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DELIVERABLE D6.3 DRAFT FOODSHIFT SUSTAINABILITY SCORING SYSTEM

DEMONSTRATOR

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Deliverable Lead	DRAXIS ENVIRONMENTAL SA (DRAXIS)
Author(s)	Chaido (Aida) Anthouli (DRAXIS) Katerina Valta (DRAXIS)
Point of Contact	Aida Anthouli, aanthouli@draxis.gr
Reviewers	Luke Schafer , University of Copenhagen
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Abstract (for public dissemination only)	The following document contains general guidelines regarding the FoodSHIFT Sustainability Scoring System, an online tool which aims to enable food system stakeholders to assess the impacts of different food system innovations based on the SDGs. FSSS is developed

	for communication and demonstration reasons, and will be available through the FoodSHIFT website and the FoodSHIFT transition toolkit.
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Role in D6.3	Role in WP6	Partner	Participants	Contact details
Task Leader	Task Leader	DRAXIS	Chaido (Aida) Anthouli Katerina Valta	aanthouli@draxis.gr katvalta@draxis.gr
Member of WP6 team	WP6 Leader	UCPH	Luke John Schafer	schafer@plen.ku.dk
Member of WP6 team	Task Leader	SUSMETRO	Dirk Wascher Poppy Eyre Gustavo Arciniegas	dirk@susmetro.eu poppy@susmetro.eu gustavo@susmetro.eu

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Abbreviations

- GHG - Greenhouse Gases
- FALs - FoodSHIFT Accelerator Labs
- FSSS - FoodSHIFT 2030 Sustainability Scoring System
- NGOs - Non Governmental Organisation
- SAFA - Sustainability Assessment of Food and Agriculture Systems - FAO
- SDGs - Sustainable Development Goals
- SME - Small & Medium Enterprise
- SSC - Sustainability Scoring Committee
- WP - Work Package

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FoodSHIFT2020 Sustainability Scoring System (FSSS) in a nutshell

What is FSSS?

FSSS is a simple, user friendly, online tool which aims to enable food system stakeholders around the world to assess the impacts of different food system innovations based on the SDGs. FSSS is developed for communication and demonstration reasons, and will be available through the FoodSHIFT website and the FoodSHIFT transition toolkit. In particular FSSS:

- demonstrates to the different stakeholders the multiple benefits they can have, when applying sustainable food-related innovations in their food system.
- provides ideas to its users on innovations they can apply and combine in their food system by comparing sustainable benefits and

How does FSSS work?

When visiting the online platform, the user can select from a list of innovations, related to his/her interest, and see how these innovations can influence the sustainability dimensions (environmental, social, governance, and economic) of a food system.

The user can each time select one or more innovations,

Who performs the scoring?

Prior to their uploading on the platform for use, the innovations have been already rated regarding their contribution to the sustainability of a food system by a dedicated team of around 30 experienced experts who have been

Who owns FSSS?

FSSS is part of the FoodSHIFT 2030 project, as a result of the Work Package 6 (WP6).

The current report and FSSS methodology has been prepared by DRAXIS, which is leader of T6.3, supported mainly by UCPH, and SUSMETRO.

The realisation of the FSSS platform as part of

Who can use FSSS?

FSSS targets the players of the entire food value chain.

Potential users include citizens, educational institutions, local authorities, agricultural producers, food processors, as

1. Introduction

1.1 Objective

The FoodSHIFT 2030 Sustainability Scoring System (FSSS) is part of the FoodSHIFT 2030 online transition toolkit (see Deliverable 6.4), which will be co-created and made available at the FoodSHIFT2030 project website.

FSSS is developed for communication and demonstration reasons, and will be available online to enable food system stakeholders around the world to assess the impacts of different food system innovations based on the SDGs.

In particular, FSSS shows to the different stakeholders the multiple benefits they can have, by applying sustainable food related innovations in their food system. Also, FSSS can provide users with ideas on which innovations they can apply in their food system, by comparing benefits, seeing real examples, and helping developing their different strategies and approaches, in line with their priorities and their different needs.

1.1 Structure of the deliverable

Deliverable 6.3 is organised as follows:

At the beginning, the abbreviations, and the lists of tables and figures, used throughout the present deliverable, are presented. Also, "FoodSHIFT2030 Sustainability Scoring System (FSSS) in a nutshell", attempts to provide a short picture of what is the scope and use of the SSS, and to answer some key questions.

In Chapter 1, titled "Introduction" (the present chapter), the objective and the structure of the report are presented.

In Chapter 2, titled "Methodology", the preparatory work for establishing the FoodSHIFT sustainability scoring system, and the overall methodology that was followed, for establishing the system, is presented.

In Chapter 3 titled "Prioritisation sustainability topics", the four SDG related categories/dimensions, under which different innovations will be scored, namely Environmental Integrity, Social Well-Being, Governance, and Economic Resilience, are seen.

In Chapter 4, the target groups that FSSS will address, namely, Educational Institution, Local Authority, Food Processor, Service Industry, Agricultural Producers, Citizens, are presented.

In Chapter 5, titled "Selecting FoodSHIFT2030 SSS innovations", the selected categories of FSSS innovations, the description of innovations, as well as the relation of FoodSHIFT2030 FALs with selected innovations, is presented.

In Chapter 6, titled "Scoring", the scoring guidelines are offered, and the role of the Scientific Scoring Committee (SSC) is described.

In Chapter 7, titled "The next steps", some issues to be considered for the next steps are raised.

2. Methodology

2.1 Preparatory work for establishing the FoodSHIFT sustainability scoring system

This deliverable was led by DRAXIS, with contributions from UCPH, SUSMETRO, and the other members of the WP6. Some input was also provided by the rest of the consortium partners, and their involvement is significant for the scoring procedure.

