



Training for sustainable food systems development

Toolbox



TRAINING FOR
SUSTAINABLE
FOOD SYSTEMS
DEVELOPMENT



Co-funded by the
Erasmus+ Programme
of the European Union

Training for sustainable food systems development

TOOLBOX

IO4 - IO5



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INTRODUCTION



Introduction

If you have found this file on the web, it probably means that you are interested in learning more about sustainable food. You are reading the right document!

“**T4F - Training for Sustainable Food Systems Development**” is an **Erasmus+ project**, funded by the European Commission. This 24-months project (November 2017-October 2019) was carried out by 7 European partners from Belgium, Italy and Spain, who tried to conceive a possible training model including the main concepts of sustainable development in food studies.

This document will **guide you to a quick understanding of the project and its content** in order to use them in the most efficient way, according to your level of current knowledge and needs. Although the project is addressed to the future and present professionals of the food sector, the materials can be useful to the general public.

1. Objectives

1. To **implement a replicable European training program**, which would provide high and relevant green and/or corporate social responsibility (CSR) skills in the food sector.
2. To **increase employability and qualification of vocational training (VET)** in the food sector.
3. To **improve the ecological transition** of the food sector.

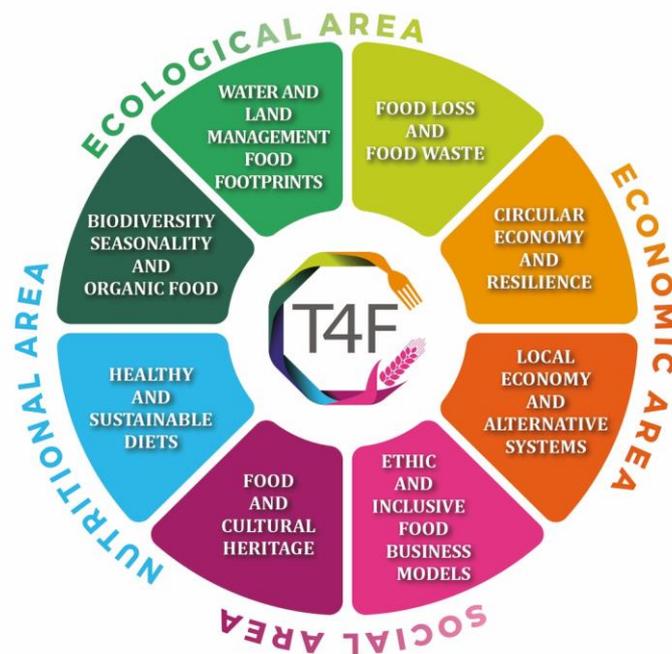
2. Targets

1. **Students** from different study levels - The training will be addressed especially to tourism, hospitality and art culinary training schools and VET providers linked to these sectors.
2. **Professionals** in these fields (e.g. entrepreneurs, managers, chefs, teachers) - The training will be useful to professionals of the food sector and those who want to re-think their workplace and to re-train themselves with a green approach.

3. Methodology

The 7 partners belong to different sectors, (vocational training, education, consultancy, and social economy) and they are linked by a strong commitment of using innovation and education to push the change of food system towards sustainable development. The working methodology was **participative and collaborative**. Their main steps were:

1. Identification of the training needs.
2. Implementation of a framework and 8 main issues divided into 4 sectors.
3. Construction by groups of the units which form the training program.
4. Creation of a methodological training guide and the assessment tools.
5. Testing and adapting the training course.



4. The key competences

1. Having basic knowledge about the main issues related to food and sustainability.
2. Understanding how these issues affect their jobs and the food sector in general.
3. Understanding how to use the acquired knowledge to increase their job opportunities or to improve their present work situation as employees, professionals and entrepreneurs.
4. Becoming able to direct their personal, family and community lifestyle towards a more sustainable approach to the food cycle

Here is the full list of the key competences we identified for the 8 learning units:

Unit 1: Healthy and sustainable diets

Promoting sustainability and health through nutrition choices. / Building a balanced meal, avoiding empty calorie foods. / Understanding nutrition and health claims of food labels and advertisements. / Creating healthy food offers / Discovering new sustainable ingredients.

Unit 2: Biodiversity, seasonality and organic food

Recognizing organic and seasonal food offers in their geographical area through a gastronomic, tasty and fair point of view. / Knowing the proper regulations and applications behind organic production. / Being able to manage an organic approach. / Being able to communicate the importance of seasonality, sustainability, and organic sourcing food.

