eduNUT

Futures Literacy on Food Nutrition and Sustainable Food Systems for School Education

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Report on collected Good Practices and Case Studies of Food Literacy and Sustainable Food Systems

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1. Introduction

Climate change has emerged as one of the biggest environmental challenges of our time, largely caused by accumulation of greenhouse gases in the atmosphere. Food systems contribute significantly to this problem, with one-third of global greenhouse gas emissions stemming from the food sector.
Sustainable management of food to reduce wasted food and its associated impacts over the entire life cycle, starting with the use of natural resources, manufacturing, sales, consumption, and ending with decisions on recovery or final disposal, is one of the keys to mitigate climate change and strengthen the resilience of the global food systems and farming.
However, there is still a lack of specialized educational materials and necessary competences among different stakeholders to drive sustainable food systems transformation.

Therefore, the EduNUT project aims to address the needs of both educators and students, focusing on development of lacking knowledge regarding the complex topic of sustainable food systems through creation of innovative educational materials and methodologies.

For this purpose, the objectives of EduNUT project are as follows:

1. To equip teachers with the ability to teach competent Food Literacy education. To achieve this objective the project develops a database of Good Practices, a collection of Case Studies and finally a comprehensive study on the integration of Food and Futures Literacy approaches within school education (WP2).
2. To expand training and educational tools on Futures Literacy and up-to-date Food Literacy that are less or not used at all, in secondary education level in Europe. To achieve this objective the project develops a teacher's capacity building program, that would assist teachers with up-to-date knowledge and skills on the proposed methodologies (WP3).
3. To help students develop their Futures Literacy and Systems Thinking skills and enhance their knowledge, skills and attitudes, in order to progressively change their personal consumption habits and inspire others to do so. That will be achieved through the innovative EduNUT curriculum and the design of the educational board game, which would usher the students to become confident and capable changemakers of the Sustainable Food Systems of the future (WP4).

The current report is WP2 output and is based on the compiled data from Good Practices and Case Studies, aiming to present final conclusions to teachers and relevant stakeholders of the existing and thriving educational projects and activities, which promote innovative thinking towards sustainable food systems. Thus, the study defines the level of awareness among participating teachers and students, in order to highlight the advantages, disadvantages, opportunities and threats of the best existing practices on food literacy and sustainable food systems.

2. Methodology

Collection of Good Practices

The collection of Good Practices on food literacy and sustainable food systems was carried out by project partners from five European countries: Estonia, Greece, Iceland, Italy, and Poland. The selected Good Practices needed to be applicable across primary, secondary, and non-formal education. Additionally, the chosen Good Practices were required to demonstrate high educational potential and be easily replicable by educators in different countries (Annex 2). To refine the selection process, the following additional criteria were considered:

- Innovative (digital) examples of educational solutions to modernize food sustainability education were highly appreciated.
- Examples of a learning-by-doing approach to improve critical thinking, analytical thinking, and creativity were highly valued.
- Examples of an interdisciplinary approach were highly appreciated.
- Examples of working with local communities were highly valued.

In total, 46 Good Practices were gathered from European countries and beyond (Annex 1). The majority of practices were identified in Estonia (12), Greece (9), Iceland (6), Italy (6) and other countries (Fig. 1). It should be noted that several educational projects described within the collected Good Practices may involve various international partners across EU countries, which are not explicitly represented in Fig. 1.

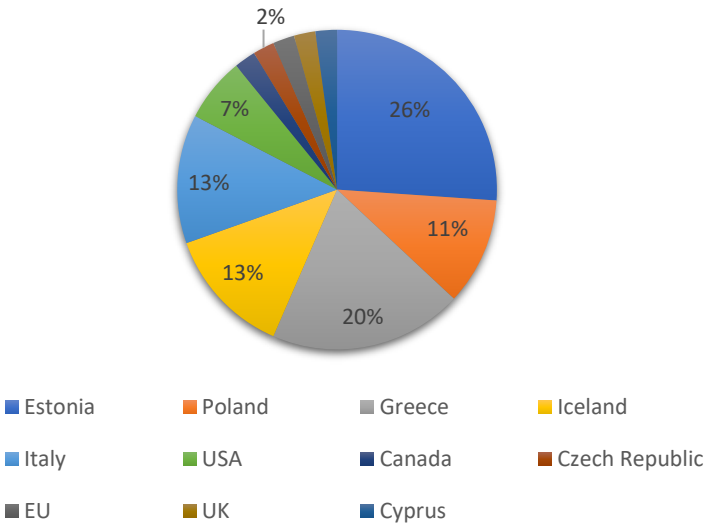

Figure 1: Percentage of collected Good Practices from different European countries and beyond.

Collection of Case Studies

The Case Studies were derived from the previously compiled list of Good Practices, collected in the previous activity of the WP2.

The chosen Case Studies were required to showcase the highest educational potential, innovation, and inspiration, serving as the groundwork for developing teaching materials for schoolteachers in WP3 and WP4. To gather insights and deep knowledge regarding the conducted Case Studies, templates for interviews were created (Annex 3). The interviews were designed in two formats: for information providers (teachers) and information recipients (students).

The criteria for conducting the semi-structured interviews included:

- Involvement of diverse stakeholders, such as teachers at schools, eco-villages, and organizations engaged in non-formal education focusing on sustainable food systems (information providers), and students (information recipients).
- Representation of a variety of ages, genders, and positions among the interviewees, aligning with the objective of inclusion.

A total of 8 Case Studies were conducted across five project partners' countries. Estonia, Poland, and Greece conducted 2 Case Studies each, while Italy and Iceland conducted one Case Study each (Fig. 2)

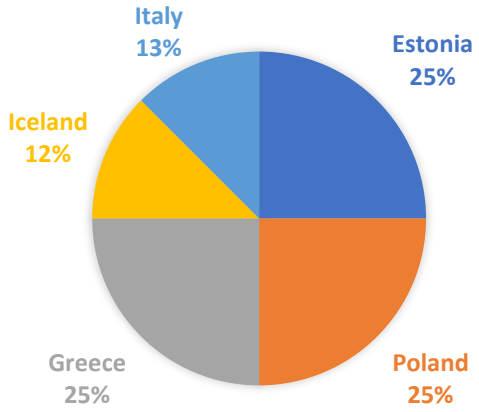

Figure 2: Percentage of conducted Case Studies from five project partners' countries.

For developing the Case Studies, 29 interviews with various stakeholders were conducted, distributed as follows: 16 with information recipients (students) and 13 with information providers (teachers, program developers).

Conducted interviews provided insights into selected Good Practices and assisted in creating a strengths, weaknesses, opportunities and threats (SWOT) analysis for each. The SWOT analysis on the collected Case Studies about sustainable food systems aims to provide a comprehensive understanding of the current state of each practice. This analysis helps in making informed decisions, developing strategies to capitalize on strengths and opportunities, addressing weaknesses, and mitigating potential threats to foster the overall sustainability and success of implemented practice in case of its replicability.Additionally, some personal expressions regarding the conducted Case Studies were selected to provide inspiration for teachers and further enhance the implementation of the described Case Studies in other regions and countries.

3. Results

Case Study 1

Title:	**Zero food waste education of "Z" generation of European citizens**
Country of implementation:	**Estonia, Croatia, Serbia, Italy, Romania**
Type of the practice:	**Educational project for young people**
Type of education (primary, secondary, non-formal):	**Universitites and secondary schools**
Age of participants:	**18-24**
Education form (online, offline, or blended):	**Online and offline**
Link:	**https://zeewaste4.eu/**
The objective of this project is to instigate and maintain behavioral change aimed at preventing and reducing food waste on both personal and collective levels among young people. These individuals, who will soon assume roles as valuable members of society, have responsibilities as family members and household owners. The self-assessment method involves monitoring the frequency of food waste for different food groups and reporting the amount of waste each time food is discarded. Students are required to maintain a 7-day food waste diary, recording waste from each meal. Conducting the survey over a typical week (7 days) provides the best measurement of food waste at home. Ideally, the survey should be completed in one week, but if there are breaks due to special occasions (birthdays, other celebrations), the measurement can be continued the next day. After completing the diary for 7 consecutive days, students should send it, along with photos of the meals (before and after), to the country coordinator's email address for further analysis.	

SWOT ANALYSIS OF CASE STUDY 1:

Strengths (internal factors):

1. Actual reduction of food waste, as students become more aware about FW problem at the end of this practice.
2. Use of newly developed software to assess the amount of food waste on students' plates.
3. Implementation of a learning-by-doing approach to enhance critical and analytical thinking among students.

