COREADO
connecting consumers and producers to rebalance farmers' position

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

Deliverable 3.2

Replicability of innovative approaches within different EU regions

Document Summary

Deliverable Title	Replicability of innovative approaches within different EU regions
Version	01
Deliverable Lead	IPS
Related Work package	WP3
Author(s)	Svetla Stoeva (IPS) Petya Slavova (IPS) Dona Pickard (IPS)
Contributor(s)	Erik Mathijs (KU LEUVEN) Marco Moretti (KU LEUVEN) Mirentxu Asin (INI) Rui Almeida (CONSULAI) Joana Faria Anjos (CONSULAI)

Communication level
☒PU Public
☐PP Restricted to other programme participants (including the Commission Services)
☐RE Restricted to a group specified by the consortium (including the Commission Services)
☐CO Confidential, only for members of the consortium (including the Commission Services)

Grant Agreement Number	101000573
Programme	Horizon 2020 H2020-RUR-2020-1
Start date of Project	01-01-2021
Duration	42 months
Project coordinator	Katholieke Universiteit Leuven

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

Table of contents

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

List of abbreviations

AKIS	Agricultural Knowledge and Innovation Systems
B2C	Business to consumers
B2B	Business to business
BCM	Business Canvas Model
CAP	Common Agricultural Policy
CF	Conceptual Framework
CSA	Community Supported Agriculture
D	Deliverable
DST	Decision Support Tool
EU	European Union
GI	Geographical Indicators
ICT	Information and Communication Technologies
LAG	Local Action Group
NGO	Non-Governmental Organization
NOFAs	Novel and fair food systems
PESTEL	Political factors (P), Economic factors (E), Socio-cultural factors (S), Technological factors (T), Environmental factors (E) and Legal factors (L).
Q&A	Question and Answer
QR	Quick Response
WP	Work Package

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

List of figures

List of tables

List of pictures

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

1. Introduction

1.1. COCOREADO's objective

The overall objective of the project is to coordinate and support actions to rebalance the position of farmers in supply chains (in novel and fair food systems) and public procurement of food. COCOREADO thereby takes two starting points. First, as a point of departure, it collects existing innovative initiatives across Europe. These initiatives are subsequently scrutinised from the perspective of the farmer's position in the chain and translated into good practices and hands-on approaches. Second, through an Ambassadors network, COCOREADO aims to invest in trainings, educational materials and decision support tools complemented with the co-creation of new 'seed' initiatives in practice. New initiatives with a potential to improve the position of farmers in the food chain are supported and evaluated. An explicit focus of COCOREADO is to foster opportunities for young people in rural areas to co-create innovative solutions that overcome current hurdles for farmers and respond to consumer needs, while simultaneously improving the conditions for sustainable public procurement to supply healthier and seasonal food. A key tool for creating such environment will be the COCOREADO Ambassador Training Programme.

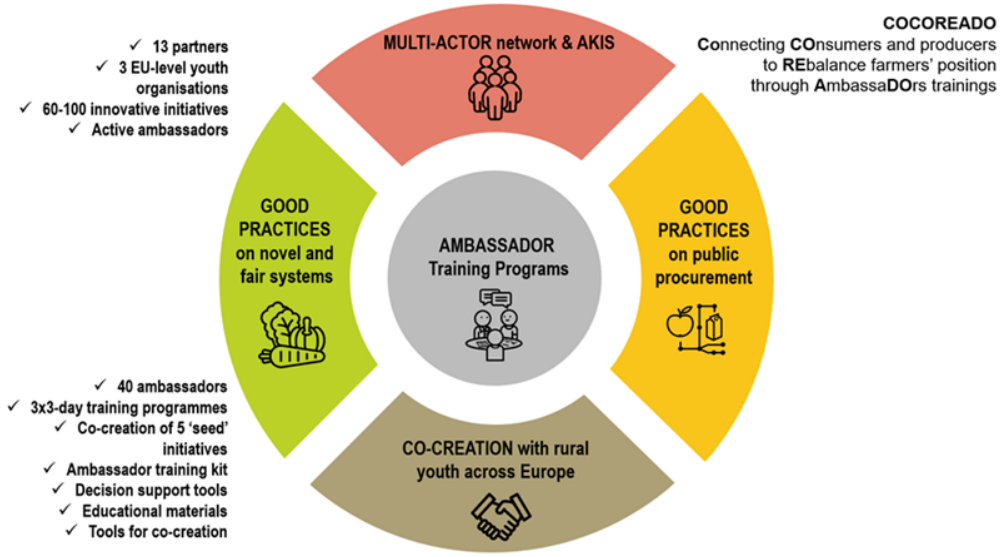


Figure 1 - Overview of COCOREADO's objective and approach

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

1.2 Aim of the report

The aim of the report is to present results from the implementation of Task 3.2 "*Replication in sites throughout Europe*"and Task 3.3. "*Cross-visits*". It is also based on the application of NOFAs replicability framework, developed within Task 2.3. "*Framework for selecting and assessing promising innovative initiatives",* presented in deliverable 2.3 "*Three frameworks for selection, evaluation and replicability of innovative initiatives*".

The report focuses on the replicability of novel and fair food systems (NOFAs) in various European regions. Following COCOREADO's Conceptual framework (CF), NOFAs refer to an innovative initiative that presents:

A collaboration between a set of actors seeking for innovative sustainable solutions. The main objective of such a collaboration is either to rebalance the position of farmers in food supply chains and/or to connect consumers and producers.

To disclose the replicability of NOFAs, 14 examples of short food supply chain collaborations were analysed in-depth. The examples were selected from a pool of 61 NOFAs across Europe. The selection included both project partners and COCOREADO's ambassadors, who appointed these examples as the most inspiring and as having the highest potential for replication.

The report is structured in five parts. The first part explains the aim of the report. The second part presents an overview of the NOFAs replicability framework[1] and the main result of its application - the development of 14 NOFAs replicability roadmaps. The third part discusses the opportunities and the bottlenecks for replication of the NOFAs in different European regions. Drawing from the NOFAs replicability framework, presented in D2.3, it discusses the "Environment of innovative initiatives", providing examples of specific internal and external environmental factors that should be considered by potential replicators. It also includes the results from the reflection of both project partners and COCOREADO's ambassadors on main external factors that may affect the replication of the selected NOFAs. This reflection widens the context and presents factors from European regions not captured by the 14 innovative initiatives. The fourth part duscusses the effects that the 14 NOFAs have on farmers' income and provides insights about other economic and social benefits for farmers, consumers and broad local communities. The fifth part presents COCOREADO's cross-visits as a tool to share knowledge and experience and to enhance further the replicability potential of NOFAs.

[1] The NOFAs replicability framework is presented in D2.3. "Three frameworks for selection, evaluation and replicability of innovative initiatives".

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

02

2. NOFAs replicability roadmaps

2.1 Overview of the NOFAs replicability framework

The NOFAs replicability framework was part of the implementation of Task 2.3. *"Framework for selecting and assessing promising innovative initiatives"*. Within this task, three frameworks were developed: one to select the NOFAs innovative initiatives, one to evaluate them for good practices and one to assess their replicability.

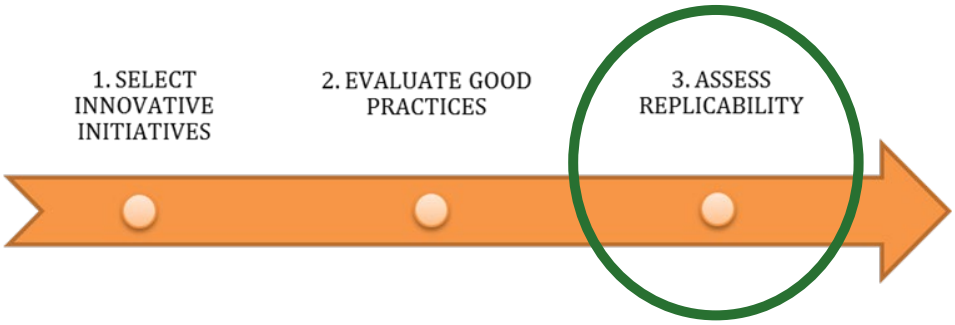


Figure 2 - Overview of NOFAs frameworks

The NOFAs replicability framework aims to provide end-users - potential replicators along the food supply chains in Europe (farmers, consumers, rural entrepreneurs, people passionate about food, etc.) with key information about possible opportunities and bottlenecks they might encounter if replicating innovative initiatives and /or the good practices they hold in their respective regions.

The framework defines "**replicability**" as **the possibility of transferring (parts of) initiatives (i.e. a set of good practices) to other contexts**. Replicating innovative initiatives means recreating the knowledge of a complex process and considering a variety of different dimensions that might influence this replication such as socio-cultural, legal, economic, political, environmental, and technological factors.

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

Based on business management and agricultural innovation literature and applying the concept of "business environment", the NOFAs replicability framework systematised a diversity of factors that might influence the replicability on innovative initiatives and good practices.

The framework also provides a categorisation of the different factors to be considered when replicating NOFAs and the good practices they have. The categorisation captures the "**Environment of innovative initiatives**" and makes a distinction between two main types of factors: **internal and external environmental factors**. The internal environmental factors are the factors that exist in the innovative initiative, imparting strength or causing weakness to the initiative. External environmental factors are related to conditions and events outside the initiative that affect the way it operates. These are also the factors that affect the initiatives' willingness and potential to collaborate with other organisations and physical persons.

