FOOD IMPROV'IDERS

Provide producers with fit-for-purpose knowledge to develop new sustainable food chain models improving their revenue and enhancing consumers' satisfaction

Intellectual Output 1
Pedagogical scenarios, including specifications for training, learner's profiles, learners' expectations, stakeholders' needs and learning tools

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

https://foodimproviders.eu

This document forms part of the deliverables from the FOOD IMPROV'IDERS project which has received funding from the European Union's ERASMUS+ program under grant agreement 2020-1-FR01-KA204-080640.

The project is aiming to develop the skills and knowledge of EU producers in short food chains circuits to facilitate their insertion in existing network and/or the creation of new one to rebalance their role in the food chain.

More information on the project can be found at www.foodimproviders.eu.

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1. Project Summary

FOOD IMPROV'IDERS is an Erasmus+ project that aims to provide EU food producers with tailored training content in line with their needs and lifestyle to improve their skills and knowledge in short food chains circuits. To reach the beneficiaries, the project will offer the training content both online and in presential courses.
The FOOD IMPROV'IDERS project gathers 6 partners from 6 different EU Member States (France, Bulgaria, Italy, Hungary, Slovenia, Spain) having complementary profiles in order to provide the necessary expertise for the implementation of all project tasks.

Part. #	Partner name	Partner short name	Country
1	Association Nationale des Industries Alimentaires	ANIA	France
2	Eszterházy Károly University	EKU	Hungary
3	University of Ljubljana	UL	Slovenia
4	University of Parma	UP	Italy
5	Foundation Juana de Vega	FJDV	Spain
6	Europroject	EP	Bulgaria

2. Introduction

The partners identified the needs and requirements of the target audience learners and stakeholders regarding short food chains models educational content and instruments.
Questionnaires collected feedbacks from EU producers (D1.3). These questionnaires aimed at gathering information regarding their basic knowledge on short food chains, their needs, their requirements and preferences regarding educational methodology and level of details needed in the modules. The project collect the target questionnaires filled. Workshops has been organized by ANIA, FJDV, EKU and UL to present the project and receive direct feedback from the target audience, an opportunity to collect insights and comments from a broader range of stakeholders (producers, involved supply chain stakeholders, policy-makers, consumers, etc.), including their own identified needs and requirements to implement fairer and more sustainable food chains models and experience. The External Advisory Body has been created and consulted to provide early feedback to improve and/or validate the developed content and platform at different stages of the project. The members of the external advisor body will be selected by the partners

to have an adequate representation of the project stakeholders. Due to COVID restrictions, the Body was smaller than foreseen.

The information gathered via the questionnaires and the workshops has been assessed by ANIA in close collaboration with UP and FJDV and with the support of the other partners to highlight the key insights regarding the needs, requirements and learning preferences of EU producers. It has been reported in the stakeholders' feedback report on how to develop the pedagogical content in terms of difficulty, level of detail, timing of the training, and pedagogical expected outcomes.

Aware of the importance of a tailored and high-quality learning content, the consortium partners dedicated a sub-task to the drawing and agreeing on common principles and standards for the formulation and development of the training content (D1.4).

The global aim of the educational content was to provide key practical skills to EU producers in short food chains models. The importance is to give the learners the capabilities to identify innovative and successful practices that can be replicated.

In line with this objective, the foreseen core modules of the pedagogical content are:

- Improving producers' entrepreneurial and managerial mindset,
- Providing theoretical knowledge on alternative food chain models,
- Highlighting best practices in alternative food chains (by sectors) and replication opportunities
- Improving producers' competencies in product valorisation, marketing and labelling and client relation.
- Ensuring high standards for food traceability and safety,

Once agreed and confirmed, the partners co-developed the educational content, submitted their developed pedagogical content for an internal assessment to ensure that it meet the quality criteria defined and refine it if deemed necessary and enhanced after stakeholders' feedback before a larger scale use of the pedagogical content.

The partners in the same time, identified the key specifications of the online e-learning platform to ensure that the platform development match the requirements needed for both the online learning component of the blended learning and the self-learning component (D2.1).
The platform was opened (https://platform.foodimproviders.eu/#) which is also reachable from the website of the project https://foodimproviders.eu/.
The pedagogical material is accessible after registration, which is free, and it will be accessible for 4 years after the end of the project.

Due to COVID restrictions, the partner started to offer the offline component of the project's blended learning offer in the partner's training centers later than foreseen as explained in the deliverables IO3 and IO4.

To ensure transferability of the elements produced through this output, the deliverables will remain free of access, published on the project website. The deliverable will be available in English.

This intellectual output results from the work performed during the Project lifetime.

3. Deliverable 1.3 - Stakeholders' feedback report on learners' needs, requirements, and learning preferences

3.1. Introduction

This document describes the results of the questionnaire shared with the stakeholders in the initial phase of the project and also the workshops/events results.

3.2. Surveys

The project FOOD IMPROV'IDERS is an European project part of the ERASMUS PLUS - KA2 (KEY ACTION 2) that aim to deliver training contents on short food chain for European producers.
This project is coordinated by the University of Parma and the Association Nationale des Industries Alimentaires ANIA (France); the consortium includes the Eszterházy Károly University, the University of Ljubljana - Veterinary Faculty, and the Foundation Juana de Vega.

To reach the aim of the project FOOD IMPROV'IDERS, a survey has been sent to various operators in the short food supply chain in each country, in local language.

1. The survey was divided into five parts:
2. Information on the respondent
3. Information on the respondent's operation
4. Basic knowledge on short food chains
5. Needs in terms of short food chains
6. Requirements and preferences regarding educational methodology

We had a total of 176 answers. The respondents that answered the survey mainly belong to both the primary and the secondary sectors.
53 out of 176 of the respondents aren't part of a cooperative and are not interested in being part of one; on the other hand, 50 respondents aren't a part of a cooperative but would like to be part of one. The remaining respondents said that they are part of a cooperative, or are part of an informal consortium.

The main aim of this part of the project was to understand what themes the interviewed people were interested to be analysed in depth.
The results told us that the producers are interested in receiving managerial advice, know about success stories, receive social and legal advices.

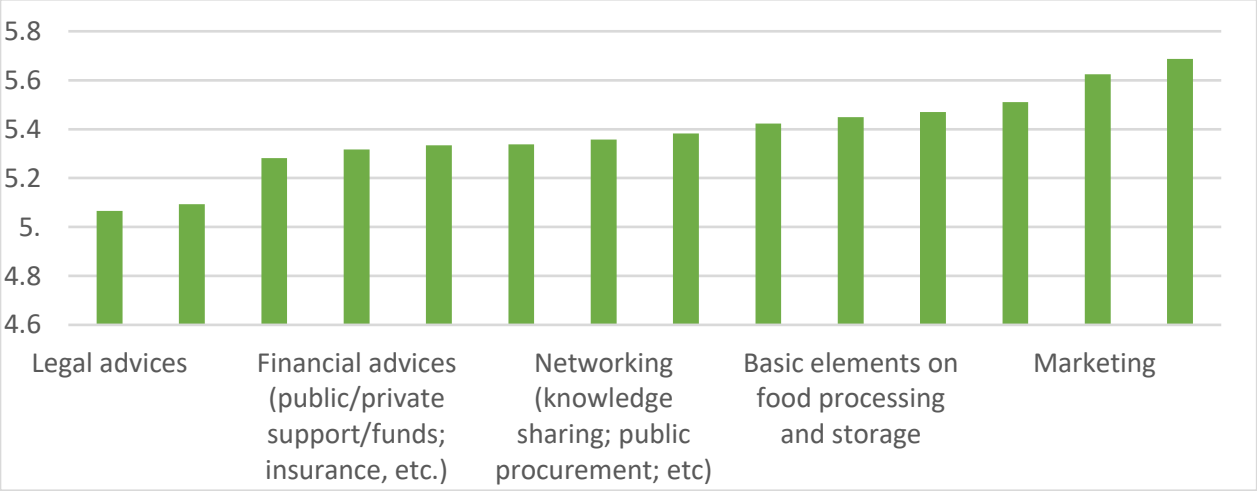
It was also asked:

- What type of training would the respondents prefer (formal training, individual training & mentoring, self-training, blended learning)
- What is the ideal frequency of training (daily, bi-weekly, once or twice a year, monthly, weekly)
- How susceptible would they be to use different tools (webinars, videos, podcasts and e-learning platform).

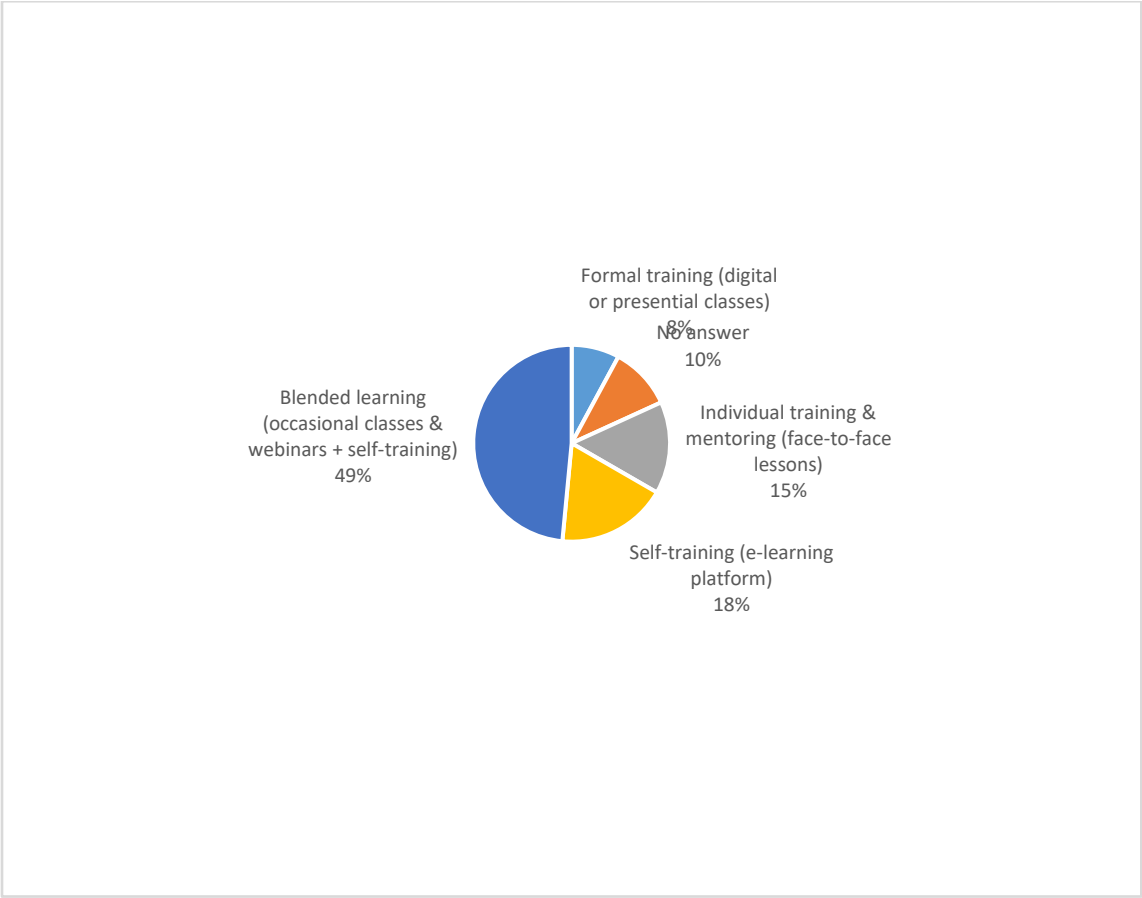
The results showed us that most of the respondents prefer blended learning (occasional classes & webinars + self-training), followed by self-training and the individual training & mentoring (face-to-face lessons).

For what concern the ideal frequency of learning occasions, most of the people prefer weekly and monthly frequency; fewer people choose the bi-weekly option and the option “once or twice a year”.
The respondents preferred tools are videos, webinars and e-learning platforms, while the podcasts were less chosen.

Distribution of proposed themes by interest of respondents (average ranking by importance)



Which type of training would you prefer for a short food chain capacity building?



In Annex all the answers for the all group.

3.3. Workshops/events

Each partner has also organized workshops/events in their country to engage the producers and stakeholders to collects their point of view. All the materials of the activities have been stored in a shared google drive (leaflets, photos, reports, list of attendant, etc.).

- Association Nationale des Industries Alimentaires (ANIA) organized a webinar titled "Short circuits and AFI's: State of affairs and opportunities for agri-food businesses". The aims of this webinar were to understand if it is possible to insert agri-food industry product in short circuits and understand how to do that, for which results and with which tools.

Contact: jchauveau@ania.net

- Eszterházy Károly University organized a workshop. The aim of this workshop was to present the FOOD IMPROV'IDERS project and receive direct feedback from the stakeholders, producers, etc. It was also an opportunity to collect insights and comments from a broader range of stakeholders, including their own identified needs and requirements to implement more sustainable food chain models.

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- University of Ljubljana (Slovenia) organized an online workshop titled "On setting up short chains from field to table". This was divided in three parts: first one the presentation of the project, focusing on its aims and purposes and highlighting the benefits of this project for producers and decision makers; second one presentation of a summary of the situation in the field of short food chains in Slovenia; and last part focused on the presentation of the results of the survey on short food chains conducted with questionnaires as part of the Food Improv'iders project.

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- Fundación Juana de Vega organized an event where they presented the project to a wide range of interested agents (producers, consumers and political leaders) and/or those involved in the short food supply chain at the Galician and Spanish level that can configure a network of support and exchange in the actions and tasks of the project. They also shared good practices and success stories about different initiatives and models of short food supply chain implemented in Spain and they talked about the information obtained with the surveys.

Contact: aribas@juanadevega.org; elopez@juanadevega.org

- University of Parma interviewed selected stakeholders asking various question about the short food supply chain, for instance, what they knew about short supply chains, if they are part of one of them, if they consider them a strategic business model, if they know of any initiatives in their region, what kind of information on short supply chain would be useful for them. All of this is to understand the idea that the stakeholders have about this topic. The results showed that training is perceived as important for consumers and producers in peripherical areas, it is

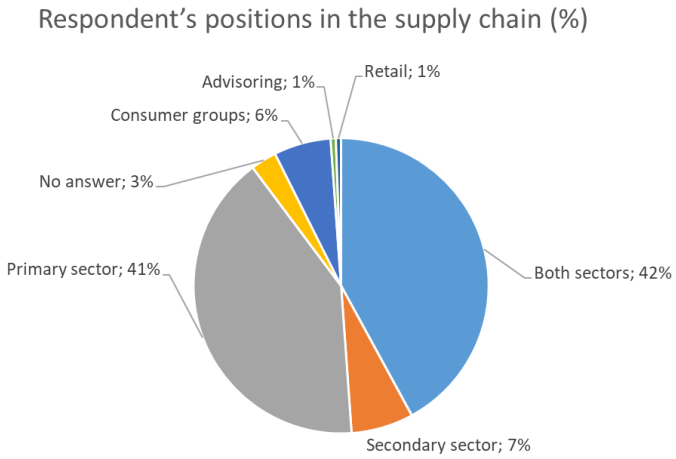
necessary to give the consumers guarantees in terms of food safety and traceability and sustainability of the supply chain. Regulation on these aspects are still missing.