Weaknesses (internal factors):

1. It was challenging to encourage student participation in the challenge due to its relatively lengthy duration (1 week) and the substantial effort required (capturing at least 6 pictures each day).
2. The voluntary nature of participation possibly introduced bias, as students already environmentally conscious were more likely to participate in the challenge compared to those less concerned about their environmental impact.

3. The research results might lack neutrality due to some participants intentionally altering their food waste production habits as a result of their participation in the research.
4. The human factor posed a significant issue as participants frequently forgot to take pictures, despite consistent reminders.
5. The analysis did not extensively address the potential impact of different types of food waste (e.g., vegetables or meat) on the outcomes.

Opportunities (external factors):

1. This activity has increased awareness and promoted behavioral changes to reduce food waste, encouraging students to make more sustainable decisions in their daily lives.
2. This activity can be easily replicated in other regions/countries and adapted for different stakeholders.
3. The activity might be further developed, for example, a "sustainable diet challenge" could educate young individuals about environmentally friendly food choices, contributing to their knowledge of sustainable consumption.

Threats (external factors):

1. When replicating this practice, analyzing the collected data might require the use of licensed software, which could pose difficulties due to limited accessibility.
2. The activity requires some (at least minimal) funding and human resources.

***Some insights from conducted interviews**:*

From students' perspective:
"The Zeewaste4EU project empowered me personally by making me reflect on my daily food waste. The 7-day challenge, where I took photos of my plate, revealed how much food I was wasting. This prompted me to think about the reasons for food waste and find ways to minimize it".

"One of the strengths of this challenge was organizing my mindset to align with the necessities of food consumption, fostering a passion for preparing and consuming food in a way that minimizes waste".

From teachers' perspective:
"This activity aimed to gather unique data about food waste generation among young people in various European countries. Additionally, it aimed to raise awareness about food waste and, ideally, contribute to reducing its occurrence".

Case Study 2

Title:	**Fairtrade Exploration Exercise**
Country of implementation:	**Estonia**
Type of the practice:	**Practical exercise**
Type of education (primary, secondary, non-formal):	**Secondary schools**
Age of participants:	**15-17**
Education form (online, offline, or blended):	**Online**
Link:	**https://padlet.com/mailane84/iglane-kaubandus-c8fjmve0lfu9x59e**

The main objectives of this exercise are: (1) to emphasize the importance of Fairtrade products; (2) to inspire and encourage concrete actions that contribute to healthy Fairtrade nutrition; and (3) to raise awareness about the issues of unfair trade, providing explanations and motivating students to choose Fairtrade.

Working in pairs, students will embark on a journey through supermarkets to identify Fairtrade products. The tasks assigned include:

1. Capture the Moment: Take a photo of the selected Fairtrade product.
2. Trace the Origins: Identify the manufacturing country of the chosen product.
3. Certification Search: Look for and identify the Fairtrade certification sign on the product.
4. Share Insights: Post the findings on the Padlet wall.

Within the Padlet platform, each pair is prompted to engage in a discussion by answering the question: "Why should one prefer Fairtrade products?"

One of the key success indicators of this exercise is the students' ability to think critically about how Fairtrade impacts the achievement of Sustainable Development Goals. Moreover, it aims to engage new audiences and cultivate interest in Fairtrade products, leading to a shift in students' perspectives on healthy lifestyle choices.
By integrating the exploration of Fairtrade products with a broader discussion on sustainable development and healthy living, this exercise aims to foster thoughtful reflection and proactive engagement among students.

SWOT ANALYSIS OF CASE STUDY 2:

Strengths (internal factors):

1. The exercise effectively raises awareness of Fairtrade aims, promoting consciousness about ethical consumer choices.
2. Strong collaboration with local communities, including supermarkets and NGOs, enhances the exercise's impact and reach.

3. The use of a digital platform for assessment facilitates efficient data collection and analysis, enhancing the overall learning experience.
4. Implementation of a learning-by-doing approach strengthens critical thinking, analytical skills, and creativity among participants.
5. The exercise applies an interdisciplinary approach, fostering a holistic understanding of Fairtrade's impact.
6. The exercise contributes to promoting both healthy lifestyles and the principles of fair trade.

Weaknesses (internal factors):

1. Assessment methods may need refinement for more comprehensive evaluation.
2. Challenges in the implementation process may pose internal hurdles.
3. The exercise may incur financial costs, potentially limiting its scalability.

Opportunities (external factors):

1. The exercise has the potential to attract students from other schools and engage parents, expanding its reach and impact.
2. The exercise's replicability in other regions or countries offers the opportunity to disseminate its positive effects on a broader scale.

Threats (external factors):

1. Various external barriers, such as regulatory or logistical challenges, may affect the effective implementation of the case study.
2. A potential threat is the low level of participation and interest in the case study, affecting its overall success.
3. The availability of Fairtrade goods in supermarkets may pose a threat, influencing the exercise's feasibility and outcomes.

***Some insights from conducted interviews**:*

From students' perspective:
"I enjoyed the research method and practical activities of "Fairtrade" exercise".

"Now when I spot the green and blue Fairtrade Mark at local grocery store or my favorite online store, I can shop with confidence, knowing that I am making a positive impact on the world and using my purchasing power to support farmers and workers who deserve sustainable livelihoods.".

From teachers' perspective:
"Given that all the students prepared for the practical part and brought packaging from home to study and analyze, it was evident that this topic was interesting and useful to them. The students were able to explain to their parents the importance of Fairtrade labelling, thereby enhancing the positive impact of this exercise".

Case Study 3

Title:	**MasterChef**
Country of implementation:	**Italy**
Type of the practice:	**Practical exercise**
Type of education (primary, secondary, non-formal):	**Non-formal**
Age of participants:	**18-31**
Education form (online, offline, or blended):	**Offline**
Link:	**https://www.youtube.com/watch?v=FkLRg7eQJtE**

Participants are divided into groups of 4 to 6 people, each assigned a cooking station equipped with necessary utensils and gadgets. Their task is to prepare a menu, including a starter, main course, and dessert. Evaluation criteria encompass the final result, sustainability, teamwork, etc., with each group receiving an award in one category.
Each group receives a 'mystery box' containing various ingredients, ranging from traditional to exotic items, determining the activity's difficulty. Unfamiliar ingredients can be chosen for added challenge.
Participants encounter 'the market,' a central table divided into common products and a 'shop' with unique items. Each group can choose up to 4 products from the 'shop' after using shared common ingredients.
Groups have 10 minutes to strategize, deciding what to cook based on received ingredients and 'market' offerings. They 'buy' products from the 'shop' in four rounds.
Cooking time begins, allowing groups two to three hours (project-dependent) to prepare their dishes.
After the allotted time, groups present dishes to the 'jury' (comprising Kora staff members) for evaluation based on predefined categories. The jury aims to appreciate positive aspects rather than strict judgment, fostering collaboration and enjoyment.
Winners are announced, and an award ceremony concludes the activity.

SWOT ANALYSIS OF CASE STUDY 3:

Strengths (internal factors):

1. Practicality: Cooking is a proven method effective for raising awareness about food sustainability.
2. Teambuilding approach fosters close relations among participants.
3. Incentivizes a mindful approach to reducing food waste.
4. Encourages creativity to redefine traditional recipes.
5. Calculating food footprint promotes the development of sustainable behaviors.
6. Participants acquire new recipes and knowledge.
7. Adaptable to different profiles: Competition encourages proactiveness and engagement.
8. Debriefing moments allow for deeper reflection.
9. By choosing the ingredients, organizers can guide the activity in a specific direction.

Weaknesses (internal factors):

1. Better footprint calculation methods need to be identified.
2. Organizers need to ensure they have all necessary tools and equipment, which may not always be the case.
3. The competition approach can exert too much pressure on some participants.

Opportunities (external factors):

4. Playful pedagogical practice allows participants to learn while having fun.
5. Provides new knowledge and encourages reflection.
6. Can be replicated in different contexts and countries, with various group profiles (age, knowledge).

Threats (external factors):

1. Participants with no cooking skills might find it less attractive.
2. Lack of knowledge about food sustainability can lead to undesired results.

***Some insights from conducted interviews**:*

From students' perspective:
"I really enjoyed the challenge of creating dishes from random ingredients. The process of strategizing with the group and coordinating ourselves was truly great!".

"What I liked most about this activity was its practical nature, involving a significant amount of cooking, and placing great importance on the process".

From teachers' perspective:
"This activity consistently performed well each time we implemented it. The students and participants thoroughly enjoy engaging in such practical activities, directly connected to concepts we encounter daily, such as making sustainable choices related to food and adopting sustainable practices. They typically have a great time cooking and take pride in presenting their creations to the juries".