Unit 3: Water and land management food footprints

Recognizing the inefficient use of water and the impact of food production on the environment. / Being vocal supporters of efforts to address climate change mitigation and adaptation in the food sector. / Being able to recognize the actions that promote the sustainable development of food systems. / Managing the company according to environmental sustainability criteria and improving resource efficiency.

Unit 4: Food loss and food waste

Organizing work more efficiently to avoid malpractice. / Planning and implementing ecological strategies to reduce food loss and waste. / Recognizing the role of packaging in minimizing food waste. / Designing strategies aimed at reducing food waste.

Unit 5: Circular economy and resilience

Implementing practices for a circular economy. / Promoting actions based on circular economy. / Understanding the regulation and programs of circular economy.

Unit 6: Local economy and alternative systems

Recognizing local and national programs as tools to promote the development of local food projects and businesses. / Working in collaboration with the business community and building bridges among complementary businesses. / Empowering participants to recognize alternative food markets as business opportunities. / Identifying the added value of local products to promote food businesses. / Developing marketing strategies and identifying the best channels to promote the production and sale of local foods.

Unit 7: Ethic and inclusive food business models

Understanding the proper price of food products. / Building a common vision regarding product quality, partner relationships and customer satisfaction. / Being able to communicate value and justify prices to consumers. / Evaluating strategic instruments for business transition towards sustainable models. / Building an implementation plan of CSR in a food enterprise.

Unit 8: Food and cultural heritage

Developing cultural competence related on food practices. / Recognizing geographical indications and their real value / Being able to design creative, innovative and sustainable food experiences. / Being able to recognize the protected designations of quality and origin of food products. / Designing business based on gastronomic tourism experience.



METHODOLOGICAL GUIDE

The methodological guide

1. Introduction

The methodological guide gives the keys to teach and/or follow the training. This document will guide the teacher and the self-learner through a fast understanding of the project and its contents. It can be used according to the learners' interests and/or their available time.

The training modules are built according to a **common framework**:

- **Introduction:** Why we consider it to be important to deal with this specific subject? What is this subject's current situation in Europe and the world?
- Different **issues regarding the subject**, including most advanced European or national laws, economic trends, etc.
- **Best practices** in Europe and in the rest of the world.
- Successful **case studies**.
- Suggestions of **practical and assessable learning activities**.
- **A list of references** if you want to learn more.

Teachers, food sector professionals, students and self-learners will find addressed information about the project training methodology in the next pages.

General public is also invited to read the entire toolkit guide to discover very useful information about training materials for colleagues, employees or family.

2. Let's start!

So, here we are. In order to give you better guidance through the training material we need you to answer to the following questions.

Step 1

How much time can you dedicate to the training?

Each unit provides a certain **workload** calculated in **hours**: this is the time considered **necessary to know the basics of each unit**. This learning workload is divided into two parts: one for **theoretical learning** and the other for the **practical activities**.

In the [first annex](#) you can find a **table with the modules, the training units, their main contents and the learning workload**, in hours, of each unit. This is the time considered **necessary to know the basics of each topic**, but it may take more time depending on each learner.

Step 2

Which are the most important topics about food sustainability that you want to teach or learn? Do you need a complete overview of sustainability or do you prefer starting with a specific issue?

In the [second annex](#) you can find **a table with the most important key concepts concerning sustainability** and in which units you can find them.

WARNING: *due to the complexity and interlinked character of the matter it's very important to consider that for a complete training about sustainability in the food sector everybody should train all Units of T4F. Just keep in mind that **all the units' issues are strictly related**, because sustainability is not a formula or a recipe, but it consists in a never-ending process of balance between the 3 pillars (economic, social and environmental). The first nutritional unit is linked to all the others. It goes without saying: how could a food be sustainable if unhealthy? Moreover, in the nutritional unit you'll also find information about how to reduce the consumption of animal food-stuffs and about new ingredients.*

Step 3

If you are a teacher...

During the training you can assess your students' knowledge and skills level with the T4F assessment tools.

It will help you to understand if they know enough about each unit, so that they can move to another module or if they need to deepen their knowledge and competences with more study and learning activities.

The **T4F 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 a feedback about the acquired knowledge and competences, their level of learning and, at the same time, offer a stimulus to you, as a teacher, in order to redirect and/or to adapt the training course.

Please, find more information in the [T4F assessment tools section](#).

If you are a professional/self-learner...

During the training you can assess your knowledge and skills level with the [T4F assessment tools](#).

It will help you to check if you know enough about each unit and move onto another module or if you need to deepen your knowledge and competences with more study and learning activities.

Evaluation tools can also be considered as a practical guide to support self-learners through the proposed training package: for example you can check if you know the answers of the units' tests, in order to choose the units to study.