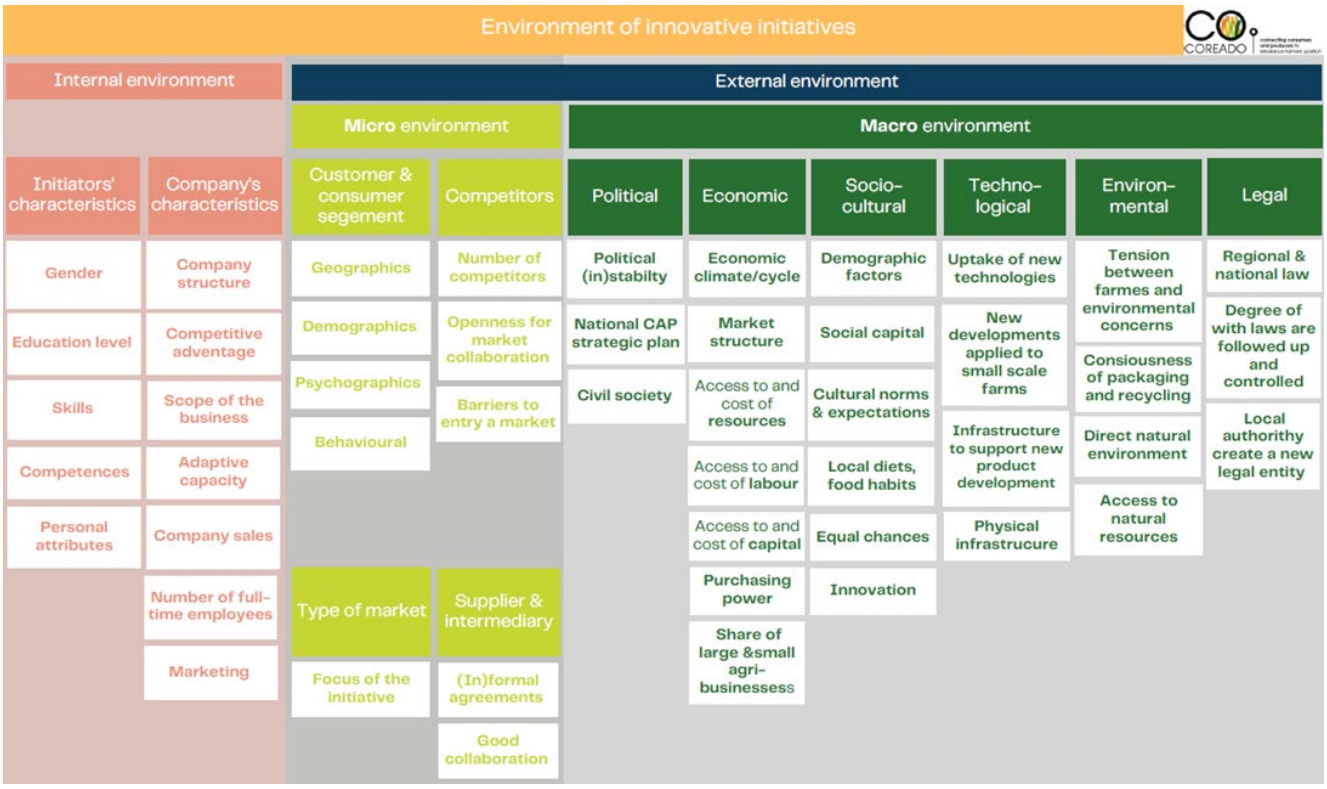


Figure 3 - Environment of Innovative Initiatives

The internal environmental factors make a distinction between the characteristics related to the initiator(s)/founder(s) of the NOFA and the characteristics related to the initiative. The external environmental factors make a further distinction between micro and macro factors. Micro environmental factors have an immediate impact on the initiative, while the macro ones give an overview of the factors influencing all initiatives at a broader level. Macro factors can be captured and analysed through the multidimensional perspective provided by the PESTEL analytical tool, allowing the business environment to be structured into political, economic, social (i.e., socio-cultural and demographic), technological, environmental, and legal dimensions (factors).

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

The NOFAs replicability framework was applied to 14 innovative initiatives, evaluated for good practices and success factors. The application was based on the analysis of the data collected at the evaluation stage, where key informants from the initiatives were approached with specific questions related to the replicability potential of their initiatives. Project partners were involved in applying the PESTEL analytical tool to identify macro environmental factors that may influence the replicability of the selected NOFAs.

2.2 NOFAs replicability roadmaps

The NOFAs replicability roadmaps were developed for each of the 14 innovative initiatives, representing short food supply collaborations.

The roadmaps should be considered as an instrument with a two-fold purpose. On one hand, they aim to share knowledge about the main internal and external factors that influenced the success of the initiatives. The roadmaps provide information about key inter-organisational characteristics and regional/national context specific characteristics that should be considered by end-users or potential replicators. The information is presented in a user-friendly way, avoiding project and scientific language and using different visualisation evidences like pictures, infographics and interesting facts about the initiatives.

On the other hand, the roadmaps aim to inspire end-users to replicate the initiatives and/or the good practices they have in their respective regions. Applying a story-telling approach, the roadmaps recreate the initiatives' pathway towards their end-results. The pathways are structured around the following thematic categories, guiding potential replicators to learn about:

- problems experienced by various actors along the European food supply chains,
- solutions found,
- resources to fund the solution,
- actors involved,
- good practices and factors of success that derive benefits for farmers and consumers when they are engaged in short food supply chain collaborations,
- a self-assessment tool for potential replicators interested in the application of specific NOFA experiences,
- and a Business Canvas Model to illustrate key elements of each specific NOFA.

Each of the categories includes a narrative highlight (a subtitle) that best reflects the specifics of the respective initiative. Business Canvas Models (BCM) are included to visualise the key building blocks of the initiatives, including insights about cost structures and revenue streams. To facilitate replication, a self-check tool is introduced to help end-users to consider important elements and contextual factors when developing and planning the replication of the NOFAs and their good practices.

During the third ambassador training, the replicability roadmap concept was presented and discussed with ambassadors and their substantial feedback helped to improve the final version of the instrument and to make it easier to be applied into practice.

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

The replicability roadmaps were also verified by key informants from each NOFA for accuracy of the information provided and for validation. The preparation of the roadmaps was a co-creative process, highly appreciated by COCOREADO practice actors, namely the NOFAs actors and the network of ambassadors.

The Replicability frameworks are presented in the Annex 1. They will be also available on COCOREADO's website

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

3. Opportunities and bottlenecks for the replication of NOFAs

Following the NOFAs replicability framework, the development of the replicability roadmaps allowed the identification of important internal and external factors that should be considered by end-users if replicating the initiatives in their regional/national contexts.

The internal factors provide information about the characteristics of the initiators/founders of the food supply chain collaboration and the inter-organisational characteristics of these partnerships. The information gives insights about the opportunities that short food supply chains create for strengthening the position of farmers and for better connectedness between producers and consumers. The examples of good practices illustrate some specific factors leading to the success of the collaborations.

The external environmental factors provided insights about context specific opportunities and bottlenecks generated within political, economic, social, technological, environmental and legal domains, that may influence the replicability of the 14 initiatives and the good practices they represent and should be considered by potential replicators.

3.1 NOFAs internal environmental factors

3.1.1 Characteristics of the initiator(s)/founder(s)

The initiators of the 14 NOFAs presented in the replicability roadmaps can be categorised into **3 main groups**: (1) farmers and food producers, (2) consumers and (3) other actors within and outside the food supply chains. In the first two groups, we found important presence of women-initiators, who either alone or as part of family or friendship-based communities built up successful short food supply chain collaborations. This gives ground for the hypothesis that the role of women and female entrepreneurship in alternative food systems, including short supply chains is increasing. Again, the first two groups are overrepresented by mostly young people - farmers and consumers, which provide evidence about the increasing engagement of the youth in innovative initiatives that strengthen the position of farmers and provide better connectedness between producers and consumers.

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

The first group of initiators is represented by mostly **young farmers and food producers**, who were in their 30s by the time they started the respective initiative. Not all of them have formal education in agriculture, and many are self-taught. Most of the farmers-initiators have formal secondary or high-level educational background in occupations different that farming. Few of the initiators are heredity farmers, who gained experience and knowledge within their farming families. Some of the farmers-initiators are newcomers into agriculture, who have received specialised training in specific production methods, such as organic, biodynamic or other type of farming. Only few have received some training in business planning and business administration. Most of them do not have marketing or logistics skills or expertise on how to develop a communication strategy or a business plan. Amongst farmers-initiators, there are local opinion makers, producers with experience in rural community and short food supply chain development, leading innovators in the field of organic farming in certain national or regional contexts. In other words, although farmers-initiators generally lack basic marketing and business skills, this has not hindered the successful development of their innovative ideas of how to strengthen the position of farmers and how to better connect producers and consumers.

On the other hand, some of the NOFAs were initiated by **consumers**, demanding local, fresh and /or organic products, sharing the values of fair production and consumption, striving for decreasing food waste or having interest in food, innovation and sustainability. Consumers-initiators are mostly young urban people, having different backgrounds like for example in environmental engineering, landscape architecture, finances, marketing, IT, etc. Among them we can even find a group of urban cyclists with awareness about local environment and consumption of organic food, who initiated a consumer-driven organic cooperative. Being experienced in farming seems to be a less important factor for the success of the initiatives led by consumers, compared to the ability to build on existing competencies and having organisational, decision-making and communication skills.

The third type of initiators relates to **other actors along or outside the food supply chains**. Here we find a diversity of actors. In one of the NOFAs, the initiator is an expert and researcher with strong experience in rural development, agricultural economics and project management. His expertise in building business models was crucial in establishing the initiative he founded. In other NOFAs, local municipalities, a city council, LAGs (Local Action Groups, established under the European programme LEADER), NGOs, agricultural institute, tourist entertainment and accommodation company, etc. represent the actors, who activated the initiatives. These are actors, who have marketing and networking expertise and diverse competencies such as promoting the local brands, applying techniques of empowerment and conflict management, knowledge of strategic planning, etc.

Apart from this categorisation, the application of the replicability framework to the 14 NOFAs shows that their **success cannot be explained only with the initiators' characteristics**, as part of the internal environmental factors. It is rather the fact that **all initiators entered into various forms of horizontal or vertical collaborations** (private or public-private partnerships) with other actors along or even outside the food supply chains. Thus, the success of the initiatives is due to the combination of various specialisations, of different skills, knowledge and expertise. This is an important factor that should be taken into account if a replication in different contexts is considered.

To share this knowledge and to facilitate replication, the replicability roadmaps provide information about the founders of the initiatives, about other actors involved in the collaboration and about the interactions among them in the sections "**Problem encountered**", **"Actors involved"** and **"How the partnership works"**.

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

3.1.2 Inter-organisational characteristics

These characteristics are presented in the NOFAs replicability roadmaps in the sections "**Funding the solution"**, **"Good practices that bring benefits"** and **"Main factors of success"**. The Section **"Business model at a glance"**, using the Business Canvas Model template, provides key information about the initiatives' characteristics related to their value proposition, key activities and resources, customer segments and relationships, as well as details about their cost structure and revenue streams.

The analysis provided below aims to outline some common characteristics of the initiatives that influenced their success and should be taken into account if replication is considered. Detailed information about each of the initiatives is available in their individual replicability roadmap.

Almost half of the 14 NOFAs have received **public funding** from EU programs, national funding instruments, seed support from local authorities, city councils, non-profit foundations and schools, mostly at the initial stage of establishing the initiatives. Only one of them has a history of continuous public financial support for almost 20 years of its operation. At the same time, most of these initiatives have become financially self-sufficient over time once they started to receive revenues from sales and/or membership fees, educational activities, etc. to cover the expenses of the operations and to allow re-investments in the further development of the collaborations. The rest of the NOFAs were established by **private funding**, through either allocation of resources from other businesses owned by the founders or crowd funding. Many of them have used subscription models, allowing the accumulation of resources to cover operational costs and the salaries of employees. In one of the NOFAs, representing a consumers' cooperative, we found practices of establishing a reserve fund, where unused investment membership contributions are allocated for future investments, as well as a solidarity fund to cover membership and investment fees of farmers or consumers who wish to join the cooperative but cannot afford the initial contribution.

In all of the NOFAs we found **the role of the same shared values** that facilitate the establishment of partnerships between actors with common vision. Actors aim to provide opportunities for strengthening the position of farmers along the food supply chains and /or to further develop connection between producers and consumers. All actors are guided by the idea to make quality fresh food accessible for larger and different social groups. Within the NOFAs we found practices that allowed **direct participation of farmers and food producers in the decision-making processes**. For example, in most of the initiatives, farmers are able to set the price of their produce by themselves, which **strengthens their negotiating power** and provides them with a stable income. We also find practices of **joint negotiation of the price setting**. There, farmers set the price for each product they supply and then the management of the initiatives together with the consumers, who participate in the collaboration, jointly decide whether to accept it or not. In cases when there are big differences in prices for the same products, all members negotiate to establish a common price. There are also practices of **collective decision-making** and joint creation of an annual strategic plan, where every partner, including farmers become part of the strategic decision-making process and can provide feedback and suggestions on how to improve the initiative.

All of the initiatives provide a **direct connection between farmers and consumers** either face-to face through farm visits, pick-up points for deliveries, fair and exhibitions, workshops, demonstrations and other social events or online - through social media, online applications or even through phone. These practices for direct sales and/or on-farm services, facilitate the **market transparency** regarding the

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

processes in the food supply chain from agricultural production to consumption: farmers and their produce become less anonymous and have an opportunity to gain information about consumers' demands.

