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SSPICE IT!

Sustainability Skills Program for International Catering operators and Entrepreneurs through Integrated Training

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Teacher's manual

Module 1

MODULE TITLE	Relationships between food, people, and environment
HOURS	15

SUMMARY OF THE MODULE

This module is a preamble to the whole SSPICE IT! training. As such it offers a broad introduction to the main topics covered in the project: climate change, sustainability in the food system, social entrepreneurship, etc. The aim of this module is to give the students the necessary context to understand the stakes of the training and to engage them to make the world a better place. To this end we focused the module on the relationships between three key stakeholders: the people (society at large), the natural environment and the food system. After the final task of this module, we hope that the students will have a clearer view about the importance of sustainability deeds in their daily and professional life.

MAIN TOPICS COVERED

- Human impact on climate change
- Consequences of climate change
- Societal challenges of food accessibility
- Sustainable food system
- Sustainable diet

- Mediterranean diet

ADDRESSED SKILLS

- #1 Recognize the principal relations and problems between humans and environment.
- #2 Understand the environmental impact of food.
- #3 Understand the correlation between health and sustainable food

SKILLS MEASUREMENT

N°	Skill	Descriptor	Level 1	Level 2	Level 3	Level 4	Level 5
1	Recognize the principal relations and problems between humans and the environment	Understanding of the human factors driving climate change and its consequences on human societies.	I can understand the idea that some human factors are driving climate change, even if I cannot explain which ones.	I can cite some of the human factors driving climate change and some of its consequences on our societies, but I cannot explain the processes behind them.	I can cite and explain some of the human factors driving climate change and some of its consequences on our societies.	I can have a critical outlook on the ways our societies interact with the environment and express nuanced opinions on these topics.	I can understand which public policies are helping or hindering the fight against climate change and convey realistic suggestions.
2	Understand the environmental impact of food	Being able to explain the various ways food systems are affecting the environment and driving climate	I can understand the idea that food systems can contribute to climate change, even if I cannot	I can cite some of the ways food systems are affecting the environment and driving climate change,	I can cite and explain some of the ways food systems are affecting the environment	I can understand and explain how alternative food systems can diminish the impact of food on the environment	I can critically assess the best ways to organize society in order to implement sustainable food systems.

		change, and to find sustainable alternatives.	explain how they do so.	but I cannot explain the processes behind them.	and driving climate change.	and contribute to the fight against climate change.	
3	Understand the correlation between health and sustainable food	Being able to explain how sustainable food can be beneficial for human health and to make informed decisions on this matter.	I am aware that sustainable food can be beneficial to human health, even if I cannot explain why.	I can cite some of the reasons why sustainable food can be beneficial to human health, but I cannot explain the processes behind them.	I can cite and explain some of the reasons why sustainable food can also be beneficial to human health.	I know a few ways to incorporate healthy and sustainable meals in my personal and professional life.	I can devise a complete food diet which is both sustainable and healthy in my personal and professional life.

EXERCISES

Exercise #1 – Watching documentaries.

Pre-requisites	Being able to use Internet for basic research.
Time	1h30 for the documentary; 1h30 for the following individual exercise.
Tools	A video projector or a large enough screen; one copy of the documentaries suggested; Smartphones or computers for the students.
Addressed skills	#1 Recognize the principal relations and problems between humans and the environment. #2 Understand the environmental impact of food
Addressed level of the skills	Skill #1 Level 1 Skill #2 Level 1

Objectives

- Offer a basic introduction to the thematic of the training to the students.
- Create an “emotional shock” to the students in order to arouse their curiosity, raise their awareness and create some commitment to these environmental issues.

Instructions to the students:

- Watch one of the following documentaries with your fellow classmates:
 - Food, Inc. (2008)
 - Cowspiracy (2014)
- In group, take some time to share your thoughts and feelings after watching the documentary. What do you think about this topic now? What questions do you have? Do you feel like you have some agency about these issues in your daily life?
- Depending on the documentary you watched, answer the following questions:

Food, Inc.: “This documentary has been realized in 2008. Even though some of these issues are still relevant today, other characteristics of the global food system have changed. Take one hour to make some Internet research, then explain the main similarities and differences between 2008 and 2024 in maximum 1 page.”.

