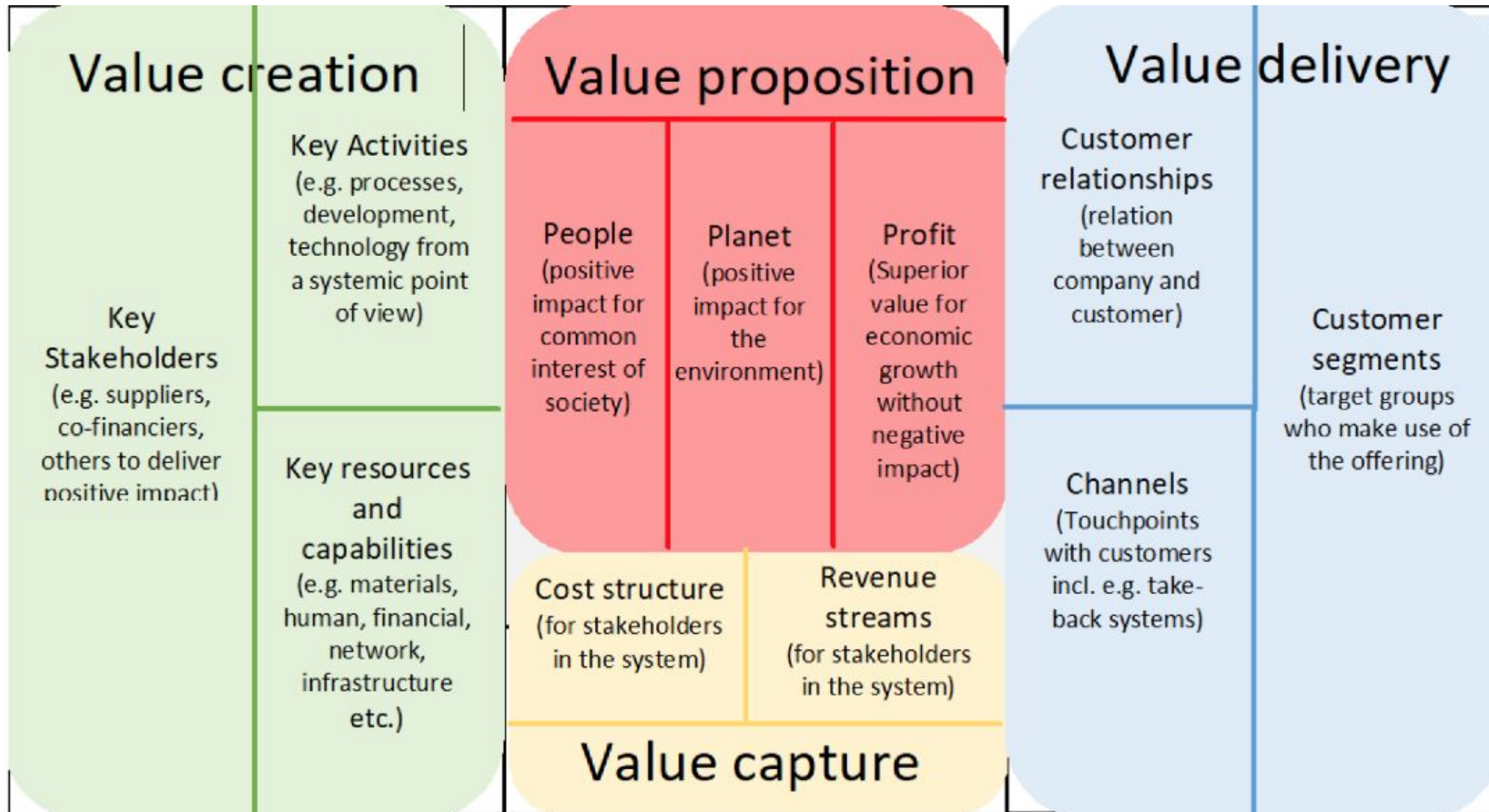


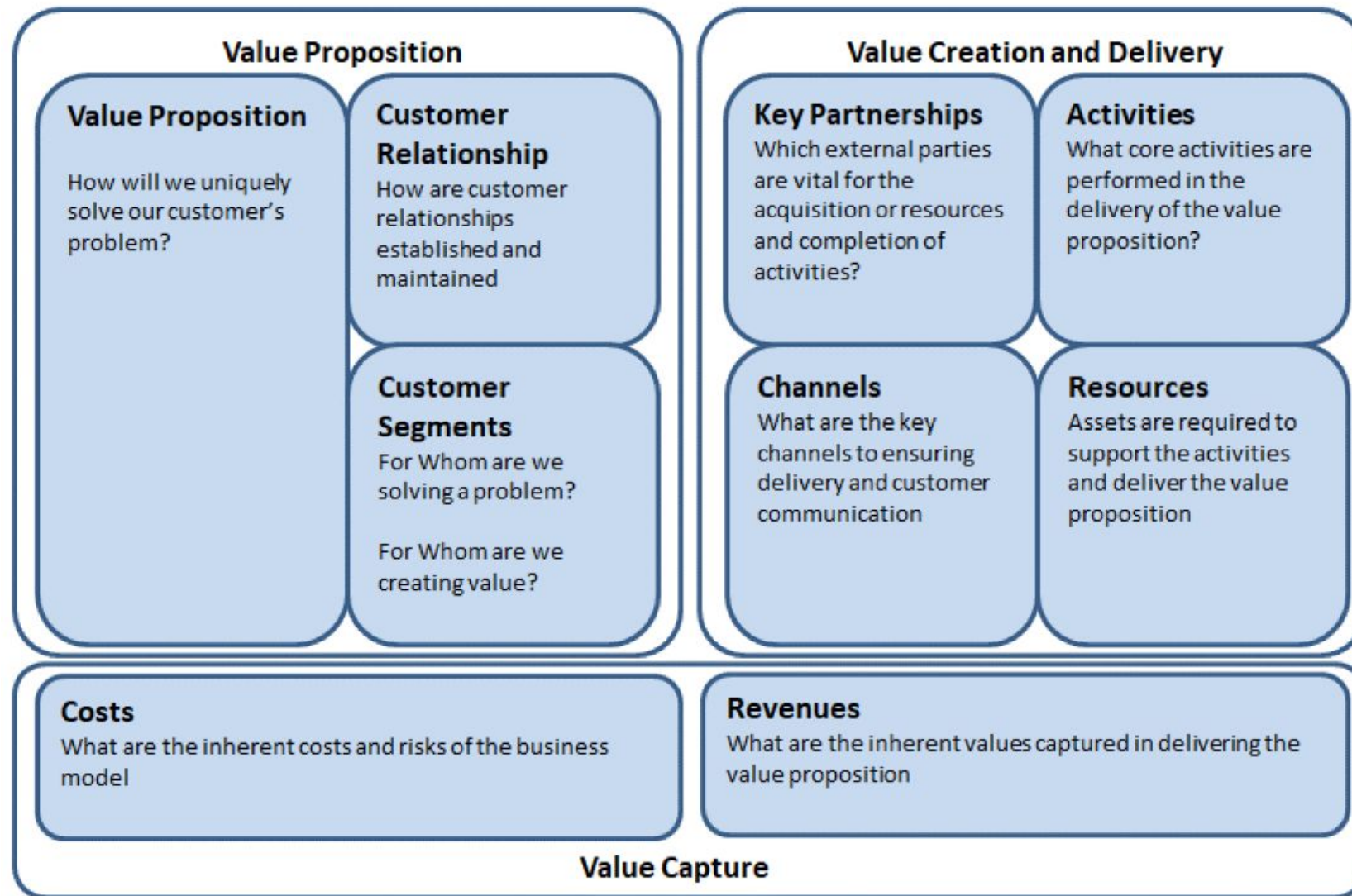
Environmental Life Cycle Business model Canvas