Case Study 4

Title:	**RESPECT**
Country of implementation:	**UK, Greece, Turkey, Lithuania, Austria, Portugal**
Type of the practice:	**Educational project**
Type of education (primary, secondary, non-formal):	**Secondary schools**
Age of participants:	**12-14**
Education form (online, offline, or blended):	**Blended**
Link:	

RESPECT is an Erasmus+ project created by the University of Gloucestershire (UK) involving schools and educational institutions from Greece, Turkey, Lithuania, Austria, and Portugal. The aim of the project is to enhance the social and civic competences of 12-14-year-olds, helping them better understand the consequences of their individual and collective actions for themselves, their local, national, and international communities. Additionally, the project aims to investigate how individual and collective behaviors affect environmental issues by engaging in clearly visible behaviors, such as purchases with different packaging, and evaluating more subtle choice outcomes, such as different clothing fiber compositions and laundry routines.
This is achieved through a multiplayer Serious Game in which the player collects points by answering questions on topics such as food habits, intensive meat and dairy production, monoculture, urban agriculture and self-production, food zero waste, and other fashion-related topics. The player then redeems those points by buying cards, where each card corresponds to a consumption choice and has a specific score that relates to the financial, environmental, well-being, and social effects of this choice. In the end, the players are ranked on a scoreboard. The game allows multiple connections to school curricula, enhances learning opportunities, and develops pupil knowledge on short and long-term issues with economic, social, and green costs.

SWOT ANALYSIS OF CASE STUDY 4:

Strengths (internal factors):

1. Multi-Country collaboration.
2. Enhancing social and civic competences.
3. Interactive serious game.
4. Integration with school curricula.
5. Promotion of sustainable behavior

Weaknesses (internal factors):

1. Limited reach and scalability.
2. Challenges in implementation.
3. Limited budget that may affect the sustainability after the end of the project.
4. Limited resources for training and support of teachers who want to implement the project results.

Opportunities (external factors):

1. Expanding reach.
2. Expand in broader topics related to sustainability.
3. Long-Term impact assessment to see how it influenced students.
4. Engage and involve with communities beyond school

Threats (external factors):

1. Sustainability beyond the project
2. Technical infrastructure and access.
3. Could any of the listed weaknesses seriously threaten the implementation of the Case Study in the future?

***Some insights from conducted interviews**:*

From students' perspective:
"*Before the RESPECT project, I knew about eating healthy, but I didn't fully understand how my food choices could impact the environment and society. The project opened my eyes to these connections and made me more aware of the importance of sustainable food systems. Now, I make choices that are not only good for me but also better for the planet*."

"*Most of us already knew about eating healthy but we had no idea for the impact of healthy eating schedule on the environment."*

From teachers' perspective:
"*The most inspiring aspect in implementing this multiplayer serious game on topics like food habits, sustainable agriculture, and fashion is the opportunity that I was given to educate, raise awareness, drive positive behavior change, foster community, and empower individuals to make a meaningful impact on critical global issues".*

"*The most inspiring aspect while implementing this practice was witnessing the transformation in students' attitudes and behaviors. Observing their engagement and enthusiasm as they learned about sustainable practices and realized the potential impact of their choices on the environment and society was truly inspiring."*

Case Study 5

Title:	**Boroume at School**
Country of implementation:	**Greece**
Type of the practice:	**Educational project**
Type of education (primary, secondary, non-formal):	**Primary, non-formal**
Age of participants:	**6-12**
Education form (online, offline, or blended):	**Offline**
Link:	**https://www.boroume.gr/en/programmata/programs-detail/boroume-at-school/**
In the project, a comprehensive educational program has been developed, providing valuable information to encourage children's participation in various verbal, interactive, and artistic activities. This allows them to learn in a playful manner and express their ideas about food waste. Two programs have been created: a brief one (for 1-2 hours) and a more detailed one (for 4-8 hours), adaptable to each school's needs in consultation with educators. Through interactive classroom activities, children gain insights into the issue of food waste, its causes, and measures to reduce it.	

SWOT ANALYSIS OF CASE STUDY 5:

Strengths (internal factors):

1. An innovative program.
2. Raising awareness.
3. Close cooperation with various entities and engagement of local communities.
4. Use of active participation methodology.
5. Implementation of a learning-by-doing approach to enhance critical thinking, analytical skills, and creativity.
6. An inspiring program effective for changing students' perceptions and habits.

Weaknesses (internal factors):

1. The link between raising awareness among field activists and its pedagogical aspects.
2. Difficulty in tracking the impact of those practices after the program's conclusion.
3. Difficulty in sustaining the program in a single school due to the traditionally rigid schedules in Greek schools (though improvements have been made in recent years).

Opportunities (external factors):

1. Changes in consumer and food manufacturers' behavior.
2. Replicability in other regions and easily transferable to different national contexts with minor adjustments.
3. Expand the program to the broader school community, including families and friends.
4. Encouraging critical thinking and a change of habits.

Threats (external factors):

1. The busy schedules and official curricula of Greek schools that leave insufficient space for such programs.
2. The varying habits that students observe between school and home environments.
3. The process of changing habits is lengthy, and it might take time to observe results.

***Some insights from conducted interviews**:*

From teachers' perspective:

"Students love the interactive way of our approach, the fact that we do not give them ready-made solutions and answers but rather try to reach a conclusion together with them, they like very much that we perceive them as agents of change and hope for a better future and not just mere young kids, the like very much the fun ways of looking into a subject such as food waste and also the fact that we take them very seriously while making sure that we have fun all the way".

„I observed tor my students, who are also recipients of the programme "Mporoume at School", that the most inspiring aspect of the it was that I found out that they started wondering about their food and their food waste."

„I realized that it had become "a way of life" for me. When my students saw me personally disposing of recycling waste in the recycling bins, they immediately offered to do the same. So, I would add, that us, as teachers, who have received the "Boroume at School" training, should incorporate its components to our routine, and inspire students towards the path of understanding better the issue of food waste".

Case Study 6

Title:	**SUSPLUS**
Country of implementation:	**Poland; Denmark, Estonia, Germany, France, Spain**
Type of the practice:	**Educational project**
Type of education (primary, secondary, non-formal):	**Students, pupils in secondary school**
Age of participants:	**Undefined**
Education form (online, offline, or blended):	**Blended**
Link:	**http://susplus.eu/**

The SUSPLUS project facilitated collaboration among eight European universities to develop, implement, and widely disseminate innovative educational materials and methods in sustainable food systems. This initiative aimed to equip students with the necessary knowledge, competences, and skills to support the sector and enhance their employability. The organic food system was presented as a model for increasing overall food production and promoting sustainable consumption. Comprehensive knowledge in various areas of sustainable food system development, not covered in standard university programs, was shared with a broad student community through highly innovative educational tools and methods. These methods were tailored to meet the expectations of European employers, focusing on developing and implementing teaching approaches that enhance education quality and future student employability.

MEASURABLE RESULTS:

- Guide/booklet on Sustainable Food Systems
- E-learning module "Sustainable Food Systems & Diets"
- Intensive Study Program "Sustainable Food Systems and Diets"
- Educational materials for the intensive study program "Sustainable Food Systems and Diets"
- SUSPLUS Small Research Projects Program
- Lectures on sustainable food systems delivered by students in schools

Analysis: The concept of integrating a Sustainable Food System, including a Sustainable Diet and the Organic Food System, into the curricula and existing study programs of partner universities.

SWOT ANALYSIS OF CASE STUDY 6:

Strengths (internal factors):

1. Different forms and methods of knowledge transfer.
2. Reachability for both remote and traditional forms.
3. Presentation of content often supported by examples.
4. High-quality, international, comprehensive knowledge in various areas of sustainable food systems development.
5. Utilization of online and digital resources, making the project accessible to a wide audience.

Weaknesses (internal factors):

1. Boring, unattractive website.
2. Limited project implementation tied to its financing period.
3. Absence of workshops and practical exercises.
4. Lack of tools developed by the project to engage stakeholders in its continuation.

Opportunities (external factors):

1. Educational materials and tools provided by the SUSPLUS PROJECT can be easily replicated and adapted to different contexts and audiences.
2. Enables participants to create an educational process tailored to their needs.
3. Promoting an approach tailored to individual needs aligns with the personality profile of Generation Z.
4. Education and communication campaigns can empower individuals to make informed choices and actively participate in sustainability initiatives. Encouraging partnerships between institutions such as universities brings together diverse knowledge, resources, and perspectives, potentially leading to advancements in the food management education sector.
5. Promoting sustainable food consumption among students and schoolchildren.
6. Raising awareness and encouraging behavioral changes towards more sustainable food choices.
7. Clear planning, stakeholder involvement, effective communication, and a strategy for managing the SURPLUS PROJECT results in a way that is responsible, transparent, and aligned with the set goals.