In many of the NOFAs we found **innovative price-setting and paying mechanisms** providing incentives for fair exchange between producers and consumers. For example, to promote local and small producers, a consumers' cooperative makes a categorisation among the different producers to apply one markup or another to the purchase cost and thus arrives at the selling price for the consumers. In a food hub, product prices are agreed weekly based on market conditions. In a farmers' shop we find two types of payment mechanisms. In the first one, farmers provide their products to a concession and receive their profit after the realisation of their products. In the second one, farmers sell their products to the owners of the shop with a certain commercial discount. Then the owners add the same markup to the price at which they offer the products to cover their logistics and distribution costs. In both mechanisms, the final price at which the products reach the final consumer is no different from the price farmers ask for the products.

Another important factor for the success of the initiatives is that they **empower consumers** to make choices on what they eat and to pay for something they value. Some of the NOFAs allows consumers to test new products and receive their immediate feedback. This is a very simple way to find out which products are good and are sought after. Others, like CSA initiatives, allow consumers to grow and / or harvest their own products and to connect with food more directly. Initiatives that provide food basket schemes, activate consumers' support to small farmers, for example by giving them the opportunity to choose the content of the baskets, when and where to receive it and /or to directly visit farms and meet producers. In one of these initiatives, consumers cannot choose what products are provided in the baskets, but they can provide feedback on what they dislike and would like to receive. Collecting consumers' feedback appears as an important practice to inform farmers of the products that the consumers demand but are not available at the moment, so that supply and demand can be better adapted in future seasons to the benefit of both parties. We also find practices where consumers participate in decision-making processes regarding, for example, proposals to improve the economic, social and environmental sustainability of the supply and to suggest ideas about new products or farmers who can join the collaboration. Almost all NOFAs organise regular events to raise awareness about organic farming, food waste and to increase the sense of community belonging. Workshops for children allow them to get an insight into farming and to develop an understanding of the connection between nature, agriculture and the origin of food.

The shared values are further underlined by the **principle of solidarity and trust relations** between the actors. Most of the collaborations are based on informal agreements rather than written contracts between the participants. Beyond formal agreements, we find practices where the selling price of the farmers' produce is informally agreed upon in advance each week. In this case it is the management of the initiatives who bears the risk of customers not paying and never passes this cost on to the producers. In the initiatives where formal contracts exists, it is the exchange of honest and factual information that facilitate the interactions among the participants in the collaborations. In all NOFAs we find practices that provide **transparency and clear information** which helps consumers to improve their knowledge about the origin and prices of the food they consume and farmers to better understand consumers' demands. A good example comes from a food hub, which introduced a blockchain technology and QR codes to ensure transparent and traceable food production processes.

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

Another good example comes from a consumers' cooperative, where in order to provide consumers with enough information on the production side, purchasing managers visit farmers to gain a better insight into what the organic label gives them. A third example shows how the creation of a regional brand linking food and craft production and farm and tourism services gives small producers a chance to reach consumers on their own, without having to rely on middlemen, and consumers are able to distinguish the local and unique from the mainstream and conventional. Thus, the **transparency of the management** appears as another important factor for building trust relations. In one of the initiatives, we find a practice where every partner has access to information about the allocation of resources and can see the balance of the bank accounts of the initiative. In other initiatives, we find various channels to provide all participants in the collaborations with information about the products, the reasons for choosing them and their prices, farmers and production methods, either face-to-face or through social media, phone, newsletters. Thus, the **trust between producers and consumers** is developed not only through the regular supply of products and food, but is further promoted by events that bring consumers closer to the farms. The practices of **information sharing** facilitate the **joint knowledge creation** among the actors in the collaborations: about the quality and origin of the food, the benefits of its consumption, the production methods, about the challenges experienced by farmers, new market niches, consumers' demands and new target groups, etc.

Some of the initiatives represent **intermediated short food supply chains**. Here the role of the intermediary appears crucial for the success of these initiatives. The main characteristics of the intermediaries is that they connect producers and consumers and perform important functions instead of the farmers and food producers involved in the collaborations. In one of the cases, the intermediary is a farming family. The family performs marketing, logistics and distribution instead of the farmers allowing them to spend as much time as possible at their farms and not being physically involved in various functions along the supply chains. A food hub, serves as an intermediary who negotiates flexible, open and fair prices with farmers, while at the same time verify for consumers the origin and operation of the supply chain. In consumers' cooperatives mediation is provided by the management, which are often consumers themselves. They often prioritize small farmers and facilitate farmers to sell their produce. In another initiative representing a collective local brand, we find a public authority in the role of the intermediator, who coordinates all the activities to connect producers and consumers, to promote the brand, and to organise local markets and sales, etc.

The 14 NOFAs differ in their characteristics regarding the **knowledge, skills and competences** of the partners involved in the collaborations. Some of the initiatives, where the founders are newcomers to agriculture and have no previous experience in the field, follow a rather "**learning by doing" pathway**. For example, the establishment of a rooftop urban garden by landscape architects, was a process of **"trial and error"** demanding new knowledge creation about CSA principles, about building partnerships and making connection between production and consumption. No special skills are demanded from those farmers and consumers who want to become part of this social community. On the other hand, in some initiatives we find a **professional team of people** with different backgrounds, but with specific tasks and responsibilities such as accounting, educational programing, managing the farmers network, communication and outreach. There are also initiatives, which have nominated a leader (a key actor) in charge of all activities, including management, marketing, logistics, etc. Some of the initiatives provide farmers with special training before joining the initiative, like for example to learn how to share resources and knowledge, how to minimise the costs associated with marketing of local produce and acquire technological skills to use the on-line delivery systems and other

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

applications. Such practices appear to be successful in avoiding miscommunication among the farmers as well as to avoid possible conflicts among them. Again, not all NOFAs have clearly planned and developed communication and marketing strategies, while others are engaged in active social media campaigns and use off and online channels to reach markets and consumers. However, both pathways bring success to the initiatives in reaching their objectives. Thus, the importance of the existence or the absence of previous experience in farming, people management skills or marketing knowledge, depends mainly on the scope and scale of the initiative: some are local while other have national coverage, they have different objectives and perform various activities.

A common characteristic for all of the 14 NOFAs relates to the **customer segments** that they target. Almost all initiatives use **both B2C and B2B** sale and marketing strategies. All initiatives target mostly urban people and young families with children, interested in high quality products, mainly local and/or organic and more generally - and in sustainability of food production, related to animal welfare, food waste and other sustainable practices. These are also consumers, often from mid to high-income groups, looking for alternatives to the large retail chains and concerned with environmental issues. For example, one of the initiatives has targeted a specific consumer group - employees at their workplaces, considering them as people who lack time to visit farmers' markets, shops or farms, but willing to support small local producers and to have access to fresh and quality food. B2B relations are established both with public institutions like schools, hospitals, kindergartens interested in raising awareness about the origin of food and with hotels, bars and restaurants interested in high quality, organic and/or local products. Private companies who want to change employees consumption behaviour and supply them with local foods as part of their social responsibility programs are also presented as a customer segment.

3.2 NOFAs external environmental factors

The external environmental factors provided insights about context specific opportunities and bottlenecks that may influence the replicability of the 14 initiatives and the good practices they represent and should be considered by possible replicators. Following the PESTEL analytical tool, the macro factors are presented below as well as in the **section "Context"** in the NOFAs replicability roadmaps.

3.2.1 Evidence from the 14 innovative initiatives

To capture the external environmental factors, providing opportunities and bottlenecks for the replication of the 14 NOFAs, a PESTEL analysis was performed. The PESTEL analytical tool captures the environmental characteristics of 6 macro domains: political factors (P), economic factors (E), socio-cultural factors (S), technological factors (T), environmental factors (E) and legal factors (L).

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

Table 1 - Overview of the PESTEL factors with specific examples

Political factors	- Political (in)stability: level of corruption, elections, … - National CAP strategic plan: local translation of the CAP legislation… - Civil society: farmers' union, trade union, other NGOs participation, including LAGs…
Economic factors	- Economic climate/cycle - Market structure - Access to and cost of resources - Access to and cost of labor - Access to and cost of capital - Purchasing power - Share of large and small agricultural business
Socio-cultural factors	- Demographic - Social capital - Cultural norms and expectations - Local diets, food habits - Equal chances - Innovation
Technological factors	- Uptake of new technologies - New developments applied to small farms - Infrastructure to support new product development - Physical infrastructure
Environmental factors	- Tension between farmers and environmental concerns - Consciousness of packaging and recycling - Direct natural environment - Access to resources
Legal factors	- Regional and national law - Local authority creates a new legal entity - Degree to which laws are followed up and controlled

Within the **policy domain,** there are a number of **opportunities** provided in the EU context, where the 14 NOFAs are located. For example in Slovenia, short food supply chains can benefit from the strong policy engagement at national and regional level to develop local brands as a type of local quality label. Slovenian government provides support to local brands through favourable policies such as financial incentives, grants, and certifications, including quality schemes such as the Geographical Indications (GI) to promote and protect the authenticity and quality of local products. This policy support further fostered the sense of belonging to the place of the local population and its entrepreneurial capacities. In Finland there is public funding available for direct sales. Under the Finnish National Rural Development Programme, farmers can receive funding for developing channels for direct sales of local

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

food. The programme also recognises the creation of REKO[2] rings as eligible for funding, especially through a measure for start-up aid for rural businesses. REKO short food supply chains benefit from the support of local municipalities which provided spaces for pick-ups of the pre-ordered products. The role of the municipalities in supporting short food supply chains is also obvious in Latvia and Denmark. In Latvia, for example, it was the close cooperation of the founders of a short food supply chain initiative and the Riga City Council that made possible the renovation of an old farmers' marketplace. It was transformated into a social place that fits the new urban lifestyle with a mixture of social and economic activities, digital, online and on-site opportunities and a diversity of products and services. In Denmark, Copenhagen local authorities provided seed funding for the establishment of the first rooftop garden in the city. As Denmark is leading globally in promoting organic food production and consumption, organic production has been given priority by national government for more than 25 years. Danish organic food and farming policies apply a wide range of policy instruments, both national and EU supported, that affect supply and demand of organic food. The country has the highest market share of organic products in the world, with about 80 percent of the Danish people purchasing organic food.

In some EU regions, innovative initiatives for strengthening the position of farmers and for better connection between producers and consumers face serious **bottlenecks at policy level** as well. For example, in Portugal, there is still not enough support for entrepreneurship and innovation. Although there are public funding mechanisms for innovation and partnerships in agriculture, red tape prevents farmers and other entrepreneurs from applying for them. Thus, local NGO and EU programmes appeared to be better options for funding innovative ideas. In Bulgaria the implementation of CAP instead of supporting small and regional producers of fruit, vegetables and healthy foods and promoting short supply chains, is geared towards supporting large grain producers. These examples demonstrate that having EU or/and national policies in place is not enough to support farmers and consumers in their efforts to directly access fresh and healthy food. The administrative and legislative barriers through which policies are implemented create serious obstacles to expanding the relevance and reach of short food chains. Requirements for co-financing by the beneficiaries represent another significant obstacle for those wishing to apply for public funding. That is why, it is not surprising that almost half of the 14 innovative initiatives presented through their replicability roadmaps were self-funded, crowd funded or applied subscription models allowing them to cover operational and other costs.