ASSESSMENT GUIDE



The assessment guide

1. Introduction

The European Higher Education Area (EHEA) has meant a reformulation of the educational model. The main axis of this pedagogical renewal is the learning process of the student.

In this new paradigm, the educational objectives consist not only of the development of knowledge, but also in the acquisition of a series of competences and skills. Therefore, the teaching-learning process acquires a new dimension and the assessment is developed through different activities that facilitate the assimilation of concrete skills and the progressive acquisition of competences.

A competence, developed by the learning-by-doing method, can only be evaluated with the progression of different activities. Therefore, continuous assessment is established as the most optimal evaluation method in this new educational model.

The continuous assessment

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 continuous assessment has three aims:

1. To incorporate a great diversity of resources and activities, thus adapting to the different types of students, making the training more entertaining and reducing the risk of leaving the training.
2. To link the evaluation with the real future work needs of the students. Continuous evaluation helps the development of their professional profile, expanding their skills and solidifying the necessary skills to increase their employability.
3. To perform the shared construction of knowledge. The continuous evaluation allows the different members of the teaching-learning process to feel part of an educational community. It serves as an incentive for students to participate actively in their learning.

The continuous evaluation presents a series of benefits:

- ✓ It allows the student a greater ability to overcome the subjects, since both the contents and the competences are assimilated and learned in a more gradual and profound way, receiving constant support from the teachers.
- ✓ It gives the student the possibility of learning at her/his own rhythm.
- ✓ It gives the teacher the opportunity to rectify and reorient the educational process, improving study habits and methods.
- ✓ It helps, therefore, autonomous learning, increasing, among other things, organizational capacity.

The continuous assessment of T4F will be linked to the main and optional **learning activities** and **units quiz tests** and will be based on two different evaluation types:

- ✓ based on memorization: reproduction question (with open response), recognition question (type test).

- ✓ based on application and problem solving: the student has to make decisions, solve problems or apply techniques, strategies, etc.

2. T4F assessment tools

The T4F 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.

In addition, assessment tools can be considered as a practical path to guide users through the training package.

The T4F assessment tools are:

- ✓ Easy to correct and score for teachers and self-learners.
- ✓ Both theoretical and practical.
- ✓ Both analogical (printable) and digital (based on tic, information and communication technologies).
- ✓ Adapted to the target of student.
- ✓ Based on determined scores and criteria.

The T4F continuous assessment tools consist of:

- ✓ Between 2 and 7 practical learning activities at the end of each unit.
- ✓ A final quiz test of each unit. The number of questions will vary between 5 and 10 depending on the length of the Unit and on the complexity of its contents.

In the [annex 3](#) you can find the unit's quiz tests.

You can find the online Moodle version of the units' quiz tests [here](#).

The T4F assessment score system

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.**

The global score of T4F will be composed by the arithmetic average of the Units' final marks and it's **available only for those who complete the whole training**.

- ✓ In the [annex 4](#) you can find the **T4F unit's quiz tests solutions**.
- ✓ In the [annex 5](#) you can find the **T4F score spreadsheet**.



CONCLUSION



Conclusion

If you want more information about this training program and you need some professional advice for your school or vocational training center or company, **please contact one of the project's partners.**

PLS - Pour la Solidarité (Belgium) – project coordinator and social economy expert

Diesis coop (Belgium) – social economy expert

ESHOB - Escola Superior d'Hostaleria de Barcelona (Spain) – VET provider

Formation Emploi Tremplin - FOR.E.T (Belgium) – VET provider

Fondazione Triulza (Italy) – social innovation actor

KOAN Consulting SL (Spain) – social economy expert

Università della Cucina Mediterranea – UCMed (Italy) – VET provider

If you have studied the training material carefully, you should now be aware and agree with us that **including sustainability issues in the food sector is a priority** and **each of us can take part** in changing the general approach to this.

No matter if you are a teacher, a professional, a student, or a consumer; you can be an important part **of general call to action** involving your students, communities, companies, family, friends, etc. This call to action can be made in different areas: shops, restaurants, homes and food industry. And it can affect both the acquisition of food and its preparation, avoiding waste, increasing the circular economy, social cohesion and fair trade, with the aim of reducing poverty, increasing social and labour justice, protecting the environment and fighting against climate change.

The first step is to introduce sustainability practices in your daily approach to food!

The world cannot wait! Join us at the T4F table and become part of the change!



ANNEXES



Annex 1: T4F unit's contents and learning workload

Nutrition : Healthy and sustainable diets

13 hours (8h theoretical + 5h practical activities)

- Macronutrients, micronutrients and energy intake; proper « quantity and quality » for balanced diets.
- Influences on nutritional status including lifestyle, knowledge and beliefs, ethic and religious choices.
- The main scientific sources for healthy nutrition.
- The risks, challenges and opportunities of new and innovative ingredients.
- The Mediterranean diet.