Threats (external factors):

1. Limited funding may hinder implementation.
2. Resistance from stakeholders, whether due to lack of awareness or vested interests, can impede progress and hinder the adoption of sustainable practices.
3. Educational resources and tools may not be sufficient to overcome ingrained habits and cultural norms related to food choices.
4. Requires behavioral change, which can be difficult to achieve.
5. Mismanagement of project outputs could lead to unequal access or underutilization of resources by those who need them most.
6. The need for establishing mechanisms or infrastructure for the implementation of the project results. Fair and equitable distribution might be challenging to achieve.
7. The need to involve project partners to prepare applications for funds to continue the project.

***Some insights from conducted interviews**:*

From students' perspective:

"In my opinion, one of the main advantages of the SUSPLUS project is the fact that it uses many different forms and ways of transferring the knowledge. It allows participants to create an educational process tailored to their needs, better assimilate knowledge, and consolidate it also later. An additional advantage is reaching for both remote and traditional forms."

"By providing targeted information and resources, SUSPLUS can help me develop knowledge and skills related to healthy and sustainable food choices. This program offers capacity-building activities, such as workshops, training sessions and community engagement, to empower individuals and communities

to adopt sustainable food practices. It fosters the development of practical nutrition skills and sustainable food systems".

From teachers' perspective:
"The strong point of this type of practice is close cooperation with other entities, developing a model of activities that, brought into the project, provide diverse perspectives and broader knowledge. Also, a strength of this project is the use of online and digital resources that make the project accessible to a wide range of people."
"The topic is an interesting challenge; I don't have any specific experience yet, but I try to talk about healthy food and environmental protection with young people on various occasions. In my private life - I care about the quality of food, at least some of the products I buy from well-known sources (directly from the farm)."

Case Study 7

Title:	**You are what you eat**
Country of implementation:	**Poland**
Type of the practice:	**Educational project**
Type of education (primary, secondary, non-formal):	**Primary**
Age of participants:	
Education form (online, offline, or blended):	**Blended**
Link:	**https://zpe.gov.pl/a/you-are-what-you-eat/DDbvSQbWh**

The project, financed by EU funds and implemented by the Ministry of Education and Sciences, aims to promote sustainable food consumption among school children. This program supports the child nutrition system through:

- Promotion of sustainable food.
- Promotion of better quality and healthier food.
- Easier access to knowledge about healthy nutrition.
- Dissemination of knowledge about Polish regional and traditional products.
- Promotion and stimulation of the use of high-quality food.

The project provides various forms of education to acquire knowledge about healthy food and proper nutrition. Participants will learn how to:

- Discuss the rules of proper nutrition and apply them in everyday life.
- Plan a menu for the whole day, taking into account nutritional needs.
- Describe the importance of vitamins and minerals for human health.
- Characterize eating disorders (obesity and anorexia).
- Care for food to avoid spoilage and loss of nutritional value.

The project involves collaboration with schools to integrate sustainable food practices into their curriculum. It also collaborates with food producers, retailers, health specialists, and policymakers to promote sustainable food systems. Education is conducted through lectures, workshops, educational materials, and competitions

SWOT ANALYSIS OF CASE STUDY 7:

Strengths (internal factors):

1. Emphasis on the influence of nutrition on overall health, well-being, and proper functioning of the human body.
2. Opportunities for the development of essential digital and social competences.
3. User-friendly presentation of content through various interactive options.
4. Educational materials designed for different target groups.

Weaknesses (internal factors), for example:

1. The influence of psychological and emotional factors on eating habits is overlooked.
2. Basic principles of healthy eating, particularly attention to meal variety, are not detailed.
3. Insufficient attention is paid to nutritional value, including the availability of complete proteins, fats, carbohydrates, vitamins, and minerals.
4. There is a lack of free combinations of foods to ensure daily nutrient requirements.

Opportunities (external factors):

1. By providing educational resources and tools, the project can raise awareness and encourage behavioral changes toward more sustainable food choices.
2. It can be easily replicated and adapted to different contexts and audiences.
3. The potential of this practice could be strengthened through dissemination activities such as implementing various events, webinars, or workshops.
4. It has great potential for disseminating results in line with current nutritional trends.
5. Providing interactive illustrations, creating a "healthy eating plate," and organizing workshop activities in groups according to the principle "practice makes perfect."
6. The project raises awareness about the environmental impact of food production, fostering a sense of responsibility for sustainable choices.
7. Students could become advocates for making environmentally conscious decisions both in and out of the classroom.
8. Students can apply their newfound knowledge to make informed and healthier food choices for themselves and their families.
9. Exposure to nutritionists, environmental scientists, and local farmers provides insight into potential career paths and areas of interest.

Threats (external factors):

1. Funding is limited to the duration of the project.
2. Promoting sustainable food consumption and production practices requires behavior change, which can be difficult to achieve.
3. The project's educational resources and tools may not be sufficient to overcome ingrained habits and cultural norms related to food choices.

4. Discussions about food choices can sometimes be sensitive, as they may intersect with cultural, religious, or personal beliefs.
5. The project should ensure a respectful and inclusive environment where diverse perspectives are valued.
6. The intricate relationship between nutrition, health, and the environment might overwhelm students, making it difficult for them to grasp key concepts.

***Some insights from conducted interviews**:*

From students' perspective:

"One of the things I like most about the project practice is its focus on the power of nutrition in shaping our overall health and wellbeing. A healthy diet can play a key role in preventing chronic diseases such as obesity, heart disease and diabetes. Adopting a 'You are what you eat' approach can lead to positive lifestyle changes such as regular physical activity, seeking nutrition education and developing healthier eating habits. By recognising the strengths of this practice, individuals can make informed choices and cultivate healthy eating habits that can positively impact their lives."

"The advantages of this practice include, first and foremost, raising people's awareness of the impact of nutrition on the proper functioning of the human body. It shows how important both physical activity and a healthy, well-balanced diet are in the everyday life of every person. Importantly, it highlights how neglecting the basic principles of healthy eating can contribute to bodily dysfunctions that may manifest themselves in the emergence of the increasingly common civilisation diseases of today, such as obesity."

"I will pay attention to eat more vegetables in my diet."

From teachers' perspective:

"An interesting stage of the lesson was the opportunity for the pupils to read an extract from the text 'Proper nutrition'. The lesson leader then can display interactive illustrations, such as the 'Healthy Eating Plate'. Volunteers explain the nutrients provided by the products indicated by the teacher, while at the same time becoming aware of the importance of their daily choices in proper nutrition."

Case Study 8

Title:	**Clean food – Slow Food**
Country of implementation:	**Iceland**
Type of the practice:	**Educational project**
Type of education (primary, secondary, non-formal):	**Kindergartens**
Age of participants:	**2-6**
Education form (online, offline, or blended):	**Offline**
Link:	**https://www.adalthing.is/is/matarmenning#slowfood**

Slow food main goal is to educate consumers about good, clean, and fair food, often meaning local and smaller production. Slow food does not have a label on the products in stores, so it is hard to identify slow food in stores. The main goal of slow food is to be sustainable. There are 11 products on the Ark of taste which is a list of food qualifying to be a slow food.
The kindergarten has the goal of making food from scratch and using food that has not been processed, precooked to make ingredients last longer, only use fresh vegetables. They have the goal of only buying Icelandic products/organic products for the meals for the kids.
These practices are used to underline for children at a very young age how important good fresh products are for them and give them the early lesson how much difference there is between buying good products versus mass produced cheaper products and to have children eating healthier in general as it is vital for their growth.
They actively monitor all the children to get the right amount of each food category required for them each day. With the challenges of being in Iceland where a lot of products are imported due to weather condition are not favorable for organic farming of many fruits and vegetables, they only import organic products.

SWOT ANALYSIS OF CASE STUDY 8:

Strengths (internal factors):

1. Focus on sustainable consumption.
2. Replicable food literacy.
3. Emphasis on the importance of biodiversity in daily life.
4. Better ecosystems management.
5. Support for small farmers and local food producers.
6. International good practices demonstrating the integration of environmental, social, and economic sustainability into local communities.
7. Children's early healthy food literacy and understanding of the importance of local products.

Weaknesses (internal factors), for example:

1. Small participation.
2. Extra food cost for consumers.
3. It is important that teachers have faith in the project.

Opportunities (external factors):

1. Changed consumer and food manufacturers' behavior.
2. Replicability in other regions/countries.
3. Maintains market diversification for both small and large producers.