The result of this deliverable is an outcome of interaction with other WPs of FoodSHIFT, namely: i) WP1, where the different priorities of the FALs have been taken into consideration, ii) WP2, compiling data and knowledge on as well as managing the acceleration process for the 90 innovations in close cooperation with FALs, iii) WP3, which served as the research departure point, and an example of how sustainability indicators can be utilised in order to assess food systems and food system innovations, iv) WP4, on how strategies and advisory plans for food system governance, can be positively affected, by primarily having assessed the sustainable character of different food system innovations, and finally v) WP5, by currently involving the FALs in the scoring process of FSSS, involving them actively in the process with multiple benefits for all parties.

2.2 Methodology stages

In this chapter, the methodology that was followed in order to develop the FoodSHIFT2030 Sustainability Scoring System project is presented.

Stage 1: Scope & Conceptual framework

During this step, the scope and conceptual framework of this deliverable was thoroughly investigated and determined.

FSSS aims to serve the project concept and main objective which is to *"foster a food system transition towards a low carbon circular future by utilizing and supporting the transformative power of citizens already engaged in developing sustainable innovative food system solutions in European city-regions"*, and in particular the specific objective *"to provide guidance for SMEs, NGOs, local governments and citizens on how to design a sustainable local food system, in which citizens are empowered to take active part in the food system transition"*. In this direction, the following needs were identified:

- The need to promote, communicate and disseminate innovations that can improve the sustainability of the food system globally along the entire food chain.
- The need to communicate the different sustainability benefits (environmental, social, governance, and economic) that derive through applying such innovations.

- The need to communicate to the wider public how FoodSHIFT innovations are part of the wider solutions, and work for a more sustainable European and global food system.

Stage 2: Defining the target groups

The target groups that should be addressed and benefit from FSSS were selected accordingly, in order to address the entire food chain. Namely, the target groups include SMEs, NGOs, local governments and citizens, as well as educational institutions, food processors, service industries, and agricultural producers.

Stage 3: Selecting the innovations

The 37 innovations that were selected, in order to be assessed in matter of their sustainability, were chosen having the following criteria in mind:

- To be relevant to the scope and objectives of FoodSHIFT2030.
- To be inspired by the FALs' work and FALs action domains.
- To be representative, as much as possible, of a sample of a wide range of similar solutions.
- To represent accordingly as much as possible the different target groups, and be of interest for application by the stakeholders, based on the experience of FoodSHIFT expert team and consortium.

Depending on the targets that a stakeholder wants to achieve, he/she can select a different combination of innovations, achieving each time different results in matter of sustainability (Environmental Integrity, Social Well-Being, Governance, and Economic Resilience) based on the characteristics of each innovation he/she chooses. In this way, the user of FSSS is able to visualise the effect that his/her innovations have or would have in his/her food system, if they were applied.

In parallel with selecting the innovations for his/her food system, the user can have access to a pool of 90 so-called 'Innovation Portraits' - offering different real cases/examples of similar innovations that have been researched in the FoodSHIFT project, or have been selected from the FoodSHIFT team, providing to the user a holistic experience of how these innovations can, and have been applied in real cases.

As part of the FS Transition Toolkit, the FSSS will be accessible and after the end of the FoodSHIFT project, being considered as a project legacy item, and the list of FSSS innovations will be further enriched.

Stage 4: Setting up the scoring system process

The scoring of the innovations, performed in FSSS, has not to do with rating the different innovations regarding which is better or worse. It rather aims, through this process, to present the sustainability character of an innovation, examining the benefits that it brings into a food system.

As the number and character of the examined innovations will be ranged well beyond the borders of the FoodSHIFT 2030, addressing the entire food chain, including innovations that are different than those included in the FoodSHIFT 2030, scoring will be made based on a recognised system as the SAFA Indicators (Sustainability Assessment of Food and Agriculture Systems – FAO)¹. SAFA has been also previously examined in T3.1, and particular in the deliverable D3.2.

Each innovation will be examined against the above indicators by a Scientific Scoring Committee (SSC), which is currently shaped by experts from the FoodSHIFT consortium, representing all the different FALs.

The results and interface of the FSSS will be presented in a user-friendly manner which is currently been developed under the T6.4 in the dedicated Online Toolkit.

Stage 5: Validating the FSSS

In order to check and validate the results, external experts from different backgrounds and SDG-related topics will be invited to form the “FSSS Advisory Team”. These experts will act as advisors and check the overall scoring results in order to examine the final outcome of rating of the dedicated innovations at a higher level.

¹

https://www.fao.org/fileadmin/templates/nr/sustainability_pathways/docs/SAFA_Indicators_final_19122013.pdf

3. Prioritisation sustainability topics (the four SDG related categories, under which innovations will be scored)

Introduction

The number and character of the examined innovations in FSSS will be spread well beyond the borders of the FoodSHIFT project, addressing the entire food value chain, including also innovations that are different than those included in the FoodSHIFT project, aiming to reach a broader audience, and to cover the different needs of wider stakeholders. In addition, FSSS has an ambition to continue after the lifetime of FoodSHIFT 2030 project, continuing as a legacy item, aiming to be further enriched, and to be of use for an even wider group of stakeholders, and potential uses.

Therefore, the research team in charge of D6.3, after conducting appropriate research, agreed that the most appropriate system to assess the selected food system innovations, and to measure their impacts based on the SDGs principles, is the recognised system of SAFA (Sustainability Assessment of Food and Agriculture Systems - FAO)² (SAFA system has been previously thoroughly examined in T3.1, and particular in the deliverable D3.2., lead also by DRAXIS team).

