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Fashion & Food synergy for sustainability. New courses and innovative digital tools in higher education F&F4sustainability

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LM 3 – FOOTPRINT - Environmental footprint in everyday consumption. Mainstream and alternative CONTENT STRUCTURE OUTLINE

This document describes the structure of the first learning module (out of six) developed as part of the "Fashion & Food Synergy for Sustainability" project. It is meant as a tool for teachers that can be adapted to a specific audience.

It is the basis of the corresponding e-learning module published as self-directed course on EduOpen platform <https://learn.eduopen.org/>

All the mentioned additional materials in brackets to create your own course can be asked to 'Centro per lo studio della moda e della produzione culturale', writing to centro.modacult@unicatt.it

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STRUCTURE

WELCOME

We encourage you to check the rules for conducting social research in your country.

0. INTRODUCTION

0.1. The project “Fashion & Food synergy for sustainability”

0.2. The Syllabus of the LM “Footprint - Environmental footprint in everyday consumption. Mainstream and alternative”

1. UNIT 1 – GENERAL CONCEPTS

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1.3. Glossary Readings

1.4. Multiple-Choice Test Unit 1

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5.1. Introduction to Unit 5

5.2. Speculative workshop

5.3. Extra Resources



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CONTENT DETAILS & ORGANIZATION

WELCOME

Welcome to **FOOTPRINT - Environmental footprint in everyday consumption. Mainstream and alternative** learning module.

This is the second of the six Learning Modules developed as part of the "Fashion & Food Synergy for Sustainability" project, an avant-garde initiative in an interdisciplinary and international context funded under the Erasmus+ programme - Higher Education. The project explores the intersecting trends and demands within the fashion and food sectors, emphasizing the need for informed and skilled professionals dedicated to sustainable practices.

The Learning Module "FOOTPRINT - Environmental footprint in everyday consumption. Mainstream and alternative" provides basic knowledge about footprint and essential competences to analyze fashion and food industry and their environmental impact. Furthermore, the aim of the Learning Module is to develop students' skills of experimental thinking on possible ways towards footprint reduction.

Click on the folder to access the Learning Module and its content.



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1. INTRODUCTION

0.1. The project “Fashion & Food synergy for sustainability”

0.2. The Syllabus of the LM “Footprint - Environmental footprint in everyday consumption. Mainstream and alternative”

In the Unit 0, also known as the Introduction, of the “Footprint - Environmental footprint in everyday consumption. Mainstream and alternative” learning module you'll be presented with:

- an overview of the "Fashion & Food Synergy for Sustainability" project;
- an in-depth look at the “Footprint - Environmental footprint in everyday consumption. Mainstream and alternative” learning module, detailing its aims, structure, and assessment methods.

This foundational unit is designed to prepare you for the journey ahead, ensuring you understand the course objectives and how to navigate through the content effectively.

0.1 The project “Fashion & Food synergy for sustainability”

The "Fashion & Food Synergy for Sustainability" project explores the intersecting trends and demands within the fashion and food sectors, emphasizing the need for informed and skilled professionals dedicated to sustainable practices.

Funded under the Erasmus+ programme – Higher Education, it aims to equip learners with the knowledge and tools necessary to navigate and contribute to these vital industries' sustainable futures.

To get into the spirit of the project, please watch this short video: [\[Fashion & Food_Intro.mov\]](#)

More information on the project can be found at this link: <https://centridiricerca.unicatt.it/modacult-la-ricerca-fashionfood-for-sustainability?rdeLocaleAttr=en>

0.2. The Syllabus of the LM “Footprint - Environmental footprint in everyday consumption. Mainstream and alternative”

Footprint is one of the most important factors that should be understood and analysed on a path towards sustainable food and fashion sectors. Within the module we will discuss this concept, and through reconstruction and evaluation of processes of fashion and food production-consumption, we will search for the ways of footprint reduction. The students will propose a program of footprint reduction in relation to the case of food cooperative. They will consider the whole of the processes involved: from the extraction and production of raw materials up to the final disposal of the product after use. The module will tackle two speculative questions; first, how food and fashion cases can interstimulate each other on a way towards footprint reduction, second, what are possible economic, social, cultural consequences of upscaling the solutions offered by the case or how they could ‘work’ in different contexts?