Social Stakeholder Business model Canvas







Credits

- “Comercio Justo” Spanish Website (Fair Trade) - <https://comerciojusto.org>
- Fair World Project Website – Fair Trade Principles - <https://fairworldproject.org/get-informed/movements/fair-trade/principles/>
- Fairtrade advocacy Website - Sustainable production and consumption policies: Fair enough? - <https://fairtrade-advocacy.org/ftao-publications/sustainable-production-and-consumption-policies-fair-enough/>
- Fair Trade Website – News and information - <https://www.fairtrade.net/>
- <https://sdgs.un.org/es/goals>
- What do you know about “Ethic and inclusive food business models” - <https://www.youtube.com/watch?v=4ZMj--hZfSU>
- A Brief History of Fair Trade - <https://www.youtube.com/watch?v=C22yzOxdUDg>
- Fair Trade: A Just World Starts with You | Benjamin Conard | TEDxSUNYGeneseo - <https://www.youtube.com/watch?v=xT6TQsXlDOY>
- International Fair Trade Charter - <https://www.youtube.com/watch?v=9G8W3llc-MU&feature=youtu.be>
- “Economía Solidaria” Spanish Website (Solidary Economy) - <https://www.economiasolidaria.org>
- Introducing The Triple Layer Business Model Canvas - <https://hackernoon.com/introducing-the-triple-layer-business-model-canvas>
- How to incorporate Green Initiatives into your CSR Policy - <https://www.sodexoengage.com/blog/how-to-incorporate-green-initiatives-into-your-csr-policy>
- The Corporate Social Responsibility - <https://corporater.com/corporate-responsibility/>
- Green Corporate Social Responsibility - <https://www.resources.org/common-resources/green-corporate-social-responsibility/>
- Corporate Social Responsibility (CSR) Explained with Examples - <https://www.investopedia.com/terms/c/corp-social-responsibility.asp>
- What is Corporate social responsibility (#CSR) ? - https://www.youtube.com/watch?v=1bpf_sHebLI
- 6 Portraits of the Solidarity Economy - <https://www.filmsforaction.org/watch/portraits-of-the-solidarity-economy/>
- Exploring Social and Solidarity Economy's - https://www.google.com/search?q=6+principles+of+the+solidarity+economy+charter+video&source=lnms&tbm=vid&sa=X&ved=2ahUKewiNrN7i8KD8AhWnR6QEHS38Ch8Q_AUoAnoECAEQBA&biw=1261&bih=607&dpr=2#fpstate=ive&vld=cid:d2a06280.vid:e9vXkxvE1wA
- EU Charter of Fundamental Rights (English) - <https://www.youtube.com/watch?v=x3YSY1DdR5U>
- History: EU Charter of Fundamental Rights - <https://www.youtube.com/watch?v=cAZnzpoRBzc>

DESCRIPTION OF THE ASSESSMENT SYSTEM

Continuous assessment is an evaluative method where different activities or tests are established throughout a subject, thus assessing the student's learning process. The permanent focus of attention is established on the student and on his/her teaching-learning process.

The VET4FOOD evaluation system is based on different types of pre-established tools in order to guarantee the systematic collection and analysis of the results. In this way it is possible to offer to students and self-learners feedback about the acquired knowledge and competences, their level of learning and, at the same time, offer a stimulus to the teacher to redirect and/or adapt the training.

- Every learning activity receives a score out of 10 points and represents a percentage of the total score of that block of the assessment. The weighted average of learning activities' scores represents 50% of the score of the unit. The result of the Unit's Quiz represents the remaining 50% of each unit's assessment score.
- So, the final mark of each Unit will be composed by:
 - **50% of the final score of the learning activities.**
 - **50% of the unit's quiz test score**



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Thank you!



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VET4FOOD
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SLOW FOOD AND CULTURAL HERITAGE - UNIT 7



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LIST OF CONTENTS

- Topic 1. The anthropology of Food
- Topic 2. Varieties and tradition through geographical indications.
- Topic 3. The emerging of Slow Food: culture and traditions related to food sector
- Topic 4. Mediterranean diet approach
- Topic 5. The case study: culinary tourism as opportunity to promote local area and economic grow



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Brief introduction about the Unit and its objectives and competences

Food has long been one of the most important factors of identity, along with religion, language, folklore, and other distinguishing elements of culture. Food is studied by several disciplines because it has always been more than just nutrients. These studies have provided better insights into important societal processes involving history, anthropology, economics, health, environment, and the politic.

The uniqueness, variety and creativity of food traditions and cultures, as well as the complex interplay of societal and environmental factors can be fully understood in this Moodle Unit by starting per an anthropologic perspective.