The economic domain seems to impose **more challenges than opportunities**, at least within the contexts where the 14 innovative initiatives are embedded. In terms of opportunities, there are some good examples from Spain (Navarra region) which is not only one of the most important producing regions in Spain, with a wide variety of organic food products, but a reference region within Europe for healthy and sustainable food, especially vegetables. The proportion of organic acreage in Navarra is constantly increasing as small businesses generally focus strictly on organic production. In the region as in the whole of Spain, the consumption of organic products is growing by over 20 % annually due to the increasing demand for local and seasonal consumption. The long tradition in organic production and consumption make the region suitable for the development of various initiatives like Landare, that

[2] The name of the REKO model is short for Fair Consumption in Swedish

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

promote organic production and reconnect farmers and consumers. In addition, in Navarra region there is a social movement in favour of healthier and more sustainable food, striving for fair prices for the farmers. Constantly increasing consumers' demand for local and organic food can be also observed in Finland, which influenced the development and the spread on the REKO ring idea. In Belgium, the Covid pandemic has changed consumption patterns, stimulating people to look for local food and visit farms. As it is the case with one of the 14 initiatives presented through the replicability roadmaps, the opportunity for buying from vending machines, for walking to the farm and using it as a social space, for being able to find various types of products, and for buying them in different cuts and sizes, made people choose to go to the farm rather than the store.

Apart from these good examples, the economic domains in other EU regions provide various **bottlenecks** imposed over the development and the operation of short food supply chain initiatives, which may hamper their replication. For example, while the Slovenian context offers advantages for local brands and produce, it also faces challenges such as limited market size, economic constraints, and global competition pressure. Overcoming these weaknesses would require potential replicators to be able to perform strategic planning, to put strong marketing efforts, and the ability to differentiate and leverage the unique characteristics of local produce and its brands. In Portugal and Bulgaria unfair food supply practices can be observed all over the chain. In Portugal, changes in the market of agricultural and food products have led to a huge concentration of supply in four large distributors, who represent about three-quarters of sales. This has also led to economic exclusion of small-scale farmers and hindering their access to the market. These developments contribute greatly to the abandonment of agricultural areas, the decline in the number of farms, and the stagnation of the rural economy in many regions. On the consumer side, in Portugal there were big layoffs, which diminished purchasing power and led people to cut down on shopping in the supermarkets. On the farmers'side, this led to increasing production costs and big chains domination over the market share. In this context, short food supply chain initiatives like the one of the cases presented in the replicability roadmaps appear as an alternative solution for farmers and consumers. In Bulgaria disloyal trading practices can be observed all over the food chain as well, including within short food supply chain initiatives. For example, online markets (platforms) in Bulgaria often put a price increase of between 40-60% of the offered products, thus making the final price for the customer many times more expensive. As a result, farmers sell a lot less through such platforms precisely because of the inflated price. Within the farmers' markets there are also practices which require the producers to pay a participation fee as well as between 10% and 15% of their turnover to the organisers of the market. At the same time, the organisers rarely cover logistics costs, which appear to be major expenses for the farmers. However, namely the strive to overcome these unfair practices stimulate the establishment of alternative initiatives providing more fair opportunities for farmers and consumers (the case of Good for you, good for the farm). Again in Bulgaria, although the demand for farming products and food has grown and direct sales have been constantly rising for the last 10 years, there are some serious challenges that micro and small farmers are still experiencing in the country. Lack of sufficient market orientation, high costs for realisation of production, weak cooperation, lack of integration between agriculture and the processing sector, underdeveloped system of trade of local products are serious barriers to small producers. Lack of skills and knowledge for market research, poor awareness of the market situation worsen the market positions of small farms. In the Czech Republic, organic products have a premium price, and consumers with high incomes can usually afford

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

it. That means that the financial situation of the customers target group has to be taken into account when replicating initiatives and good practices aimed to promote organic farming products and food as it happened in the Obziva initiative.

The social domain provides good **opportunities** for partnerships among various actors along the food supply chain in some EU contexts, while it hampers the cooperation in others. For example, in Slovenia, strong involvement and collaboration between local authorities, local tourism and crafts businesses and local agricultural businesses lead to the establishment of successful initiatives, as it is the case with Taste Lasko local brand. In Portugal, farmers are usually open for partnerships with consumers and the agricultural sector has long tradition of networking among supply chain actors. Nowadays the cooperatives play an important role in marketing dairy products, wine, olive oil and fruit and vegetables all along the food supply chains. Portuguese farmers become members of processing/marketing cooperatives mainly to obtain economic benefits and to improve their position in the food supply chain. What also stimulates the establishment of short food supply chains in the country is the demand of young urban consumers for fresh, local and organic food. In big urban cities in Portugal there is open mindedness about social problems such as food waste and climate change, with young people being the main force behind pushing these issues to the forefront.

At the same time, in some EU regions, there are still serious **bottlenecks in terms of partnership and collaboration within food supply chains**. In Bulgaria and the Czech Republic, the level of interpersonal and institutional trust is still very low, so that forms of cooperation between actors in the chain are limited to certain segments (primary agricultural production and distribution) and do not lead to the creation of comprehensive joint initiatives. The association of farmers in Bulgaria is a rather rare phenomenon and happens more formally rather than being influenced by the needs of the market and the farmers themselves. This poses challenges in terms of raising awareness about the benefits of building partnerships based on solidarity and trust relations.

The technological domain seems to be of less importance when potential replication is considered. It was identified to have influence only in two contexts. In Latvia, it is the consumers' willingness to explore new ways to shop fresh and local food, and novel services and social activities when using digital tools that influenced the success of the initiative presented in the Āgenskalns Market replicability roadmap. In Bulgaria, it turns out that the implementation of a technology alone, like vending machines, does not always lead to a sustainable short food supply chain. To make it affordable, it requires appropriate human service like it happens in one of the Bulgarian initiatives (Borima).

The impact of the **legal domain** was of importance for three of the contexts, represented by the 14 innovative initiatives, imposing more challenges than opportunities for establishing fair short food supply chains. For example, in Bulgaria direct sales from farmers to consumers are subjected to a number of legal restrictions and administrative procedures, which are a serious bottleneck for the development of short food supply chains. This situation is made even worse by the legislative framework on the specific requirements for direct supplies of small quantities of raw materials and foods of animal origin, which limits the volume, share of production of animal origin and regions of delivery. In Finland, legal, health and tax regulations have to be considered if replicating the REKO idea in a certain context. For example, raw milk is not allowed to be sold outside a farm in Finland. Every

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

producer is personally in charge for keeping the Finnish regulations and REKO ring has no legal responsibility by itself. In the Czech Republic, unlike other countries, there are no national regulations on cooperatives' operation. This provides more flexibility for the establishment of organisations that are looking to connect producers and consumers and to provide opportunities for direct sales, like in the case of Obziva.

3.2.2 Evidence provided by project partners and COCOREADO's ambassadors

As part of the second ambassadors' training, two reflection workshops were held to collect ambassadors' and project partners' feedback on the replication of NOFAs innovative initiatives and good practices they hold. The focus of the workshops was to disclose context-specific factors from various European regions that may provide opportunities or bottlenecks for the replication of the NOFAs. The discussions followed the PESTEL analysis approach, introduced as an analytical tool in the NOFAs replicability framework. Both project partners and ambassadors reflected on their national/regional characteristics of the contexts that may influence the replication.

For the purpose of the workshops, project partners and COCOREADO's ambassadors were grouped in four European macroregions depending on the coutry they represent: Northern European region (UK, Scotland, Ireland, Finland, Sweden); Central European region (Belgium, Germany, France); Former Socialist - Eastern and Baltic European region (Bulgaria, Slovenia, Latvia, Romania, Lithuania, Poland, Albania, Czech Republic) and Southern European region (Spain, Portugal, Italy).

The results of the analysis should not be considered as exhaustive and covering all characteristics of the national/regional European contexts. They are based on the experience of COCOREADO's ambassadors and project partners. However, as both ambassadors and project partners are representing a strong diversity of actors along national food supply chains, these results outline important features that should be taken into consideration if replicating innovative initiatives and good practices elsewhere.

An important outcome of the analysis is that **socio-cultural, economic and political factors seem to have stronger contextual impact for replication compared to technological, environmental and legal ones in all of the macro-regions**.

The feedback on the influence of the **policy domain** shows that in all countries represented by project partners and ambassadors, there are EU or other national financial mechanisms in support of collaboration between supply chain actors and of innovation in local food systems. At the same time, in almost all national contexts we can observe serious **bottlenecks** that may affect potential replication. In countries like UK, Germany, Portugal, Bulgaria there are heavy administrative burdens that farmers and other supply chain actors experience when trying to apply for funding. In Romania, there seems to be a lack of national policy strategic planning on agricultural production at regional and national level. The frequent political changes in the country interfere with public authorities' abilities to support and create long-term partnerships with supply chain actors. Farmers usually have limited capacity to apply for funding. Feedback from Romania and Bulgaria are showing that public

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

authorities "*are not aware of the needs of the producers and are not allocating financial resources properly*", as a representative from Romania put it. Another one from Portugal explained that "*The applications for public funding are too bureaucratic. Farmers need support to apply*". In Bulgaria, national policies limit the amount of produce that small farmers can sell directly to final customers. Thus, the legislation prevents small farmers from expanding their networks of individual customers. There is a high level of fragmentation within the national Agricultural and Knowledge Innovation Systems (AKIS), which is evident from the miscommunication between all stakeholders in the food system like policy decision-makers, agri-food businesses, farmers, customers, etc. reported as part of the feedback. In Italy, Portugal and Spain the national CAP strategic plans and funding mechanisms are not focused enough on small-scale projects, which form certain bottlenecks for small producers and limit the opportunities for collaboration along the supply chain.

The feedback shows that **economic factors** seem to have great influence on replicability. On one hand, there is evidence that some characteristics of the national economic domains provide certain **opportunities** for replication of good practices. For example, in Romania there is national products certification for traditional products, mountain products and local certifications, which in turn increase the transparency and the visibility of the origin of products. In such context, good practices related to quality and safety of food would be easier to replicate. In Poland, there is an increase in cooperation between young farmers and young consumers. There is also a tendency where young farmers are becoming more sensitive to consumers' demands and are trying to adjust products to consumers' requirements. In Bulgaria, many farmers who produce organic products tend to target middle- and high-income families - a market niche focused not only on products but also on the end consumer. These elements of the context provide opportunity for the replication of collaborative practices related to joint knowledge creation, risks and resources sharing among farmers and consumers. Feedback from representatives of the Central and Northern European regions also describes some opportunities for replication provided by the characteristics of the economic environment. For example, in Belgium and France farmers have a clear focus on markets to reconnect with consumers while at the same time consumers demand to know more about the origin of products. In Scotland and UK, crowdfunding appears to be a well-known strategy for funding innovative initiatives that saves farmers and other supply chain actors from the bureaucracy if applying for subsidies and other national funding instruments.

At the same time, national economic domains impose certain **bottlenecks** for the replication of innovative initiatives and good practices that connect producers and consumers and strengthen the position of farmers in local food supply chains. In the Northern European region it seems that consumer awareness about product quality and nutritional benefits is still developing (UK). This in turn requires more efforts for farmers to promote quality products and to change consumption patterns. In Finland, food producers often lack brand building and other marketing skills. In Denmark land appears to be expensive and scarce resource, which makes it difficult to start a farming organisation and to expand it. The situation is similar in some countries in Central Europe (Belgium and Germany), where the scarcity of land causes high competition among farmers to access this resource. In turn, this competition appears to limit the farmers' willingness to cooperate. Other bottlenecks within the Central European region (for example in France), but also for countries from Eastern Europe, seem to be the dominance of large agribusiness and market structures. Big farmers have easier access to bank

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

loans and subsidies (especially when they require some pre-financing) to develop and implement innovations in farming. In Germany farming seems to be perceived as a risky activity and not as attractive as working as an employee, especially for young people.
The feedback on the **socio-cultural domain** reveals many common **challenges** experienced by farmers and food producers in all European regions. Representatives along the food supply chain from the Eastern and Baltic European region experience serious challenges in terms of reconnecting producers and consumers and strengthening the position of farmers. They all share the vision that although farmers know how to produce, they have limited marketing skills and knowledge of consumers' needs. Representatives from Romania share the observation that farmers and food producers often have no knowledge of consumer needs as they are very focused on their daily activities. In Latvia, local producers do not have a communication strategy, the skills and the time to properly promote themselves.

