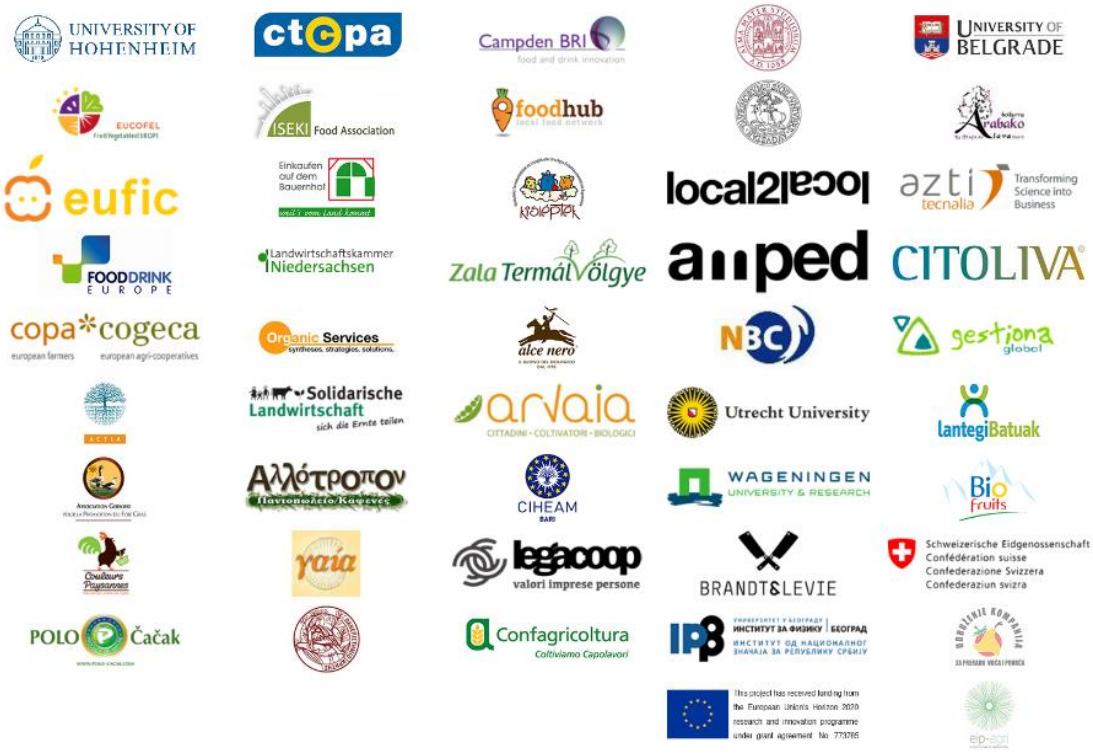
SMARTCHAIN
SMART SOLUTIONS IN SHORT FOOD SUPPLY CHAINS

QIfresh

innovative solutions for Short Food Supply Chains

Campden BRI Hungary

December 2019



Project code: 773785

Project acronym: Smart Food Supply Chains

Internal template:

Template for good practice cases

Work package number: T2

WP leader: CBHU

Work package title: Technological and non-technological innovations

Document issued by:

Delivery month:

Version:

Document language: ENG

Dissemination Level		
PU	**Public**	
PP	**Restricted to other programme participants**	
RE	**Restricted to a group specified by the consortium**	
CO	**Confidential, only for members of the consortium**	

1. **Title of the case description**

   QIfresh

2. **Indicate your role in the Smart Food Supply Chain:**

   individual member of the chain: ☐
   chain operator: ☐
   network operator: ☐
   association: ☒
   technical, scientific, or management expert: ☐
   advisor: ☐
   policy maker: ☐
   other: ..... ☐

3. **Indicate the region (if applicable):**

4. WP2 Cross-reference table

Please indicate with an X in the relevant box of the matrix for which needs and the steps / functions of the supply chain the described innovative solution is applicable

		Individual steps of the SFSC							Short food supply chain as whole						
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**
Needs of the consumers (citizens)	food safety			X		X	X		X		X			X	
	food quality			X		X	X		X		X				
	trust	X	X	X		X	X	X	X	X	X			X	
	ethical aspects														
	accessibility														
Needs of the chain actors	fair price														
	increased negotiating power	X	X						X						
	shared use of available resources														
	product development support														
	access to markets and consumers								X						
	access to infrastructure														

1: Farming

2: Primary production

3: Transport

4: Processing and packaging

5: Storage

6: Logistics

7: Sale

8: Product integrity, authenticity, transparency

9: Marketing concepts

10: Food chain management and networking for enhancing cooperation among chain actors