Objectives

The aim of the module is to provide the LM participants with basic knowledge about footprint and essential competences to analyze fashion and food industry and their environmental impact. Furthermore, the aim is to develop students’ skills of experimental thinking on possible ways towards footprint reduction.

Learning outcomes

G5 Students can critically evaluate the manufacturing process of fashion and food products, including the place of production and the conditions the employees must work under.

G6 Students can identify greenwashing tactics and false green claims and assess potential divergences between sustainable behavior and sustainable communication.

S4 Students can apply several digital resources to guarantee (or to certify) the traceability of product information in their own industry (fashion, food, etc.) including several solutions such as digital passports, tagging, and watermarks.





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Evaluation:

The "Footprint - Environmental footprint in everyday consumption. Mainstream and alternative" learning module consists of 5 comprehensive units.

In general, evaluation is via group work, however an individual input to the group work should be indicated by the students. Team composition is according to the class size and specific conditions at the given university.

Learners will be required to apply theories, concepts and technicalities learned during the course to a specific case (choose a case study from the available ones) to present their skills of data collection and data analysis.

To successfully complete the learning module, learners must:

- Complete Unit Tests (a result in a unit 1)
- To have a contribution to the mind map of footprint (work group)
- Prepare a short presentation (a video, ppt or other form) on alternatives that could limit footprint at any stage of the process / value chain (a result in unit 2)
- Prepare a final presentation on footprint (analysis of the case and proposition of the new ways/methods of footprint reduction; possibilities and limitations of upscaling the model) (unit 4 and 5)

Badges and Certificate of Attendance

Learners meeting the criteria stated above will be awarded a digital badge indicating their final result in the learning module. Additionally, all learners will receive a certificate of attendance.

Badges and attendance certificates will be issued upon completion of the learning module and sent via email.



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UNIT 1 – GENERAL CONCEPTS

- 1.1. Introduction to Unit 1
- 1.2. Knowledge collection
- 1.3. Glossary Readings
- 1.4. Multiple-Choice Test Unit 1
- 1.5. Extra Resources

In this unit we will cover the general concepts of this module “Footprint - Environmental footprint in everyday consumption. Mainstream and alternative”.

1.1. Introduction to the Unit 1

In this unit, we will explore the fundamental concepts that define environmental footprint as one of the most important factors that should be considered on a path towards sustainable food and fashion sectors. To help you delve into this topic, we have prepared a comprehensive array of activities and materials, including:

- a group activity to collect information about footprint
- a glossary of key terms [<https://centridiricerca.unicatt.it/modacult-risorse-a-disposizione-glossario-della-sostenibilita?rdeLocaleAttr=en>]
- a list of additional resources for deeper exploration

You will be asked to make a contribution to the group work on the mind map of footprint.

result of the discussion within the working group you will be asked to prepare a mind map or other visual/textual representation of collected information on footprint. Additionally, after reading all seven glossary entries, you will be prompted to complete a multiple-choice test to assess your understanding. For further details and instructions, please proceed to the next section.

1.2. Knowledge collection

You have probably heard the term footprint being used to describe the impact of human activities on the environment. However, it is a general concept, and a footprint can be described through its sources, factors shaping its scale and character, as well as its intensity at different stages of producing, consuming, or using various goods or services. Using different online sources and through discussions with your colleagues, gather as much information as possible about the footprint, creating an initial mind map or any other visual/text representation of the studied phenomenon. You can use the list of additional materials (1.4). Post the final version of the map in [the online team]. This graphic note will be useful for completing tasks in the following units.

Now proceed to the following section and read the GLOSSARY entries.