Threats (external factors):

1. Low levels of participation and interest in the Case Study.
2. Economic market challenges.
3. Competition from larger food-related organizations.

***Some insights from conducted interviews**:*

From students' perspective:
"I do think more about eating something that grows or manufactured in the local area. I also think, what is good for the environment."

From stakeholder's perspective:
"The work that goes on in Slow food youth network has been very creative for younger generations and there lies the opportunity to educate them. With that we are trying to reach young future food producers and consumers."

4. Conclusion

The report comprises two key components:

Firstly, a database of Good Practices related to food literacy and sustainable food systems collected across European countries and beyond. This aims to provide knowledge and inspiration for enhancing teachers' capacities in complex food system education.

Secondly, a precise description of Case Studies developed with the help of conducted interviews from the most promising and innovative Good Practices. The SWOT analysis conducted for each Case Study aims to offer teachers a comprehensive overview and help assess possibilities for implementation concrete practice in different schools, regions, and countries. It is anticipated that these Case Studies have the potential to modernize food sustainability education, serving as a key driver of the green transition in European schools and non-formal education.

The SWOT analysis reveals that there are more strengths and opportunities in analysed Case Studies, thereby expanding the possibilities of transforming weaknesses or threats into strengths or opportunities. If they cannot be converted, efforts should be made to minimize them.

The primary strengths of the implemented Case Studies lie in their ability to enhance food literacy through the implementation of various practical activities related to food waste prevention and sustainable food systems in general. These practices have significantly contributed to changing the behaviour of young people in their daily lives, fostering the adoption of sustainable consumption habits. Other notable strengths and opportunities include the replicability of the practices, the utilization of local products, and the emphasis on biodiversity.
However, there are also weaknesses, such as economic challenges, including budgetary constraints, traditional behaviours, and a shortage of resources (including human resources). Identified threats encompass external barriers, such as regulatory or logistical challenges, a lack of knowledge, insufficient technical infrastructure, and low awareness. In many cases, overcoming these challenges may prove to be a hindrance to the successful implementation of the case studies.

Collaborative efforts across different stakeholders, informed policymaking, and increased awareness can contribute to a more resilient and sustainable future. The Case Studies offer valuable insights into the intricacies of promoting sustainable food systems practices, providing a foundation for further research and action in the ongoing pursuit of a more environmentally conscious and responsible society.

Annex 1: List of collected Good Practices

Nr	Country	Name of the Good Practice	Type of the practice	Type of education	Link
1	Estonia	CLIKIS-Network - climate-friendly school kitchens	Educational project	Schools (primary, secondary)	https://tartu.ee/et/uudised/tartu-koolid-ja-lasteaiad-ennetavad-toiduraiskamist
Description: The project enabled eight Estonian kindergartens and schools to assess and enhance their kitchen operations, menus, cooking methods, and waste management. Its focus was on promoting environmentally friendly alternatives, fostering sustainable food practices, and ensuring the provision of healthy, high-quality, and affordable meals.					
2	Estonia	Zero food waste education of "Z" generation of European citizens (Zeewaste4EU)	Educational project	Universities and secondary schools	https://zeewaste4.eu/
Description: The project aims to instill behavioral change in young individuals to prevent and reduce food waste. The self-assessment method involves monitoring and reporting food waste frequency for different food groups. Students maintain a 7-day food waste diary, covering all meals. Ideally, the survey spans a week, but occasional breaks are acceptable for special occasions. After completing the diary, students send it, along with meal photos (before and after), to the country coordinator's email address.					
3	Estonia	Competition among Estonian schools to determine the least food-wasting school canteen	Educational competition for schools	Schools (primary, secondary)	https://www.facebook.com/tulevikukoolitoit/
Description: To combat food waste, Daily, the largest school caterer in Estonia, is launching a competition among nearly 70 school canteens to find the least wasteful. The one-week competition involves monitoring and recording the daily amount of discarded food in each canteen. Results are displayed on a public chart, and the school with the least food wasted per student wins. In 2022, the Tallinn French Lyceum won, wasting only 6 grams per day. This food waste monitoring has been a four-year tradition in Daily school canteens.					
4	Estonia	Children's summer camp in the farm	Summer camp (educational program)	Non-formal for school children	https://www.rannarantso.com/lastelaagrid
Description: The Ranna Rancho is a farm located in Western Estonia that serves as a second chance for many abandoned animals to have a new lease on life. Whether they've lost their homes, owners, or are injured, these animals have found a safe place and have adapted well to living as a single-family unit. The Ranna Rancho summer camp offers children the opportunity to gain a fresh perspective on nature, including the process of food cultivation. During the camp, children live amidst nature and engage in simple, traditional countryside activities. A significant component of the program involves learning about plants, their benefits, and how they can be utilized in food preparation. Additionally, children learn to care for a variety of animals, ride horses, create basic crafts, etc.					
5	Estonia	Campaign in schools: Let's cook together!	Awareness campaign	Secondary, primary	https://www.sei.org/featured/kokkamekoos/
Description: To address the issue of approximately 50 carloads of uneaten food being discarded annually in Estonian schools, the "Let's Cook Together!" campaign aimed to raise awareness and improve the situation. The campaign, starting on October 17, 2018, at Saue Gymnasium, continued throughout the academic year. In 14 schools, joint cooking sessions allowed students to repurpose leftover food under chef guidance, learning about food recycling. Discussions preceded these sessions, covering food waste causes and prevention. At the school year's end, remaining food in canteens was weighed to update waste statistics. The project also created guidance material titled "Preventing and Reducing Food Waste and Loss in Schools.					
6	Estonia	Valuing food! Sincerely, food!	Educational project	Non-formal, households, teachers, students	www.sincerelyfood.eu
Description: The project had the following goals: (1) to raise consumer awareness of reducing food waste in households, involving sharing food tips, explaining trade-used food labels, creating educational materials, conducting thematic seminars and training for adults, and organizing lessons in schools; (2) to draw public attention to the global effects of food waste and the importance of its reduction, utilizing public media and information campaigns.					
7	Estonia	Day of water	Practical exercise	High schools	Worksheet: https://www.globe.gov/docume

					nts/11865/920675f5-56c0-46a3-97b5-74f9953b2ae4
Description: The task includes collecting a water sample from some open water in a bucket for testing, bottling a water sample to bring back to the classroom for testing pH, conductivity or salinity, alkalinity, and nitrate, and filling out the worksheet.					
8	Estonia	Move and Eat	Practical exercise	High schools	https://tap.nutridata.ee/et/avaleht
Description: Work in pairs using the NutriData app for teamwork. Goals include highlighting important themes in healthy nutrition and sport exercises, inspiring concrete actions for healthy eating, and learning to use a calorie calculator, pedometer, and perform calorie-burning exercises. Students will keep a food diary, analyze meals by counting calories, and track progress using the app. The worksheet includes questions about daily steps, calories burned in PE class, daily water intake, and meal calorie content.					
9	Estonia	Fairtrade exercise	Practical exercise	High schools	https://padlet.com/mailane84/iglane-kaubandus-c8fjmve0lfu9x59e
Description: In pairs, students aim to highlight the importance of Fairtrade products, inspire healthy Fairtrade nutrition, and raise awareness of unfair trade issues. Their objective is to find Fairtrade products in supermarkets, involving tasks like taking a photo, identifying the product's manufacturing country, locating the Fairtrade sign, and posting on the Padlet wall. Comments on the Padlet should answer the question: "Why prefer fair trade products?"					
10	Estonia	Food e-substances	Practical exercise	High schools	Moodle.ee
Description: Work in pairs to conduct research on food composition, calorie content, and the presence of e-substances in school-purchased items like dairy products, meat products, pastries, sweets, etc. Using product packaging information, fill out a table on the Moodle platform. Include the name of the product, country of origin, composition, and energy value. The goal is to highlight the significance of food composition, calorie content, and the effects of e-substances on human health.					
11	Estonia	Celebration of the International Day of Plant Health	Quiz	High schools	https://www.tartuloodusmaja.ee/qsm_quiz/quiz-growing-with-your-food-ii/
Description: Participating in a quiz aimed at cultivating food plants and contemplating the processes of growing and consuming food. Developed in collaboration with the Centre of Estonian Rural Research and Knowledge, the quiz questions also emphasize the theme of plant health. This activity is aligned with the celebration of the International Day of Plant Health.					
12	Estonia	Cooking lesson	Practical exercise	Secondary school	-
Description: Engage in a practical lesson working in pairs to learn how to prepare a Greek salad using fresh vegetables. The objectives include acquiring skills in counting calories, proper vegetable and feta cheese cutting, dish arrangement, and serving. Emphasizing the concept of zero-waste production, utilize compost from the compost box in the school yard and packaging for stuffing studio bags. Evaluate the prepared salad by students from a parallel class and teachers.					
13	Greece	FoodTreasure	Educational Project	Primary school	https://incommon.gr/foodtreasure/
Description: FoodTreasure is an educational project that familiarizes the school community with circular economy principles through the case study of food waste. It aims to make learning about organic waste engaging and formative, encouraging lifelong ecological behaviors. The project collaborates with educators, schools, and pupils, fostering critical thinking and hands-on environmental education. The project, including school competitions approved by the Ministry of Education for 3 years (and approved for 2023), engages educators and children in creating innovative circular economy projects. These competitions support teachers in inspiring young people to think critically, work collaboratively, and implement small-scale solutions, such as clothes swap events, repurposing furniture, and creating educational videos on material reuse.					
14	Greece	Close the Food Circle	Local Initiative	Non-formal	https://incommon.gr/close-the-food-circle/
Description: The 'Close the Food Circle' project in the Municipality of Papagos – Holargos aims to co-design tools for effective food waste recycling. Active participation of stakeholders (municipality, citizens, businesses) is crucial to achieve gradual changes in citizens' attitudes toward food waste. Current municipal waste management practices focus on industrial regulations and neglect organic residues from citizens and small businesses, despite individual behavior contributing significantly to the total burden. Based on 2019 EDSNA data, 42.3% of Attica's waste is organics, with 82% being kitchen waste. Despite almost 20 years of the current recycling system, citizen participation remains inadequate. The project focuses on informing and involving the community in proper sorting and brown bin use, aiming to change perceptions of organic waste and transition to a circular economy.					
15	Greece	Boroume at School	Educational project/program	Primary, non-formal	https://www.boroume.gr/en/programmata/programs-detail/boroume-at-school/