Ecology : Biodiversity, seasonality and organic food

18 hours (4 theoretical + 14h practical activities)

- Highlight the importance of biodiversity at multiple levels.
- The importance of the seasonality at environmental and nutritional levels.
- Food preservation techniques to avoid food loss and preserve food heritage and artisanal production.
- Organic food production and how it is sustainable at local and global levels.

Ecology : Water – land management and food foot prints

26 hours (16h theoretical + 10h practical activities)

- Overview on food system, its impact on the natural environment.
- Water demand, land usage and their implications on climate change.
- Food footprints (water and carbon).
- The intensive food production and farming and their footprints.
- Innovative and sustainable practices and technologies that aims to integrate the management of land, water, biodiversity, and other environmental resources to meet human needs while ensuring the long-term sustainability of ecosystem services and livelihoods.

Ecology : Food loss and food waste

14 hours (8h theoretical + 6h practical activities)

- Definitions and implications.
- How to reduce your waste: tracking and assessing tools.
- Convert exploitation strategies into actions through education: re-use / reprocessing of food (vegetable soup, fruit smoothies, etc.), improvements in conservation techniques, recycling and composting.
- Benefits of packaging reduction strategies.

Economy : Circular economy and resilience

26 hours (12h theoretical + 14h practical activities)

- Definitions (circular economy and resilience).
- Practical examples of funding opportunities.
- Cooperation, collaboration and networking.
- The Economic value and potential benefits of circular economy as innovative business that create employment.

Economy : Local economy and alternative systems

12 hours (6h theoretical + 6h practical activities)

- The concept of local food economies and their economic impact on the community.
- Proposing the concept of food sovereignty, as an alternative to the concept of food security.
- Practical examples of alternatives businesses based on local and short supply chain.

Social : Ethic and inclusive business models

18 hours (12h theoretical + 6h practical activities)

- Decent work, fair prices for producers, fair trade: the food supply chain based on value.
- Social economy as a business model to develop sustainable food activities (economic growth and local development socially inclusive).
- Developing the concept of green social entrepreneur in a practical way.

Social : Food and cultural heritage

18 hours (10h theoretical + 8h practical activities)

- The relationship between food culture and daily, spiritual and social life.
- The influence of social and cultural trend on contemporary nutrition.
- Sustainable food and the concept of "time".
- Protected designations of origin and quality: safeguarding, valuing and transmitting the know-how of the food production.
- Gastronomic tourism as an opportunity to develop a sustainable business activity.

Training for food learning workload and ECTS

Theoretical	<i>Reading / Contact hours¹</i>	76 hours
	<i>Autonomous work</i>	28 hours
Practical	<i>Practical activities-continuous assessment</i>	69 hours
Final assessment	<i>Final quiz test</i>	3 hours
Total learning workload		175 hours
ECTS²		7

¹ Contact hours: in case of a traditional classroom course these are the teaching hours in the classroom, in case of self-learning these are the hours dedicated to the theoretical contents.

² ECTS: European Credit Transfer and Accumulation System: ECTS is a credit system designed to make it easier for students to move between different countries. 60 credits are the equivalent of a full year of study or work (from 1,500 to 1,800 hours for an academic year), which means that one credit corresponds to 25 to 30 hours of work. Find further information here: http://ec.europa.eu/education/ects/users-guide/index_en.htm

Annex 2: Key concepts in T4F units

KEY CONCEPTS	UNIT 1	UNIT 2	UNIT 3	UNIT 4	UNIT 5	UNIT 6	UNIT 7	UNIT 8
Food products	X	X						X
Cooking technique		X	X	X				
Traceability			X					
Climate change	X		X					
Waste recycling				X	X			
Packaging				X				
Resources efficiency			X					
Food culture	X							X
Denomination of origin								X
Food tourism								X
Food anthropology and sociology	X						X	X
Food ethics and diversity	X						X	
Nutrition and food security	X					X		X
Entrepreneurship					X	X	X	
Fair-trade and animal welfare							X	