Brief introduction about the Unit and its objectives and competences

Knowledge:

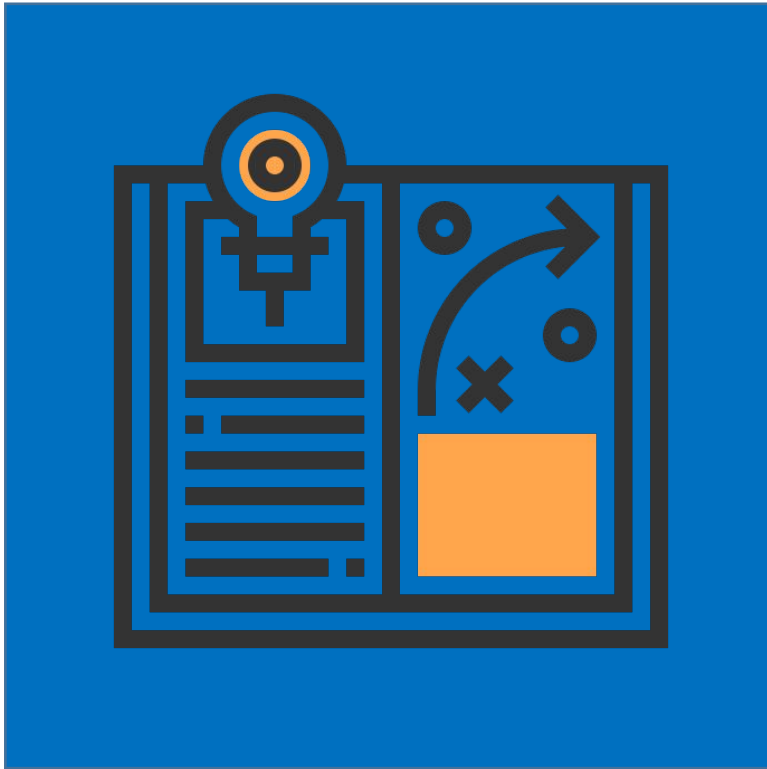
1. The relationship of food with cultural identity of territories
2. Protected designations roles and applications
3. The knowledge of slow food approach and their opportunity
4. The cultural culinary tourism as opportunity of sustainable business

Competences:

1. Using Cultural competences to understand food practices
2. Capacity to understand geographical indications and their real values
3. How choose products aligned with the profiles coming from the market information through the utilization of protected designations
4. Concept and design own business based on culinary tourism experience



OBJECTIVES



1. To better understand food values and its implications on social and cultural level.
2. To recognize the multiple values of food.
3. To understand the unique characteristics of food and their cultural heritage linked to the identity of territory.
4. To understand the Mediterranean diet.
5. To identify alternative business models (cultural, touristic activities related to food sector) to promote sustainability and local development.

Topic 1. The anthropology of Food

- The Anthropology of Food has deep roots. E. B. Tylor (1865), the world's first professional anthropologist, planted the seeds when he worked to establish the fact (disputed at the time) that cooking qualified as a human universal. Colonel John Bourke (1885) wrote the Anthropology of Food's first dedicated paper, "The Urine Dance of the Zuni Indians of New Mexico" twenty years later (Routledge International Handbook of Food Studies (2012) Chapter: Anthropology of Food. Ken Albala).
- Anthropologists study food from different perspectives. Some look at eating and drinking in connection with other aspects of social life. Others are concerned with dietary matters and how food-related practices and beliefs affect physical well-being. These two points of view, referred to respectively as "The Anthropology of Food" and "Nutritional Anthropology," need to be considered together if one wants a truly complete picture of a food culture. (Robert Dirks & Gina Hunter - Illinois State University)

Topic 1. The anthropology of Food

- However, we limit our concern in this topic to eating and drinking as social and cultural experiences. The major topic explored within this tradition have included the foodways of particular peoples and regions; the dynamics of various food systems; the cultural effects of ancient foodways; the ethnohistory of specific commodities; food-related beliefs, rituals, and symbols; eating habits and etiquettes; and systems of food classification and meal structure. (Routledge International Handbook of Food Studies (2012) Chapter: Anthropology of Food. Ken Albala)

Topic 2. Varieties and tradition through geographical indications.

- EU quality policy aims to protect the names of specific products to promote their unique characteristics, linked to their geographical origin as well as traditional knowhow.
- Product names can be granted a 'geographical indication' (GI) if they have a specific link to the place where they are made.
- Products that are under consideration or have been granted GI recognition are listed in geographical indications registers. The registers also include information on the geographical and production specifications for each product.
- Recognised as intellectual property, geographical indications play an increasingly important role in trade negotiations between the EU and other countries.
- Other EU quality schemes emphasise the traditional production process or products made in difficult natural areas such as mountains or islands.
- Geographical indications establish intellectual property rights for specific products, whose qualities are specifically linked to the area of production.