Contact: cristina.mora@unipr.it; giovanni.sogari@unipr.it

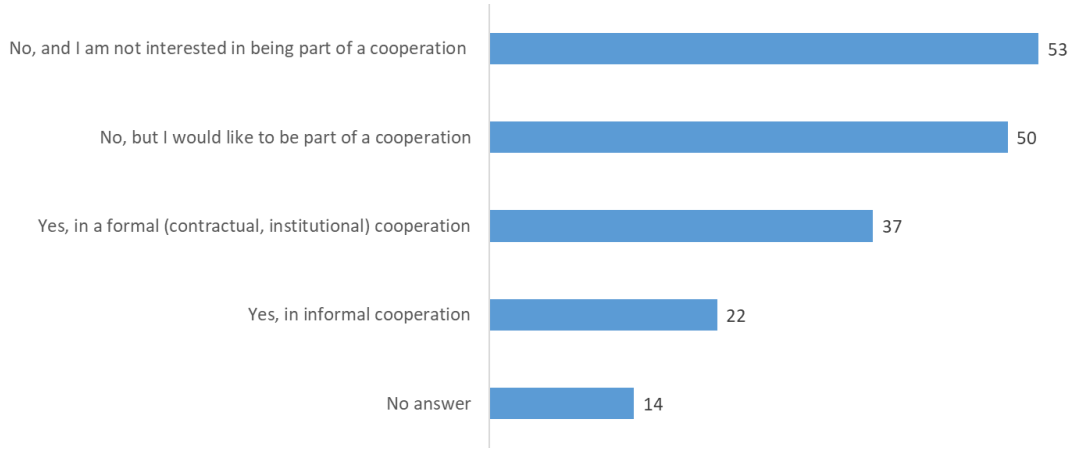
3.4. Annex

1. **Profiles of respondents**

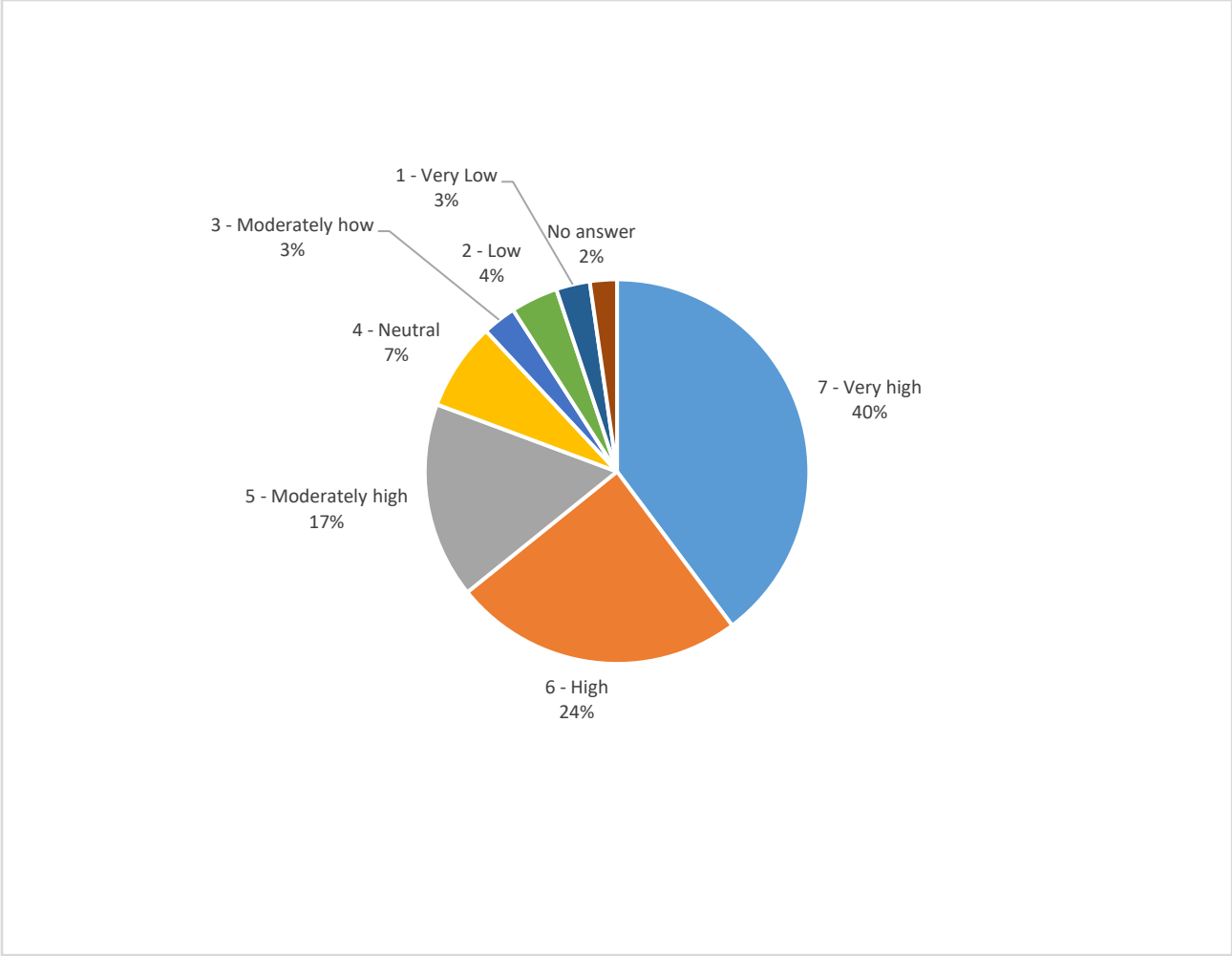
What is your position in the supply chain?

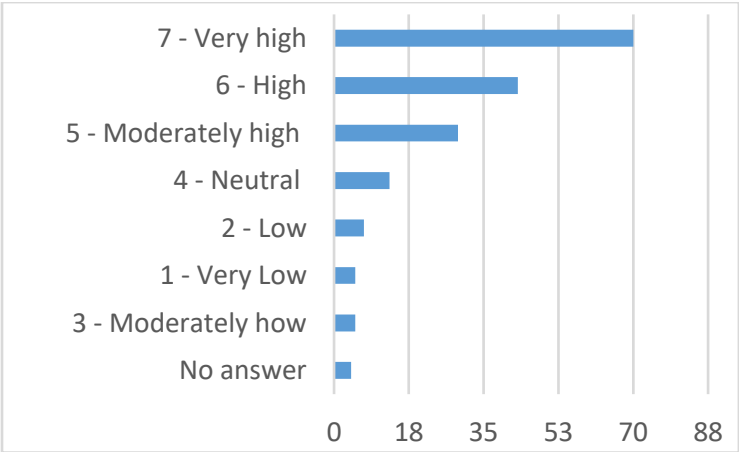


Are you a member of any production and / or sales professional cooperative (for respondents working in the agricultural sector)?

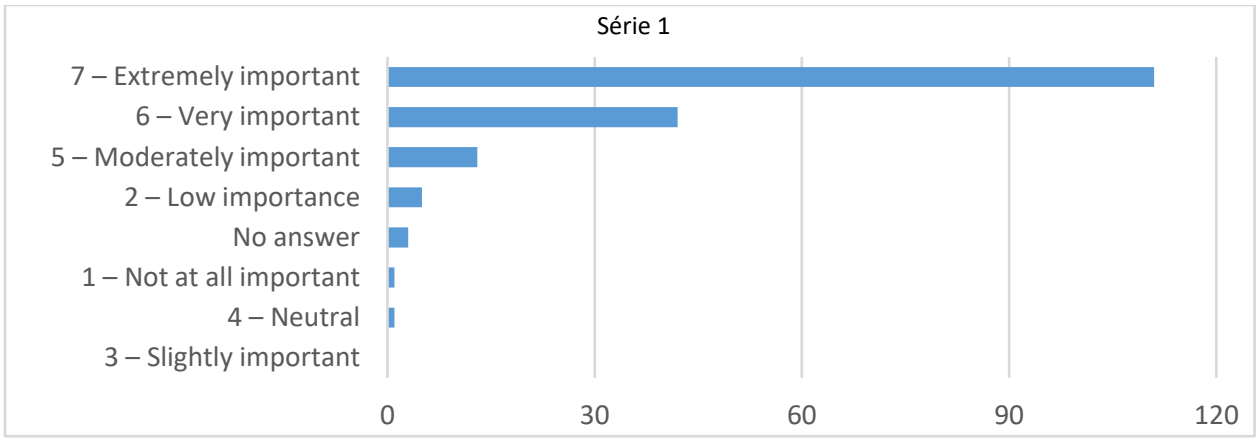


From 1 to 7, 7 being a major impact, how do you quantify the impact of seasonality on your activity?

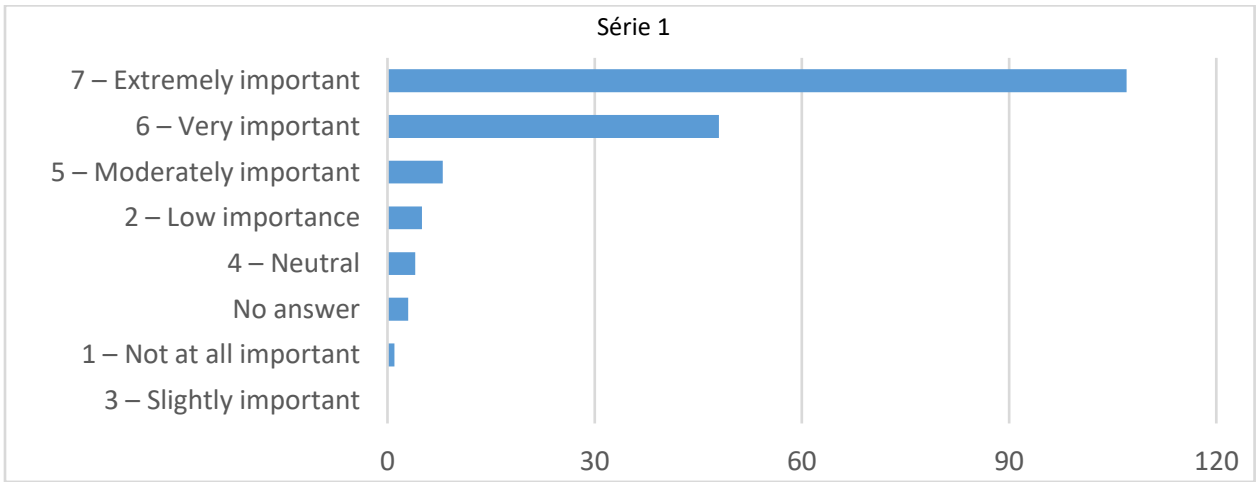




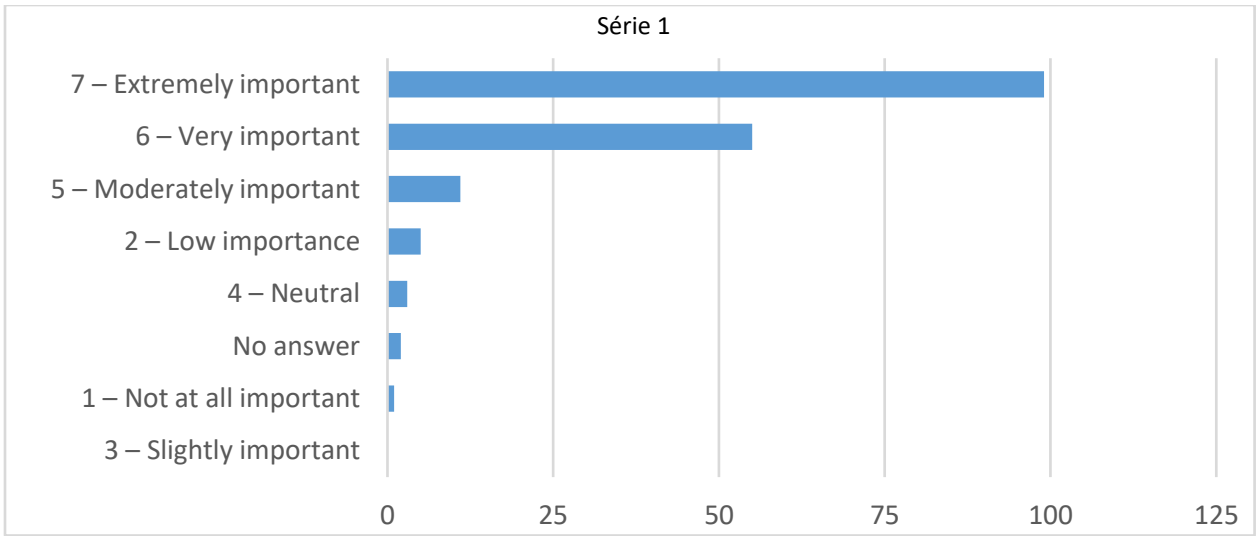
From 1 to 7, 7 being very important, how much importance do you give to the following aspects of your products: (Quality (organoleptic / sensorial properties)