1.3. Glossary Readings

The Glossary of Sustainability is a digital, open and participatory resource. Through key words, it describes the dimensions of sustainability in the fashion and food industries and brings together case studies, research practices, and exemplary European-level information sources that are freely accessible and useful for education and research. It is designed with the aim of strengthening and developing the understanding of sustainability as a concept, by interpreting terms and issues of growing importance for the fashion and food sectors. Accordingly, it aims to inform and advance action and debate on the most pressing challenges affecting the environment, available resources, respect for workers' rights etc.

Please read the following entries from the glossary:

- circularity
- proximity
- packaging free
- short supply chain
- consumerism and sustainable consumption





- traceability
- zero waste.

1.4. Multiple-Choice Test Unit 1

After reading the glossary entries, please complete the following multiple-choice test for self-assessment. The test consists of 13 questions, each worth 1 point, allowing you to earn up to 13 points. Try to answer the questions as best as you can and learn more about how to reduce your environmental impact.

1. Mark the sentence that is false:
 - Glass returnable bottles allow to reduce CO2 emissions by half compared to single-use plastic bottles
 - Transporting glass returnable bottles generates more CO2 than plastic ones
 - **Glass returnable bottles can be refilled over 100 times**
 - Glass returnable bottles do not eliminate CO2 emissions

1. Examples of alternative, so-called green packaging, for products that cannot be deprived of them are:
 - Glass returnable bottles, styrofoam
 - Paper and cardboard, styrofoam
 - **Glass returnable bottles, paper and cardboard**
 - Paper and cardboard, synthetic resin

2. According to EU regulations, by ... year 90% of PET bottles must be collected from consumers:
 - 2040
 - **2029**
 - 2025
 - 2050

3. The protection of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning and without disposing of them to soil, water, or air, which threaten the environment or human health is:
 - Greenwashing
 - Responsible consumption
 - **Zero waste**
 - Environmental footprint

4. The idea of zero waste refers to goals defined at the level of:
 - Communities
 - Cities
 - Countries
 - **All of the above**

5. The idea of zero waste does not include:
 - Actions oriented towards energy conservation
 - Working with local communities
 - **Recycling, if the options for using the product in the future are limited**
 - Supporting the local economy

6. The ability to identify the "history" of a product by analyzing all stages of the supply chain is:
 - Shortened supply chain
 - Circularity



- **Traceability**
 - Transparency
7. The concept of traceability does not directly refer to:
- **The environmental footprint that a product generates**
 - Production
 - Product distribution
 - Product origin
8. Circular economy is a concept referring to an economy in which
- development must take place at the expense of the quality of products and materials
 - the end of the life cycle of products is defined at the stage of product manufacturing
 - **it is assumed that the value of products and materials should be maintained as long as possible**
 - the circularity of products and materials takes place between producers and consumers
9. The principle of circular economy is NOT the motto
- proximity is a priority
 - waste is food
 - **prices must be high**
 - systems thinking
10. Sustainable consumption is a consumption that assumes
- uniform consumer needs
 - the need to reduce people's well-being due to environmental needs
 - **the possibility of reconciling social, economic and environmental needs**
 - assumes a reduction in the importance of consumer behaviors
11. "Production districts" are:
- **spatial clusters of producers characterized by a high degree of specialization and a culture of cooperation**
 - spatial clusters of food producers for the local market
 - districts where employers are oriented towards employing cheap labor
 - parts of cities where companies producing so-called fast fashion are located
12. Short supply chain is a term referring to
- a short time between product creation and consumption
 - **direct relations between producer and intermediary and intermediary and consumer**
 - indirect, but dynamic relations between producer and up to two intermediaries
 - logistical solutions implemented in large-scale industries
13. Biomimicry is
- designing and manufacturing products exclusively from natural ingredients
 - **an approach to design and manufacturing inspired by solutions found in nature**
 - designing and developing zero-waste environments
 - a type of products that are certified as organic



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1.5. Extra Resources

Interactive maps demonstrating ecological reserve/deficit, ecological footprint and biocapacity (total, per person) for each country <https://data.footprintnetwork.org/#/>

UN Sustainable Development Goals: 12. Ensure sustainable consumption and production – infographics, publications, latest news <https://sdgs.un.org/goals/goal12>

UNIT 2 – RECONSTRUCTION OF LIFE CYCLE PHASES

In this unit we will talk about the environmental impact of the food and fashion industry.