Within the Eastern European and the Baltic regions (Romania, Bulgaria, Albania, Slovenia, Poland, Latvia) farmers have mostly high school level and often no formal education in agriculture. Ambassadors and project partners from these regions share the need for professionalisation of the farmers' communities, be it fiscal, accounting, marketing, etc. At the same time, the reflection shows that majority of consumers do not have much influence on food production. Latvian consumers seem to be very price sensitive and not willing to pay extra for "social value". The source and method of production do not seem to be important for consumers (Poland). In Bulgaria quality certification is not associated by consumers with high quality food. For example, in this country, there is a black market for organic certificates which additional decreases trust in organic food. As a representative from Latvia explained "*Consumers look for brands not for certificates*". In Romania, farmers are not very open and not used to providing information to the consumer, which hampers potential partnerships for better connection between producers and consumers. This is why in Romania there are few examples of successful multidisciplinary and inter-sectoral partnerships within the food supply chain. The situation in others countries from these regions is similar. In Latvia farmers are rarely cooperating, and this is also the case in Georgia were producers are used to working independently and rarely cooperate with consumers and other actors along the food chain.

A tendency of disconnection between farmers and producers can be also observed in other European regions, according to the received feedback. For example, in the UK and Scotland consumers are not used to visiting farms and to engaging in partnerships with producers. As a representative from Scotland put it: "*Consumers just want to buy products, they are not engaged in farming*". Again, in the UK, there is a lack of consumer awareness about product quality and nutritional benefits of the food. In Portugal, farmers generally lack marketing knowledge and communication skills with consumers and other actors along the chain. As one of the ambassadors from this country put it: "*Farmers know how to produce. They don't know how to sell*." In Germany local products are available, but there is a lack of information for consumers where you find these products. Representatives from Finland and Denmark report about low culture of cooperation between farmers. Partnerships' agreements are sometimes made, but if they are not enforced by law, they are not respected. Farmers rarely see each other as partners, as they value their independency within the food supply chain. In Finland, there are good examples of cooperation, however these are between farmers or between consumers, and partnerships between both types of actors are rarely established. In Belgium, formal education of

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

farmers seems still to be a bottleneck. As farmers lack financial literacy and lack of skills to calculate costs and margins, their willingness to share costs and risks with other actors along the food supply chain is rather low. In France, there is a growing demand from the consumers to know more about where the products come from.

Apart from the challenges mentioned above, the received feedback outlined some **opportunities** provided within the social-cultural domain, especially in the Eastern European and Northern European regions. In Romania, short food supply chain initiatives are becoming more transparent, as farmers are starting to realise the need to show themselves to the public and to promote their produce. The partnership aspect is gaining recognition in Lithuania, as examples of cooperation between local manufacturers and farmers are multiplying. In Poland, initiatives like "Educational farm", aimed to provide knowledge about farming and food among school and pre-school children, are becoming popular. In this country, there is a tendency of increasing cooperation especially between young farmers and young consumers. In Bulgaria, there are good examples of multidisciplinary partnerships among various participants in the food supply chain, and food hubs are starting to gain recognition. The feedback from representatives of the Northern European region shows that for example in Scotland farmers often have entrepreneurial skills and experience in establishing networks with other supply chain actors. Start-up culture and mentality is arriving to the field of food production in Finland. In Sweden there is high level of trust between consumers and producers.

The feedback received for the **technological, environmental and the legal domain** was not that exhaustive as for the other domains. Representatives from the four macro-regions identified just a few factors that may influence the replicability of the innovative initiatives and the good practices they hold. Concerning the technological domain, both project partners and ambassadors report that the uptake of new technologies in agriculture imposes serious challenges for food producers as they lack digital skills and knowledge how to make profit using them. In Germany for example, there is infrastructure to support new product development, however farmers are still not willing to diversify their produce and make use of information and communication technologies (ICT) in farming. In Poland digital communication and on-line market platforms are becoming popular channels for marketing farming products and food. In Portugal there seem to be a gap between consumers' and farmers' ICT skills. While consumers demand more opportunities for on-line buying of products, farmers still do not have enough knowledge how to use digital channels for communication and marketing. This also seems to be the case in Latvia and Georgia where farmers have limited skills in modern digital marketing. In Bulgaria, there is a low level of digitalisation in agriculture and no ICT knowledge on small farmers' level and in specific sub-sectors like vegetables and livestock. Concerning the environmental domain, the feedback indicates both challenges and opportunities. For example, in Finland food waste has become a popular concept, however the country still does not have regulations on that. In Bulgaria, more farmers are starting to reduce food waste along the production process. However, the circular business model is still not popular in this country and a need for governmental interventions to support and finance the application of this model was identified. Examples for the impact of national legal domains show that for example in Belgium, vertical collaboration (e.g. between farmers and consumers) is difficult to achieve, as laws are mainly designed for horizontal collaboration (e.g. between farmers). Representatives of this country reported that the legislation is not adapted to new models of cooperation between the participants in the food supply chains and

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

needs further improvement. In Spain, there are differences between regional and national laws which often cause challenges for farmers and food producers. For example, in Navarra and the Basque Country there is new legislation that obligates the farmer to have an accounting system, but this is not the case for the rest of Spain.

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

4. NOFAs effects on farmers' income and other economic and social benefits: insights for potential replicators

As part of the implementation of Task 3.2 *"Replication in sites throughout Europe"*, COCOREADO had the ambition to pay particular attention to the calculation of costs and margins before and after the participation in innovative initiatives that strengthen the position of the farmers and provide better connection between producers and consumers.

In line with this ambition, the NOFAs evaluation framework was designed in a way to capture specific numbers on farmers' revenue and expenses to allow the calculation of costs and margins. However, key informants from the 14 NOFAs were not willing to share this information with project partners as they represent the interests of private companies and consider these questions as sensitive. At the same time, the qualitative data gathered at the evaluation stage, allow a discussion of the benefits that farmers and consumers receive as a result of their participation in short food supply chain collaborations. As it will be presented below, the data show that these benefits cannot be limited to economical or financial ones only. In addition, the Business Canvas Models analysis of the 14 NOFAs, provides important insights about the costs structure and the revenue streams of the initiatives.

To improve the information further, a cost benefit analysis of COCOREADO's seed initiatives will be provided as part of the implementation of Task 6.3.

The qualitative data indicate two characteristics of the 14 NOFAs, that should be taken into account, when the benefits are considered. Firstly, some of the initiatives were established as non-profit organisations, which means that they are not aiming to gain economic profit and no financial benefits are shared among the partners in the collaboration. For example, a rooftop garden was established with the cause to make the city, where it is located greener and where citizens are connected with local, organic and sustainable food production. A consumers' cooperative established an organic shop with the aim to provide a space for joint exchange between farmers and consumers. In this space, all partners bear a share of the responsibilities and the costs associated with the cooperative operation.

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

In the REKO ring, all work is carried out on a voluntary basis and administrators do not receive any compensation. This increases the sense of community and co-creation of a common marketplace. Another consumers' cooperative was established with the objective not to make economic gains, but to promote sustainable, fair and collaborative forms of production and consumption. As a non-profit organisation, the gains from the sales and the membership fees are adjusted to maintain the structure of the organisation, not to make a profit.

Secondly, it should be noted that many of the farmers from the 14 NOFAs are simultaneously participating in a number of short food supply chains/initiatives (farmers' markets, farmers' shops, online deliveries, etc.) so it was difficult for them to estimate the contribution of each particular initiative to their revenues and incomes.

Thirdly, reffering to Patrick Pasgang[3] expert participation in the 3rd COCOREADO's ambassadors training, farmers often do not calculate well their own labour input. That means that although income may have increased in absolute terms, it may not have increased or even decreased when expressed per hour.

The development of NOFAs Business Canvas Models allowed not only a description of the cost structures and revenues streams within the 14 initiatives, but also to reflect on the effects of the NOFAs on farmers' income. The reflection allowed the categorisation of the NOFAs into several groups, based on how they affect farmers' income[4]. The categorisation refers only to the 14 investigated cases.

Taking the farmers perspective, to better understand how/whether NOFAs affect farmers' income, an income formula was introduced. Behind the formula stands the assumption that an initiative enhances the position of the farmers if it increases their income: that is, the sum of the income a farmer gets from the NOFA and the income a farmer gets form all the other activities, should be greater than the income the farmer would have gotten without the NOFA.

This can be expressed with the formula:

Formula n° 1: $\pi S(pS,qs) + \pi 0(p0,(q - qs)) > \pi 0(p0,q)$
Where:

$\pi S(pS,qs)$ is the income a farmer gets from the NOFA;
$\pi 0(p0,(q - qs))$ is the income a farmer gets from all the other activities;
$\pi 0(p0,q)$ is the income a farmer would have gotten without the NOFA.

The assumption here is that the income a farmer gets from a NOFA is equal to the difference between the revenue and the costs associated with the NOFA. Costs can be divided into: transportation cost, labour cost and marketing costs. The latter are comprehensive of both marketing operational costs, or the personnel costs to operate the transaction, and marketing investment costs, or the required

[3] Innovation Support Center of Boerenbond Belgium (Innovatiesteunpunt)
[4] The reflection is part of a draft scientific article deneloped by KU LEUVEN project partner.

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

investments in software and facilities (handling, storage, cooling, retail). This can be summarised with the formula:

Formula n° 2: πS(pS,qs) = pSqS – t(qS) – m(qS) – w(qS) – D
Where:

pSqS = revenue coming from the NOFA
t = transportation costs required for the NOFA
m = marketing costs required for the NOFA
w = wages required for the NOFA
D = depreciation

The results of the analysis show that in order to enhance farmers' income, NOFAs must have an effect on one of the components of Formula n. 2. Based on the Business Canvas Models developed for each of the 14 NOFAs, it was possible to identify three major groups based on which parameter is affected:

Group 1.0: involving no investments and no product transformation;
Group 2.0: involving investments and no product transformation;
Group 3.0: involving both investments and product transformation.

Successively, these groups were divided into sub-groups, based on analysis of which parameter is affected by the NOFA.