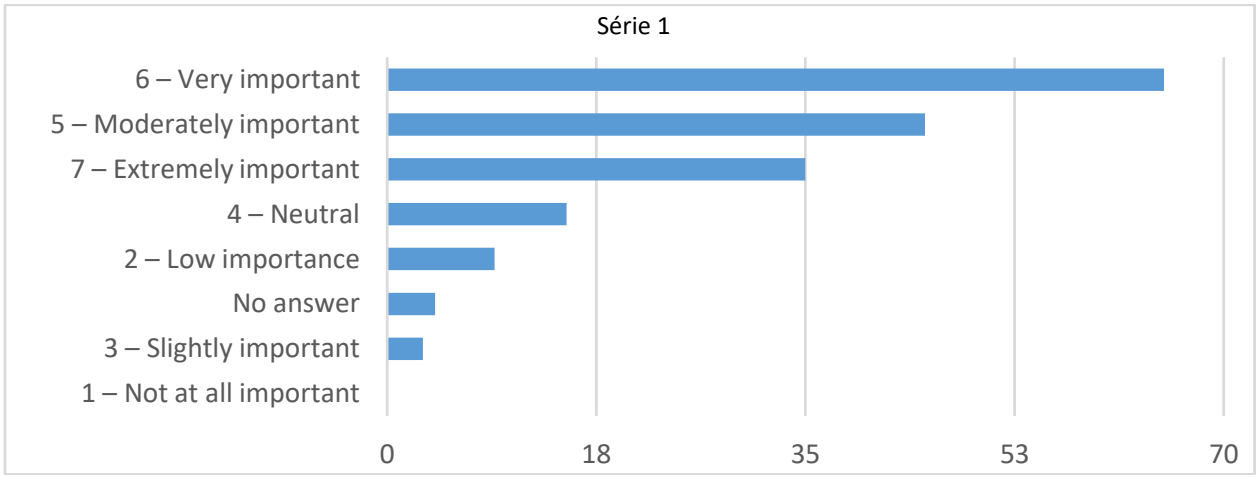
From 1 to 7, 7 being very important, how much importance do you give to the following aspects of your products [Safety]



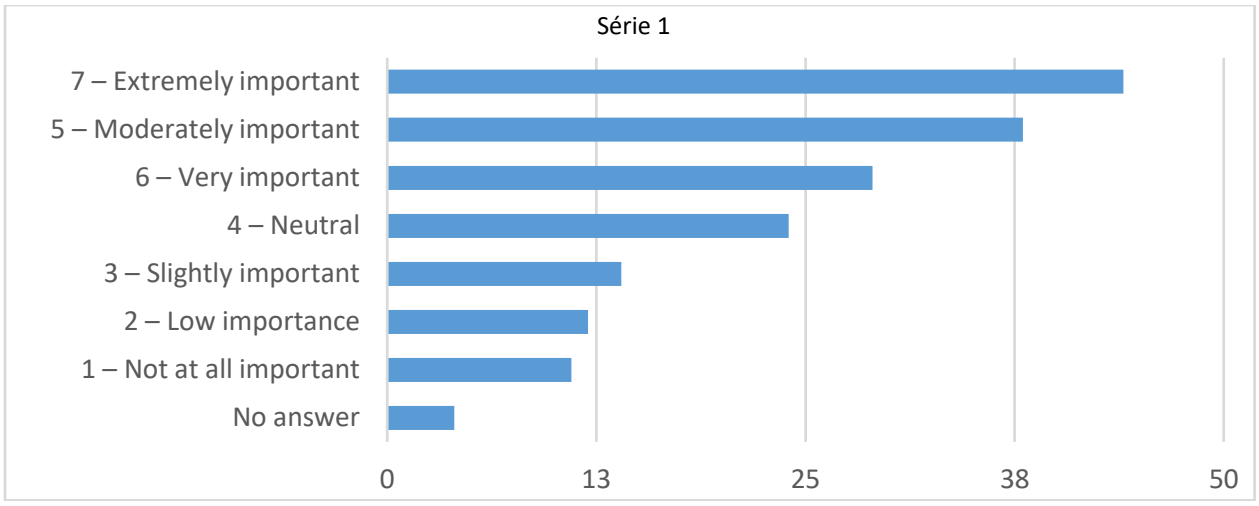
From 1 to 7, 7 being very important, how much importance do you give to the following aspects of your products [Health (Less processed foods)]



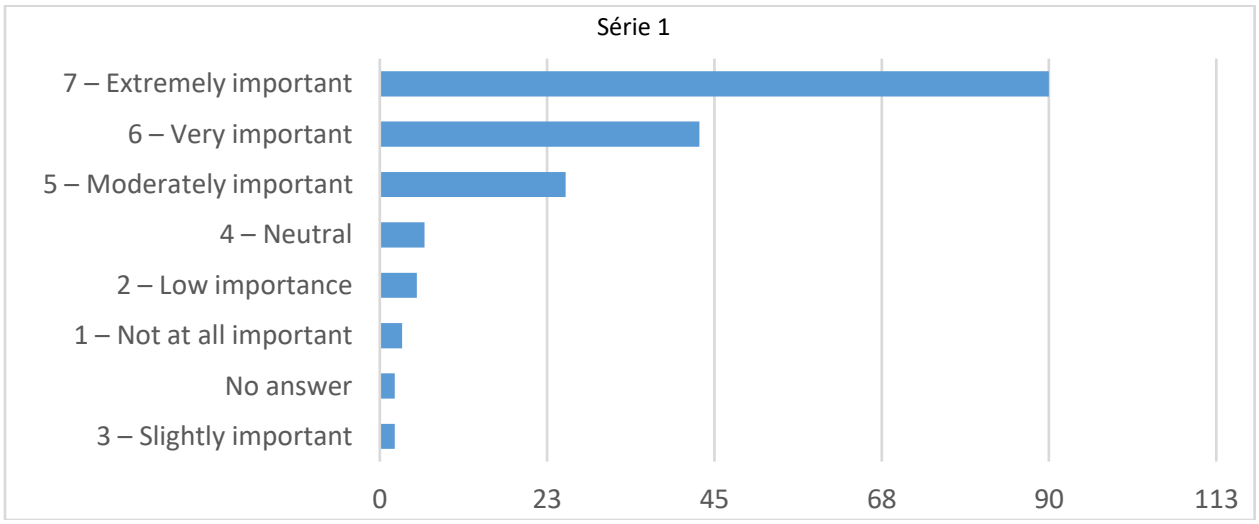
From 1 to 7, 7 being very important, how much importance do you give to the following aspects of your products [Price]



m 1 to 7, 7 being very important, how much importance do you give to the following aspects of your products [Certification (Organic…)]



From 1 to 7, 7 being very important, how much importance do you give to the following aspects of your products [Local origin]



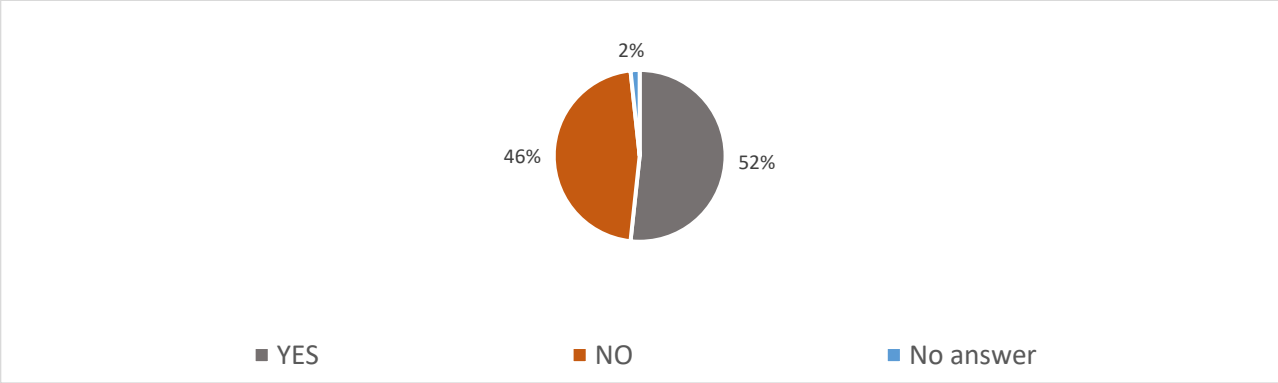
2. Knowledge of and relationship with short food chains

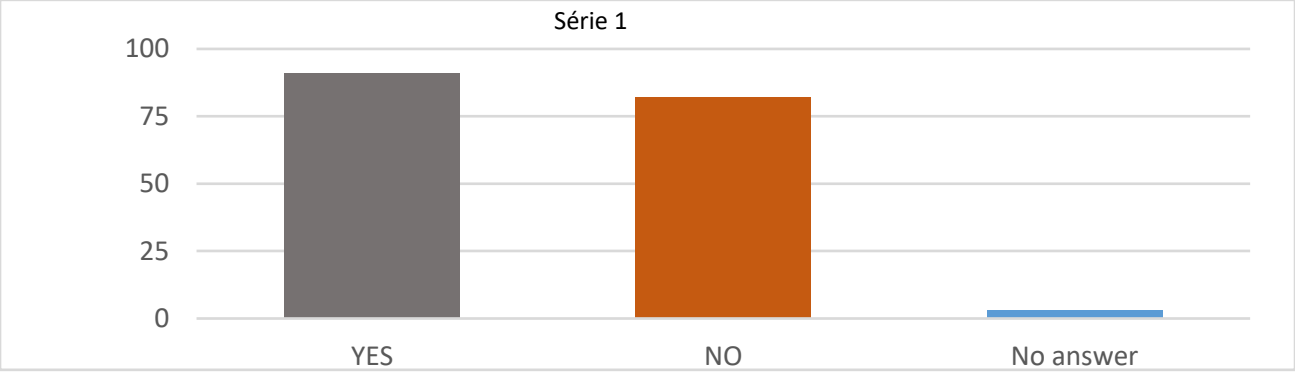
Examples of the best-known short food chains by country:

Country	Example 1	Exemple 2	Exemple 3	Exemple 4
SP	Direct sales by individuals	Collective direct sales	Local markets	Partnerships

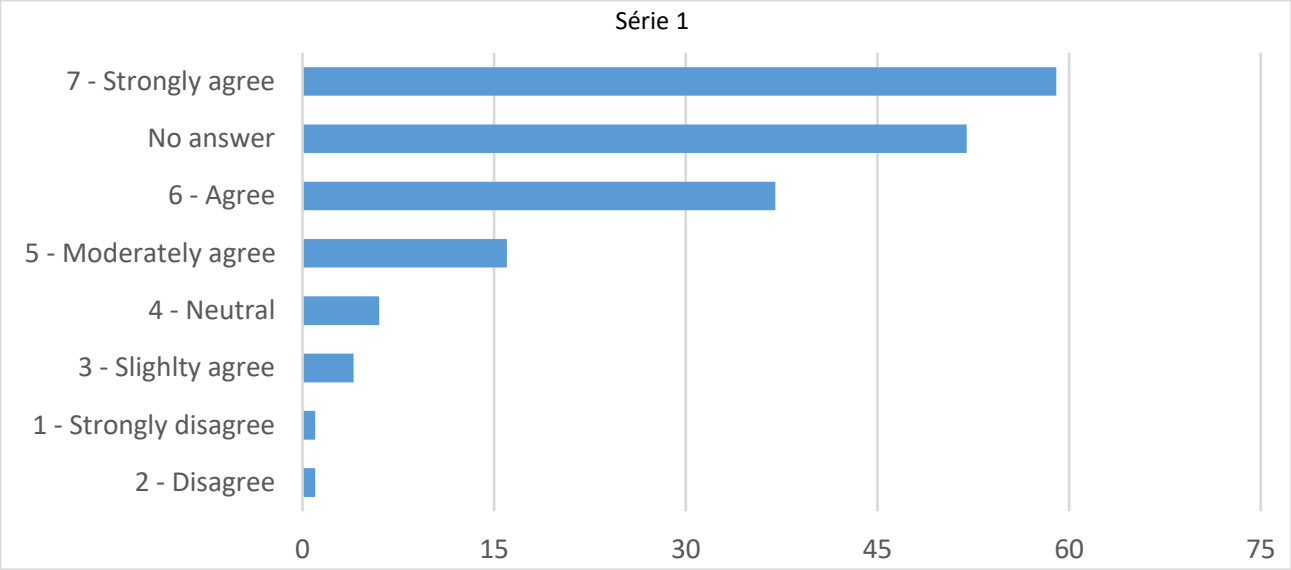
FR	Direct sales via Internet / e-shop	Direct sales by individuals	HORECA channels	Social media sales
IT	Direct selling on the production site	Direct selling through Internet	Direct selling through own physical shop	Delivery scheme (box schemes)
SL	Direct selling on the production site	HoReCa channel	Direct selling through Internet	Direct selling on local/farmers markets
HU	Direct sales by individuals	Local markets	Web sales	Collective direct sales

Have you ever been involved in a short food chain? YES / NO





From 1 to 7, how do you agree with the short food chains European definition? (7 being strongly agree)

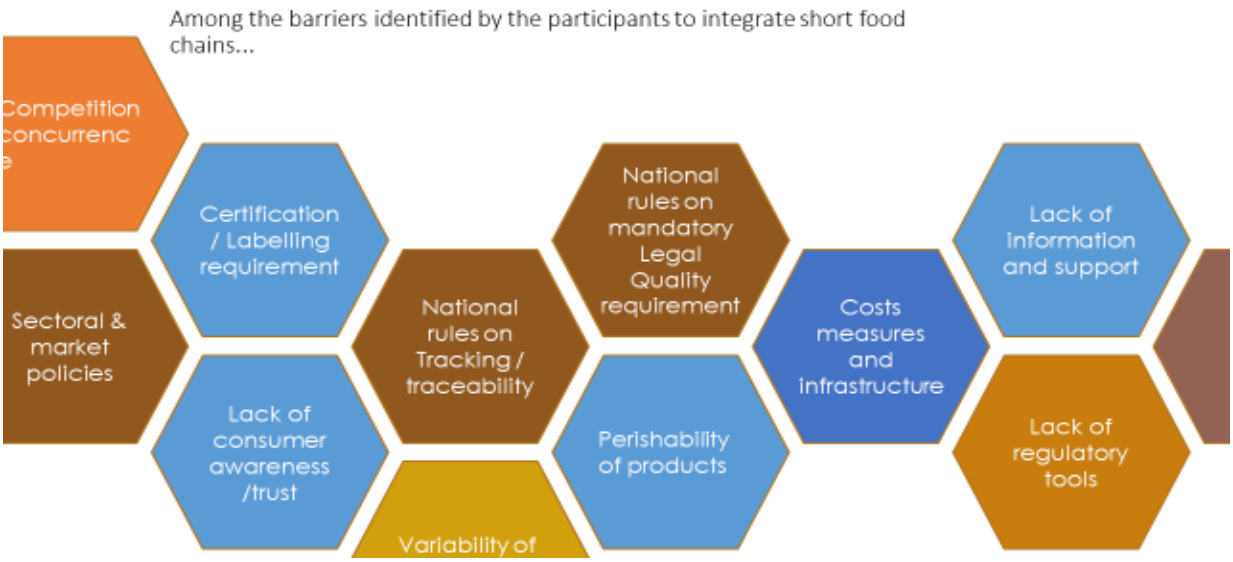


As the Slovenian partners only used an open-ended question for this item, their answers cannot be included in the quantitative analysis.
VERBATIM: “Very important, also to enlighten people on importance of local production”
“Short food supply chains are a supply chain model that seeks to renew the link and reduce the distance between producers and consumers, involving a limited number of economic operators, committed to cooperation, local economic development and the strengthening of the geographic and social relationships between producers, processors, and consumers”
“A good solution to get a good price and give real confidence to the buyer.”
“They are important due to smaller impact of transport on the environment, products are fresher and have better quality, consumers see them also more trustworthy (known origin)”