The SAFA indicators' approach, was created to be used for learning and communication purposes, and is carefully developed using a clear and common language to all stakeholders (Food and agriculture enterprises (individual or associations), NGOs and sustainability standards and tools community, and Governments, investors and policy-makers, in order to assess sustainability.

In particular, the Sustainability Assessment of Food and Agriculture systems (SAFA)³ defines the meaning of sustainability in the food and agriculture sector. It is a global reference for assessing all components of sustainability along the food and agriculture value chain, including crops, livestock, forestry and fisheries. SAFA defines elements of sustainability through its: 4 sustainability dimensions (i.e. environmental, social, economic, governance); 22 sustainability themes that are universal for sustainable development policy, planning and management; over 60 sub-themes that are relevant to all food and agriculture supply chains; and over a hundred core performance indicators related to the sub-themes².

The following tables present the four sustainability dimensions upon which the innovations will be scored.

3.1 Environmental Integrity dimension

²

https://www.fao.org/fileadmin/templates/nr/sustainability_pathways/docs/SAFA_Indicators_final_19122013.pdf

³ https://www.fao.org/fileadmin/templates/nr/sustainability_pathways/docs/SAFA_FAQ_final.pdf

This dimension includes 6 themes, 14 sub-themes, and 52 relevant indicators.

Table 3-1: Indicators of Environmental Integrity for scoring FSSS innovations

ENVIRONMENTAL INTEGRITY		
Themes	Sub-Themes	Default Indicators
E1 Atmosphere	E 1.1 Greenhouse Gases	E 1.1.1 GHG Reduction Target
		E 1.1.2 GHG Mitigation Practices
		E 1.1.3 GHG Balance
	E 1.2 Air Quality	E 1.2.1 Air Pollution Reduction Target
		E 1.2.2 Air Pollution Prevention Practices
		E 1.2.3 Ambient Concentration of Air Pollutants
E2 Water	E 2.1 Water Withdrawal	E 2.1.1 Water Conservation Target
		E 2.1.2 Water Conservation Practices
		E 2.1.3 Ground and Surface Water Withdrawals
	E. 2.2 Water Quality	E 2.2.1 Clean Water Target
		E 2.2.2 Water Pollution Prevention Practices
		E 2.2.3 Concentration of Water Pollutants
		E 2.2.4 Wastewater Quality
		E 2.2.5 Water Quality
E3 Land	E 3.1 Soil Quality	E 3.1.1 Soil Improvement Practices
		E 3.1.2 Soil Physical Structure
		E 3.1.3 Soil Chemical Quality
		E 3.1.4 Soil Biological Quality
		E 3.1.5 Soil Organic Matter
	E 3.2 Land Degradation	E 3.2.1 Land Conservation and Rehabilitation Plan
		E 3.2.2 Land Conservation and Rehabilitation Practices
		E 3.2.3 Net Loss/Gain of Productive Land
		E 3.2.4 Land Degradation
E4 Biodiversity	E 4. 1 Ecosystem Diversity	E 4.1.1 Landscape/Marine Habitat Conservation Plan
		E 4.1.2 Ecosystem Enhancing Practices
		E 4.1.3 Structural Diversity of Ecosystems
		E 4.1.4 Ecosystem Connectivity
		E 4.1.5 Land Use and Land Cover Change
	E 4.2 Species Diversity	E 4.2.1 Species Conservation Target
		E 4.2.2 Species Conservation Practices
		E 4.2.3 Diversity and Abundance of Key Species
		E 4.2.4 Diversity of Production
	E. 4.3 Genetic Diversity	E 4.3.1 Wild Genetic Diversity Enhancing Practices
		E 4.3.2 Agro-biodiversity in-situ Conservation
		E 4.3.3 Locally Adapted Varieties and Breeds
		E 4.3.4 Genetic Diversity in Wild Species
		E 4.3.5 Saving of Seeds and Breeds
		E 4.3.6 Genetic Diversity
E5 Materials and Energy	E 5.1 Material Use	E 5.1.1 Material Consumption Practices
		E 5.1.2 Nutrient Balance
		E 5.1.3 Renewable and Recycled Materials
		E 5.1.4 Intensity of Material Use
	E 5.2 Energy Use	E 5.2.1 Renewable Energy Use Target

		E 5.2.2 Energy Saving Practices
		E 5.2.3 Energy Consumption
		E 5.2.4 Renewable Energy
		E 5.3.1 Waste Reduction Target
	E 5.3 Waste Reduction and Disposal	E 5.3.2 Waste Reduction Practices
		E 5.3.3 Waste Disposal
		E 5.3.4 Food Loss and Waste Reduction
E6 Animal Welfare	E 6.1 Animal Health	E 6.1.1 Animal Health Practices
		E 6.1.2 Animal Health
	E 6.2 Freedom from Stress	E 6.2.1 Humane Animal Handling Practices
		E 6.2.2 Appropriate Animal Husbandry
		E 6.2.3 Freedom from Stress

3.2 Social Well-Being dimension

It includes 6 themes, 16 sub-themes, and 19 relevant indicators.