- 2.1. Introduction to Unit 2
- 2.2. Think about what you're wearing right now
- 2.3. The life cycle of a t-shirt
- 2.4. Extra Resources

2.1. Introduction to Unit 2

In this unit you will learn that footprint is not as an abstract term, but as an aspect of our everyday life. We will learn how you can reconstruct the phases of life cycle of the products and the footprint at subsequent stages. You will also develop your analytical competences in sociological and anthropological fieldwork by using the sensitizing tool to carry out in-site observation.

2.2. Think about what you're wearing right now

The project in which you're developing your knowledge about footprint focuses particularly on fashion and food—both of which are essential parts of our lives. Choose one item you're currently wearing, excluding a t-shirt. It could be, for example, shoes, pants, a skirt, socks, underwear, a bag, or a backpack.

Try to answer the following questions (the answers are for you and will not be graded, but please make sure to write them down):

- What is this clothing item or accessory made of?
- Where was it produced?
- How was it produced?
- When and how did you acquire it?

Now reflect and answer the following questions

- How many of these questions were you able to answer?
- How easy was it for you to answer them?
- Which information was easily accessible to you? What information was missing?
- In your opinion, how does wearing this specific item generate an environmental footprint?

The information from the video, which is part of the next task, will help you expand your knowledge on this topic.



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2.3. The life cycle of a t-shirt

In order to explore this topic, please start by watching a short video clip “The life cycle of a t-shirt” where you will find a diagram of the t-shirt’s life cycle, allowing you to trace its footprint at various stages of production, from the creation of basic materials to the end of its wearing life.

While watching the video please make notes to answer the questions in the form below:

Link to the video clip: [The life cycle of a t-shirt - Angel Chang \(youtube.com\)](https://www.youtube.com/watch?v=...)

Life Cycle Phase	Materials (e.g. production and extraction of raw materials, packaging)	Manufacturing (e.g.molding, cutting, stitching and product assembly)	Transportation (e.g. raw materials, primary textiles to Tier 1 factory, from distribution centers to customers, including returns)	Product use (e.g. customer care, including washing, drying, ironing product over lifetime)	End of life (final disposal of product after use)
What factors contribute to the production of the environmental footprint?					
What alternative actions could reduce the environmental footprint at this stage? What solutions are proposed in the film? Write at least one new idea for each stage.					

- Share your ideas with the classmates – upload your answers or share with post-it notes and read what other people propose.
- Choose one of the answers to the last question about alternatives proposed by your classmates - in your opinion, what are the strengths and what are the barriers for implementing the alternatives?



2.4. Extra Resources

- Look at the concept of “cradle to cradle”: [What is Cradle to Cradle? \(youtube.com\)](https://www.youtube.com/watch?v=ISMOwyBdggg)
Do you think the life cycle of the item you have chosen can be a closed cycle? (not “cradle to grave”, but “cradle to cradle”)? If so, in what way? Refer to Circularity entry from the “Glossary”.
- **Documentary about the export of plastic waste to the Global South:**
<https://www.youtube.com/watch?v=ISMOwyBdggg>
- **Documentary about how fast fashion is flooding West Africa with used clothes:**
<https://www.youtube.com/watch?v=bB3kuuBPVys>

UNIT 3 - ENVIRONMENTAL FOOTPRINT IN EVERYDAY CONSUMPTION

- 3.1. Introduction to the Unit 3.
- 3.2. Instruction
- 3.3. Observation scheme
- 3.4. Extra Resources