Cowspiracy: “One of the major controversies surrounding the documentary was about one of its main claims: that animal exploitation was the cause of more than half of the world total greenhouse gases emissions. Take one hour to make some Internet research, then explain the different data about animal agriculture involvement in the total percentage of greenhouse gases emissions.”

Criteria:

- The main criterion for passing this exercise is to have answered the question while following the instructions.

Comments:

- If the written part of this exercise is not suitable for the students, it can be replaced by a group exercise with the same instructions followed by a class discussion about the findings of the different groups. More than writing an essay, the main point of this activity is to think critically about the documentary just watched and to encourage the students to do some research to fact check them.
- Feel free to pick other documentaries if the ones suggested are not available to you. Rather than watching a specific movie, the crucial aspect of this activity is to create an emotional shock to the students in order to motivate them to take part to the rest of the training.

Exercise #2 - Understanding the intricacies of the food system.

Pre-requisites	Having closely saw and understood the HLPE diagram in the section 2.1 of the Student's Manual.
Time	This exercise is expected to be completed within 2 to 3 hours.
Tools	A copy of the HLPE diagram for each group (see Student's Manual, Module 1, part 2.1); pen and paper; eventually, tools to realize Internet research
Addressed skills	#1 Recognize the principal relations and problems between humans and the environment. #2 Understand the environmental impact of food
Addressed level of the skills	Skill #1 Level 5 Skill #2 Level 5
Objectives	<ul style="list-style-type: none"> • Help students understand the complexity of the food system. • Encourage students to think critically about the social implications of changes in the food system. • Train language skills such as formulating opinions, debating, negotiating, public speaking, etc.

Instructions to the students:

- 1) Read the following scenario:

"Following a scientific breakthrough, it became possible to produce cultured meat (or "lab-grown meat") quickly and cheaply. Its taste is indistinguishable from real meat. Some surveys suggest that a large portion of the population would agree to replace their usual meat dishes with cultured ones."

- 2) Choose one of the following groups and create a relevant fictional identity for yourself.
 - a. **Representatives from the "real meat" industries** (farmers, industrialists, investors, etc.). Their aim is to encourage real meat consumption as much as they can.
 - b. **Environmentalists** (some of them are vegan and fighting for animals' rights, others are committed to fight against climate change, and the last ones are focused on protecting biodiversity and natural environments). Their aim is to encourage the reduction of real meat consumption.
 - c. **The "Prospectivists"** (socio-economic analysts, consumer organizations, think tanks, journalists). Their aim is to predict the consequences of cultured meat massive adoption for the whole society and to encourage policies benefitting to the maximum of people.

3) With the other members of your group, take a close look to the HLPE diagram in section 2.1 of Module 1 in your Student’s Manual. What consequences would have this fictional scenario on the whole food system? First, find in the diagram where the main factor is (is it in the production process? in the consumer behaviour? etc.). Then, for one hour, imagine as many consequences as possible for the following points:

- a. Food supply chains
 - i. Production systems
 - ii. Storage and distribution
 - iii. Processing and packaging
 - iv. Retail and markets
- b. Food environments
 - i. Availability and physical access
 - ii. Affordability
 - iii. Advertising
 - iv. Food quality and safety
- c. Consumer behaviour
- d. Diets
 - i. Quantity
 - ii. Quality
 - iii. Diversity
 - iv. Safety
- e. Impacts
 - i. Social
 - ii. Economic
 - iii. Environmental

4) Finally, imagine you are proposing new policies to the leading politicians of your country. You are willing to advance your interests about the topic at hand. What would be your three main proposals?

1. _____

2. _____

3. _____

5) After the last exercise has been completed by each group, gather everyone. Each group will explain to the others their proposals, then after a discussion a vote will be held to adopt or reject each one of them. What does your new society look like? Are you happy with the results?

Criteria:

- Each group should complete most if not all of the different points highlighted in part n°3. These answers must not be perfect, but some genuine effort should be made to answer them: from 0 pt. (no answer) to 5 pt. (all points completed).
- Each group should produce three plausible proposals. These proposals should be distinct, somewhat realistic and by the interests of their group's identity: from 0 pt. (no plausible proposals) to 3 pt. (three plausible proposals).
- Each member of the groups should take part to the different activities. During the final debate, every group member should speak, either by reading one of their group proposals aloud or by giving their opinion about other's: from 0 pt. (no participation) to 2 pt. (everyone took part).