Table 3-2: Indicators of Social Well-being for scoring FSSS innovations

SOCIAL WELL-BEING		
Themes	Sub-Themes	Default Indicators
S1 Decent Livelihood	S 1.1 Quality of Life	S 1.1.1 Right to Quality of Life
		S 1.1.2 Wage Level
	S 1.2 Capacity Development	S 1.2.1 Capacity Development
S2 Fair Trading Practices	S 1.3 Fair Access to Means of Production	S 1.3.1 Fair Access to Means of Production
	S 2.1 Responsible Buyers	S 2.1.1 Fair Pricing and Transparent Contracts
S3 Labour Rights	S 2.2 Rights of Suppliers	S 2.2.1 Rights of Suppliers
	S 3.1 Employment Relations	S 3.1.1 Employment Relations
	S 3.2 Forced Labour	S 3.2.1 Forced Labour
	S 3.3 Child Labour	S 3.3.1 Child Labour
S4 Equity	S 3.4 Freedom of Association and Right to Bargaining	S 3.4.1 Freedom of Association and Right to Bargaining
	S 4.1 Non Discrimination	S 4.1.1 Non Discrimination
	S 4.2 Gender Equality	S 4.2.1 Gender Equality
S5 Human Safety and Health	S 4.3 Support to Vulnerable People	S 4.3.1 Support to Vulnerable People
		S 5.1 Workplace Safety and Health Provisions
	S 5.1.1 Safety and Health Trainings	
S6 Cultural Diversity	S 5.1.2 Safety of Workplace, Operations and Facilities	
	S 5.1.3 Health Coverage and Access to Medical care	
	S 5.2 Public Health	S 5.2.1 Public Health
	S 6.1 Indigenous Knowledge	S 6.1.1 Indigenous Knowledge
	S 6.2 Food Sovereignty	S 6.2.1 Food Sovereignty

3.3 Governance dimension

It includes 5 themes, 14 sub-themes, and 19 relevant indicators.

Table 3-3: Indicators of Governance for scoring FSSS innovations

GOVERNANCE		
Themes	Sub-Themes	Default Indicators

G1 Corporate Ethics	G1.1 Mission Statement	G 1.1.1 Mission Explicitness
		G 1.1.2 Mission Driven
G2 Accountability	G 1.2 Due Diligence	G 1.2.1 Due Diligence
	G 2.1 Holistic Audits	G 2.1.1 Holistic Audits
	G 2.2 Responsibility	G 2.2.1 Responsibility
G3 Participation	G 3.1 Stakeholder Dialogue	G 2.3 Transparency
		G 2.3.1 Transparency
		G 3.1.1 Stakeholder Identification
		G 3.1.2 Stakeholder Engagement
	G 3.1.3 Engagement Barriers	
G 3.1.4 Effective Participation		
G 3.2 Grievance Procedures	G 3.2.1 Grievance Procedures	
G 3.3 Conflict Resolution	G 3.3.1 Conflict Resolution	
G4 Rule of Law	G 4.1 Legitimacy	G 4.1.1 Legitimacy
	G 4.2 Remedy, Restoration and Prevention	G 4.2.1 Remedy, Restoration and Prevention
	G 4.3 Civic Responsibility	G 4.3.1 Civic Responsibility
	G 4.4 Resource Appropriation	G 4.4.1 Free, Prior and Informed Consent
		G 4.4.2 Tenure rights
G5 Holistic Management	G 5.1 Sustainability Management Plan	G 5.1.1 Sustainability Management Plan
	G 5.2 Full-Cost Accounting	G 5.2.1 Full-Cost Accounting

3.4 Economic Resilience dimension

It includes 4 themes, 14 sub-themes, and 26 relevant indicators.

Table 3-4: Indicators of Economic Resilience for scoring FSSS innovations

ECONOMIC RESILIENCE		
Themes	Sub-Themes	Default Indicators
C1 Investment	C 1.1 Internal Investment	C 1.1.1 Internal Investment
	C 1.2 Community Investment	C 1.2.1 Community Investment
	C 1.3 Long Ranging Investment	C 1.3.1 Long Term Profitability
		C 1.3.2 Business Plan
	C 1.4 Profitability	C 1.4.1 Net Income
		C 1.4.2 Cost of Production
C 1.4.3 Price Determination		
C2 Vulnerability	C 2.1 Stability of Production	C 2.1.1 Guarantee of Production Levels
		C 2.1.2 Product Diversification
	C 2.2 Stability of Supply	C 2.2.1 Procurement Channels
		C 2.2.2 Stability of Supplier Relationships
		C 2.2.3 Dependence on the Leading supplier
	C 2.3 Stability of Market	C 2.3.1 Stability of Market
	C 2.4 Liquidity	C 2.4.1 Net Cash Flow
		C 2.4.2 Safety Nets
C 2.5 Risk Management	C 2.5.1 Risk Management	
C3 Product Quality and Information	C 3.1 Food Safety	C 3.1.1 Control Measures
		C 3.1.2 Hazardous Pesticides
		C 3.1.3 Food Contamination
	C 3.2 Food Quality	C 3.2.1 Food Quality
	C 3.3 Product Information	C 3.3.1 Product Labelling
		C 3.3.2 Traceability System
C 3.3.3 Certified Production		
C4 Local Economy	C 4.1 Value Creation	C 4.1.1 Regional Workforce
		C 4.1.2 Fiscal Commitment
	C 4.2 Local Procurement	C 4.2.1 Local Procurement

4. Target Groups

In order to positively impact the sustainability of a food system to a maximum degree, one has to look into affecting all the players of the entire food value chain. Therefore, in the FSSS we have tried to assess innovations that affect all the different players, from citizens, schools and local authorities, to producers, food processors, and the service industry.

4.1 Educational and Research Institutions

Schools, students, and generally people involved in educational activities, can see examples that they can implement in their establishments, and measure the sustainability of several food related innovations for practical (ex. food waste reduction activities in the school kitchen) and educational reasons (ex. school gardens).

4.2 Local Authorities

Local authorities can see examples that they can implement in their municipalities, and measure and investigate the sustainability of several food related innovations in order to plan more carefully their sustainable food strategies, or increase the food related sustainable actions in their cities.