Group 1.0: involving no investments and no product transformation:

- *Group 1.1: No investments, price increase covers increase in transportation, marketing and labour costs that are all born by the farmer;*
- *Group 1.2: No investments, price increase covers increase in transportation and labour costs that are born by the farmer, while marketing costs are born by upstream actors;*
- *Group 1.3: No investments, price increase covers increase in transportation, marketing and labour costs some of which are shared with upstream actors (mainly marketing);*

Group 2.0: involving investments and no product transformation:

- *Group 2.1: Investments covered by subsidies;*
- *Group 2.2: Investments not covered by subsidies;*

Group 3.0: involving both investments and product transformation:

- *Group 3.1: Investments covered by subsidies;*
- *Group 3.2: Investments not covered by subsidies*

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

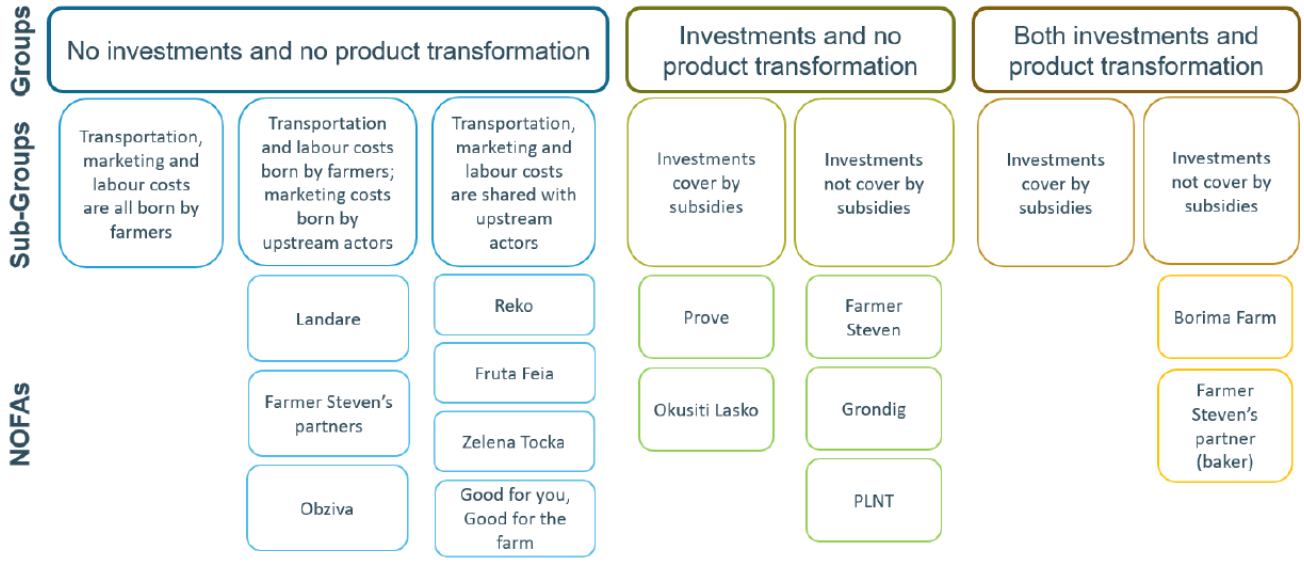


Figure 4 - Categorisation of the selected NOFAs

The analysis shows the different effects that NOFAs can have on farmers and food producers, especially from a farmer's point of view. Although it provides insights about how NOFAs can help farmers in terms of strengthening their position in the food supply chains, these insights are limited to the pool of 14 examples only. In this sense, further research on how NOFAs enhance farmers' income is still needed.

The qualitative data, gathered at the NOFAs evaluation stage disclose this problem a bit further. Based on the data received, it can be assumed that farmers participating in the 14 initiatives, experienced an **income increase** as a result of their participation in short food supply chain collaborations. For example, in one of the initiatives, farmers declare an income increase between 10 to 20%. In another initiative, farmers' income increase has been steady over the years and varies between 5% and 20% depending on the type of products. Only in one of the initiatives, it was found out that the collaboration with other agri-food businesses do not significantly influence the farmer's income. In this sense, the farmer can successfully operate without any form of collaboration as in this particular case they lengthen the food chain, instead of shortening it.

Apart from the income increase, **other economic benefits** should be considered as well. For example, initiatives which apply delivery basket schemes allow farmers to receive **immediate and fair payment** of agricultural products. In these cases, farmers have no storage costs, and have reduced transportation costs, due to shortening the distance between producers and consumers. In most of the initiatives, farmers do not need to invest time and money in advertising and communicating with customers as this function is usually performed by an intermediary or a team of professionals with market skills and knowledge. The data also show that in most of the initiatives the farmers are the ultimate price-setters. In other words, the short food supply chain collaborations improved farmers' negotiation power. In most of the initiatives, it is up to the farmers and their knowledge of the market to set the prices of their produce. Only in few of the cases, the price-setting appears to be a result of joint negotiation, as explained in the previous section.

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

In the cases where the initiatives apply practices like farm visits, these practices benefit farmers directly, as many of them developed agri-tourism as one of their main activities. Other initiatives provide farmers with **special training** to develop skills and knowledge to predict and prepare annual planning based on detailed data from previous years. The application of Blockchain technology in one of the initiatives helps farmers to monitor the processes on the farm and in the chain and extract knowledge from the collected data. The applications for on-line sales and tools for communication in some of the initiatives **improved farmers' digital knowledge**. The participation of farmers in local brand initiatives helps them not only to get a **better understanding of the market**, but also to **access new markets and consumer groups**, which they were not able to access before, entering collaboration with other actors along the chain. Initiatives where an intermediator performs various functions along the chain instead of the farmers, allow the farmers to continue working in their farms and not perform functions that take from their time and resources.

Other economic benefit experienced by the farmers is the **improved connection with consumers**. In all of the initiatives, an important key factor for their success appears to be the communication with customers and even with broader local communities and interested stakeholders. The direct contact between producers and consumers allows for the sharing of a range of information on production methods and care for the environment, regional varieties, product quality, difficulties encountered during production, customers' wishes and motivations, among others. This type of interaction often allows a change of consumers' attitude towards local, organic, fresh produce and attracts new target groups of end-users. The direct connection allows farmers to receive consumers' feedback and to use this information to adapt or diversify their produce according to the demand. We also find examples where due to consumers' feedback, food producers have introduced new products and entered a new market niche.

The improved connection generated through short food supply chains collaboration, brings benefits not only for producers, but for consumers as well. All initiatives under study provide opportunities for consumers to have access to fresh, organic, good quality food, which is mostly local. The reduction in the number of intermediaries results in reasonable prices for both sides in the exchange. Various social activities as farm-visits and other services build consumer confidence in what they are consuming and allow them to better acknowledge the origin of the food and its methods of production. They also provide consumers with information on production methods, regional varieties and recipes, difficulties encountered by farmers during production. Thus, the consumers have an opportunity to get close to rural communities, to contribute directly to the livelihood of local farmers and to build solidarity and trust relations with them. Within the initiatives we find consumers actively contributing to sustainable and responsible consumption supporting local agriculture, helping to preserve traditional practices, and reduce the carbon footprint associated with long supply chains. Some of the initiatives under study provide educational activities to the consumers in order to raise their awareness about the food choices they have, but also on topics related to food waste, valorisation of the local produce, reduction of packaging, etc. Such activities often allow for rural and urban communities to come together again, encouraging solidarity between small local producers and consumers, building bonds of trust and cooperation between those who produce and those who consume.

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

Some of the initiatives impacted the broader local communities also by providing **employment opportunities** and/or by **increasing environmental awareness** through good practices which reduce food loss and waste, air polluting emissions, and transportation intensity.

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

05

5. COCOREADO's cross-visits: a tool to share knowledge and experience

Within COCOREADO's WP 3 "Boost novel and fair food systems", Task 3.3 introduced cross-visists as a tool to share knowledge and experiences in a peer-to-peer learning process. It was also meant to enhance further the replicability potential of NOFAs, with concrete data on the benefits of their replication for the farmers and other actors in the food supply chain. As a result of the implementation of Task 3.3 four visits were organised during the second and the third ambassadors' training.

The main conclusion from the implementation of Task 3.3 is that the success of the cross-visits tool depends on the willingness of participants to become part of interactive discussions and to gain new knowledge and experience in peer-to-peer learning. The methodology and materials developed are available for use both by project partners and by the ambassadors. They will be publicy availalable in the ambassadors' Toolkit (D5.4) and Educational Materials (D3.3) that are being developed by project partners.

5.1. COCOREADO's methodology

The cross-visits were based on the Agrispin and NEFERTITI H2020 projects' cross-visit approach, introducing a two-day visit which includes the kick-off, demonstrations, reflections, a social activity, and knowledge exchange between farmers, consumers and other actors along the food chain. However, the approach for the COCOREADO's cross-visits needed to be adjusted to the context of the project, considering that it should include different actors of the value chain and that the time available for the cross-visit was limited. A questionnaire was created that assisted the discussion and knowledge sharing between NOFAs representatives, COCOREADO's ambassadors and project partners during the cross-visit.

According to COCOREADO's methodology, there are three different steps in a cross-visit where the questions available in the questionnaire should be asked:

1. **Before the cross-visit**: Project partners should answer the section on the general characteristics of the cross-visit (See Figure 5)
2. **Kick-off (Getting oriented)**: If time is limited, and the number of participants is small, they can discuss the first set of questions regarding the knowledge exchange that a cross-visit can

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

provide during the cross-visit. A project partner in charge of timekeeping should take note of the answers (writing down or recording to transcribe later). If there is a larger number of participants, the questions should be shared beforehand, and its answers discussed during this step.

3. **Reflections**: During the reflection stage the participants will discuss the six (6) questions related to the final section of this questionnaire.

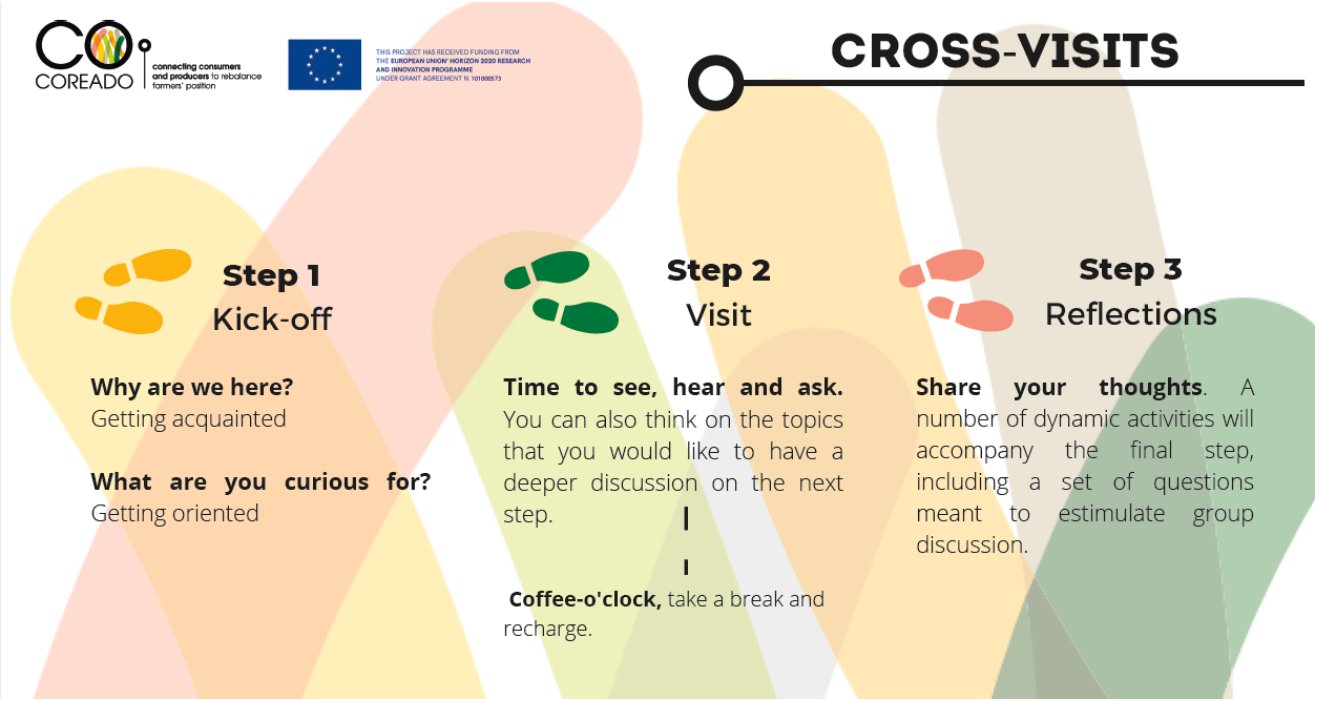


Figure 5 - COCOREADO three-step approach for a cross-visit

5.1.1. Scenario for implementation of the 3-step approach

Within COCOREADO's cross-visits the following scenario for the implementation of the 3-step approach was applied.