Annex 3: T4F unit's quiz tests

HEALTHY AND SUSTAINABLE DIETS

QUESTIONS	ANSWERS
1. FAO estimated that global meat consumption will increase by 2050	<ul style="list-style-type: none"> a) By 82%. b) By 54%. c) By 27%.
2. Which is the definition of a sustainable diet?	<ul style="list-style-type: none"> a) A diet with low environmental impacts, respectful of biodiversity and ecosystems. b) A diet economically fair and affordable, nutritionally adequate, safe and healthy. c) Both of them.
3. A global change in diets could reduce greenhouse gas emissions by two-thirds.	<ul style="list-style-type: none"> a) No, a global change in diets it's not enough to reduce greenhouse gas emissions by two-thirds. b) Yes, if based less on meat and more on fish and vegetables. c) Yes if based less on meat and more on fruits and vegetables.
4. Some sources of carbohydrate are healthier than others.	<ul style="list-style-type: none"> a) Yes: vegetables, fruits, whole grains, and beans. b) Yes: potatoes, grains and beans. c) No, in human bodies all the sources of carbohydrates work in the same way.
5. Some sources of proteins are healthier than others.	<ul style="list-style-type: none"> a) YES: red meat is better because is rich in iron. b) Yes, fish, poultry, beans and nuts are healthier than red meat and cheese. c) No, all kind of protein's sources are healthy.
6. The phrase "without added sugar" on a label is...	<ul style="list-style-type: none"> a) A nutritional claim. b) A health claim. c) Just a commercial claim.
7. Eat well and stay physically active are priorities in daily routines in order to...	<ul style="list-style-type: none"> a) ...maintain an optimum health at the physical level. b) ...maintain an optimum health at the mental and emotional level. c) Both of them.
8. Is the development of insect breeding for food positive?	<ul style="list-style-type: none"> a) Yes, also if insect harvesting is a high-tech and high-capital investment option. b) No: breed insects require land clearing. c) Yes: for its sustainability and high feed-to-protein conversion.
9. What is the principal source of dietary lipids in Mediterranean diet?	<ul style="list-style-type: none"> a) Olive oil. b) Olive and coconut oil. c) All kind of vegetable oils.
10. Is the combination of legumes and cereals a complete and healthy protein source?	<ul style="list-style-type: none"> a) Yes. b) No, only fish and meat are a complete protein source. c) Yes, but only if completed with eggs and diary.

BIODIVERSITY, SEASONALITY AND ORGANIC FOOD

QUESTIONS	ANSWERS
1. When does the term « biodiversity » appear?	<ul style="list-style-type: none">a) At the end of the 70thb) At the end of the 80thc) At the end of the 90th
2. What is sustainable food?	<ul style="list-style-type: none">a) An intensive agriculture ensuring European self-sufficiency food.b) A natural mode of agricultural production that uses no chemical synthesis, such as pesticides, chemical herbicides, artificial fertilizers or growth hormones.c) To approach the question of access to good quality food, respectful of the health, the environment and the human. However, there is no European official "sustainable" certification.
3. What are the health issues linked to industrial food consumption?	<ul style="list-style-type: none">a) Diseases such as obesity, cardiovascular problems, diabetes and food allergies.b) Support of economic actors who produce services based on local, ecological and sustainable production.c) Allowing everyone to have a high-quality, healthy and balanced diet at a socially acceptable price.
4. Produced and non-consumed food takes ...% of the croplands.	<ul style="list-style-type: none">a) 20b) 30c) 40
5. What is one of the 5 techniques of food preservation in order to use them off-season and to respect local sustainability?	<ul style="list-style-type: none">a) The change of atmosphered) To steame) To use a water bath

WATER AND LAND MANAGEMENT FOOD FOOTPRINTS

QUESTIONS	ANSWERS
1. What is the Ecological Footprint?	<ul style="list-style-type: none"> a) The impact of a person, community, practice or technology on the environment, expressed as the amount of land required to sustain their use of natural resources. b) The consequence of a bad practice or technology on the environment. c) A way to measure the positive effect of the environment on the human health.
2. Carbon footprint...	<ul style="list-style-type: none"> a) ... evaluates the effect of the use of coal and other fossil fuels on the atmosphere. b) ... evaluates the emissions of greenhouse gases responsible for climate change and is measured in grams of equivalent mass of CO₂. c) ... evaluates the amount of forests necessary to clean a determinate amount of greenhouse gases.
3. Which is the cooking technique with the lowest impact on the environment?	<ul style="list-style-type: none"> a) Boiling. b) Roasting in an oven. c) Microwave cooking.
4. The difference on carbon footprint between plant products grown in the field or in greenhouses is....	<ul style="list-style-type: none"> a) Plant products grown in greenhouses can have a footprint 10 times greater than those grown in the field. b) Plant products grown in greenhouses can have a footprint 30 times greater than those grown in the field. c) Plant products grown in greenhouses can have a footprint 3 times greater than those grown in the field.
5. What is "intensive farming"?	<ul style="list-style-type: none"> a) An agricultural intensification and mechanization system that aims to maximize yields from available land through various means. b) An agricultural system that only aims to maximize yields. c) A system used to maximize the weight of livestock.
6. Water footprint...	<ul style="list-style-type: none"> a) is a calculation of the effect of a specific human activity on rivers, lakes, oceans and other water reserves. b) is a calculation of the volume of fresh water used directly and indirectly along the different stages of a production chain. c) is a calculation of the effect on the environment of natural disasters in which water is involved (tsunamis, floods, storm surges).
7. Which is the biggest contributor to climate change?	<ul style="list-style-type: none"> a) Transport. b) Agriculture. c) Electric industry.
8. Which are the three foods with the worst environmental impact?	<ul style="list-style-type: none"> a) Red meat, fish and cheese. b) Red meat, white meat and fish. c) Meat, eggs and dairy products.
9. Which are the three foods with the lowest environmental impact?	<ul style="list-style-type: none"> a) Vegetables, fruits and potatoes. b) Vegetables, fruits and olive oil. c) Vegetables, fruits and cereals.
10. A sustainable diet is good for the planet but also for health.	<ul style="list-style-type: none"> a) Yes. b) No. c) We don't have enough scientific evidence that confirms it.