3.1. Introduction to the Unit 3.

The activities in the previous unit provided you with preliminary knowledge about the footprint created at various stages of a product’s life cycle. You also had the opportunity to think about ways to minimize the footprint. In this unit, you will further develop your skills in recognizing the manifestations and factors of the footprint phenomenon. Completing the tasks will require you to:

- 1) Read the case study “Food cooperative”
- 2) Familiarize yourself with the observation scheme.
- 3) Search in your area and visit two places:
 - a) A local, local organic store/grocery, local farmers’ market or food cooperative, and
 - b) A large supermarket of one of the popular chains in the country where you are staying.

3.2. Instruction

Ad 1) Case study – read the text, as it will be a good introduction to how a food cooperative operates and will provide you with a comprehensive overview of such a model. The case study will also be useful in the further analysis process (sensitizing you to different aspects).

While reading the case study, think about: In what ways does the cooperative described in the study try to reduce its environmental footprint (in which areas, and what type of footprint)? Where does this reduction encounter obstacles or fail to succeed?

Additional questions that can guide your reading are found at the end of the text (recommended sections: Alternative Food Networks and Circularity and Zero-Waste).

Ad 2) Observation in social sciences – introduction

- Remember the **ethical principles** of conducting research—we want to understand social practices related to food, we are observing places, objects, and people’s activities. Do not take pictures of people, do not stare at them, and do not create a sense of uncertainty or discomfort. These issues are covered in section 4.1 Avoiding undue intrusion and 4.2 Obtaining informed consent in the Ethical Guidelines (see: ethical guidelines 2003.pdf (the-sra.org.uk)). We encourage you to check the ethical guidelines in your country (you can start by checking the website of the university or sociological association in your country).



- You should familiarize yourself with the form and the questions contained in it before you go to the cooperative or the store, to know what to pay attention to. The form sensitizes you to certain aspects related to the environmental footprint, but this does not mean that you cannot record your other observations, comments, feelings. We strongly encourage you to do so! The more data you collect at this stage, the deeper and more interesting the later analysis will be. It is worth noting both your observations and the emerging interpretations.

To help you know better the form, we ask you to do a simple exercise:

- Familiarize yourself with the aspects listed in the table (left column in the table below) and the detailed questions below the table.
- Drag and drop: Try to match the questions to the aspect.
- After completing the task, compare it with the ready observation scheme. How many questions did you place in the correct location?

ASPECT	HELPFUL QUESTIONS
DIVERSITY	
WASTE	
ENERGY	
COSTS	
PROXIMITY	
VALUES	

- Are the products available here processed, preserved in any way? Is the energy, work and other resources spent on this process reflected in the price? Is information on this topic available?
- Are there any visible waste or leftovers in this place?
- Can this place be characterized by diversity?
- Can you tell how they were created and what happens/will happen to them in the future?
- Do the products that can be purchased here generate waste during processing? What kind? Can they be avoided?





- From what place/places do things (including furniture, equipment, tools) and products offered in this place come from?
- How are they communicated?
- How diverse are the ingredients of the products available here? Count how many species and varieties of cereals are used to produce the breakfast cereals available here (v2: bread).
- How diverse are the products that can be purchased here?
- How do you know? How can you find out?
- How does the price affect what happens to the product later?
- How is energy used? What is it used for?
- If not - what is the lack of diversity manifested by? What does it indicate? What may be the causes of the lack of diversity?
- If so, what kind? What are they made of or where do they come from?
- If there is no waste here, why?
- Is energy use controlled/monitored in any way? If so, how?
- What can we say about transport: people (consumers/customers, employees) and products (to and from this place)?
- What does the customer pay for in the price of the product (is there such information? If not - what do you think)?
- What does the product price include?
- What does this diversity consist of?
- What types of energy are used in this place?
- What values are communicated in this place? What does it indicate?
- Who communicates them to whom?
- Who sets these prices? Why are they like that (based on the information available here and your knowledge)?