Needs of the respondents regarding their integration into short food chains

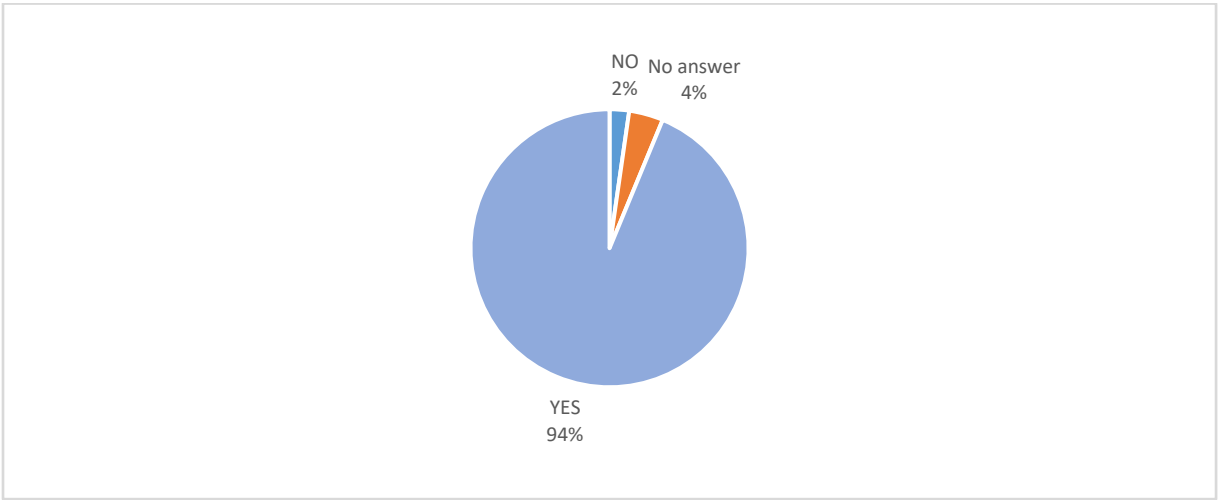
- Local and regional supports
- Knowledge of the actors and practices
- Knowledge of the Tools
- Legal Knowledge

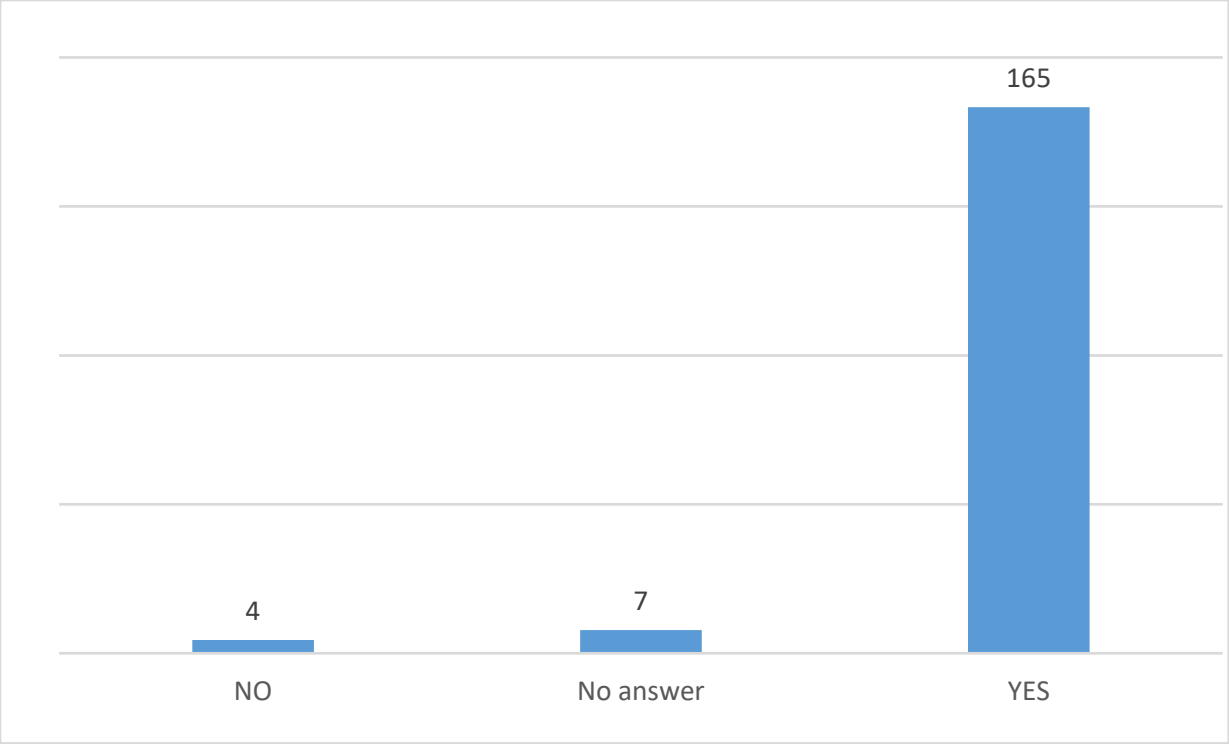
Among the barriers identified by the participants to integrate short food chains...



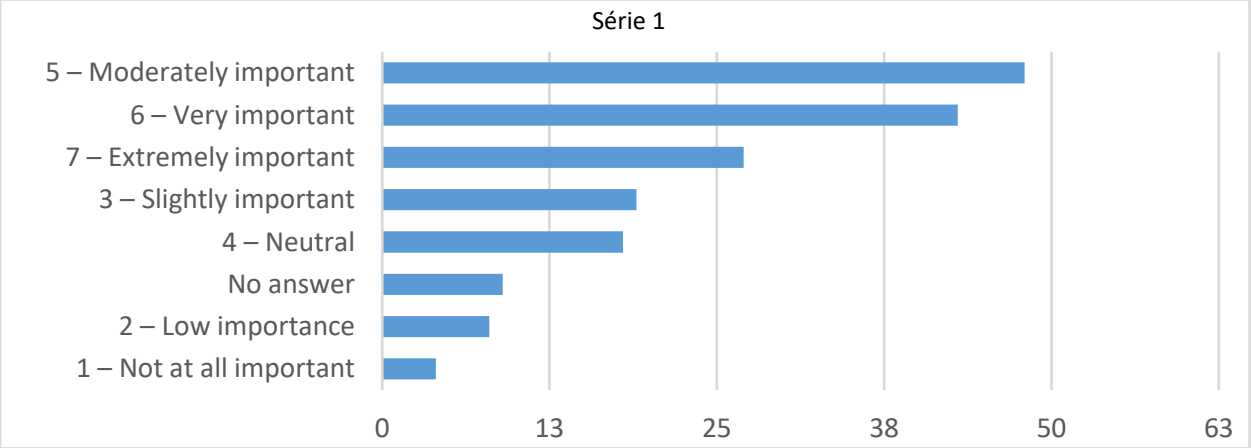
3. Expectation in terms of training in short food chains

Do you think continuous learning is important to develop your organization?

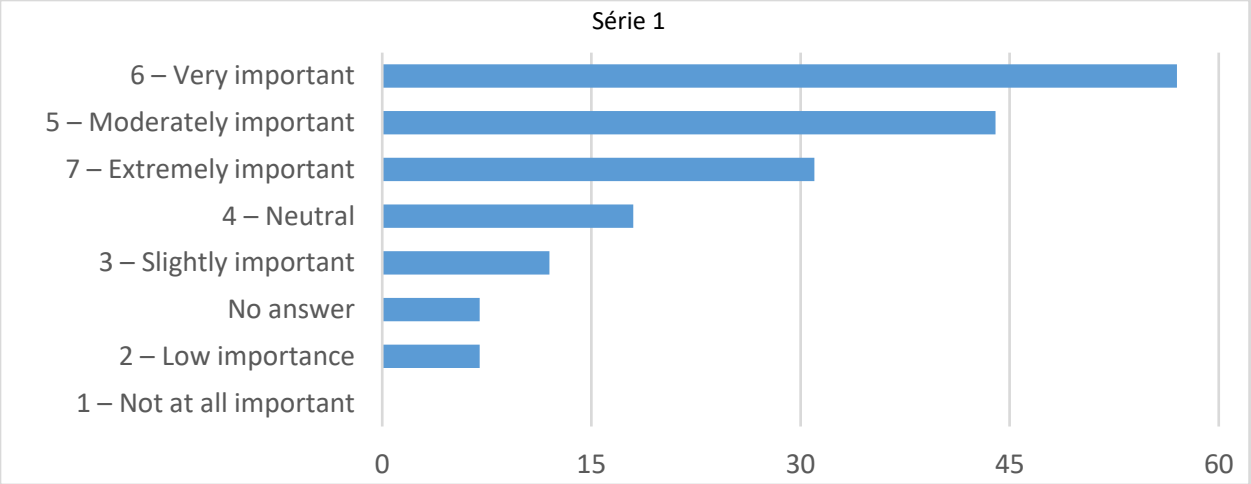




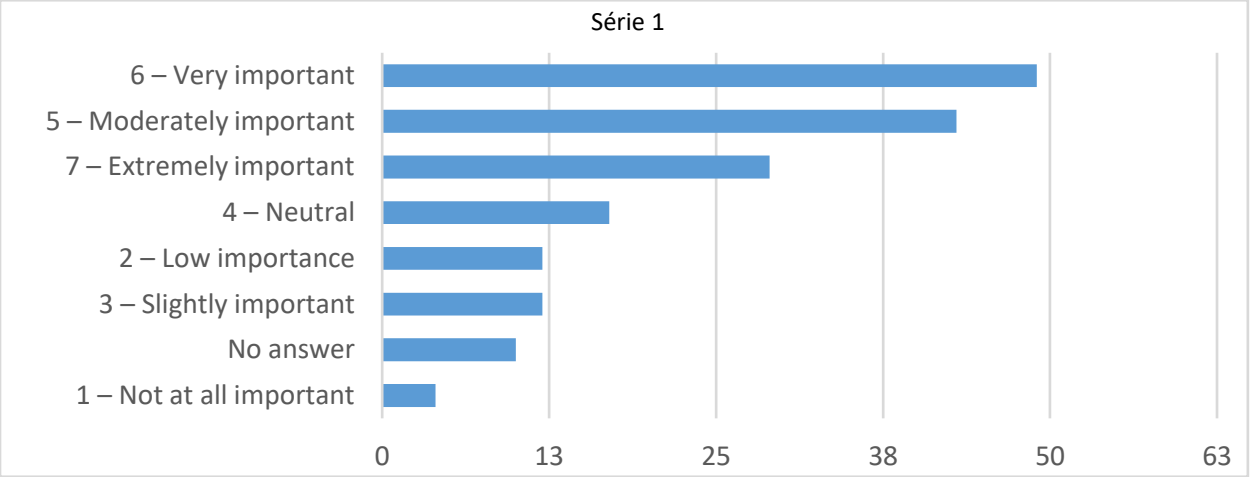
What would you expect from a training / capacity building on short food chain? [Please rank the importance of each proposition below from 1 to 7, 7 being the most important for you] [Legal advices]



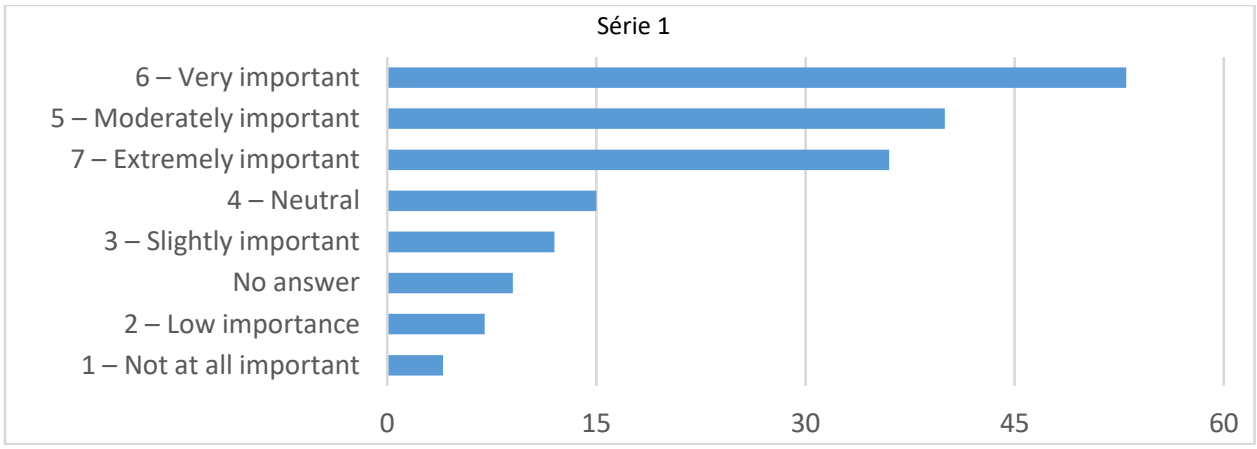
What would you expect from a training / capacity building on short food chain? [Please rank the importance of each proposition below from 1 to 7, 7 being the most important for you] [Infrastructural advices (digitalization, technical advices)]



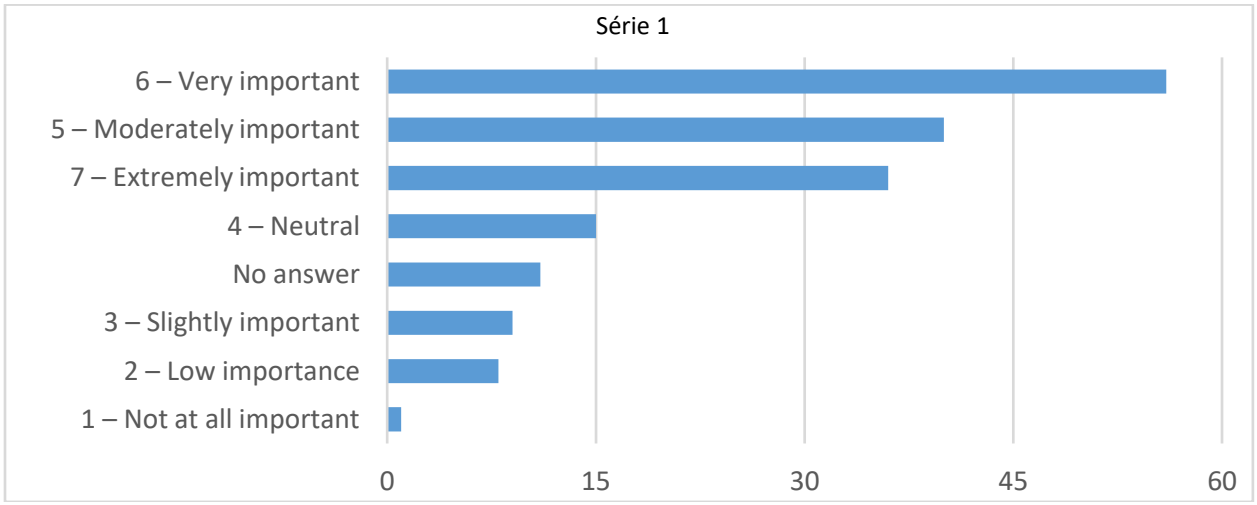
What would you expect from a training / capacity building on short food chain? [Please rank the importance of each proposition below from 1 to 7, 7 being the most important for you] [managerial advices .]