Step 1 - Kick-off (15min)

- Getting acquainted:

→ Introduction of the COCOREADO project and the cross-visit purpose to the host (CONSULAI team).
→ Introduction of the cross-visit's host (by the host).

- Getting oriented:

→ Before the cross-visit, the questions below (also present in the "Cross-visit Questionnaire") were answered by the COCOREADO ambassadors. Its answers were compiled by the CONSULAI team and adapted to the cross-visit programme. During this step, the COCOREADO's project partners addressed the answers of the participants, explaining how the cross-visit programme was built.

1. What are you most curious about?
2. What kind of answers would you like to take home after this visit?
3. How would you like to use these answers for your own work in your network?

4. What specific experience or knowledge would you like to share?

If a flyer of the initiative is available, it should be distributed before the visit. The notebooks must be distributed before the visit.

Step 2 - Visit

Necessary materials:

→ Notebooks and pens

The notebooks and pens must be distributed before the visit.

The participants make sure they collect the information needed. For this, the project partners will distribute material where the participants can write their doubts and relevant aspects to clarify at the next step.

Coffee-o'clock (10min): After the visit, a small break can take place to let the participants discuss what was visited. During this break, water and food should by supplied.

Step 3 - Reflections

For this step different materials are necessary:

→ Cards with the questions included in the questionnaire

→ Notebooks

→ Post-its

→ Pens

There should be a sufficient number of facilitators, that together with the host, promote the discussion among the different participants and the timekeeper takes note of the key aspects and ensures time distribution.

Methodology (60min):

→ Each of the first 5 questions are written on a card and distributed to the participants. If there are more than 5 participants, they can pair up. For 15 minutes, each group discusses their question, with the team leader presenting their answers afterwards.

→ The discussion for all 5 questions takes 25 minutes.

Once the cross-visit is finished, the participants return to the training location

5.2. COCOREADO's cross-visit locations

The cross-visits included one NOFA innovative initiative in Pamplona (Spain, Navarra region) and three in Riga (Latvia).

5.2.1 Pamplona cross-visit

About the selected NOFA

As part of the second ambassadors' training, COCOREADO's ambassadors and project partners visited Landare - a consumers' association of organic products, located in Pamplona. Landare stands as a non-profit organisation with the main aim of giving its members access to healthy and organic foods at affordable prices. Their mission is to contribute to the transformation of the world through the purchase

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

of food products, with initiatives to facilitate access to healthier products. Landare is committed daily to look for local products and contact directly with farmers establishing fair and mutually beneficial trade relations, offering consumers healthy & organic products.

Landare was also identified and selected through a multi-actor approach as a NOFA and is presented in one of the 14 replicability roadmaps.

Description of the cross-visit

Following COCOREADO's cross-visit methodology both ambassadors and project partners visit one of Landare's organic shops. They were welcomed by Landare's key actors - the president, the director and the temporary operational director. Together they presented Landare and participated in a Q&A session, answering various questions on the social, economic, and logistic aspects of this initiative.

Picture 1 - Landare's key actors (management)

Outputs

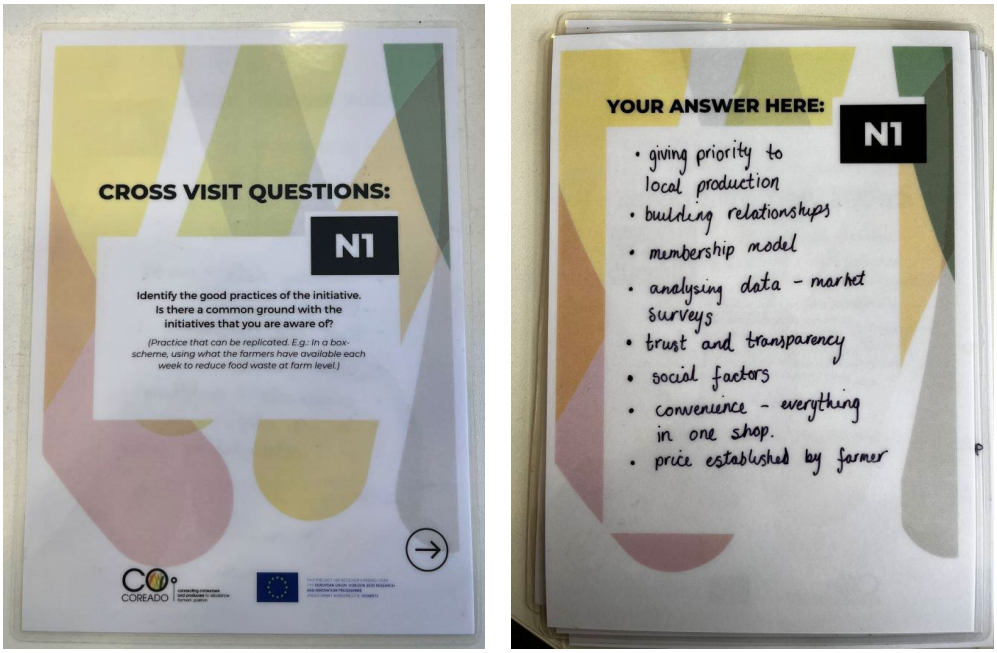
For the '**Reflection**' step of the cross-visit methodology, the participants were divided in 5 groups, so that each group could discuss and answer one of the five questions:

1. Identify the good practices of the initiative. Is there a common ground with the initiatives that you are aware of?
2. Which barriers and possible solutions have been identified? Please identity if you encounter any similar issues and how did you overcome them?
3. What are the strengths of this initiative? Did you encounter any similarities with the initiatives that you know of?
4. Are any decision support tools used in this initiative? If yes, please identity. Are you aware of any DST that could be beneficial?
5. Do you think farmers benefit from this initiative? If yes, are the benefits applicable to the initiatives that you are aware of?

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

Afterwards, each group elected a leader to present their answers in plenary, promoting a discussion amongst all participants.

Picture 2 - Open discussion on the questions presented above



Picture 3 - Example of the answers provided by COCOREADO's ambassadors

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

5.2.2. Riga cross-visits

As part of the third ambassadors' training, three cross-visits were organised to present different examples of NOFAs innovative initiatives. Due to limitation of space and time, two of the cross-visits ran in parallel, while the 3rd brought together all those who participated in the Ambassadors Training.

About NOFA 1

The first innovative initiative was Getliņi Eko, an innovative waste management company located in Latvia. The company operates a modern landfill and waste-to-energy facility and provides a range of waste management services, including waste collection, transportation, sorting, and recycling. Their goal is to create a zero-waste society by reducing the amount of waste that ends up in landfills. They collect hazardous and non-hazardous waste, and process organic waste into compost. They also offer consulting services for businesses and municipalities looking to improve their waste management practices. Getliņi Eko has won several awards for their work in sustainable waste management.

Here are some examples of Getliņi Eko's sustainable practices:

- *Waste sorting and recycling*: Getliņi Eko promotes waste sorting and recycling to reduce the amount of waste that ends up in landfills. They operate a sorting facility that separates different types of waste, including paper, plastic, glass, and metal, and they work with local recycling companies to ensure that these materials are properly disposed of;
- *Waste-to-energy*: Getliņi Eko operates a waste-to-energy facility that uses advanced technology to convert waste into renewable energy. The facility produces electricity and heat that can be used to power homes and businesses;
- *Environmental monitoring*: Getliņi Eko conducts regular environmental monitoring to ensure that their operations comply with environmental regulations and minimize their impact on the environment. They monitor air, water, and soil quality, and they work to reduce greenhouse gas emissions and other pollutants;
- *Community engagement*: Getliņi Eko engages with the local community to raise awareness about sustainable waste management practices and to promote responsible consumption.Here are some examples of Getliņi Eko's sustainable practices:
    - They organize educational events and workshops and work with local schools to educate children about the importance of recycling and sustainability.

Description of cross-visit 1

Getliņi Eko in Riga offers an opportunity to explore a state-of-the-art waste management facility that uses waste material to heat glasshouses, and learn about sustainable waste treatment processes. Upon arrival, the ambassadors and project partners were greeted by staff who provided an overview of Getliņi Eko and its operations. This included the facility's purpose, its role in waste management, and the importance of sustainable practices. Next, the group was taken on a guided tour of the facility, where they observed various stages of waste treatment and learned about the processes involved. The tour included visits to different sections of the facility, such as the sorting area, recycling facilities, composting areas, and landfill sites.

During the tour, the group could ask questions and engage in discussions with the facility's experts on the topics of sustainability, scalability, and replication.

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

Picture 4 - Visit to the Getliņi Eko facilities

Outputs from cross-vist 1

Overall, the visit to Getliņi Eko waste management facility provided valuable insights into sustainable waste treatment processes, waste-to-energy technology, waste management best practices, environmental monitoring, and opportunities for engagement and collaboration. These outputs align with the objectives of COCOREADO by promoting sustainable practices and waste reduction in the agricultural sector.

About NOFA 2

The second innovative initiative was Āgenskalns Market, a popular indoor market. The market offers a wide variety of goods and services, including fresh produce, meat, fish, and dairy products but also possibilities for on-line shopping and participation in social activities and educational events. There are also several stalls selling handmade crafts and souvenirs. The market has a long history, dating back to the early 20th century, and has become a beloved institution in the community. The market is re-open year-round, and visitors can enjoy a lively atmosphere with friendly vendors and shoppers.

Here are some examples of Āgenskalns Market sustainable practices:

- *Local sourcing:* The market prioritises products that are grown and produced locally, reducing the carbon footprint associated with transportation and supporting local farmers and producers;
- *Supporting local producers:* The market has a range of instruments designed to support local producers (such as ensuring that a part of trading space is reserved for local smallholders, providing a possibility to rent negotiable space in cold storage, and providing space for a direct purchasing group);
- *Community support:* The market engages in place-making and supports the local community by partnering with local organisations and participating in community events. Āgenskalns market regularly hosts local cultural events;
- *Environmental education:* Āgenskalns Market provides educational materials and workshops to raise awareness about sustainable practices and encourages visitors to adopt eco-friendly habits.

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

Description of cross-visit 2

The visit started with a presentation by the Marketing manager of Āgenskalns Market, with an introduction to the history and significance of the Āgenskalns Market. Information about the market's establishment, its role in the local community, and its importance as a hub for fresh produce and local products was provided. The group then had the opportunity to wander through the market and explore the various stalls and vendors. This included the opportunity to sample traditional Latvian dishes, and to learn about traditional farming practices, artisanal food production methods, and the stories behind the locally produced goods.

After the tour, a Q&A session took place, to answer questions on how this initiative that was already replicated in Riga, can be adapted and replicated in other contexts and regions.

Picture 5 - Visit to the Āgenskalns Market

Outputs from cross-visit 2

Overall, the visit to Āgenskalns Market provides visitors with knowledge, exposure to sustainable practices, cultural experiences, and opportunities for replication and adaptation. These outputs align with the objectives of the COCOREADO project, emphasizing the importance of connecting consumers and producers, while also supporting local producers and sharing insights on how to adapt and implement similar initiatives in their own communities.