4.3 Food Processors

Food processors (ex. food processing industries), can see how applying food related innovations in their business can have multiple benefits, generate profit, while helping the environment. FSSS will also help them to communicate these profits to their customers, as well as their personnel.

4.4 Service Industry

The service industry includes restaurants, hotels, canteens, and hospitality sector. Along with ideas for implementing food related sustainable innovations in their businesses, FSSS can provide them the knowledge on why and how these innovations can help their businesses and the planet.

4.5 Agricultural Producers

FSSS demonstrates how the Agricultural producers can positively affect the sustainability of the food system and constitute vital part of the solution. Being very important players in the food value chain, by adopting innovative technologies and embracing new business practices, they can interact as well with innovative ways with several other value chain players, and increase in that way the overall sustainability of the food system they are part off.

4.6 Citizens

Citizens are key target groups as they have a central role in the food system: they are both consumers and influencers of the system. Therefore educating citizens is an important parameter for success in creating sustainable food value chains, and FSSS can demonstrate how their actions can have positive influence in the system.

5. Selecting FoodSHIFT2030 SSS innovations

The selection of FSSS innovations has been performed in particular by interacting with the results of the WP2, and the work of SUSMETRO, leader of the WP2, which aims through FoodSHIFT, to mature, combine and upscale existing food system innovations.

In general the innovations that were selected, in order to be assessed in matter of their sustainability, were chosen having the following criteria into mind:

- To be relevant to the scopes, and objectives of FoodSHIFT.
- To be inspired by the FALs' work and FALs action domains.
- To represent, as much as possible, the different target groups, and be of interest for application by the stakeholders.

5.1 Categories of FSSS innovations

Each innovation case has been categorized according to its *Innovation Dimension*, indicating what kind of innovation is being presented, and where in the value chain it plays a role (see Innovation Portraits [insert reference]). The dimensions are defined as follows:

Product - Innovations in this category address new or updated products, including quality, safety and market impact.

Process - These innovations are relevant to new technologies for processing, logistical improvements, infrastructure and new/improved services.

Social - Innovations in this category are relevant to changes in behaviour (e.g. consumers/citizens), development of new relationships and inclusiveness.

Governance - The innovations address policy developments, including food planning, subsidies, taxing, certificates & labelling.

Based on the WP2 inventory - see next section - Innovation Dimensions have been further broken down into the following sub-categories⁴. These sub-categories will be useful when comparing different innovation cases in the Transition Toolkit.

- Governance related
 - o Information
 - o Organisational
 - o Public
 - o Public-Private
- Process related
 - o Circularity

⁴ SUSMETRO provided information about this categorisation

- o Production
- o Retail
- o Technology
- Product related
- Social related
 - o Education
 - o Inclusion

5.2 Describing the innovations

The nine FoodSHIFT Accelerator Labs (FALs) have been engaged in a continuous process of supporting innovators with a process of maturing, combining, upscaling and multiplying the lessons learned. By means of a qualitative and quantitative inventory assessment of innovation narratives and performance data at the level of nine city regions, FoodSHIFT2030 has catalogued key characteristics of 90 innovation cases.

Information on the innovation dimensions, but also on the main objectives of these innovations, has been analysed to select 37 innovation cases which are considered as especially relevant with regard to the FSSS objectives.

In the following table the 37 different innovations are presented.

Table 5-1: List of FSSS innovations

Innovation Categories				
<i>Inspired by the FALs' work and FALs action domains</i>				
No	Code name	Level 1	Level 2	Level 3 – INNOVATIONS TO BE ACCESSED
1	G1	Governance	Information	Menu language adaptation
2	G2	Governance	Information	Healthy diets information campaigns
3	G3	Governance	Information	Sustainable food education & citizen engagement
4	G4	Governance	Organisational	Food collectives / food hubs
5	G5	Governance	Organisational	Establish Multi-actor network
6	G6	Governance	Organisational	Connecting local producers with local retailers & restaurants
7	G7	Governance	Organisational	Producer / Farmer associations
8	G8	Governance	Organisational	Local food markets & platforms (online & offline)
9	G9	Governance	Public	Public procurement development
10	G10	Governance	Public	City region food policies
11	G11	Governance	Public	Sign Milan Urban Food Policy Pact
12	G12	Governance	Public	Include healthy diets in school menu
13	G13	Governance	Public	Food aid initiatives
14	G14	Governance	Public	Food Policy Councils (citizen-led)
15	G15	Governance	Public	Local food strategies
16	G16	Governance	Public-Private	Agro-parks & food districts
17	P1	Process	Circularity	Composting
18	P2	Process	Circularity	Reuse waste streams for food
19	P3	Process	Circularity	Food waste minimisation information campaigns
20	P4	Process	Circularity	Circular economy solutions

21	P5	Process	Circularity	Sustainable packaging materials
22	P6	Process	Production	Community Supported Agriculture (CSA) (focus on production)
23	P7	Process	Production	Small scale agro-tech
24	P8	Process	Production	Restoration / repurposing of land
25	P9	Process	Retail	Cooperative supermarkets
26	P10	Process	Retail	Food saving (re-distribution of surpluses from retail & wholesale)
27	P11	Process	Retail	Sustainable restaurants
28	P12	Process	Technology	Smart irrigation
29	P13	Process	Technology	Hydropogenic Microgreens
30	P14	Process	Technology	3D printed food
31	P15	Process	Technology	Food technology & prototypes
32	PR1	Product	Product	Novelty & Speciality food products
33	S1	Social	Education	Community gardens (focus on social & educational aspects)
34	S2	Social	Education	School gardens (focus on education)
35	S3	Social	Education	Sustainable Food Competence Training
36	S4	Social	Inclusion	Food sharing (community sharing e.g. through fridges)
37	S5	Social	Inclusion	Social inclusion / integration initiatives

6. Scoring

The scoring of the innovations performed in FSSS does not relate to rating the different innovations regarding which is better or worse. It rather aims, through this process, to present the character of an innovation, examining the benefits that it brings in a food system. The assessment of the sustainability of innovations will be qualitative, based on the opinion from experienced experts from different related disciplines in the food system.