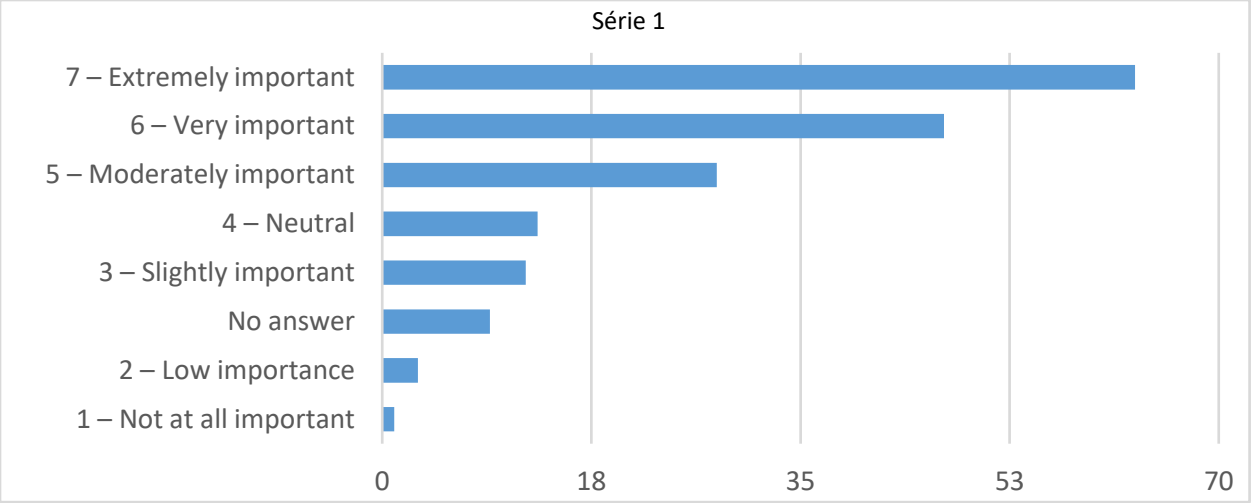
What would you expect from a training / capacity building on short food chain? [Please rank the importance of each proposition below from 1 to 7, 7 being the most important for you] [social advices (stakeholders' engagement)]



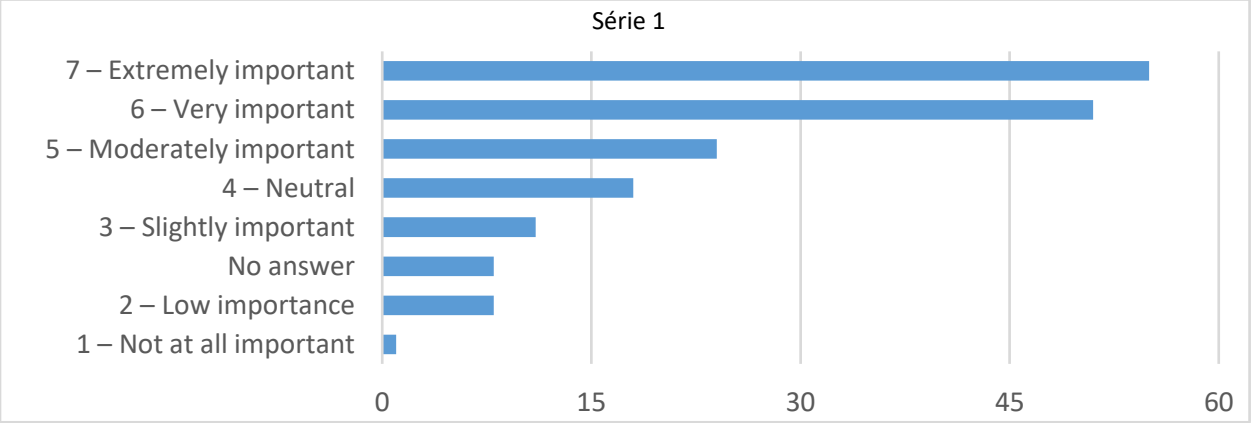
What would you expect from a training / capacity building on short food chain? [Please rank the importance of each proposition below from 1 to 7, 7 being the most important for you] [Financial advices (public/private support/funds; insurance, etc.)]



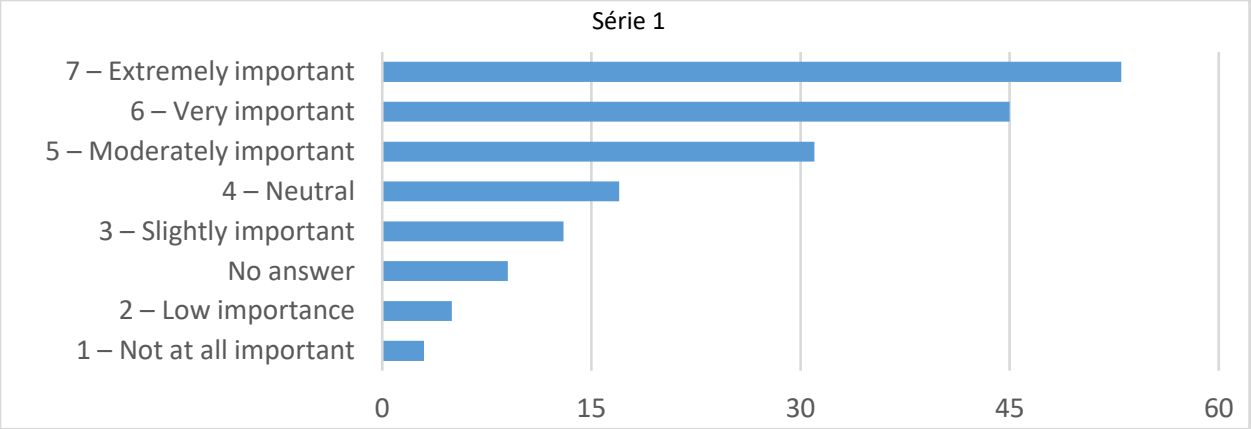
What would you expect from a training / capacity building on short food chain? [Please rank the importance of each proposition below from 1 to 7, 7 being the most important for you] [food safety standards]



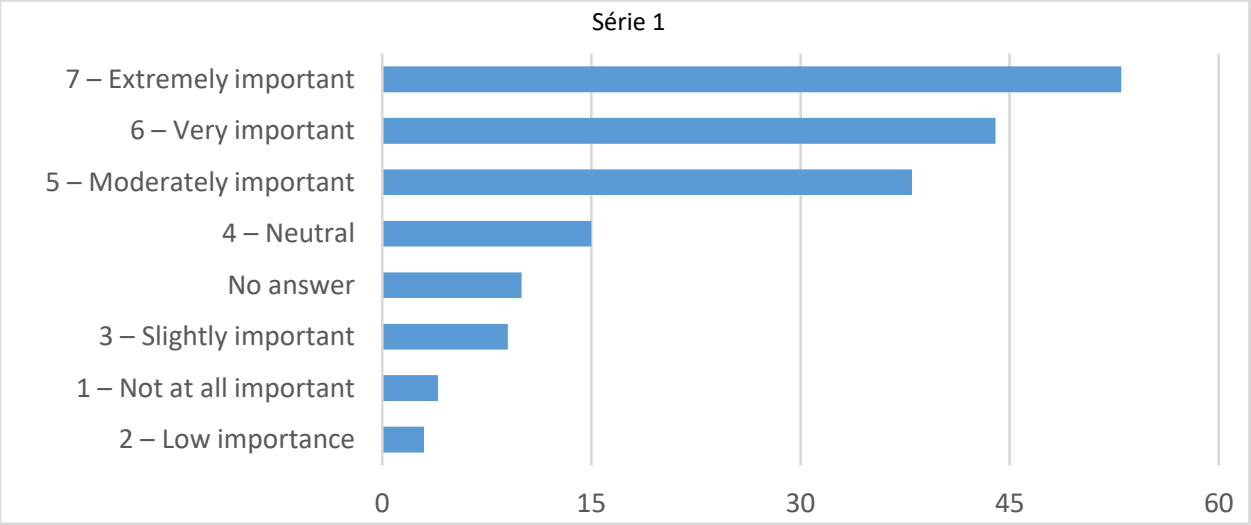
What would you expect from a training / capacity building on short food chain? [Please rank the importance of each proposition below from 1 to 7, 7 being the most important for you][basic elements on food processing and storage]



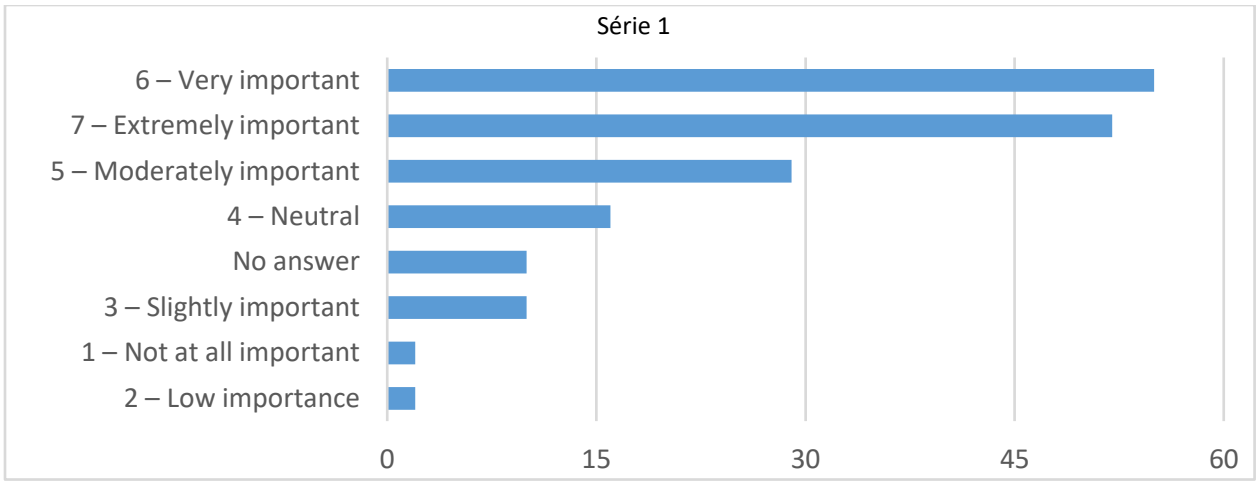
What would you expect from a training / capacity building on short food chain? [Please rank the importance of each proposition below from 1 to 7, 7 being the most important for you] [traceability.]



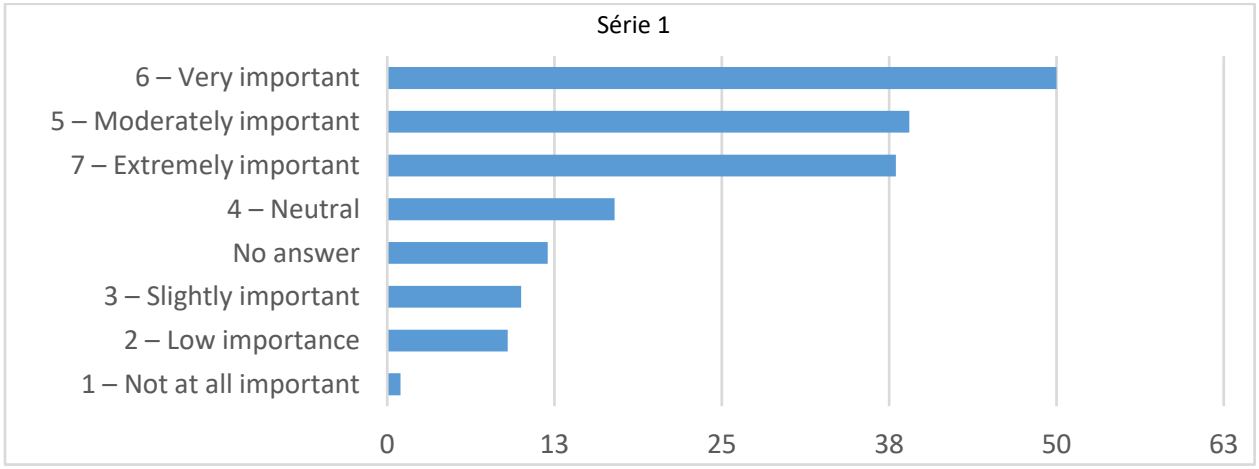
What would you expect from a training / capacity building on short food chain? [Please rank the importance of each proposition below from 1 to 7, 7 being the most important for you] [labeling schemes.]