CRITERIA	NOTATION					
	0	1	2	3	4	5
The group completed the different categories of the HLPE diagram with plausible answers						
The group produced three plausible proposals						
Every member of the group took part during the final debate						
NOTATION	/10					

Comments:

- If you want to explore other scenarios rather than the massive adoption of cultured

meat, feel free to choose one of the following scenarios taken from the Student's Manual Module 1's second exercise:

- a. *"Overnight, all humans became vegetarians. No one wanted to consume animal products anymore."*
 - b. *"After a series of diplomatic tensions, a war finally broke out in Distantland. Overnight, the prices of the most common fertilizers on the market skyrocketed, leading to a significant increase in the cost of plant-based products."*
 - c. *"Following an exceptionally strong solar eruption, terrestrial telecommunication networks (including the Internet) ceased to function. Restoring them will take months, if not years."*
 - d. *"A revolution erupts in the heart of one of the world's largest oil-exporting countries, causing fuel prices to soar."*
- The main point of this exercise is simply to raise the awareness of the students about the complexity of the food system. They should not be afraid by the seemingly difficulty of this exercise, as they will not be rated according to the correctness of their arguments about the topic at hand, but rather to their general willingness to engage in the exercise. If necessary, this fact should be made abundantly clear to them from the beginning of the task.
 - If needed, you can print the HLPE diagram and give it to the students, so they can read it in high-resolution. Here are the references: HLPE. (2020). *Food security and nutrition: building a global narrative towards 2030 (Report No. 15)*. High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security. Retrieved from <https://www.fao.org/3/ca9731en/ca9731en.pdf>, p.31.

Exercise #3 - Collective Reflection – The Impact of the Horeca Industry on Food Insecurity

Pre-requisites

Basic knowledge of food insecurity and its causes (economic, social, and environmental factors).
The role of the Horeca sector in society, access to food, pricing ethics, and the impact of business practices on vulnerable populations.

Time

1 hour.

Tools

Markers, papers.

Addressed skills

#1 Recognize the principal relations and problems between humans and the environment.

	#2 Understand the environmental impact of food
Addressed level of the skills	Skill #1 Level 5 Skill #2 Level 5
Objectives	<ul style="list-style-type: none"> • To make students reflect on their future role as professionals in the Horeca sector in combating food insecurity. • To develop an ethical and responsible approach in professional practices related to foodservice management.

Instructions of the exercise:

1. Introduction to Food Insecurity:

Explain the concept of food insecurity, its causes, and its consequences on both a global and local scale. Briefly present the main challenges that the Horeca sector might face in this context, including reducing food waste, ensuring access to healthy food for all, combating socio-economic inequalities, etc.

2. Open Questions for Collective Reflection:

Pose open questions to the students to encourage group reflection:

- "How can hotels, restaurants, and cafés contribute to reducing food insecurity?"
- "What concrete actions can a restaurant take to ensure equitable access to food?"
- ...

3. Collective Notes on the Board:

Write down the students' ideas and responses on the board. This allows every student to see different perspectives and add their own ideas.

4. Discussion of Solutions:

After collecting ideas, discuss how these solutions could be implemented

5. Mind Map Creation:

Create a mind map collectively or individually, outlining the different problems and solutions related to the impact of the Horeca sector on food insecurity. This map will help each student visualize the connections between various elements (causes, solutions, stakeholders).

Criteria:

- The student has taken part in the design and preparation of the meals: from 0 pt. (not at all) to 5 pt. (leadership position).
- The choice of the ingredients follows the principles of sustainability: from 0 pt. (not at all) to 5 pt. (perfectly by sustainability principles).
- The meals are healthy: from 0 pt. (poisonous) to 5 pt. (healthy).
- (Bonus) The meals follow the principles of the Mediterranean diet specifically: from 0 pt. (not at all) to 3 pt. (entirely Mediterranean).
- (Bonus) The recipe is original or offers a new twist to a well-established meal: from 0 pt. (unoriginal) to 2 pt. (never seen before).