Description: The objective of this program is to increase awareness and instill values of food waste reduction, volunteering, and giving among schoolchildren. Approach: Educate children through interactive classroom activities about the causes of food waste and ways to mitigate it, empowering them to bring positive change to their homes. Program Options: (1) Brief Program: 1-2 hours duration; (2) Detailed Program: 4-8 hours duration. Adaptability: Programs can be tailored to suit the specific needs of each school, in consultation with educators.					
16	Greece	Regenerative Farming Greece	Educational project/program	Non-formal	http://regenerativefarminggreece.org
Description: The program aims at enabling and supporting the transition of Greek farming to regenerative practices by disseminating knowledge about agroforestry. This involves restoring soil, plant, and animal health, regenerating ecosystems, and building resilience to climate change. Regenerative Practices: Apply proven regenerative farming techniques like agroforestry, water control, holistic management, and land planning. These methods have demonstrated effectiveness globally, offering ecological and economic benefits in the short, mid, and long term. Pilot Farms: Convert six pilot farms, representing prevalent agricultural models in the Mediterranean, into regenerative farming operations. Publish farm details, designs, and frameworks to share foundational knowledge and support farmers in their transition. Awareness and Empowerment: Raise awareness about regenerative farming and empower farmers across Greece to transform their operations into regenerative ones.					
17	Greece	How to compost and useful tips to reduce food waste	Workshop	Primary	https://foodwave.eu/activities/how-to-compost-and-useful-tips-to-reduce-food-waste/
Description: Alongside the partner Organization Earth, the Municipality will organize a workshop at the 1st Primary School of Nea Smyrni for over 20 students in the Environmental class. The workshop will focus on composting and food waste. The school, known for its strong commitment to environmental issues, is selected as the venue. The session will commence with a discussion on food waste, its impact on climate change, and personal strategies for reduction. Additionally, the Food Wave projects will be presented. Towards the end of the workshop, students will initiate the composting process at the school's designated compost area.					
18	Canada	Think&EatGreen@School	School workshops and summer institutes	Primary and Secondary	https://thinkeatgreen.ca/
Description: The project empowered students, teachers, and policymakers to influence food production and sourcing. It targeted four key areas within a comprehensive school health framework, employing a systems approach: (1) Emphasized activities like establishing food gardens, composting, and environmentally responsible disposal of end products; (2) Focused on aspects such as school food programs, cooking skills, eating spaces, and farm-to-school initiatives for local fresh food; (3) Created and disseminated innovative learning methods integrating the entire food systems cycle, including production, processing, transportation, distribution, consumption, and disposal. Explored the impacts on health and the environment, highlighting composting and recycling; (4) Conducted research and developed policies and programs to support healthier and more sustainable food systems in schools.					
19	Czech Republic	Really Healthy School	Educational project	Non-formal education	https://www.skutecnezdravaskola.cz/
Description: Skutečně zdravá škola is a civic initiative aiming to enhance the quality and sustainability of school meals, educate children about food, and improve overall health. The program promotes local economies, sustainable agriculture, and food distribution. Key Points: • Framework sets goals and standards for individual schools. • Each school maintains its own blog. • A certification system interconnects participating schools. • Involves everyone within and beyond the school. • Focuses on healthy and environmentally conscious nutrition, fostering awareness, school development, and regional economic cycles. Achievements: Winner of the SozialMarie prize for Social Innovation.					
20	Greece	RESPECT project	Educational project	Secondary	-
Description: RESPECT, an Erasmus+ project, involves schools and educational institutions from Greece, Turkey, Lithuania, Austria, and Portugal. The project targets 12-14-year-olds, aiming to enhance their social and civic competences, fostering an understanding of the consequences of their actions at individual, collective, local, national, and international levels. Additionally, it explores how behaviors impact environmental issues, spanning visible choices like purchases and subtler aspects like clothing fibre compositions and laundry routines. Key Elements:					

• Multiplayer Serious Game focusing on topics such as food habits, meat and dairy production, monoculture, urban agriculture, self-production, food zero waste, and fashion. • Players collect points by answering questions and redeem them for cards representing consumption choices with specific scores for financial, environmental, well-being, and social effects. • The game concludes with players ranked on a scoreboard.					
21	Greece	BOROUME (WE CAN)	Local initiative	Non-formal	https://www.boroume.gr/en/
Description: Boroume, a Greek non-profit organization, focuses on reducing food waste and addressing malnutrition. Through the 'Food Rescue & Donation' program, they collect surplus food from donors like restaurants and supermarkets, distributing it to those facing food insecurity through public interest agencies. This approach not only alleviates social challenges but also lessens the environmental impact of food waste. Key Programs: • "No Portion of Food Lost": An informational program. • "Boroume at School": An educational initiative. • "Boroume in the Field": A program saving surplus agricultural production. • "Boroume in Laiki": Rescuing products from street markets. • "Boroume in Neighborhood": A voluntary information program for potential food donors.					
22	Greece	Social Supermarkets	Local initiative	NA	-
Description: In Greece, social supermarkets address food waste and insecurity by providing affordable, dignified shopping experiences to financially struggling individuals and families. They collaborate with producers, retailers, and distributors to acquire surplus or nearly expired products, ensuring quality and safety. Offered at reduced prices, these products enable those with limited resources to access diverse items. Social supermarkets resemble regular grocery stores, requiring individuals to become members with varying eligibility criteria. They go beyond shopping, organizing events, workshops, and programs like cooking classes, nutrition education, and job training to enhance overall well-being. Relying on partnerships and volunteers, social supermarkets contribute to sustainability and social justice in the communities they serve.					
23	Greece	The Food Bank of Greece	Local initiative	NA	https://foodbank.gr/en/
Description: The Food Bank of Greece, a non-profit organization, actively combats food waste and addresses food insecurity by collecting surplus food and distributing it to those in need. Collaborating with various food businesses, they collect products nearing expiration, with damaged packaging, or excess stock. Collected food undergoes rigorous quality checks before distribution to charitable organizations. Partnerships with government agencies, non-profits, and volunteers support their operations and awareness campaigns on food waste and insecurity. Educational initiatives promoting sustainable food practices are also conducted. Relying on volunteers, the organization has expanded its reach and collaborations, contributing significantly to reducing food waste, aiding vulnerable populations, and fostering social and environmental sustainability.					
24	EU countries	European School Fruit and Vegetable Scheme (EU SFVS)	Educational program	Primary and secondary	https://www.euschoolfruit.nl/nl/schoolfruit.htm
Description: The European School Fruit and Vegetable Scheme (EU SFVS) promotes healthy eating among school-aged children through free fruit and vegetable distribution. Funded by the EU and/or national governments, participating schools offer these items during a set period, fostering nutrition education and awareness. With goals like promoting healthy eating and increasing consumption, the program has positively impacted nutrition habits and wellness culture in schools. Each year, around 3,000 out of 7,000 schools participate, emphasizing the significance of health education and regular fruit- and vegetable-focused days in schools.					
25	UK	Food for Life	Educational project	All levels	https://www.foodforlife.org.uk/
Description: The 'Food for Life' program by the Soil Association, originating in the UK and adopted across Europe, promotes healthy and sustainable food choices, offering comprehensive education on diet, cooking, sourcing, and sustainability. The initiative encourages institutions to prioritize local and sustainable food procurement, supporting farmers and reducing food miles. Promoting a positive food culture, it engages communities, schools, and workplaces through cooking clubs, gardens, and farm visits. The program's certification scheme recognizes and rewards institutions meeting criteria for food quality, sustainability, and education, fostering continuous improvement.					
26	Iceland	Krakkar kokka	Educational project	Primary	https://matis.is/matis_projects/krakkar-kokka/
Description: The project aims to educate children about local food traditions and resources through entertaining activities, connecting them with the UN sustainable goals. A field trip to nature or production facilities involves cooking with local ingredients, fostering understanding. Participating schools create educational videos showcasing their landscapes and ingredients. The project, initially in a few schools, envisions expansion across Iceland, mapping areas in each region.					