6.1 Scientific Scoring Committee (SSC)

A pool of around 30 experienced experts will be created in order to assess the initial 37 innovations on their sustainability that is proposed in this deliverable. These experts will constitute the Scientific Scoring Committee (SSC).

Roles in the SSC

A. FSSS Guiding Team

Guiding and coordination of this process will be a responsibility of the FSSS "Guiding Team". The Guiding Team will be led by the University of Copenhagen (UCPH), which has the network and overall capacities, and can further the FSSS legacy beyond the current project time boundaries. Members of this team will be also DRAXIS, which has developed the current FSSS methodology, as well as SUSMETRO, which is responsible for the realisation of the Toolkit platform and the compilation of the Innovation Portraits.

B. FSSS Scientific Scoring Committee Experts

Scoring selected innovations will be done by a group of around 30 selected experts. As a first step, SSC will be created by experts from the FoodSHIFT consortium, representing all the different FALs (i.e., each FAL will appoint 2-3 experts). At a later stage, external experts, outside of the FoodSHIFT project will also be added. All experts must have the needed qualifications, knowledge, and experience to judge the sustainability qualities of the proposed innovations. Personal invitations will be sent later to selected members of the wider scientific community and to the FoodSHIFT sister EU projects.

C. FSSS Advisory Team

In order to check and validate the results, four prominent experts from different target groups and SDG related topics will be invited. These experts will act as advisors who will check the scoring results in order to examine the final outcome of rating of the dedicated innovations at a higher level.

The number of the identified experts for the SSC is currently around 30, which ensures that the outcomes deriving from this platform, which is only for educational and communication purposes, are credible enough for serving the overall scope of the FSSS.

6.2 Scoring Guidelines

During the scoring procedure, the following steps will be followed:

Step 1: PREPARING THE POOL OF INNOVATIONS - Scoring of different innovations against the four sustainability dimensions

This step will be performed in order to determine the character of each innovation, and its effect in the sustainability of the food system that it belongs to.

Each expert of the SSC will be asked to fill in an excel file, grading each innovation against the relevant indicators, using a scale from 0 to 5 as shown in the following tables.

The scoring of each innovation will be performed against 52 environmental, 19 social, 19 governance and 26 economic related indicators.

Grading towards achieving the desired targets will be done by answering the question "How much does this innovation contribute to promoting "name of indicator"? And it will be performed according to the following scoring scheme:

- 0 - no contribution
- 1 - very little contribution
- 2 - little contribution
- 3 - some contribution
- 4 - good contribution
- 5 - great contribution

The final score of each innovation against each sustainability dimension will be the average of all expert's scoring expressed as a percentage. Table below shows an example of a scoring procedure for Environmental Integrity.

Table 6-1: Example of a scoring procedure for Environmental Integrity

ENVIRONMENTAL INTEGRITY			
Themes	Sub-Themes	Default Indicators (52 indicators)	Does the innovation promote...? (0-5)
E1 Atmosphere	E 1.1 Greenhouse Gases	E 1.1.1 GHG Reduction Target	(grade contribution from 0-5)
		E 1.1.2 GHG Mitigation Practices	(grade contribution from 0-5)
		E 1.1.3 GHG Balance	(grade contribution from 0-5)
	
	
	
TOTAL ENVIRONMENTAL INTEGRITY SCORE [min score 0, max score 260 (52 indicators x 5)]			a (SUM of the above gradings)
Score in %			A (=a x 100/260)

The final score of the innovation on environmental integrity (A) will be the average of all expert's scoring expressed as a percentage.

Table 6-2: Example of a scoring procedure for Social Well Being

SOCIAL WELL-BEING			
Themes	Sub-Themes	Default Indicators (19 indicators)	Does innovation promotes...? (1-5)
S1 Decent Livelihood	S 1.1 Quality of Life	S 1.1.1 Right to Quality of Life	(grade contribution from 0-5)
		S 1.1.2 Wage Level	(grade contribution from 0-5)
	S 1.2 Capacity Development	S 1.2.1 Capacity Development	(grade contribution from 0-5)
	S 1.3 Fair Access to Means of Production	S 1.3.1 Fair Access to Means of Production	(grade contribution from 0-5)
...
...
TOTAL SOCIAL WELL-BEING SCORE [min score 0, max score 95 (19 indicators x 5)]			b (SUM of the above gradings)
Score in %			B (=b x 100/95)

The final score of the innovation on social well-being (B) will be the average of all expert's scoring expressed as a percentage.

Table 6-3: Example of a scoring procedure for Governance

GOVERNANCE			
Themes	Sub-Themes	Default Indicators (19 indicators)	Does the innovation promotes...? (1-5)
G1 Corporate Ethics	G1.1 Mission Statement	G 1.1.1 Mission Explicitness	(grade contribution from 0-5)
		G 1.1.2 Mission Driven	(grade contribution from 0-5)
	G 1.2 Due Diligence	G 1.2.1 Due Diligence	(grade contribution from 0-5)
...
...
TOTAL GOVERNANCE SCORE [min score 0, max score 95 (19 indicators x 5)]			c (SUM of the above gradings)
Score in %			C (=c x 100/95)

The final score of the innovation on governance (C) will be the average of all expert's scoring expressed as a percentage.