CRITERIA	NOTATION					
	0	1	2	3	4	5
The student has taken an active part in the design and preparation of the meals						
The choice of the ingredients follows the principles of sustainability						
The recipe is healthy						
The meals follow the principles of the Mediterranean diet specifically (bonus)						
The recipe is original or offers a new twist to a well-established meal (bonus)						
NOTATION	/15					

Comments:

- If the configuration of your center does not allow for multiple groups of students to cook at the same time, the exercise can be extended such as each group can prepare its meals at a different time (for example one group a week for one month).
- If other cooking exercises are held in the center, this exercise could be mixed with them if the other teachers agree.
- An emphasis could be put on the bonus linked to the adhesion to Mediterranean principles in order to encourage the students to focus their attention on it.

FINAL TASK OF THE MODULE

FINAL TASK MODULE 1: Analysis of the local context

Pre-requisites	Learners should have completed module 1.
Time	3 hours
Tools	Learners will require access to research materials, writing tools, presentation software, and any added resources relevant to their research and project presentation.
Addressed skills	/
Addressed level of the skills	/
Topic area	Local environment
Objective(s)	<ul style="list-style-type: none"> • Allow the students to become aware of the major sustainability actors in their local area. • Train the students for the final exercise of the SSPICE IT! training. • Teach the students how to conduct a SWOT analysis. • Encourage the students to work collaboratively towards a common goal. • Train language skills such as formulating opinions, debating, negotiating, public speaking, etc.

Instructions to the students:

- 1) Constitute different groups of 3 to 4 students.

- 2) Brainstorm different ideas of **sustainable food businesses** for one hour, then pick one of them. Unleash your imagination, you can be as crazy as you want at this stage!
- 3) Read the document "What is a SWOT analysis (Strengths, Weaknesses, Opportunities, Threats)?" and conduct a SWOT analysis of your fictional sustainable food business.
- 4) Then, create the following slideshows on PowerPoint or Canva:

Slideshow n°1

Create a "sustainable map" of your region with:

- Local sustainable businesses (of all type).
- Local groups / non-profit organizations active in sustainability thematic.
- Local public bodies related to sustainability.
- Other businesses (sustainable or not) related to your activity (potential competitors)

Slideshow n°2

Illustrate the SWOT analysis of your business:

- What are the strengths of your company? Mention at least 3 of them.
- What are the weaknesses of your company? Mention at least 3 of them.
- What are the opportunities for your company? Mention at least 3 of them.
- What are the threats to your company? Mention at least 3 of them.

- 5) Make a short presentation of your fictional business, local map, and SWOT analysis in front of your classmates.

Criteria:

- The business idea is related to the sustainable food sector, from 0 pt. (completely unrelated) to 2 pt. (related to sustainable food).
- The sustainable map shows the local area's major actors of the different categories mentioned (local businesses, non-profits and public bodies related to sustainability, and potential competitors of the group's fictional business), from 0 pt. (no actors) to 2 pt. (all the key actors appear on the map).
- The SWOT analysis is complete and somewhat plausible, from 0 pt. (no analysis) to 4 pt. (complete analysis).
- The presentation in front of the class was clear and well-prepared, from 0 pt. (no

efforts) to 2 pt. (honest efforts were made).

- Bonus points if the business idea is original, from 0 pt. (unoriginal) to 2 pt. (never seen before).

CRITERIA	NOTATION				
	0	1	2	3	4
The business idea is related to the sustainable food sector					
The sustainable map shows the local area's major actors of the different categories mentioned					
The SWOT analysis is complete and somewhat plausible					
The presentation in front of the class was clear and well-prepared					
The business idea is original (bonus)					
NOTATION	/10				

Added material: Check *Document 1* below.

Comments:

- The main points of this final task are to allow the students to discover the various sustainability actors of their local area and to train them for the final exercise of the training. The SWOT analysis, albeit important and useful to force the students to develop their first business idea, should not be considered as the most crucial part of this exercise.

- During the second task, students could experience some difficulty producing ideas of sustainable businesses. In this case, you could give them some local examples, or tell them to browse the Internet to find some more. The needed idea can be as simple as a vegetarian restaurant using local suppliers, “originality” being simply a bonus point in this exercise.
- If you choose to let the students present their slideshows in front of the class, you can ask them to simply highlight the major differences of their sustainable maps compared to the other groups.’
- Given the fact that we recommend using a “PowerPoint” support for the final exercise of the training, encouraging the students to train themselves to use this software (or similar ones like Apache, Canva, etc.) during this low-stake exercise could be a good idea. Some added time should be planned in case of the students are preparing a presentation with this software for the first time.