27	Iceland	Clean food – Slow Food	Educational program	Kindergartens	https://www.adalthing.is/is/matarmenning#slowfood
Description: Slow Food's primary goal is to promote awareness of good, clean, and fair food, emphasizing local and smaller-scale production. The challenge lies in the absence of specific labels on products in stores. Sustainability is a key focus, with 11 products listed on the Ark of Taste, qualifying as slow food. In this kindergarten, the emphasis is on preparing food from scratch, using unprocessed and fresh ingredients, prioritizing Icelandic or organic products for meals. The aim is to teach children about the importance of fresh, quality products and the difference between them and mass-produced alternatives. The kindergarten actively monitors children's nutrition, adapting to challenges like weather conditions affecting organic farming in Iceland, leading to the importation of organic products.					
28	Iceland	Sustainability at kindergarten	Educational program	Kindergarten	https://www.adalthing.is/is/matarmenning#valdefla
Description: Since 2011, Aðalþing Kindergarten has prioritized sustainability in its curriculum, emphasizing values like liberty, respect, and environmental consciousness. Sustainability permeates all aspects of the school's operation, including active involvement of children in shaping its policies. Despite weather limitations for growing vegetables, the kindergarten aims for self-sufficiency. They implement a three-part recycling system with bins for organic, recyclable, and non-recyclable waste. The kindergarten takes pride in offering diverse experiences that respect each child's traditions and background, considering it a core human rights value.					
29	Iceland	Go ahead with prevention of waste	Educational project	Non-formal	https://samangegnsoun.is/matarsoun/
Description: This project targets diverse age groups, providing training manuals for teachers and students suitable for social studies and cooking classes. Covering recyclable objects, clothing, food, and electrical appliances, the project includes slideshows and pamphlets with educational content and practical exercises. For food waste, activities involve calculating household food waste weight, associated CO2 emissions, types of discarded food, prevention strategies, and reflections on future trends. The project also addresses the economic aspect, estimating the cost of food waste for families and supermarkets.					
30	Iceland	Sólheimar	Business	Non-formal	https://www.solheimar.is/pages/nam-og-fraedsla
Description: Sólheimar, founded in 1930, is an Icelandic Eco Village promoting organic farming and inclusivity for individuals with special needs. It aims to integrate them into society, providing fulfilling jobs. Since 2006, Sólheimar has collaborated with local schools, teaching sustainability and environmental values. The village welcomes schools nationwide for educational field trips, emphasizing the benefits of organic farming. Visitors witness the daily lives of special needs individuals engaging in normal activities. Additionally, Sólheimar offers tours and sells products made by residents to support its operations.					
31	Iceland	Healthy elementary school	Workshop	Primary, secondary	https://thjorsarskoli.is/wp-content/uploads/2021/11/Heilsueflandi-grunnskoli-yfirferd-i-vetur.pdf
Description: In the 2011-2012 school year, Þjósarskóli dedicated a theme week to children's health, involving collaboration among school officials, teachers, students, parents, and other adults. The themed weeks covered eight areas: food, teeth cleaning, home, mental health, local community, exercise, safety, and lifestyle. To engage students, the school incorporated staff-generated ideas without imposing directives. During the food-themed week, students watched brief educational videos by the Icelandic government, participated in group exercises on the food cycle, and created a visual representation highlighting each nutritional category. The teacher explained the importance of healthy food and its impact on teeth, fostering an interactive learning experience.					
32	Italy	Slow Food Taste Education Resources	Educational program	Primary, Non-formal	https://www.SlowFood.com/what-we-do/food-and-taste-education/taste-education-resources/
Description: Founded in 1989, Slow Food is a global grassroots organization aiming to preserve local food cultures, counteract fast-paced living, and promote awareness of our food choices' impact. With millions involved across 160 countries, Slow Food advocates for access to good, clean, and fair food, emphasizing the interconnectedness of food with culture, politics, agriculture, and the environment. The provided educational resources target educators and leaders, offering practical advice, activities, and toolkits to conduct workshops on taste, food, and societal discussions in schools and non-formal settings. Resources include Slow Food's					

Education Manifesto, Education Handbook, The Origins of Taste: A Taste Education Kit, and an Education Manual for workshop implementation and learner engagement.					
33	Italy	RECUP	Local initiative	Non-formal	https://associazionerecup.org/
Description: RECUP aims to combat food waste by collaborating with markets and supermarkets to rescue expiring or visually imperfect produce, which volunteers transform and share within local communities. As a youth-led organization, RECUP welcomes volunteers, currently operating in Rome and Milan with plans to expand to other Italian cities. Tips for replicating RECUP's actions include establishing direct contacts with smaller supermarkets, partnering with local organizations aiding those in need, and connecting with local food processors. RECUP not only conducts ongoing food pickups but also conducts workshops with young people on reusing food waste, such as creating painting colors from vegetables.					
34	Italy	ImMENSAmente	Educational project	Primary	https://immensamente.com/
Description: ImMENSAmente is an educational project focusing on food education for children (0-13 years) in Rome's schools. The project promotes a responsible diet, environmental sustainability, social agriculture, and multiculturalism through food. It engages students, teachers, and families by distributing free teaching materials, organizing school meetings, and conducting culinary workshops in school canteens. The goal is to foster a playful understanding of healthy and sustainable food, emphasizing hygiene, eating habits, environmental awareness, and measures to reduce food waste. The project provides both paper and digital teaching kits to support face-to-face lessons and the teacher's training course.					
35	Italy	Ecologia dell'Alimentazione	Educational program	Primary	https://cittadinanzattiva.umbria.it/ecologia-dellalimentazione/
Description: "Ecologia dell'alimentazione" is a project promoting proper eating habits, food sustainability, and well-being for young consumers. The project includes study modules for primary classes, covering topics such as reading food labels, reducing packaging waste, supporting the short supply chain, anti-waste practices, healthy nutrition, table etiquette, and organizing the refrigerator to prevent food waste. Through playful-didactic workshops, the project aims to instill values of solidarity, equality, and environmental responsibility, emphasizing local products and fostering a positive attitude towards life.					
36	Italy	Kora's 4 best non formal learning activities related to food	Practical exercises	Non-formal	https://associazionekora.it/2023/05/12/non-formal-learning-and-food-activities/
Description: Associazione Kora has developed non-formal education projects focusing on the nexus between food and environmental sustainability. This compendium highlights four highly appreciated activities for youth workers or educators. The activities include 'Cooking on a budget' for teambuilding and sustainability, 'Jeopardy' for knowledge-sharing, 'Leftovers Cooking' to reduce food waste, and 'Speed tasting' for intercultural learning.					
37	Italy	MasterChef	Practical exercise	Non-formal	https://www.youtube.com/watch?v=FkLRg7eQJtE
Description: Participants, in groups of 4 to 6, prepare a menu with a 'mystery box' of varied ingredients. The 'market' offers common and unique products for added challenge. After a 10-minute strategy session, cooking begins, allowing 2 to 3 hours (project-dependent). The 'jury' evaluates dishes positively, with winners announced in an award ceremony.					
38	Cyprus	LIFE – FOODPRINT	Educational project	Non-formal	https://www.foodprintcy.eu/
Description: LIFE FOODPRINT, an EU-funded project under the LIFE Program, aims to promote sustainable food consumption and production. It offers digital and offline resources like a carbon calculator, webinars, and educational materials. Collaborating with schools, universities, businesses, and policymakers, the project targets various groups, including professionals, students, local authorities, NGOs, policymakers, and the general public. The project encompasses preparatory, core, monitoring, communication, and project management actions, covering mapping, workshops, impact measurement, and awareness campaigns.					
39	United States of America (USA)	FOOD RECOVERY NETWORK	Educational program	Non-formal	https://www.foodrecoverynetwork.org/
Description: The Food Recovery Network (FRN), a U.S.-based nonprofit, led by students, addresses food waste and insecurity on college campuses. Collaborating with dining services, FRN recovers surplus food, donating it to local hunger-fighting organizations. The network offers education and resources for waste reduction and sustainability. Public learning sessions called Roundtable Talks					