Table 6-4: Example of a scoring procedure for Economic Resilience

ECONOMIC RESILIENCE			
Themes	Sub-Themes	Default Indicators (26 indicators)	Does the innovation promotes...? (1-5)
C1 Investment	C 1.1 Internal Investment	C 1.1.1 Internal Investment	(grade contribution from 0-5)
	C 1.2 Community Investment	C 1.2.1 Community Investment	(grade contribution from 0-5)
	C 1.3 Long Ranging Investment	C 1.3.1 Long Term Profitability	(grade contribution from 0-5)
...
...
TOTAL ECONOMIC RESILIENCE SCORE [min score 0, max score 130 (26 indicators x 5)]			d (SUM of the above gradings)
Score in %			D (=d x 100/130)

The final score of the innovation on economic resilience (D) will be the average of all expert's scoring expressed as a percentage.

The **total sustainability score of an examined innovation** (S) will be the sum of the scores of all its dimensions, which are described above, namely:

$$(S) = (A) + (B) + (C) + (D)$$

A: Score for innovation on environmental integrity

B: Score for innovation on social well-being

C: Score for innovation on governance

D: Score for innovation on economic resilience

S: Total scored sustainability of an examined innovation

At the end of this process, a pool of 37 innovations will have been characterised, based on their sustainable characteristics, and will be ready to be used in FSSS platform to help the users improve the sustainability of their food system.

Step 2: CREATE YOUR VIRTUAL INNOVATIVE FOOD SYSTEM - Creating virtual sustainable experimentations by combining innovative solutions for your food system

The user of the FSSS can later, in the dedicated platform, select among different innovations from the list, and create his/her virtual sustainable pack of innovative solutions for his/her food system, examining each time its overall sustainability.

The more innovations one user wish to add to his/her virtual food system, the more points he/she gathers for his/her virtual sustainable pack of innovations. In this way, the user can experiment with different choices, strengthening virtually his/her food system by making choices of different sustainability dimensions that he/she wishes to apply.

Table 6-5: Calculating total sustainability of selected innovations

No	Selection of innovations	INNOVATION SUSTAINABLE DIMENTIONS				Total points (=A+B+C+D)
		ENVIRONMENTAL INTEGRITY (A)	SOCIAL WELL-BEING (B)	GOVERNANCE (C)	ECONOMIC RESILIENCE (D)	
1	Innovation No 1	A1 points	B1 points	C1 points	D1 points	S1 points
2	Innovation No 2	A2 points	B2 points	C2 points	D2 points	S2 points
3	Innovation No 3	A3 points	B3 points	C3 points	D3 points	S3 points
...	Innovation No points	... points	... points	... points	... points
...
TOTAL SUSTAINABILITY OF INNOVATION PACK		=A1+A2+A3+...	=B1+B2+B3+...	=C1+C2+C3+...	=D1+D2+D3+..	=S1+S2+S3+...

Step 3: VISUALISE YOUR CHOICES - Visualisation of the sustainable nature of each innovation

When the user selects his/her innovations, and creates his virtual innovation food system, the results will be visualized in a suitable diagram, e.g a radar chart or a bar chart.

Below there are some examples of proposed visualisations.