11: Business modelling

12: Policy environment

13: Legal requirements

14: Labelling

5. Short description of the innovative solution

- **Describe the specific need or problem being addressed by the case and please explain what is the novelty of this innovative solution**

  Food quality, IT, Information flow management support for producers of fresh fruits and vegetables

  Ordering, planning, executing and reporting quality inspections for fresh fruits and vegetables
  Smart collaboration between retailers, suppliers and quality inspection providers
  Fast and error-free data
  Access anytime – anywhere

- **Describe the enabling function(s) and the practical benefit(s)-(e.g. for which types of problems and opportunities is used and can it be used, and how)**

  • Full process life-cycle support from loading plans to the Quality Inspection reports, covering all the needs of Retailers, Quality Inspectors and Suppliers.
  • Improves communication and collaboration between retailers, quality inspectors and suppliers.
  • Shortens the time and effort required for the planning and executing inspections and preparing the reports.
  • Minimizes errors in capturing inspection data or transfer them to paper reports.
  • Eliminates paperwork and unstructured e-mail exchanges.
  • Provides accurate and consistent inspection reporting and useful statistics.
  • Instant access to previous QI reports.
  • Easy and simple to use mobile App, optimized for use in both Tablets and Smartphones, to capture and record quality inspection data on the spot.
  • No upfront investment required: Small fee on a pay per use / pay per inspection basis. Split cost between involved parties. Unlimited access both in terms of bandwidth and data storage.

- **Describe the method/procedure/technology/solution implemented. (Please explain, whether the innovative method is a product / service / process / marketing or organisational / management innovation) After completing the description, please indicate, whether this innovation is a technological or non-technological one.**

• Retailers enter the loading plans and shipment information and assign the inspection of each shipment to a quality inspection provider. They automatically receive process updates and the final Quality Inspection report.

• 3rd party,quality inspection companies plan and execute the quality inspection and prepare the inspection report.

• Fruit and vegetable suppliers (e.g. cooperatives, groups of producers, packaging companies) are notified on the planning, execution and the result of the inspection and have access to the inspection report.

• Connects your Supply Chain to Open standards based quality system that fully supports and complies with the EC directive 543/2011 on marketing standards for fruit & vegetables.

• Secure, FIWARE/FIspace technology
• Business Collabora/on: Workflow-based execu/on of Business Logic
• Partners get instant updates and no/fica/ons for each step of the QI process

technological ☒ non-technological ☐

- **Describe the business, which implemented the innovated solution (size, country, region, location, type of food)**

  producers and retailers of fresh fruits and vegetables

- **Describe the distribution channels of the product(s)**

- **Describe what makes the innovation work.**

• Improves communica/on and collabora/on between Retailers, Quality Inspectors and Suppliers.

• Shortens /me and effort required for the planning and execu/ng inspec/ons and preparing the reports.

• Minimizes errors in capturing inspec/on data or transfer them to paper reports.

• Eliminates paperwork and unstructured e-mail / fax exchanges.

• Provides accurate and consistent inspec/on repor/ng

• Instant access to previous QI reports and useful sta/s/cs

- **Describe the specific prerequisites for the business related to the implementation of the method and/or related to the location, method, procedure, solution**

a: List the relevant necessary resources (including the estimated cost) for the specific innovation.
Please list the relevant ones only (list is annexed)

- human: labour force: size, knowledge & skills (production, technical, marketing, managerial, ICT, financial, etc.)
- technology: patents, know-how, trademarks, copyrights, trade secrets
- infrastructure, equipment, facilities, - size, minimum volume of production/sales, IT infrastructure
- information, reputation, brand, trust

b: List the relevant necessary capabilities for the specific innovation.
Please list the relevant ones only (list is annexed)

- **food safety:**
  - basic skills to comply with the EU food safety regulations
  - ability to understand what makes the product safe (the key controls, which ensure the safety of the product – biological, chemical and physical hazards, providing the safety shelf life of perishable products)
  - food safety culture (motivation, responsibility for food safety) and basic skills for the implementation of HACCP

- **food quality:**
  - ability to define the target segments of consumers for SFSCs
  - ability to define the product characteristics which are (tacit) basic requirements for the target segment(s) of consumers;
  - ability to define which product attributes/levels and augmented services represent an added value for the target segments of consumers;
  - food quality culture (motivation, responsibility for food quality);
  - production experiences which help to provide the expected quality reliably, uniformly;
  - ability to provide distinguishable quality which meets the needs of the targeted consumer segment;
  - meeting (local) legal requirements, application of the labelling rules;
  - ability to access the consumer willingness to pay for specific products of SFSCs.