FOOD LOSS AND FOOD WASTE

QUESTIONS	ANSWERS
1. Food waste/loss is a problem concerning exclusively	<ul style="list-style-type: none"> a) The whole world. b) Europe, North America, Oceania. c) Asia, Africa, South America.
2. How many tons of food waste is produced in the EU alone?	<ul style="list-style-type: none"> a) 8.000 tons. b) 8 million tons. c) 88 million tons.
3. How many kilos of food per family is thrown in the trash bin in Italy every year?	<ul style="list-style-type: none"> a) 14 kilos. b) 75 kilos. c) 145 kilos.
4. In developing countries and developed countries, does food loss occur at the same stage of production?	<ul style="list-style-type: none"> a) No, in developing countries it occurs in the food processing stage, while in developed countries it occurs at retail/home stages. b) Yes. c) No, in developing countries it occurs at retail/home stage, while in developed countries it occurs in the post harvest stage.
5. Are food loss and food waste are synonyms	<ul style="list-style-type: none"> a) Yes. b) No, food waste is part of food loss. c) No, food loss is part of food waste.
6. In the EU, what percentage of food waste comes from manufacturing, food services and catering, retail and wholesale sectors?	<ul style="list-style-type: none"> a) About 60%. b) About 45%. c) About 30%.
7. Active packaging is	<ul style="list-style-type: none"> a) Able to reduce the dimensions of packaging. b) Able to extend the shelf life of products. c) Able to increase the quantity of the products.
8. Have the EU and all the member states passed very effective laws on food waste?	<ul style="list-style-type: none"> a) Yes. b) No, food waste has not been introduced in any law. c) No, the EU passed no laws, but there are effective laws at national level.
9. In the EU, is Public Private Partnership essential for the efficiency of food waste contrast policies?	<ul style="list-style-type: none"> a) Yes. b) No, the private sector alone can solve the problem. c) No, the public sector alone can solve the problem.
10. What is the Zero Waste Strategy?	<ul style="list-style-type: none"> a) A strategy invented by Prof. Paul Connec in the USA. b) A strategy of the EU Commission in 2002 to reduce food waste in hotels and restaurants. c) A strategy adopted by the UK hotel association at national level.

CIRCULAR ECONOMY AND RESILIENCE

QUESTIONS	ANSWERS
1. What is the linear economic model?	<ul style="list-style-type: none"> a) Extraction – production – disposal. b) Production – consumption – disposal. c) Consumption – disposal – recycle.
2. What are the principles of the circular economy?	<ul style="list-style-type: none"> a) Consume, recycle, use. b) Reduce, repair, recycle. c) Repair, reuse, throw.
3. When the concept of the loop economy appears?	<ul style="list-style-type: none"> a) 1964. b) 1972. c) 1976.
4. Mention three of the seven circular economy's pillars.	<ul style="list-style-type: none"> a) Eco-conception, functionality economy, responsible consumption. b) To consume, to storage, to transport. c) Price volatility, supply risks and dwindling resources.
5. What is the resilience notion?	<ul style="list-style-type: none"> a) To encompass all stages of the value chain, from production to storage, transport and consumption. b) To mankind's ability to find solutions in order to adapt to a changing environment, namely climate change. c) A viable and profitable economic model.
6. Mention one of linear economy's inconvenient.	<ul style="list-style-type: none"> a) To maintain the quality of raw materials throughout all of the multiple cycles of life of products. b) Lack of funding. c) Urbanisation facilitates an economy based on sharing through the greater proximity of individuals.
7. What is the theory developed by the Foundation MacArthur?	<ul style="list-style-type: none"> a) Theory ReSOLVE. b) Theory ReUSE. c) Theory ReLEASE.
8. What is the European program which supports environmental initiatives geared towards nature, biodiversity and climate preservation?	<ul style="list-style-type: none"> a) Erasmus. b) LIFE. c) Horizon 2020.
9. Where the Zero Positive Protocol was developed?	<ul style="list-style-type: none"> a) Belgium. b) Italy. c) Spain.