foster transparency and inclusivity. Operating on 190 campuses in 46 states and D.C., FRN has recovered 12.1 million pounds, preventing 5353 metric tonnes of CO2 emissions. FRN partners with The Farmlink Project, recovering and donating 3.1 million pounds of surplus food. Earth Day and Stop Food Waste Day are actively celebrated with initiatives like Power Hours, fostering connections with farms and communities.					
40	District of Columbia and USA	Farm to School	Educational program	NA	https://www.farmtoschool.org/
Description: Farm to School connects schools with local farmers, fostering a fresh, healthy food supply and supporting local agriculture. Activities include workshops, cooking classes, and farm visits, enhancing students' understanding of food sources and production. Encouraging local sourcing reduces the carbon footprint. The National Farm to School Network, with over 15,000 members, champions farm-to-school initiatives. Members advocate for supportive policies, volunteer, and receive newsletters. The website features an interactive tool for creating nutrition-focused games, promoting awareness and informed food choices among children.					
41	USA	The Food Literacy Project	Educational project	Non-formal	https://foodliteracyproject.org/
Description: This project promotes sustainable and healthy food choices through farm-based education for youth. Emphasizing experiential learning, the project offers programs in leadership, employment, community engagement, and civic involvement. Activities cover farm-to-school education and environmental awareness, including composting, seed dissection, food miles, food webs, gardening tips, soil quality, and plant parts. Available in English and Spanish, these engaging, interactive activities encourage movement while fostering knowledge of sustainable agriculture and healthy eating. The project also coordinates a Field-to-Fork club, a 6-10 week after-school program for grades 3-5, focusing on holistic wellness through gardening, cooking, and hands-on nutrition activities, culminating in a community meal celebration.					
42	Poland, Germany	Nutrition education network for sustainable development of the Nysa Euroregion	Educational project	All types of education	https://www.netsus.net/home-346.html
Description: The project facilitated collaboration between economic and scientific experts, aiming to exchange knowledge, transfer scientific insights, and enhance cooperation among various entities. It created a network, expanded the educational offer, and raised awareness about sustainable nutrition. A survey among 11-16-year-olds in the Euroregion Nysa informed the development of bilingual educational materials and an online platform on sustainable nutrition. The Research and Didactic Station in Radomierz and a didactic kitchen were established, serving as nutrition education centers. Workshops for children and youth on healthy meal preparation are planned. The project also trained additional teaching staff to create a long-term network of nutrition educators supporting educational activities in border areas.					
43	Poland	YOU ARE WHAT YOU EAT	Educational project	Primary	https://zpe.gov.pl/a/you-are-what-you-eat/DDbvSQbWh
Description: This project promotes sustainable food consumption among school children. It supports the child nutrition system through the promotion of sustainable, better quality, and healthier food. The project aims to facilitate easier access to knowledge about healthy nutrition, disseminate information about Polish regional and traditional products, and stimulate the use of high-quality food. Education includes discussing proper nutrition rules, planning daily menus, understanding the importance of vitamins and minerals, addressing eating disorders, and emphasizing food care to avoid spoilage and loss of nutritional value. The project collaborates with schools, food producers, retailers, health specialists, and policymakers, delivering education through lectures, workshops, materials, and competitions.					
44	Poland	FoodScienceClass	Educational project	primary, secondary	https://www.eitfood.eu/projects/foodscienceclass/project-resources
Description: Over the 3-year project, students explored food production and nutrition challenges and opportunities independently, guided by teachers and food scientists. They were viewed as active citizens, contributing to discussions on relevant scientific issues. FoodScienceClass offers free, ready-to-use materials and lesson plans in English, Spanish, Polish, Dutch, Finnish, and Hebrew, suitable for ages 9-14. Topics include processing, food waste, data utilization, and science communication. EIT FoodScienceClass integrates food science and technology in classrooms, transforming students into young food researchers, fostering a generation of empowered citizens. Lectures cover food production, nutrition, cooking, and sustainability, with a focus on critically evaluating food and health					

information. Students explore food production techniques and ingredients, mentored by academia and industry experts. They also receive training in science communication, taking responsibility for sharing their knowledge in their communities.					
45	Poland	School Does Not Waste	Workshop	primary, secondary	https://sp404.edupage.org/a/projekt-edukacyjny-szkola-nie-marnuje
Description: The "School Does Not Waste" initiative was implemented in 76 educational institutions in Warsaw, along with "Climate on a Plate" lessons and "Climate on a Fork" workshops. Launched in 2021, this initiative, developed by the city in collaboration with external partners, is designed for secondary school students in grades 6-8. Facilitated by a nutrition education trainer and a teacher, participants engage in a series of five workshops to devise strategies for reducing food waste at school. Additionally, they collaborate on culinary workshops, creating dishes from vegetables and fruits that may not have an appealing appearance but are still nutritious. The project's outcomes, including best practices from participating schools, are compiled in a comprehensive report.					
46	Poland	SUSPLUS PROJECT	Educational project	students, pupils in secondary school	http://susplus.eu/
Description: The SUSPLUS project fostered collaboration among eight European universities to create and disseminate innovative educational materials and methods in sustainable food systems. This initiative aimed to equip students with the knowledge and skills necessary to support this crucial sector, enhancing their employment prospects. One model presented was the organic food system, emphasizing increased overall food production and sustainable consumption. The project successfully transferred high-quality, international knowledge in sustainable development across various areas of food systems. Innovative teaching approaches, tailored to meet European employers' expectations, were developed and implemented to enhance education quality and students' future employability.					

Annex 2: Template for description of Good Practices

1. Title of the Good Practice
1.
2. Country of implementation:
2.
3. Type of the practice (workshop, practical exercise, excursion, educational project/programme, local initiative, business):
3.
4. Initiator of the practice (governmental body, school, NGO, business, etc):
4.
5. Type of education (primary, secondary, non-formal):
5.
6. Age of participants:
6.
7. How many participants max can participate:
7.
8. Education form (online, offline, or blended):
8.
9. Short description *(200-500 words)*:
9.
10. Strengths (impact and replicability):
10.
11. Challenges in implementation:
11.
12. Link:
12.

Annex 3: Interview template for the development of Case Studies

INTERVIEW FOR INFORMATION PROVIDERS (TEACHERS)

GOOD PRACTICE TITLE:

MEETING DATE AND PLACE:

NAME OF THE INTERVIEWEE:

GENDER AND AGE OF THE INTERVIEWEE:

POSITION OR ROLE OF THE INTERVIEWEE:

GOOD PRACTICE OVERVIEW, CHALLENGES AND OPPORTUNITIES

1.1 What were the original goals and objectives of this practice/activity?
1.2 What was found to be particularly useful in achieving this practice objectives (methods, approaches)? *strengths*
1.3 What did students like the most about this practice? *strengths*
1.4 What were the key problems areas of this practice? *weaknesses*
1.5 How can these elements be improved in the future? *opportunities*

1.6 Is this practice replicable by other teachers in different countries? What factors should be considered while replicating this practice? *opportunities*
1.7 What was the most inspiring aspect for you while implementing this practice? *opportunities*

1.8 Additional comments

INTERVIEW FOR INFORMATION RECIPIENTS (STUDENTS)

GOOD PRACTICE TITLE:

MEETING DATE AND PLACE:

NAME OF THE INTERVIEWEE:

GENDER AND AGE OF THE INTERVIEWEE:

POSITION OR ROLE OF THE INTERVIEWEE:

GOOD PRACTICE OVERVIEW, CHALLENGES AND OPPORTUNITIES

2.1 What did you like the most about this practice? *strengths*
2.2 What did you like the least about this practice? weaknesses

2.3 How can this practice be improved in the future? *opportunities*
2.4 Do you think your understanding of Food Literacy and sustainable food systems has been improved after implementing this practice?
2.5 Have you made any changes to your diet yet after implementing this practice?
2.6 Do you have any ideas, how can sustainable food systems be promoted among young people/children?

2.7 Additional comments