Ad 3) You will conduct observations in two kinds of sites: one in the food cooperative or organic food store, the other in supermarket (typical in the country where you live).

- During the observations take notes about what is happening. Be sure to complete your notes for each section.
- If the observation does not give you the empirical data to answer a question, write it down as well, be clear about it, don't force your response.
- It is important to record your observations regularly. You can also draw (e.g. maps, objects or details).
- You should submit your field notes to the instructors after completing their observations.
- The results of the analysis will be needed for work in subsequent units.



3.3. Observation scheme

Observation scheme in an organic shop or food cooperative / a supermarket (cross out the unnecessary one)

Observation place (name of the store)	Researcher:.....
Date of observation [dd-mm-yyyy].....	Time of observation: Start hour:.....end hour.....

ASPECT	HELPFUL QUESTIONS	NOTES
DIVERSITY	Can this place be said to be characterized by diversity? If not - what is the lack of diversity manifested by? What does it indicate? what may be the causes of the lack of diversity?	
	How diverse are the products that can be purchased here?	
	What does this diversity consist of?	
	How diverse are the ingredients of the products available here? Count how many species and varieties of cereals are used to produce the breakfast cereals available here (v2: bread).	
WASTE	Are there any visible waste or leftovers in this place? If there is no waste here, why is there none?	
	If so, what kind? what are they made of or where do they come from?	
	Can you tell how they were created and what happens/will happen to them in the future?	
	Do the products that can be purchased here generate waste during processing? What kind? Can they be avoided?	
ENERGY	What types of energy are used in this place?	
	How is energy used? What is it used for?	



ASPECT	HELPFUL QUESTIONS	NOTES
	Is energy use controlled/monitored in any way? If so, how?	
	Are the products available here processed, preserved in any way? Is the energy, work and other resources spent on this process reflected in the price? Is information on this topic available?	
	What can we say about transport: people (consumers/customers, employees) and products (to and from this place)?	
COSTS	What does the product price include? How does the price affect what happens to the product later?	
	Who sets these prices? Why are they like that (based on the information available here and your knowledge)?	
	What does the customer pay for in the price of the product (is there such information? If not – how do you think, why?)	
PROXIMITY	From what place/places do things (including furniture, equipment, tools) and products offered in this place come from?	
	How do you know? How can you find out?	
VALUES	What values are communicated in this place? What does it indicate?	
	Who communicates them to whom?	
	How are they communicated?	
Additional questions	Typical food packaging in this place - draw, describe, what they look like, where they come from, what functions, disadvantages, advantages they have, what happens to them after leaving this place.	
	(Food) waste at the stage of purchase and consumption: how consumer decisions are	



ASPECT	HELPFUL QUESTIONS	NOTES
	made, what factors influencing decisions are embedded in this place?	
	To which part of the products offered here can you assign a specific place of origin? Describe these places - what do you know about them? What do you know about the production process based on the information available here?	
REFLECTIONS: ENVIRONMENTAL FOOTPRINT	How does the way this place operates relate to the environmental footprint or translate into the environmental footprint?	

3.4. Extra Resources

There are already many tools that help people estimate the carbon footprint of individual products—these are, of course, estimated and averaged values that do not take into account local factors and individual ways of consuming things. However, even such calculators provide some insight into our environmental impact, which we have when making choices in our daily lives.: EU Consumer Footprint Calculator: <https://knowsdgs.jrc.ec.europa.eu/cfc>
Footprint Calculator: What is your ecological footprint?: <https://www.footprintcalculator.org/home/en>

UNIT 4 – TOWARDS FOOTPRINT REDUCTION – WORKING ON COLLECTED EMPIRICAL MATERIAL

- 4.1. Introduction to Unit 4
- 4.2. Inspirations from fashion and food sectors – a workshop (groups)
- 4.3. Extra Resources

4.1. Introduction to Unit 3

In this unit we will focus on the ways towards environmental footprint reduction, based on your knowledge from the observations in two sites.