LOCAL ECONOMY AND ALTERNATIVE SYSTEMS

QUESTIONS	ANSWERS
1. Which of the following statements is not a pillar of food sovereignty	<ul style="list-style-type: none"> a) Support sustainable livelihoods. b) Food sovereignty calls for appropriate research systems to support the development of agricultural knowledge and skills. c) Support technology such as genetic engineering for food availability and selection.
2. Ethical purchasing groups are groups of consumers that...	<ul style="list-style-type: none"> a) ... purchase collectively and directly from producers. b) ... are chosen on the basis of organic productions. c) ... purchase only from fair trade companies.
3. Are food security and food sovereignty different concepts?	<ul style="list-style-type: none"> a) No, they are synonymous. b) Food security does not distinguish where food comes from, or the conditions under which it is produced and distribute, while food sovereignty does. c) The food security concept is based only on food safety and food sovereignty mainly means affordable and accessible food.
4. What is one of local farming and direct sales strengths?	<ul style="list-style-type: none"> a) Relatively low cost. b) Organic food. c) Control over the final price.
5. The main characteristics of Alternative Food Systems are based on ...	<ul style="list-style-type: none"> a) Proximity / promoting biodiversity/ minimising food miles. b) Bio-functional Food / food safety/ healthy diet. c) Novel ingredients/ vegetarianism / fair trade products.
6. The term "short" in Short Food Supply Chain refers to	<ul style="list-style-type: none"> a) Physical distance. b) Social distance. c) Both of them.
7. What is a Community Supported Agriculture (CSA)?	<ul style="list-style-type: none"> a) Funding opportunities for farmers. b) Partnerships of mutual commitment between a farm and a community of supporters that provide a direct link between the production and consumption of food. c) None of them.
8. Which of the following models cannot be considered as a local alternative food systems?	<ul style="list-style-type: none"> a) Urban agriculture. b) Smart Farming. c) Food Hubs.
9. Short Food Supply Chain is...	<ul style="list-style-type: none"> a) Organic local food production. b) Limited to food distribution dimension. c) Originally identified as example of resistance of farmers to the modernization of food system.
10. Local Food purchased can	<ul style="list-style-type: none"> a) Increase local economy. b) Increase the consumption of vegetables. c) Both of them.

ETHIC AND INCLUSIVE FOOD BUSINESS MODELS

QUESTIONS	ANSWERS
1. What does value chain mean?	<ul style="list-style-type: none"> a) The process or activities by which a company adds value to an article, including production, marketing, and the provision of after-sales service. b) The process or activities by which a company value the social impact of its service or product. c) The social dimension of production, marketing, and the provision of after-sales service.
2. Which of these characteristics is not related to sustainable food value chain?	<ul style="list-style-type: none"> a) Profitable throughout. b) Has broad-based benefits for society. c) Promotes healthy and proper diets.
3. What is Fair Trade?	<ul style="list-style-type: none"> a) A trading partnership, based on dialogue, transparency and respect, that seeks greater equity in international trade. b) A trade union of farmer and more in general food producers from developing countries. c) A trading partnership to promote chocolate and coffee.
4. The European Commission defines the social enterprises taking into account three different aspects. These aspects are:	<ul style="list-style-type: none"> a) Social objectives + reinvestment of profits + participatory organization/ownership. b) Social objectives + non-profit nature + voluntary policies on environment protection. c) Voluntary work + social objectives + high attention to the quality of the service/product offered.
5. The corporate social responsibility can be defined as ...	<ul style="list-style-type: none"> a) Continuing commitment by business where the societal objective of the common good is the reason for their commercial activity. b) Continuing commitment by business to contribute to economic development while improving the quality of life of the workforce and their families as well as of the community and society at large. c) Continuing commitment by business to develop business models based on circular economy.
6. What is meant by green economy?	<ul style="list-style-type: none"> a) It is defined as an economy that contributes to a reduction of waste, pollution, and the use of resources, materials, and energy to revitalize and diversify economies. b) It is defined as an economy that supports a peaceful interaction between humans and the environment, while trying to meet the needs of both at the same time. c) Both of them.
7. The 2030 Agenda for Sustainable Development is an action program...	<ul style="list-style-type: none"> a) Signed in 2015 by the governments of the 190 member countries of the United nation that includes 15 Sustainable Development Goals - SDGs - in a large action program for a total of 169 'targets' or goals. b) Signed in 2017 by the governments of the 190 member countries of the Union Nation that includes 17 Sustainable Development Goals - SDGs - in a large action program for a total of 169 'targets' or goals. c) None of them.