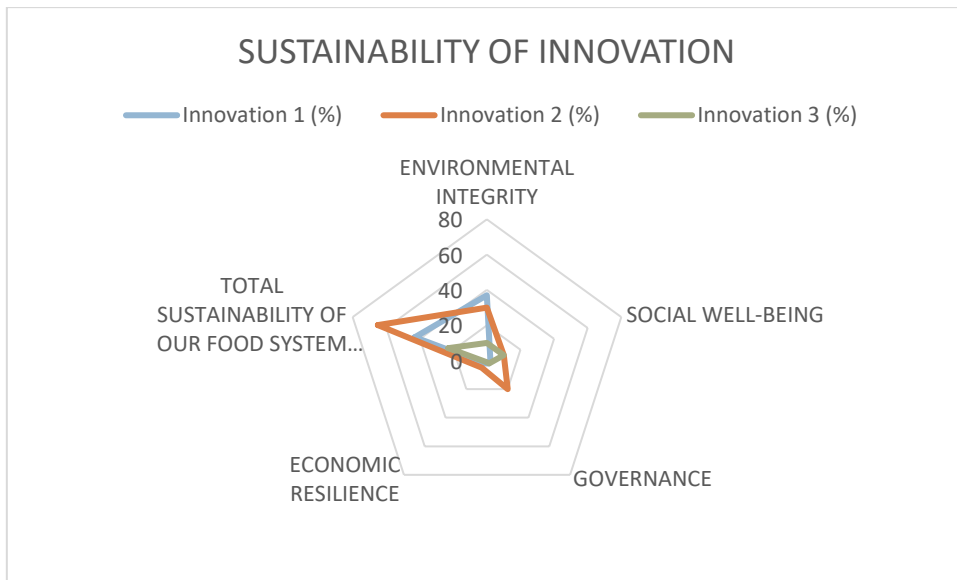


Figure 1: Visualisation example 1

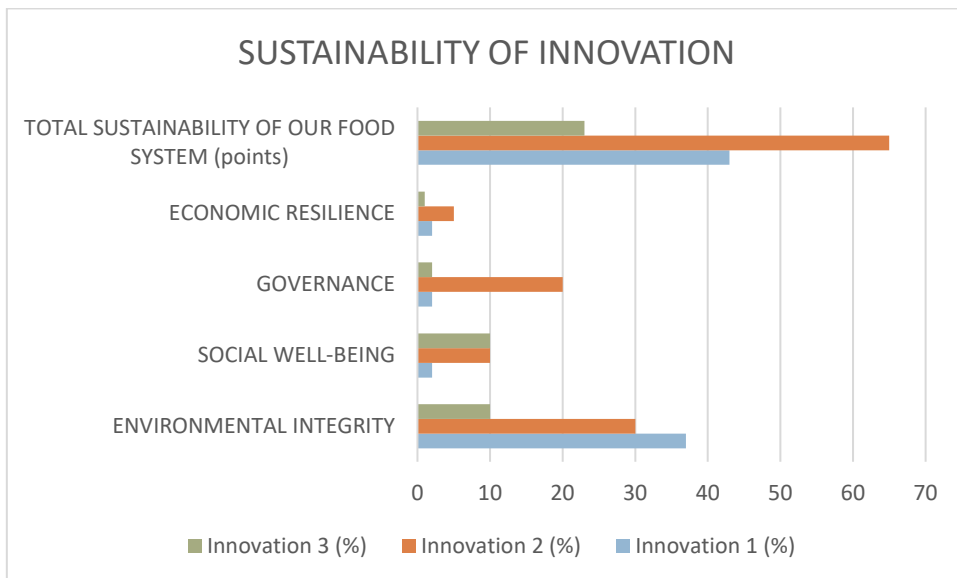


Figure 2: Visualisation example 2

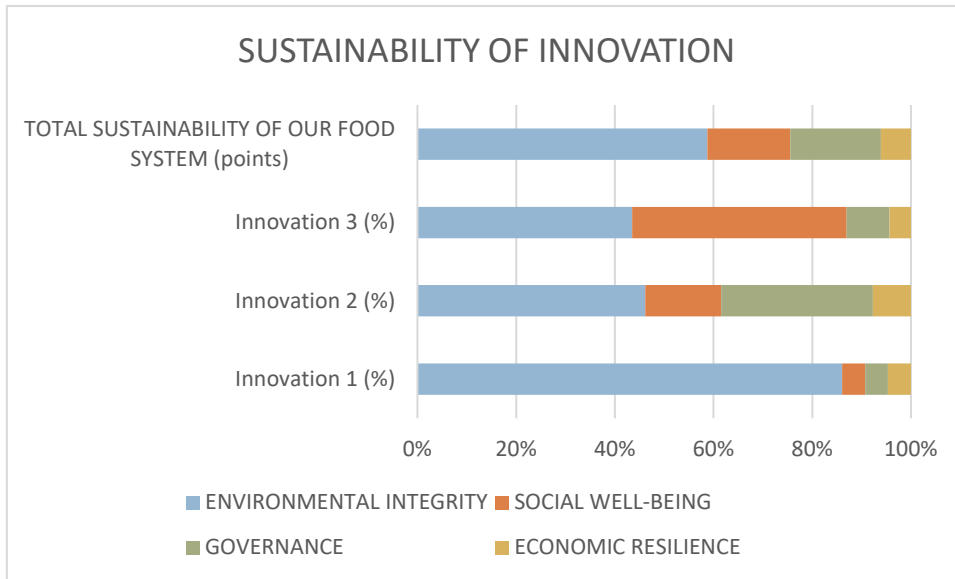


Figure 3: Visualisation example 3

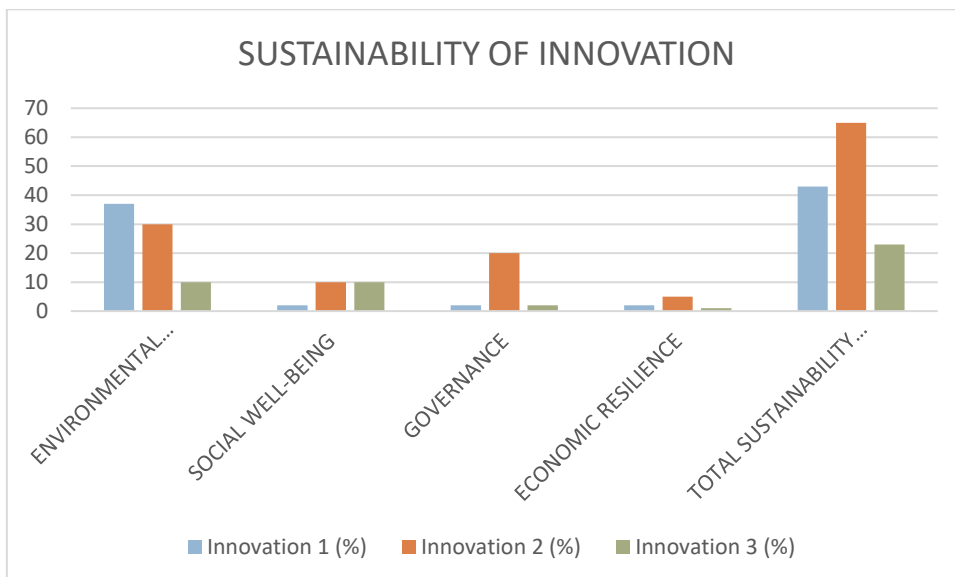


Figure 4: Visualisation example 4

7. The next steps

In the coming period the following steps will take place for the realisation of the FSSS:

Table 7-1: Next steps

No	Action	Leader	Participants
1.	Scoring of the 37 innovations by the experts of the SSC	DRAXIS	All experts of SSC
2.	Preparation of the interface of the FSSS platform	SUSMETRO	DRAXIS, UCPH
3.	Setting up of the FSSS Advisory Team	UCPH	DRAXIS, SUSMETRO
4.	Validation of the scoring of innovations made by the SSC	FSSS Advisory Team	UCPH, DRAXIS, SUSMETRO
5.	Launching of the FSSS platform	SUSMETRO	DRAXIS, UCPH
6.	Communication of the FSSS & the FoodSHIFT Toolkit	UCPH	All partners

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