This is the part where it is important to share your observations. Together with the person in your group, you will discuss what you have noticed in two sites during your observation, filling in the environmental footprint form step-by-step.

4.2. Inspirations from fashion and food sectors – a workshop (groups)

ATTENTION: The table below is an online form (subsequent questions appear when the previous question is answered)





- in green, instructions for the tasks performed at each stage

1) PREPARATORY-ANALYTICAL PHASE (15 min)

- Briefly tell your partner where you conducted your observations, when, and how much time you spent in those places.
- Then share your ideas about footprint production and reduction in the sites.
- Enter your observations in the appropriate sections.

FOOTPRINT	Supermarket/Large area store	Local organic food shop/Food cooperative
How is footprint produced here?		
How is footprint reduced here?		

2) CRITICAL PHASE (10 min)

- Are there any aspects of the footprint that you are unable to describe, even in general terms, for example, due to the lack of data? When/where (at what stages) is footprint the same/not measurable/not under control?
- Enter your observations in the appropriate sections.

[x – means that information was introduced in the previous phase]

FOOTPRINT	Sopermarket/Large area store	Local organic food shop/Food cooperative
How is footprint produced here?	x	x
How is footprint reduced here?	x	x
NOT measurable/NOT under control		

3) EXTERNAL INSPIRATIONS AND CROSS-FERTILIZATION BETWEEN THE FOOD AND FASHION SECTORS (15 min)



Changes often occur because we draw inspiration from solutions outside of a given field. The fashion sector and the food sector each have their own specific characteristics, but can the solutions implemented on the path to sustainability in one of these sectors inspire new sustainable solutions in the other? What solutions do you observe in the fashion industry that could also be helpful in reducing the footprint in the food sector? Write down as many ideas as possible (at least 3 for a person), even if they seem crazy or impossible to implement. Discuss the ideas in your group. Together, choose at least five ideas and enter them into the form.

FOOTPRINT	Large area store	Local small grocery/Food cooperative
How is footprint produced here?	x	x
How is footprint reduced here?	x	x
NOT measurable/NOT under control	x	x
What kind of solutions, methods etc. within the fashion sector can serve as inspiration for reducing the footprint in the food sector?		

The ideas you have noted down will be needed for the task in the next unit, where you will work on an optimal future development scenario for the food sector.

4.3. Extra Resources

BBC series Smart Guide to Climate Change - using scientific research and data for the most effective personal strategies to shrink the carbon footprint: <https://www.bbc.com/future/smart-guide-to-climate-change>

UNIT 5 - TOWARDS FOOTPRINT REDUCTION – SPECULATIVE DESIGN

- 5.1. Introduction to Unit 5
- 5.2. Speculative workshop
- 5.3. Extra Resources





5.1. Introduction to Unit 5

Unit 5 is dedicated to speculative thinking about possible ways of footprint reduction in food sector. You are invited to use a speculative design approach to ask questions about the future and to offer “some alternatives that are essential for the world of today, but more importantly, the world of tomorrow. (...) Through imagination and its radical approach and by using design as a medium, speculative practice inspires thinking, raises awareness, examines, provokes actions, opens discussions and has the ability to provide alternatives. (...) Speculative practice moves away from the consumerist role of design and uses speculation about potential futures and design as a medium to challenge current social, economic and political relationships as well as our relationship with the natural environment. It also intends to move beyond the role that design has in presenting market-ready solutions and attempts to restore design’s foundations, such as discursiveness (analysis, reflection, examination of various possibilities, anticipation and so on)” (Mitrović, Auger, Hanna, Helgason 2021: 69-70, the book available here: [Beyond-Speculative-Design.pdf \(speculativeedu.eu\)](#) If you’re worried that design thinking might be difficult for you, think about science fiction movies and books where a world is created that doesn’t yet exist, but could potentially become reality.