FOOD AND CULTURAL HERITAGE

QUESTIONS	ANSWERS
1. Choose the correct answer:	<ul style="list-style-type: none"> a) Industrialization can only be seen as positive for food systems, since it has made food available for a vast number of people. b) The industrial Revolution has also had negative impacts in food conservation, using artificial ingredients risky for health. c) Traditional methods used in food systems must always be disregarded due to their potential risks for health. d) Are valid at local level, but cannot be taken into account in a global context.
2. Cultural and social values of food...	<ul style="list-style-type: none"> a) May be relevant in cultural terms, but are often opposite to nutritional values. b) May accomplish nutritional advantages, as the FAO states in one of its articles.
3. The reasons that explain the growing interest in recovering techniques of traditional production, elaboration and consumption of food are:	<ul style="list-style-type: none"> a) A smart relationship between food, local production and temporality. b) Their relevance as cultural identity signs. c) Both are correct.
4. The three European labels that allow the certification of traditions and specific qualities of its food and agricultural products are:	<ul style="list-style-type: none"> a) TSG, DOOR, CIA b) POD, PGI, TSG. c) POD. PGI, TSG.
5. Regarding European products with some type of geographical indication	<ul style="list-style-type: none"> a) Due to their vast number and heterogeneity, it is not possible to identify and find them systematically. b) There is an official European database which collects them. c) There are no reliable databases which collect them.
6. Geographical indications such as labels and certifications...	<ul style="list-style-type: none"> a) ...are only valid at national level. b) ...aim to protect and promote products with particular characteristics linked to geographical origin and traditions. c) Are just a commercial claim.
7. Is there any proven link between culture and food?	<ul style="list-style-type: none"> a) No, since culture is not measurable. b) Yes, and the Mediterranean diet, which in 2013 was inscribed on the Representative List of the Intangible Cultural Heritage of Humanity of UNESCO is a good example of it. c) Any of the above options are correct.
8. When talking about the relationship among culture, food system and entrepreneurship...	<ul style="list-style-type: none"> a) ...one relevant weakness is the impossibility of creating monetary value based on culture. b) ...tourism rises often as an opportunity for sustainable local development. c) ...tourism is a recreational activity which cannot be considered in terms of entrepreneurship.
9. What can we say in regard with travellers' purchase decision?	<ul style="list-style-type: none"> a) Travellers are increasingly sensitive to sustainable matters, but this does not affect their decisions. b) There are no resourced-based statements on this item. c) The responsibility of travellers in social and environmental matters is growing.
10. A positive aspect when analysing initiatives based on agro-food sector and tourism...	<ul style="list-style-type: none"> a) Is that some cases have proved their ability to fight depopulation of rural areas. b) Is their possible replicability at all levels, local, regional, and transnational. c) Both are correct.

Annex 4: T4F units' quiz tests solutions

UNIT 1	UNIT 2	UNIT 3	UNIT 4	UNIT 5	UNIT 6	UNIT 7	UNIT 8
1/a	1/b	1/a	1/a	1/a	1/c	1/a	1/b
2/c	2/c	2/b	2/c	2/b	2/a	2/c	2/c
3/c	3/a	3/c	3/c	3/c	3/b	3/a	3/c
4/a	4/b	4/a	4/a	4/a	4/c	4/a	4/b
5/b	5/a	5/a	5/b	5/b	5/a	5/a	5/b
6/a		6/b	6/a	6/c	6/c	6/c	6/b
7/c		7/b	7/b	7/a	7/b	7/b	7/b
8/c		8/a	8/c	8/b	8/b		8/b
9/a		9/a	9/a	9/b	9/c		9/c
10/a		10/a	10/a		10/a		10/c

Annex 5: T4F score spreadsheet for teachers

In order to easily calculate the final result of all the training please find the excel sheet [here](#). You have to introduce in the sheet the learners' scores of 1) the continuous assessment (= learning activities) and 2) the units' tests in order to obtain their final score of the complete **Training for Food**.

How to do this?

1. Click on the link
2. Click on "File"
3. Select "Download as"
4. Choose the excel format
5. Work in the downloaded excel file



TRAINING FOR
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DEVELOPMENT

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