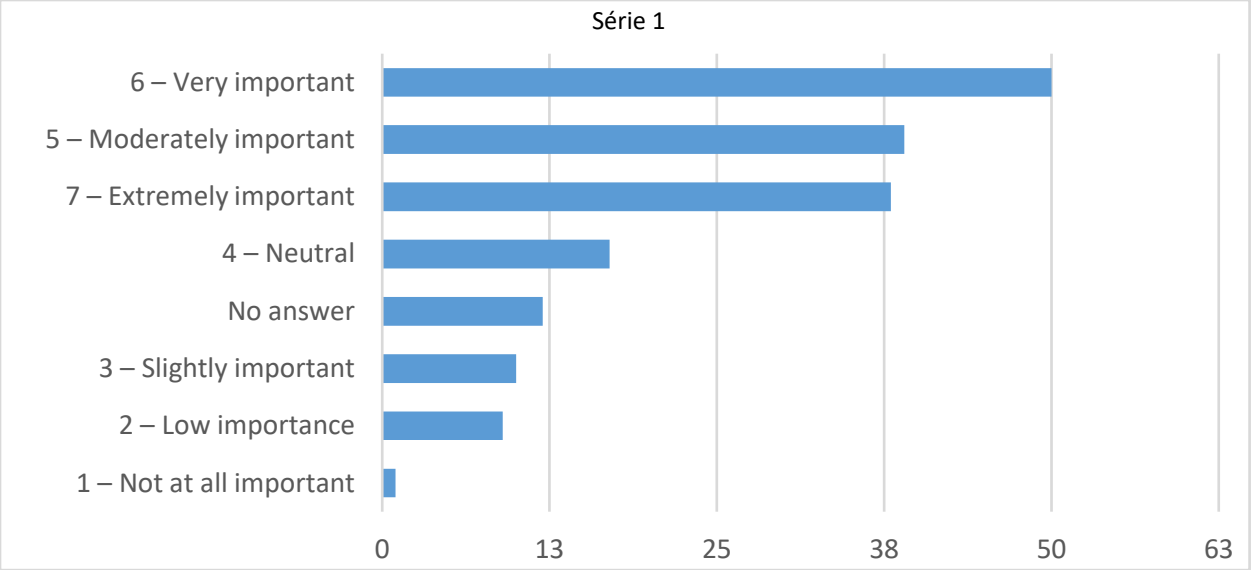
What would you expect from a training / capacity building on short food chain? [Please rank the importance of each proposition below from 1 to 7, 7 being the most important for you] [marketing (digital marketing)]



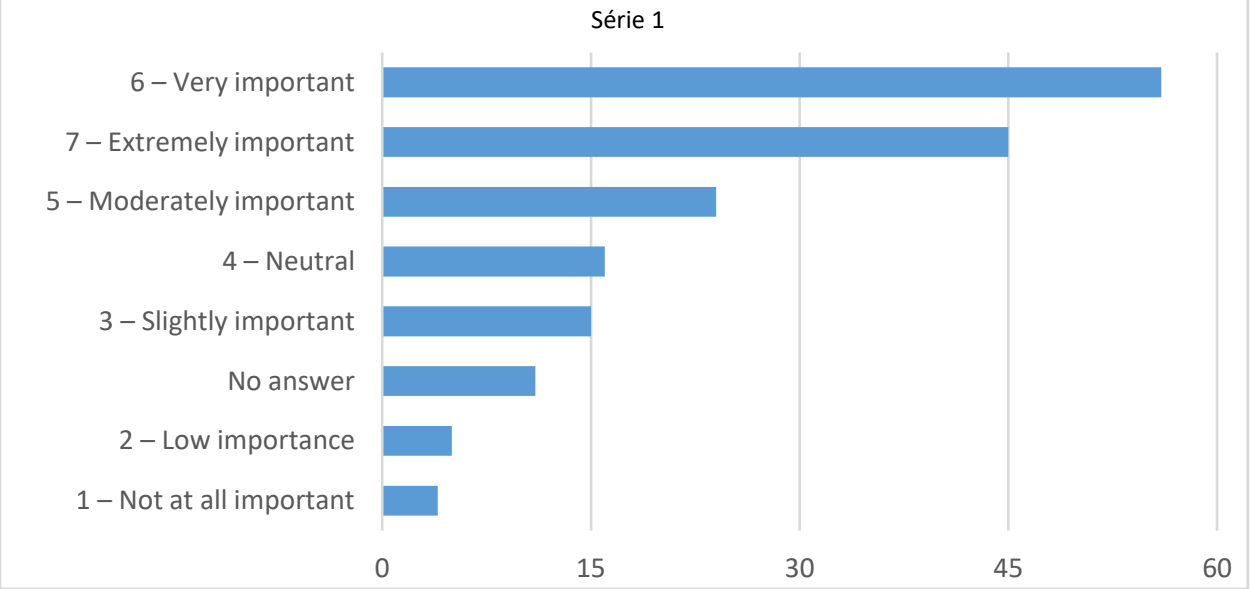
What would you expect from a training / capacity building on short food chain? [Please rank the importance of each proposition below from 1 to 7, 7 being the most important for you] [sustainable best practices (e.g. waste management; etc)]



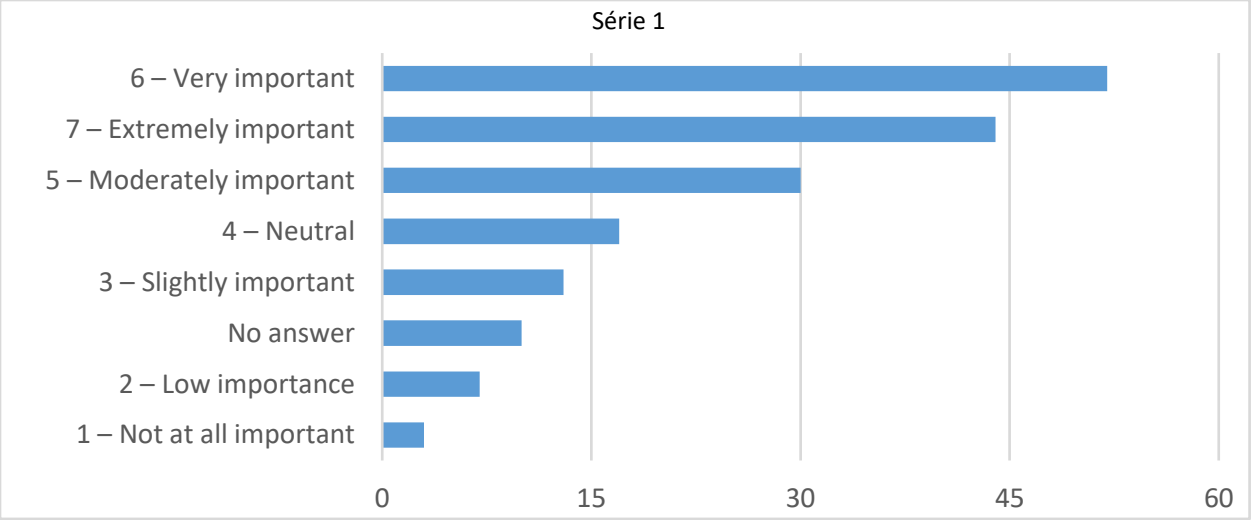
What would you expect from a training / capacity building on short food chain? [Please rank the importance of each proposition below from 1 to 7, 7 being the most important for you] [networking (knowledge sharing; public procurement; etc).]



What would you expect from a training / capacity building on short food chain? [Please rank the importance of each proposition below from 1 to 7, 7 being the most important for you] [legislation on different areas (food safety and hygiene…)]



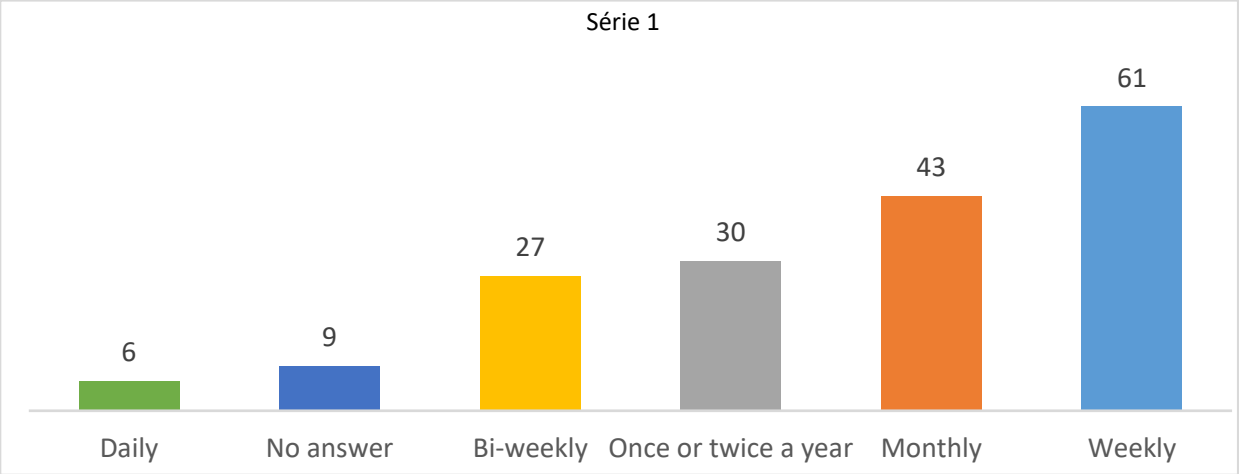
What would you expect from a training / capacity building on short food chain? [Please rank the importance of each proposition below from 1 to 7, 7 being the most important for you] [success stories]



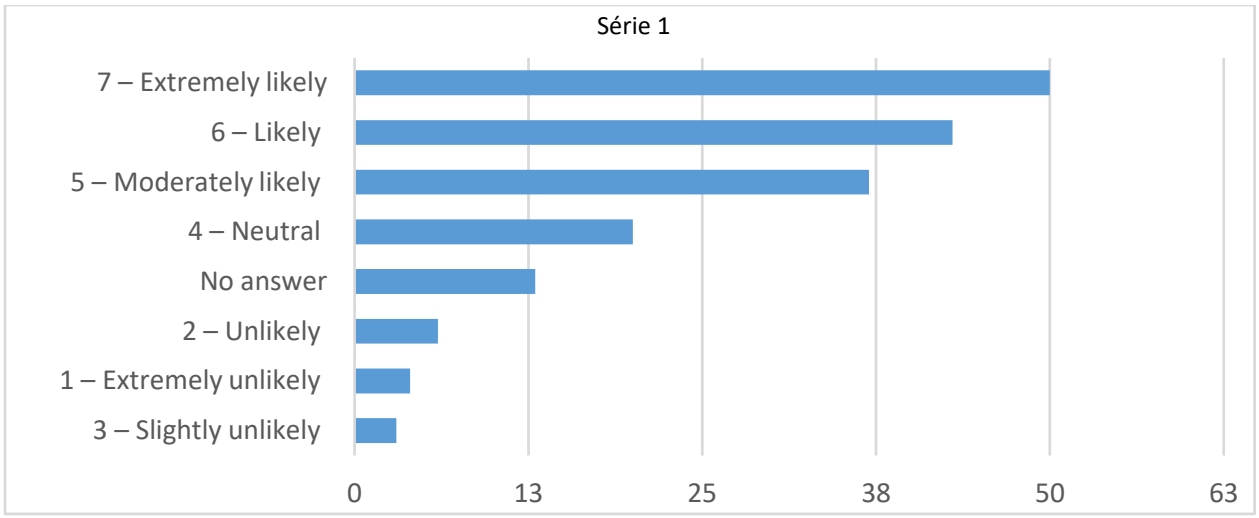
Distribution of proposed themes by interest of respondents (average ranking by importance)

Which type of training would you prefer for a short food chain capacity building?

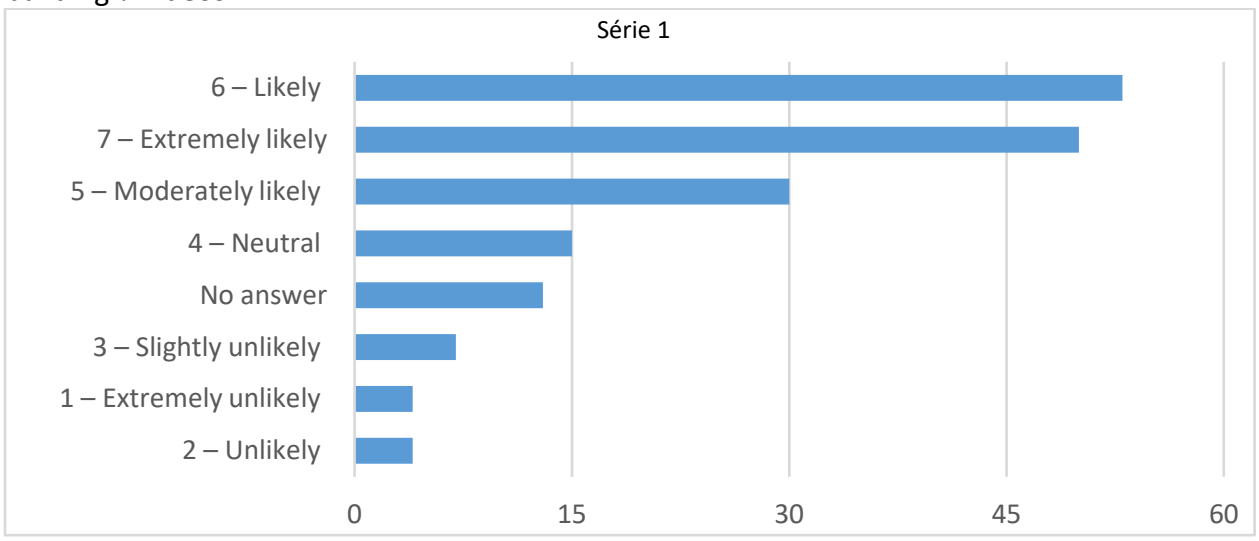
What is for you the ideal frequency of learning occasions?