5.2. Speculative workshop

ATTENTION: The table below is an online form (subsequent questions appear when the previous question is answered)

- in green, instructions for the tasks performed at each stage

- 0) To start, go back to the task you completed in Unit 4, beginning with the analysis of the footprint in the observed locations, and then move on to the ideas for using various methods of reducing the footprint inspired by the fashion sector. Recall what you noted down as a group.

1) UTOPIAN PHASE (15 min)

Come up with a completely new idea of the place where you can buy food. It should include as many elements as possible to reduce the environmental footprint. Think about the features this place should have.

Write or draw the ideas in a form.

FOOTPRINT	Large area store	Local small grocery/Food cooperative
How is footprint produced here?	x	x
How is footprint reduced here?	x	x
NOT measurable/NOT under control	x	x
Can the fashion sector serve as an inspiration reducing footprint in the food sector?	x	
What features would this place of acquiring food have, if it could combine as many elements as possible that favor reducing the footprint?	<i>[a stage of writing or building a model with a narrative – e.g. on Miro board, whiteboard etc. If it is the in-site workshop, the students use clay, recycled materials, paper, etc..]</i>	



SPECULATIVE PHASE – “WHAT IF...” (15 min)

You have built a model of a utopian place where food could be acquired, and the environmental footprint associated with all phases of the life cycle is minimized.

Now try to imagine what would happen if such a model were implemented and write down your notes to answer the questions:

- What if such a place were to be a universal, mainstream model (on the scale of your country, Europe, the world)?
- What would be the economic, social and cultural consequences of such a change?

FOOTPRINT	Large area store	Local small grocery/Food cooperative
How is footprint produced here?	x	x
How is footprint reduced here?	x	x
NOT measurable/NOT under control	x	x
Can the fashion sector serve as an inspiration reducing footprint in the food sector?	x	
What features would this place of acquiring food have, if it could combine as many elements as possible that favor reducing the footprint?	Models/prototypes	
What if such a place were to be a universal model (on the scale of your country, Europe, the world), what would be the economic, social and cultural consequences of such a change?		

PRESENTATIONS AND SUMMARY

1. In your group prepare the presentation of your speculative model and explain the idea
2. Take a close look at the other presentations.
 - What were the most interesting/surprising results of the speculation workshop?
 - What could be realistically implemented in the future to reduce the environmental footprint?
 - Could there be any negative social, cultural, or environmental consequences that the model's authors did not take into account? What are those consequences?
 - How can they be prevented or minimized?





5.3. Extra Resources

In this section, we present extra activities to deepen your your understanding of speculative design and its use in different creative sectors. Feel free to explore online materials and try to find more if you find the approach of speculative design intriguing.

- Footprint scenario tool to design possible futures by choosing key parameters that shape overshoot <https://www.footprintnetwork.org/resources/footprint-scenario-tool/>
- If you are interested in different forms of speculative design, visit the website of the other Erasmus+ project, focused on such approach. The book *Beyond Speculative Design: Past – Present – Future* presents a brief history of speculation, a broad overview of speculative design practice and education, speculative design approaches, methods, and tools, including a series of case studies written by the practitioners themselves: [SpeculativeEduBeyond Speculative Design: Past – Present – Future \(THE BOOK\) - SpeculativeEdu](#)
- [Council of Foods \(council-of-foods.com\)](#) and [Pink Chicken Project](#) are two intriguing projects created by a Nonhuman Nonsense – a collective which combines a research-driven art and design collective working in the realm of social dreaming and world-making. As the collective introduces itself: “Our projects engage with the nonhuman: animals, objects, ecology, technology, and the spectres between and beyond categories. We see nonsense as an antidote to “common sense” – embracing paradoxical stories to explore the ethical and metaphysical layers of our relationship with the (nonhuman) world. We create contradictory scenarios & propositions in which we appropriate ideas from fields such as science, computing, law and mythology.” You can find more examples of speculative design on the website: [Nonhuman Nonsense \(nonhuman-nonsense.com\)](#)