Geographical indications comprise:

- PDO – protected designation of origin (food and wine)
- PGI – protected geographical indication (food and wine)
- GI – geographical indication (spirit drinks).
- The EU geographical indications system protects the names of products that originate from specific regions and have specific qualities or enjoy a reputation linked to the production territory. The differences between PDO and PGI are linked primarily to how much of the product's raw materials must come from the area, or how much of the production process has to take place within the specific region. GI is specific for spirit drinks.

Protected designation of origin (PDO)



- Product names registered as PDO are those that have the strongest link to the place in which they are made.
- **Products:** food, agricultural products and wines.
- **Specifications:** Every part of the production, processing and preparation process must take place in the specific region. For wines, this means that the grapes have to come exclusively from the geographical area where the wine is made.
- **Example:** Kalamata olive oil PDO is entirely produced in the region of Kalamata in Greece, using olive varieties from that area.
- **Label:** mandatory for food and agricultural products, optional for wine.



Protected geographical indication (PGI)

- PGI emphasises the relationship between the specific geographic region and the name of the product, where a particular quality, reputation or other characteristic is essentially attributable to its geographical origin.
- **Products:** food, agricultural products and wines.
- **Specifications:** For most products, at least one of the stages of production, processing or preparation takes place in the region. In the case of wine, this means that at least 85% of the grapes used have to come exclusively from the geographical area where the wine is actually made.
- **Example:** Westfälischer Knochenschinken PGI ham is produced in Westphalia using age-old techniques, but the meat used does not exclusively come from animals born and reared in that specific region of Germany.
- **Label:** mandatory for food, agricultural products, optional for wines.



Geographical indication of spirit drinks (GI)

- The GI protects the name of a spirit drink originating in a country, region or locality where the product's particular quality, reputation or other characteristic is essentially attributable to its geographical origin.
- **Products:** spirit drinks.
- **Specifications:** For most products, at least one of the stages of distillation or preparation takes place in the region. However, raw products do not need to come from the region.
- **Example:** Irish Whiskey GI has been brewed, distilled and matured in Ireland since the 6th century, but the raw materials do not exclusively come from Ireland.
- **Label:** optional for all products.



Traditional speciality guaranteed (TSG)

- Traditional speciality guaranteed (TSG) highlights the traditional aspects, such as the way the product is made or its composition, without being linked to a specific geographical area. The name of a product being registered as a TSG protects it against falsification and misuse.
- **Products:** food and agricultural products.
- **Example:** Gueuze TSG is a traditional beer obtained by spontaneous fermentation. It is generally produced in and around Brussels, Belgium. Nonetheless, being a TSG, its production method is protected but it could be produced somewhere else.
- **Label:** mandatory for all products.

Other schemes

Mountain product

- The quality term 'mountain product' highlights the specificities of a product, made in mountain areas, with difficult natural conditions. 4 Recognising this is an advantage for farmers as well as consumers. It enables farmers to market the product better but also ensures certain characteristics are clear to the consumer.
- **Products:** agricultural and food products.
- **Specifications:** Raw materials and animal feed comes from mountain areas. For processed products, production should take place in such areas as well.
- **Report:** Labelling of agricultural and food products of mountain farming

Topic 3. The emerging of Slow Food: culture and traditions related to food sector

- Slow Food is a global, organization, founded in 1989 to prevent the disappearance of local food cultures and traditions, counteract the rise of fast life and combat people's dwindling interest in the food they eat, where it comes from and how our food choices affect the world around us.
- Since its beginnings, Slow Food has grown into a global movement involving millions of people in over 160 countries, working to ensure everyone has access to good, clean, and fair food.
- Slow Food believes food is tied to many other aspects of life, including culture, politics, agriculture, and the environment. Through our food choices we can collectively influence how food is cultivated, produced, and distributed, and change the world as a result.

Topic 3. The emerging of Slow Food: culture and traditions related to food sector

- The Slow Food philosophy envisions a world in which all people can access and enjoy food that is good for them, good for those who grow it and good for the planet. The approach is based on a concept of food that is defined by three interconnected principles: good, clean and fair.
- GOOD: quality, flavor some and healthy food
- CLEAN: production that does not harm the environment
- FAIR: accessible prices for consumers and fair conditions and pay for producers

Topic 3. The emerging of Slow Food: culture and traditions related to food sector

A Slow Food community is a group of people who share the values of the international Slow Food movement (reasserted in the Chengdu Declaration), starting from its primary principle: that everyone has a right to good, clean and fair food and that Slow Food will not give up the fight until every last person on the planet has access to it.