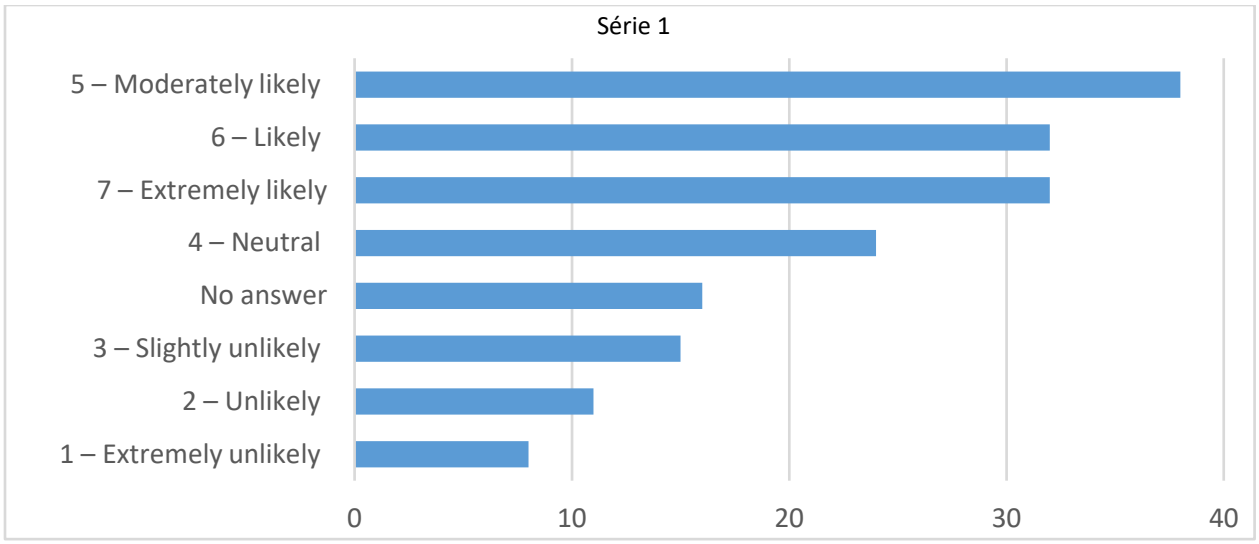
How susceptible would you be to use the following educational tools in short food chain capacity building ? Webinars



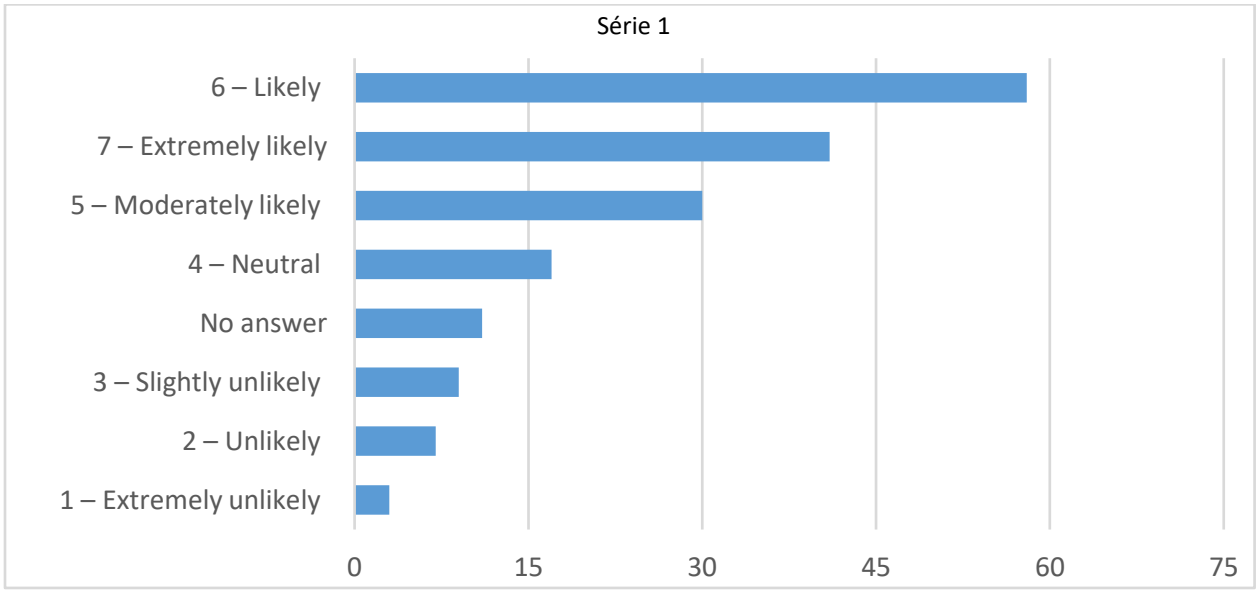
How susceptible would you be to use the following educational tools in short food chain capacity building ? Videos



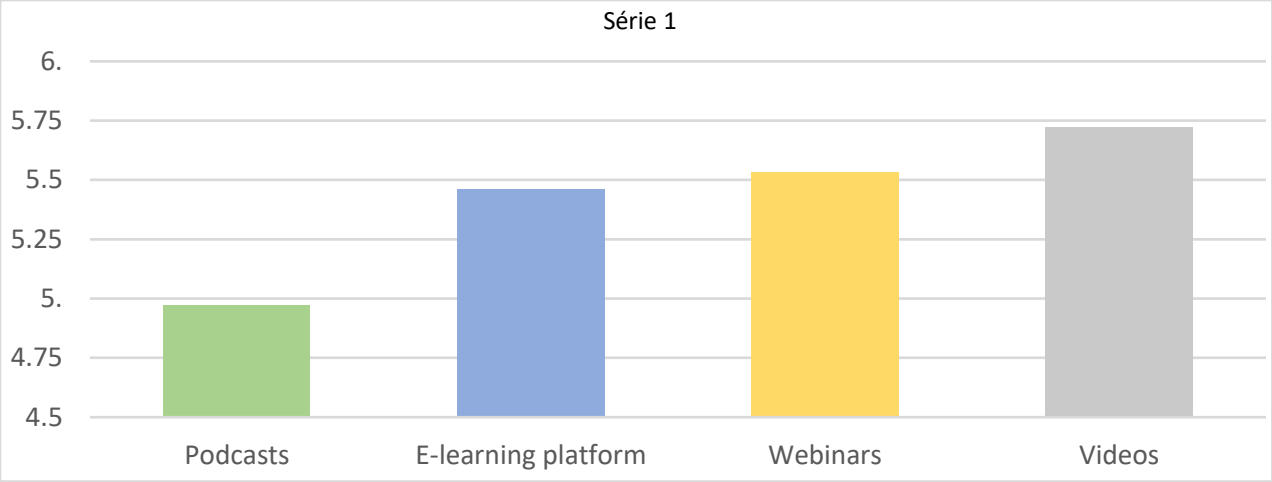
How susceptible would you be to use the following educational tools in short food chain capacity building ? Podcasts



How susceptible would you be to use the following educational tools in short food chain capacity building ? E-learning platform



Distribution of proposed tools by interest of respondents (average ranking by susceptibility to use)



4. Deliverable 1.4 - Pedagogical Requirements and Quality Standards

4.1 Introduction

Before to start the selection and development of the pedagogical content that will be provided during the project, aware of the importance of a tailored and high-quality learning content, the consortium partners will draw common principles and standards for the formulation and development of the training content.
This Deliverable describes these common principles and standards for the formulation and development of the pedagogical training content taking into account that the pedagogical content (1) will be assessed by stakeholders for feedback, (2) will be adapted for online media, (3) will be translated in the national languages of the Partners. The result of these activities (4) will provide key practical skills to EU producers.

4.2 Quality criteria for (online) courses

The University of Parma team has conducted a literature review to identify the common best practices used in MOOC's worldwide. After looking at specific studies on online education 1 we have been underlined the following quality criteria which should be taken into consideration for the next tasks according to our experience as Instructors at University level (first and second-cycle degree) and in Master Course and Professional Continuing Education. Our team is dedicated to making educational and experiential opportunities accessible to the broadest possible range of food supply chain stakeholders, including farmers and food industry. Thereby, according to the European guidelines applied on MOOCs (Massive Open Online Courses) just identified, we can

highlight the following criteria for high quality (online) education for our project.

The Quality criteria comprises:

- Course elements and best practices;
- Syllabus content;
- Educational material best practices;
- Pedagogical Content Index.

Table 1: Course elements and best practices

Course elements	Best practices	Description
Course content	6-8 Core Modules (CM) Each module (5-7 submodules SM)	The Course should be divided into Core Modules and each Modules in Specific Dedicated Courses (Sub-Modules SM)
Each Module/Submodule	Descriptive Name	in order to inform learners on the main topics
Each Module	Syllabus (see Table 2)	page with Program and Course information
Educational Materials (see Table 3)	Digital book text (handbook, contents) PowerPoint Presentation Video Exercises Forum Discussion Glossary with hyperlinks FAQ Keywords	In order to offer wide range of pedagogical solutions
Visibility of the educational materials	Only registered users	should be visible to register users even when the course is completed, three years after the end of the project

Material available for download	Yes	in order learners can have access to it without internet network and from different devices (Digital book text and the ppt presentation). Each module will be downloadable from a content storage site in pdf

Cont. Tab. 1		
Enable comments	Comments only for feedback task	Enable comments only at the bottom of every material page to promote feed back to the pedagogical team
Mobile friendly	Yes	
"Complete activity" button	Yes	at the end of each activity for monitoring progress
Certification	Yes	At the end of the course every participant will receive a pdf certificate

Source: adapted from N. Spyropoulou, C. Pierrakaes, A. Kameas (2014)

4.3 Syllabus Elements

A syllabus is the guide to a course. It will include course policies, rules and regulations, required texts, and a schedule of assignments. A syllabus can tell nearly everything learner needs to know about how a course will be run and what will be expected of you.

Table 2: Syllabus

Syllabus elements	Best practices
Title	• The title of the module and sub module should be informal and adapted to the target and should spark interest
Learning objectives	• SMART criteria (Specific, Measureable, Achievable, Realistic and in Time)
Target	• Define a specific target (owners, specific function, all)
Length	• Each theme (module and sub modules) must not last more than 4 hours that includes content material and effective engagement with interactive features and media tools. • Additional time required for supplementary reading and external resources
Entry levels:	• Beginner
Course schedule / Content description/ Calendar of events	• Learning subjects, course and information • Provide students with a tentative projected outline of significant events that occur throughout the course development...
Assessment modality	• Quiz
Plan the type of sessions	• Synchronous sessions should be integrated with asynchronous sessions to promote interaction between learners

Cont. Table 2	
Content expert teams (see Table 4)	• Set up a team of content experts with members from all the countries to assure a good translation and adaptation
Define didactical approaches in relation to defined learning objectives	• Active-learning oriented • Lectures and videos • Case study: Problem-based approach: • Focus: supplementary material on the subject of the sub-module in a box

	• Specialized content: problem solving (FAQ)
Provide some of the following learning activities based on pedagogical approach	• Activities to motivate and engage learners • Autenticity of the tasks in real life settings • Simulations and case study • Application of learning in real life's issues • Webinars • Activities promoting interaction between learners (to be adapted to local contest) • Additional and external resources (links and media tools)
Technical concepts	• Provide curated sources (references, open source) • Integrate tecnological tools (e.g. online documents, video conferencing etc.) • Size: for picture 1600x1200, for videos any kind of lenght can be uploaded, but is better to not exceed 15 minutes.
Define the types of media	• That should be used: video lectures, digital text, hypertext, PPT
Feedback concept	• Should be present to understand and improve the value of the course according to learner's needs and requests • Satisfaction forms at the end of each course are mandatory to fill to obtain the certificate
Evaluation Procedures	• Define how the learning objectives will be assessed • Courses should include quizzes to help learners verify their skills

Source: adapted from N. Spyropoulou, C. Pierrakaes, A. Kameas (2014)
Here described best practices on Educational Materials.

Table 3 : Educational material best practices

Educational material	Best practies
Ebook	• Guidance should be clear and easy to follow by learners; it should provide not only informations but also help learners to apply their learning through interactive activities
Ebook language/style	• The book must be written in English • The scientific content should be adapted for non-academic users • The tone of voice should be adapted to the target and should spark interest
Ebook length	• Each ebook should not exceed the length of 20 - 25 pages excluding additional material (links, focus, boxes etc.) (or 12-15 sections) and cover one theme
Videos	• Educational videos should have the possibility to be stopped • Duration of videos: 5-15 minutes • File size: up to 1 GB • Subtitles in local language
Powerpoint presentation	• Presentations should contain photos, charts and diagrams • Presentations should contain additional material (e.g. files, resources) • Presentations should be uploaded in pdf slideshow
Additional readings	• Links to documents or websites to examine in depth the subject of the module
Exercises	• Courses should include quizzes multiple choice questions to fix the concepts learned during the module and based on the real-world context to help learners transfer their knowledge in real life situations

Cont. Table 3

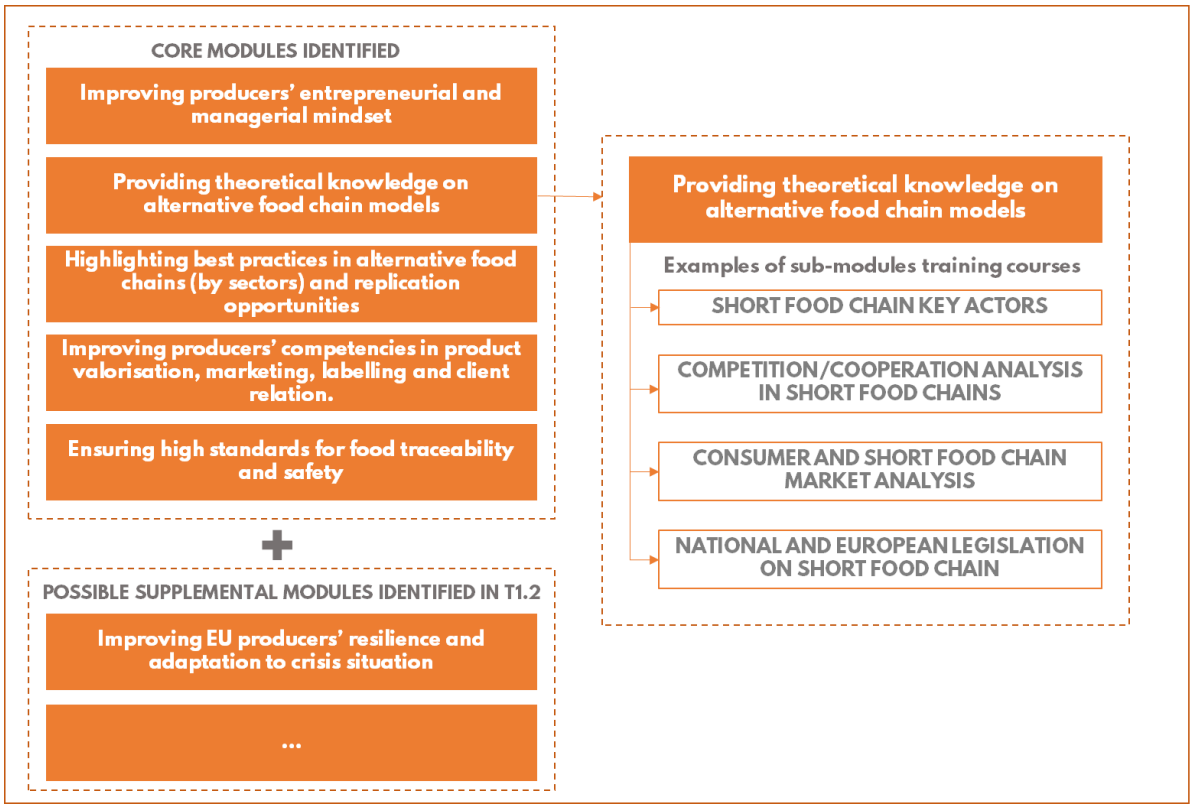
Glossary with hyperlinks	• Online articles and esseys should be present in every course and downloadable
Frequently asked questions	• Courses should include FAQ based on the content to help leaners to reach the point
Keywords	• Words used to indicate the content of the ebook
Copyright	• Open source materials if available

Source: adapted from N. Spyropoulou, C. Pierrakaes, A. Kameas (2014)

4.4 Development of Pedagogical Content

The foreseen Core Modules of the pedagogical content are:
- Improving producers' entrepreneurial and managerial mindset,
- Providing theoretical knowledge on alternative food chain models,
- Highlighting best practices in alternative food chains (by sectors) and replication opportunities,
- Improving producers' competencies in product valorization, marketing and labelling and client relation.
- Ensuring high standards for food traceability and safety

Each of the Core Modules identified will be subdivided in Specific Dedicated Courses (Sub-Modules SM) clearly defining the topic and ensuring a digestible learning content for the learners (See example below):



Agreed and confirmed, **the partners will co-develop the educational content** by:

- Identifying the **expected learning outcomes** and setting quantifiable indicators **of success**.
- Deciding on the **format** and on the **media** of the pedagogical content.
- Creating **raw pedagogical contents** on the selected topics in cohesive **training units**.