About NOFA 3

The third NOFA was Rāmkalni, a recreational complex located in the picturesque countryside of Latvia. The complex is situated in the Vidzeme region, which is known for its beautiful forests, rolling hills, and scenic landscape. During the winter months, Rāmkalni transforms into a ski resort, offering a variety of winter sports activities such as skiing, snowboarding, and sledding. In the summer, Rāmkalni offers a range of outdoor activities such as hiking, mountain biking, and Nordic walking. Rāmkalni has a restaurant that serves traditional Latvian cuisine and a range of international dishes. Rāmkalni sets an example of how a successful farm can engage in rural tourism, take the lead in shortening the supply chain and increase the value of its products:

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

- *Farming*: Rāmkalni is an organic farm. It grows potatoes (~1ha), grain (~100ha), quinces (~20ha), rhubarb (~4ha) and other cultures. It has been experimenting with agroecological practices;
- *Diversification*: Ramkalni has a processing facility that focuses on producing high-value added products;
- *Local sourcing*: Rāmkalni uses local ingredients in their restaurant and promotes local products in their shop. They support local farmers and producers, and they prioritise products that are in season and grown locally;
- *Environmental education*: Rāmkalni provides environmental education to their staff and guests, raising awareness about sustainability and promoting eco-friendly practices;
- *Community support*: Rāmkalni supports the local community by partnering with local businesses and organisations. They also organise community events and activities, such as clean-up days and tree-planting events.

Description of cross-visit 3

At the Rāmkalni Complex, after a brief introduction by the owner, participants were divided into three separate groups, with each group starting on a different section of the complex. All the groups had a chance to rotate between an introduction to the history of this initiative and the different services it offers, the processing factory and a taste-test of the different products produced in the factory.
Prior to starting the visit, the participants received a bingo card to identify the success factors that had been shared in the previous ambassadors training and are detailed in D3.1. The first to correctly respond in each of the groups received a prize at the end.

This exercise proved to be an effective tool to keep the ambassadors and project partners engaged in the conversation with the host, as well as discuss good practices and the potential to replicate them in their own local contexts.

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

Picture 6 - Visit to Rāmkalni complex

Output from cross-visit 3

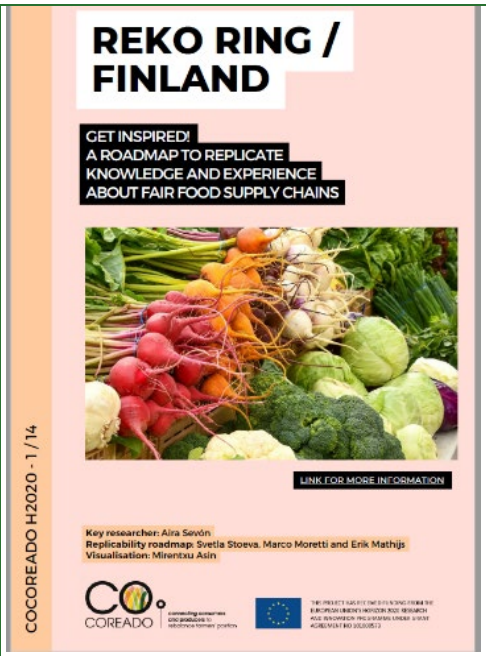
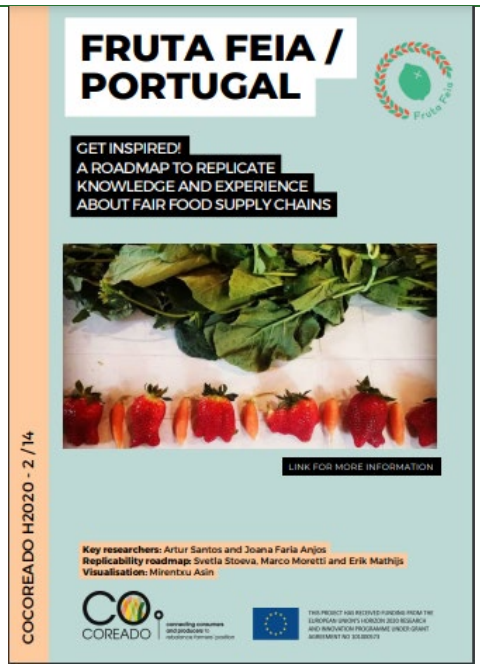
The Bingo exercise proved to be an effective tool to keep the ambassadors and project partners engaged in the conversation with the host, as well as discuss good practices and the potential to replicate them in their own local contexts.

It was interesting to note that the participants interpreted the success factors in distinct ways, associating different practices of the Rāmkalni farm. This notion is perfectly aligned with the fact that the cultural, social and economic aspects of each individual influences their interpretation of a good practice and of a success factor and that there isn't just one correct answer due to the great diversity that exists in the supply chains across Europe.

The visit to Rāmkalni provided insights into successful farm engagement in rural tourism, which aligns with the project's objective of connecting consumers with producers. Through the recreational activities offered during different seasons, participants can experience the interconnectedness of the farm's products with the local tourism industry. The cross-visit further contributed to increased awareness of sustainable farming practices, exposure to high-value added products through the processing facility, understanding of the significance of local sourcing and its impact on supporting local farmers, and knowledge about environmental education initiatives and community support programmes.

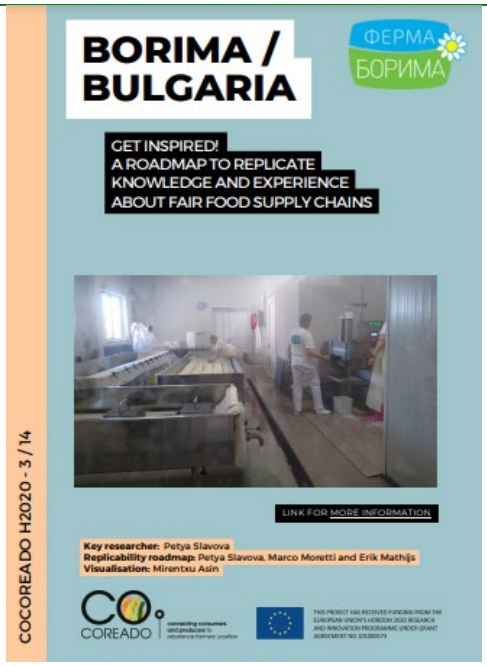
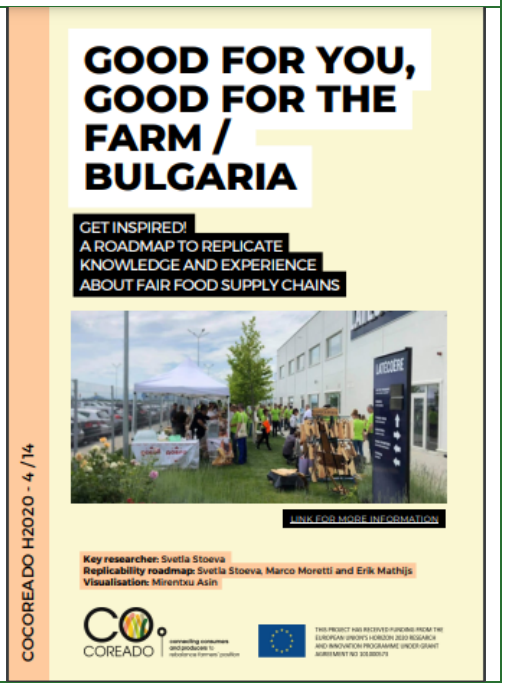
THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

ANNEX 1. NOFAs Replicability Roadmaps[5]

ROADMAP 1	REKO RING	
ROADMAP 2	FRUTA FEIA	

[5] NOFAs repicability roadmaps can be accessed by klicking on the links.

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

ROADMAP 3	BORIMA	
ROADMAP 4	GOOD FOR YOU, GOOD FOR THE FARM	

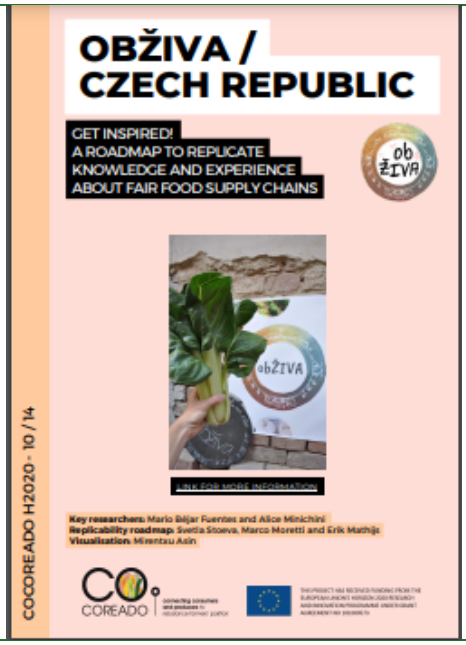
THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

ROADMAP 5	PROVE	
ROADMAP 6	LANDARE	

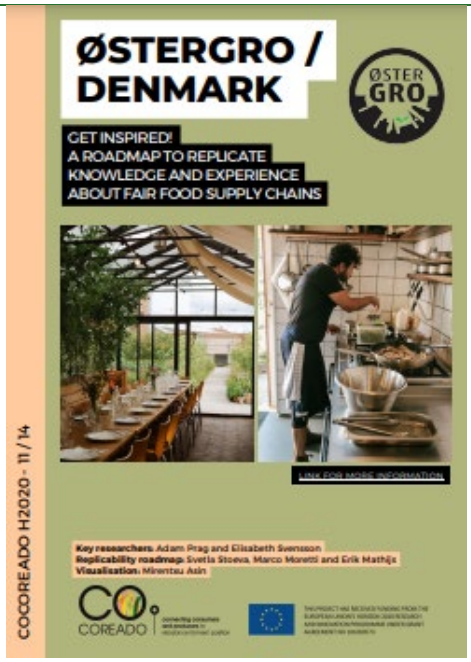
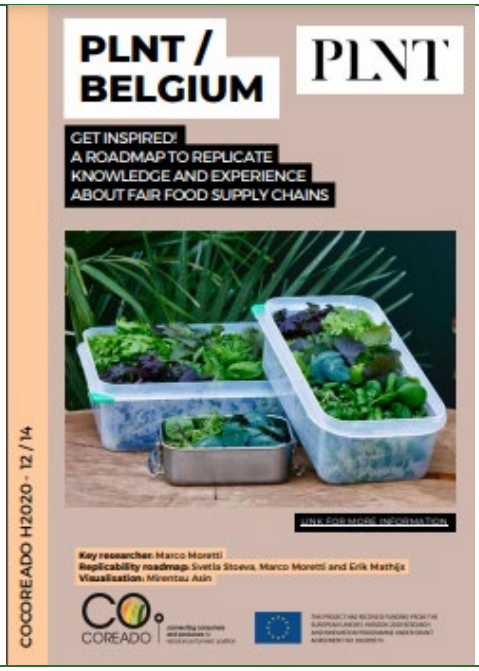
THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

ROADMAP 7	FARMER STEVEN	
ROADMAP 8	GREEN POINT	

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

ROADMAP 9	AGENSKALNA MARKET	
ROADMAP 10	OBZIVA	

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

ROADMAP 11	OESTERGRO	
ROADMAP 12	PLNT	

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

ROADMAP 13	TASTE LASKO	
ROADMAP 14	GRONDIG	

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

COREADO

connecting consumers and producers to rebalance farmers' position

THIS PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON 2020 RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO 101000573

COCOREADO PARTNERS

KU LEUVEN

LUT University

CONSULAI www.consulai.com

INSTITUTE OF PHILOSOPHY AND SOCIOLOGY 2019

UNIVERSITY OF COPENHAGEN

BSC BALTIC STUDIES CENTRE

ILVO Flanders research institute for agriculture, fisheries and food

Jožef Stefan Institute, Ljubljana, Slovenia

MIJARC EUROPE

INTIA

Rural Youth Europe

CEJA

iniciativas innovadoras