Made up of at least 10 people (the exact number will vary depending on the 5 area), it represents the basic nucleus of the Slow Food network, similar to the convivia.

A community is formed for a specific purpose (for example to protect and promote a local food, to create a food garden, to launch an education project, etc.) linked to Slow Food's general aims, and works in a specific area, in dialog with the rest of the local and regional network.

At the same time, it undertakes to make the international network stronger by supporting it in various ways.

Topic 4. Mediterranean diet approach

When we think of a “diet” these days, we usually think of some kind of restriction, that will help us reach a specific outcome, such as weight loss.

The Mediterranean diet couldn't be further from that. Rather, it encourages an eating pattern that includes the food staples of people who live in the countries around the Mediterranean Sea, such as **Spain, Greece, Italy, Morocco, Croatia, Cyprus and Portugal**. It also focuses on community when eating — think meals with family and friends and enjoyable conversation.

You'll find that in their meals, Mediterranean dieters emphasize a plant-based eating approach loaded with vegetables and healthy fats, including olive oil and omega-3 fatty acids from fish. It's a diet known for being heart healthy.

This diet is rich in fruits and vegetables, whole grains, seafood, nuts and legumes, olive oil and small amounts of dairy like yogurt and cheese are included. On this diet, you'll limit or avoid red meat and sugary foods. The Mediterranean diet allow low moderate amounts of wine. The Mediterranean diet is famous for its touted health benefits, which may be attributed to its high produce content.

Topic 5. The case study: culinary tourism as opportunity to promote local area and economic grow

The impact of food tourism can be beneficial to the growth of a local economy. However, there are downsides to food tourism that can challenge a community and destroy its cultural heritage in the search for profits.

According to the World Food Travel Association (WFTA), food tourists spend about 25% of their travel budget on food and beverages. This can mean an increase in profits for a local community as well as the local government's budget due to the taxes imposed on the goods purchased by tourists. This rise in revenue can afford local governments the ability to invest in marketing to tourists, which in turn can boost profits for local shops, restaurants, hotels and transportation services. An increase in culinary tourism can also in still in locals' cultural pride and help ensure unemployment rates remain low, especially in rural areas with low economic activity.

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Topic 5. The case study: culinary tourism as opportunity to promote local area and economic grow

- Though food tourism can have many desirable effects on a local community, in some cases the negatives may outweigh the positives. For communities that are suffering from a lack of natural resources — food, water, electricity — tourism can negatively affect the lives of those in the community. Fresh water may be re-routed to crops to sustain tourists' demand for food, while the locals' ability to have fresh water and food can be diminished.
- Some communities can face loss of cultural identity, because the local economy has transitioned to supporting the needs of tourists. Restaurants may begin to refrain from serving local cuisine and change menus to suit the culinary needs of tourists. In some cases, the influx of tourists can drive up the prices of goods and services, which forces many locals out of their communities, thus destroying a community's unique character.
- Gastronomy and wine tourism represents an opportunity to revitalize and diversify tourism, promote local economic development, involve many different professional sectors and bring new uses to the primary sector.

DESCRIPTION OF THE ASSESSMENT SYSTEM

Continuous assessment is an evaluative method where different activities or tests are established throughout a subject, thus assessing the student's learning process. The permanent focus of attention is established on the student and on his/her teaching-learning process.

The VET4FOOD evaluation system is based on different types of pre-established tools in order to guarantee the systematic collection and analysis of the results. In this way it is possible to offer to students and self-learners feedback about the acquired knowledge and competences, their level of learning and, at the same time, offer a stimulus to the teacher to redirect and/or adapt the training.

- Every learning activity receives a score out of 10 points and represents a percentage of the total score of that block of the assessment. The weighted average of learning activities' scores represents 50% of the score of the unit. The result of the Unit's Quiz represents the remaining 50% of each unit's assessment score.
- So, the final mark of each Unit will be composed by:
 - **50% of the final score of the learning activities.**
 - **50% of the unit's quiz test score**



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VET Training for Food Sustainability

Thank you!



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