The partners involved in the development of the educational content will then submit their developed pedagogical content for an internal assessment to ensure that it meets the quality criteria defined and refined it if deemed necessary.

Assessment by stakeholders for feedback

For feed –back from stakeholders a version beta in English of the platform will be lanched and promoted in each countries for selected Modules.

Adaptation of the raw pedagogical content in different formats

The adaptation of the raw pedagogical content developed for the e-learning platform will answer to the two main use of the e-learning platform: the complementary training module of the blended-learning and the self-learning component.

The pedagogical content developed will be adapted in a MOOC format divided by thematic and sub-divided in short online training modules on specific topics according to the identified goals.

Translation of the content and platform in national languages

The partners involved in the project will provide the translation of the pedagogical content in national languages.

Table 4: Pedagogical contents (Modules and sub-modules)

Introduction

Project presentation

Objective of the project, partners, other info

Best practices guide on short food chains models development and implementation

Questionnaires and events results

The platform

Theoretical knowledge on alternative food chain

Theoretical knowledge on alternative food chain

Sustainability & Rural development

Short chain actors

Cooperation and trust in short food chains

Contribution to thepreservation of the culture/tradition/heritage of the territory (PDO products)

Consumer and short food chain market analysis

Legal aspect and financial advices

European and national legislation on short food value chain

Improving producers' entrepreneurial and managerial mindset

Managerial advice

Introduction - what is the multifunctional farm

Human capital management

Time and budget management

Control planning (cost classification)

Business Plan

Equipment

Fund sourcing (EU, National, local)

Ensuring high standards for food traceability and safety

Food safety

When is food safe at Farm level - Introduction General EU food law

How to ensure safety in a multifuncional farm

Animal and plant identification

Animal and plant health, One health concept -

Wrong behaviour - Risks and fake news; Take home message

European legislation; National and regional legislation

Basic elements on food processing and storage

Food quality and consumer trust

Food processing

Storage

New technologies, plant innovation (industria 4.0 digitalization)

Sustainable and user friendly food plants (economic, environmental, food waste, social point of view)

Packaging, labelling, traceability, block chain

Case studies (crowdfarming, sharing, etc)

Improving producers' competencies in product valorisation, marketing and labelling and client relation

Local-Short Chain Food Marketing

Introduction & Value chain

Instruments (swot, business canvas, questionnaire e focus group)

Competitor analysis

Customer satisfation - Branding - Loyalty

Innovation and Design Thinking

Digital marketing

Case studies

Labeling scheme

Introduction (and how to obtain)

Ingredients and allergens

Nutritional

PDO/PGI/LABEL ROUGE/others

Organic

Sustainable labeling (comprising Km 0)

European, National and Regional legislation

Highlighting best practices in alternative food chains (by sectors) and replication opportunities

Success stories

Italian cases

Hungarian cases

Spanish cases

French cases

Slovenian cases

4.5 References

- European Alliance for the Quality of Massive Open Online Courses (MOOCs), MOOQ, Online Courses - The Checklist for Beginners - MOOQ for the Quality of MOOCs (mooc-quality.eu) downloaded April 2021
- Natalia Spyropoulou, Christos Pierrakaes, Achilles Kameas (2014), Creating MOOC guidelines based on best practices, downloaded March 22nd 2021, EDULEARN14_paper-draft.pdf (eap.gr)
- Udemy, Udemy Course Checklist, downloaded March 2021 from https://docs.google.com/document/pub?id=1SbCv-uFZk6LiUh0D8tuwRmlK1Ybgnom0wXIPjvjuOdg

5. Deliverable 2.1 - Specification of e-learning platform

5.1 Introduction

In the past decades, EU producers and consumers have shown greater acceptance of Short Food Chain (SFC) models. However, the COVID-19 pandemic has highlighted to the food sector at the European level that traditional food chains can be unstable.
The goal of the FoodImprov'iders project is to educate stakeholders and consumers to maximize their potential for SFC sales. To achieve this goal, project partners will create specific pedagogical content, which will be available on an e-learning platform. The platform needs to be appropriate for self-learning and blended learning methods, using activities to make learning more effective and enjoyable. Additionally, the platform will be available in French, Hungarian, Italian, Spanish, and Slovenian to bridge the gap between farmers and international academic teachers.
This report outlines the main specifications of the platform, in line with the objectives of the FoodImprov'iders project.

5.2 Specifications

Purpose and scope of this Specification

The establishment of platform specifications aims to identify, define, and list the key features of the online e-learning platform to ensure that the platform development matches the requirements needed for both the online learning component of blended learning and the self-learning component.
The platform is expected to have a pedagogical section with training content and to support sharing knowledge about short food chains.

Organization of this Specification

EP and EKU will be responsible for establishing the platform specifications and working together to develop a backlog outlining the required technical functionalities of the e-learning platform. The IT team will be in charge of designing and developing the platform, and the backlog will also include the different steps of this process, the rationale behind the choice of hosting services, the ergonomic and user experience approach to be followed, and the planned process for ensuring the availability of the learning content beyond the e-learning platform's lifetime. This includes identifying where and how the content will be accessible after the end of the platform support, which is four years after the end of the project.

5.3 E-learning platform

In this section, the general specifications related to the e-learning platform of the project, as well as the proposed tools to be used, will be described. The platform will work under three different roles: content manager, editor, and user (learner), which will be referred to in an agile way. The specifications will be appropriate for each role, and if not, they will be denoted.

Requirements

Presentation of project e-learning materials

This part will be used as a means of hosting the documents of the project. Such documents may include leaflets, documents, deliverables, etc. This area must have the ability to be available in all project languages although, different content may be uploaded for each language.

Presentation of e-courses information

This area will provide the learners with the ability to browse through the available educational material. It may also provide a way to search for specific content, based on some criteria and it may contain some other elements related to the courses. This area must have the ability to be available in all project languages although, different content may be uploaded for each language.

User registration and authentication

A login and registration form must be provided so that learners can register and access the educational content of the project, as described in other deliverables. This area must be available in all project languages (French, Hungarian, Slovenian, Italian, Spanish, and English), although different content may be uploaded for each language. Asking e-learning platform users to register will enable partners to monitor connections and analyze the attractiveness and relevance of the educational content.

Links

The links section can contain useful links to external or internal pages, related to the project. This area must have the ability to be available in all project languages although, different content may be uploaded for each language. This section may also refer to news or events related to the project.

Multilingual elements

Multilingual capabilities needed to ensure that there are no linguistic limitations for online learning. Seven languages required: the native languages of the consortium partners (French, Hungarian, Slovenian, Italian, Spanish, Bulgarian) and English.

Cooperation with the e-learning environment

There will be some requirements related to the e-learning environment, which is a web-based environment that contains the corresponding educational material. The functional and non-functional requirements of the e-learning environment are described below, under Chapter 3. The e-learning environment should be usable at any time on any device with cross-browser compatibility.

Software proposal

Table 1. Portal requirements

Requirement	EKERNEL core CMS feature	Extension and feature	Level of requirements met (CMS and/or combined with extension)
Presentation of project e-learning materials	EKERNEL is designed to support both teaching and learning, delivering a powerful set of learner centric tools and collaborative learning environments that empower both teaching and learning.	Not needed	High
Presentation of e-courses information	All-in-one learning platform, providing the most flexible tool-set to support both blended learning and 100% online courses.	Not needed	High
User registration and authentication	EKERNEL is a robust software learning management system powering learning environments. It fully supports user registration and authentication mechanisms which allows easier management of the user rights.	Not needed	High
Links	As a CMS, EKERNEL fully allows the creation and management of links content, which can be presented in various ways in the website.	Not needed	High

Basic accessibility	Available mostly only by the way the content is organized and displayed in the website.	Not needed	High
Multilingual elements	Fully supported. Multilingual capabilities to ensure that there are no linguistic limitations to learning online.	Not needed	High
Cooperation with the e-learning environment	Use anytime, anywhere, on any device, as it is web-based with cross-browser compatibility.	Needed	High

Hardware proposal and requirements

The e-learning platform that will be developed for FOOD IMPROV'IDERS is proposed to operate under the following hardware requirements, so as to ensure compatibility with the proposed software, good performance, capacity, availability and latency, good security features, as well as maintainability and portability:

Virtual hosting environment featuring
▪ RAM: 16 GB memory
▪ Hard drive initial capacity: 4 vCPU
▪ CPU: 256GB SSD storage place for the operationg system and the database server. An additional 100 GB HDD storage space for the media items
▪ Operating system: Ubuntu 20.04 LTS

This hardware must be able to run flawlessly:

- Processor: 1GHz (min), 2GHz dual core or more recommended.
- Memory: 512MB (min), 1GB or more is recommended.
- Consider separate servers for the web "front ends" and the database.

This will ensure that all desktop clients (windows and linux), as well as mobile devices, with the latest browsers versions, can access the e-learning application at any time without disruption.

5.4 E-learning environment

This section describes the requirements related to the e-learning environment, based on the previous deliverables, the tools that are proposed to be used, as well as how well these tools meet these
requirements.

Requirements

The FOOD IMPROV'IDERS e-learning environment is a web based environment which contains the corresponding educational material. With this, the participating users can train and assess their knowledge on the selected topics.

The requirements are categorized in functional and non-functional:

Functional requirements

1. Getting started
- Role allocation
- Confirmation screen
- User Registration Form
- Language selection
- Search bar

2. Working
- Content selection and display
- Content selection interface
- "Activity" development interface
- Account activation/deactivation
- Smart book editing interface
- Assessment creation
- Content management system

3. Feedbacks
- Feedback
- Content process monitoring

Non-functional requirements
- User data processing and storing
- Provide content
- Content translation
- Report count
- Store and display feedback

The exact function of each of these requirements has been explained in the O2 deliverables and it is
beyond the scope of this document to perform an in-depth analysis of each one here. For each of
the functional requirements, a priority level has been specified.

Software proposal

EKERNEL is a robust software learning management system powering learning environments. It is designed to provide educators, administrators and learners with a single robust, secure and integrated system to create personalised learning environments. Developed on pedagogical principles, EKERNEL is used for blended learning, distance education, learning groups and other e-learning projects in schools, universities, workplaces and other sectors. The EKERNEL engine with customizable management features is used to create websites with online courses for educators and trainers to achieve learning goals.

EKERNEL is:

- Built for learning globally Proven and trusted by more than 150.000 users per day.
- Designed to support both teaching and learning, delivering a powerful set of learner centric tools and collaborative learning environments that empower both teaching and learning.
- Always up-to-date, as it is continually being reviewed and improved on to suit the current and evolving needs of its users.
- Multilingual capabilities to ensure that there are no linguistic limitations to learning online.
- All-in-one learning platform, providing the most flexible tool-set to support both blended learning and 100% online courses
- Highly flexible and fully customizable in any way and tailored to individual needs.
- Scalable to any size from a few students to millions of users.
- Robust, secure and private when needed, to protect against unauthorized access, data loss and misuse.
- Use any time, anywhere, on any device, as it is web-based with cross-browser compatibility.

Functional Requirements and proposed software

Table 2 summarizes the functional requirements of the e-learning environment and explains how well these are met, using EKERNEL Software and possible extensions.

Table 2. Functional requirements

Requirement	Software and/or extension feature	Priority level
Confirmation screen	EKERNEL	High
User Registration Form	EKERNEL	High

Search bar	EKERNEL	High
Content selection and display	EKERNEL	High
Content interface	EKERNEL	High
Assessment creation	EKERNEL	High
Multiple choice interface	EKERNEL	High
Topic metadata	EKERNEL	High
L-mite approval	EKERNEL	High
Content reporting	EKERNEL	Medium
Feedbacks	EKERNEL	Medium
Content selection interface	EKERNEL	Medium
Account deactivation	EKERNEL	Medium
Role allocation	EKERNEL	Medium
Follow trainer	EKERNEL	Medium

Non functional requirements

Table 3. summarizes the non-functional requirements of the e-learning environment and explains how well these are met, using EKERNEL Software features and possible extensions.

Table 3 Non-functional requirements compared to the EKERNEL Software features

Requirement	Software and/or extension feature	Level of requirements met
User data processing and storing	EKERNEL	High
Provide content	EKERNEL	High
Content translation	EKERNEL	High
l-mite management (storing and approval)	EKERNEL	High
Suggest difficulty level for l-bundle	EKERNEL	High
Publish l-bundle	EKERNEL	High

Publish l-mite	EKERNEL	High
Return for editing	EKERNEL	High
Delist l-mite	EKERNEL	High
Delete l-bundle	EKERNEL	High
Report count	EKERNEL	High
Store and display feedback	EKERNEL	High
Reputation and ranking	EKERNEL	High
Delete account	EKERNEL	High

Hardware proposal

The e-learning application that will be developed for FOOD IMPROV 'IDERS, is proposed to operate under the same environment as the website of the project. Thus, the hardware requirements, so as to ensure compatibility with the proposed software, good performance, capacity, availability and latency, good security features, as well as maintainability and portability are exactly the same for the e-learning application. This will ensure that all desktop clients (windows and linux), as well as mobile devices, with the latest browsers versions, can access the e-learning application at any time without disruption.

6. Conclusion

The objective of this phase of the work was to develop tailored pedagogical contents that needed to be useful to the producers already involved in short food supply chain but also for the ones that wanted to become part of this kind of supply chain.
Together with the production of the pedagogical material it was necessary to develop a tool (e-learning platform) to allow the fruition of the material produced.
Overall it can be stated that the aim of these Intellectual output were reached despite the delays and difficulties due to the pandemic.