Document 1:

What is a SWOT analysis (Strengths, Weaknesses, Opportunities, Threats)?

This is a tool that allows for the identification of the strengths, weaknesses, opportunities, and threats of a given project. It enables the establishment of a strategic plan for the company, which concretely involves defining corrective measures and implementing prioritized action plans (you will learn more about strategic planning in Module 5).

Strengths and **weaknesses** pertain to what the company can directly act upon and control. This may include ability or a lack of training.

Opportunities and **threats** are aspects over which the company has less control. This could involve new legislation or changes in the market, for example.

More specifically:

- **Strengths:** Internal actions that yield good results.
 - What are the strong points?
 - In what way does the company stand out?
 - What aspects of the company does the target audience appreciate?
-

- **Weaknesses:** Less effective internal actions.
 - Which initiatives are less effective? Why?
 - What are the areas for improvement?
 - What resources are available to achieve better results?

- **Opportunities:** Results of current strengths and weaknesses, as well as external initiatives that can position the company more competitively.
 - What resources are available to address the company's weaknesses?
 - Which market aspects are not covered by the company's services?
 - What are the annual goals?

- **Threats:** External areas that may create difficulties for the company.
 - What societal developments could be sources of concern?
 - What market trends are appearing?
 - In what areas are competitors outperforming us?

Example of a SWOT analysis for a company specializing in the distribution of sustainable food products

Let us create a fictional company named "Delicious Beans", specializing in producing organic and eco-friendly cans of beans. Here is an example of the SWOT analysis:

- **Strengths:**
 - **High-quality organic and plant-based products:** Delicious Beans is known for its premium quality, offering a variety of organic and plant-based options that cater to health-conscious and environmentally conscious consumers.
 - **Innovation and Sustainable Packaging:** The company is committed to continual innovation, regularly introducing new plant-based recipes, and using eco-friendly packaging solutions to reduce its environmental footprint.
 - **Robust Distribution Partnerships:** Delicious Beans has set up strong partnerships with local organic farms, health food stores, and an efficient online platform, ensuring widespread accessibility for consumers.

- **Weaknesses:**

- **Higher Production Costs:** Ensuring organic and plant-based products results in higher production costs, potentially affecting pricing and requiring strategic cost management.
 - **Seasonal Produce Challenges:** Dependency on seasonal and local produce poses challenges in keeping consistent inventory levels, especially during peak demand periods.
 - **Intense Competition:** The growing popularity of beans consumption has led to increased competition, needing effective differentiation and marketing strategies.
- **Opportunities:**
 - **Rising Demand for Sustainable Food:** The increasing consumer demand for organic and plant-based foods supplies a significant growth opportunity for Delicious Beans to expand its market presence.
 - **Global Market Expansion:** Exploring international markets offers the potential to introduce sustainable and plant-based options to a broader audience.
 - **Strategic Partnerships for Credibility:** Collaborating with health influencers, nutritionists, and environmental organizations enhances Delicious Beans brand credibility and reach.
- **Threats:**
 - **Evolving Certification Regulations:** Changes in regulations related to organic certifications and plant-based labelling may require ongoing compliance efforts and adaptation.
 - **Price Volatility in Raw Materials:** Fluctuations in the prices of organic ingredients and plant-based alternatives pose challenges to keeping consistent production costs.
 - **Intensified Competitive Landscape:** The competitive market demands continuous innovation and effective marketing strategies to navigate and stand out.

SUGGESTED SCHEDULE

HOURS	ACTIVITIES
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1	Chapter 1
3	Exercise 1
1	Chapter 2
3	Exercise 2
1	Chapter 3
3	Exercise 3
3	Final task

PEDAGOGICAL SUGGESTIONS AND GENERAL REMARKS

- Do not hesitate to share **a lot of examples**, local or otherwise, during the different chapters. Since students are probably discovering a whole new world, it is normal for them to feel out of water. Like for the rest of the training, mastery is not the aim; rather, we should consider this Module as a popularization of the main food-related ecological issues and principles.
- The point is not for the students to achieve the level 5 of the different skills listed above. Best case scenario would be for the students to achieve level 3 of these different skills.
- More than the content in itself, the main aim of this module is to make students aware of environmental issues and to encourage them to take an active part in this cause.