- **trust:**
  - ability to ensure product integrity, authenticity and transparent information for the consumers (including systems, tools);

- ability to access external trust enhancers (third party certification, internal certification system, participatory guarantee systems);
- application of the labelling rules and branding (mandatory and voluntary);
- ability to meet third party certification requirements

• **management:**

- to implement management systems for vision, planning, implementing), coordinating, controlling, monitoring, continuously;
- improving; ability to motivate, authorize staff;

6. **Describe the results, achievements and typical failures**

7. **Summarize what makes the case to a good practice for the members of the SFSCs (e.g. lessons learned)**

8. **Aspects, methods for transfer of methods for other SFSC members**

9. **Recommendations for members of other SFSCs for further applications**

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10. **More information is available at (web), if it is relevant**

https://qifresh.agrostis.gr/

Annex

1. Checklist for necessary resources (tangible and non-tangible):

- materials (access to: raw materials/ ingredients - including volume, land – including size, packaging materials
- human: labour force: size, knowledge & skills (production, technical, marketing, managerial, ICT, financial, etc.)
- technology: patents, know-how, trademarks, copyrights, trade secrets
- infrastructure, equipment, facilities, - size, minimum volume of production/sales, IT infrastructure
- information, reputation, brand, trust
- financial*

  *: estimated cost:

  0 - 10 000 Eur
  10 001 - 50 000 Eur
  50 001 - 100 000 Eur
  100 001 - 300 000 Eur
  300 001 – 1 000 000 Eur
  1 000 000 Eur above –

- other specific necessary resources for the application of the specific innovation

2. Checklist for the necessary capabilities

- **food safety:**
  - basic skills to comply with the EU food safety regulations
  - ability to understand what makes the product safe (the key controls, which ensure the safety of the product – biological, chemical and physical hazards, providing the safety shelf life of perishable products)
  - food safety culture (motivation, responsibility for food safety) and basic skills for the implementation of HACCP

- **food quality:**
  - ability to define the target segments of consumers for SFSCs
  - ability to define the product characteristics which are (tacit) basic requirements for the target segment(s) of consumers;
  - ability to define which product attributes/levels and augmented services represent an added value for the target segments of consumers;
  - food quality culture (motivation, responsibility for food quality);
  - production experiences which help to provide the expected quality reliably, uniformly;
  - ability to provide distinguishable quality which meets the needs of the targeted consumer segment;
  - meeting (local) legal requirements, application of the labelling rules;
  - ability to access the consumer willingness to pay for specific products of SFSCs.

- **trust:**
  - ability to ensure product integrity, authenticity and transparent information for the consumers (including systems, tools);
  - ability to access external trust enhancers (third party certification, internal certification system, participatory guarantee systems);
  - application of the labelling rules and branding (mandatory and voluntary);
  - ability to meet third party certification requirements

- **ethical aspects**
  - ability to understand consumer needs for ethical behaviour related to the specific product(s) of the SFSCs;
  - culture for ethical food production and supply;
  - ability to implement necessary measures to ensure ethical food production and supply;
  - ability to access the consumer willingness to pay for products meeting ethical aspects

- **accessibility to consumers:**
  - ability to organize logistics efficiently and to exploit innovative solutions and distribution channels;
  - efficient, innovative sales methods;

	- ability to develop and implement new business models for ensuring access of consumers to products and augmented services;
• **fair price:**	- collecting marketing information; - ability to enhance and maintain cooperation among chain actors including the combined use of available complementary resources, capabilities, competences of SFSCs actors, networking, understanding the principles of food value chain management; - ability to define, develop or maintain unique quality of products and augmented services; - ability to develop and implement new business models; - ability to access the consumer willingness to pay for fair price
• **increased negotiation power:**	- collecting marketing information; - ability to enhance and maintain cooperation among chain actors including the combined use of available complementary resources, capabilities, competences of SFSCs actors, networking, understanding the principles of food value chain management, cooperation culture; - ability to define. develop or maintain unique quality of products and augmented services; - ability to develop and implement new business models;
• **shared use of available resources:**	- ability to enhance and maintain cooperation among chain actors including the shared and combined use of available complementary resources, capabilities, competences of SFSCs actors, networking, understanding the principles of food value chain management, cooperation culture; - the level of value chain management culture; - ability to access the consumer willingness to pay for food with reduced environmental impacts

- **input for R+D:**
  - ability to monitor, research, evaluate, and understand the needs and wants of customers and consumers;
  - ability to develop new products, processes, packaging, preservation techniques, systems and access to new markets, including in other categories;
  - access to innovative technologies; distribution and marketing solutions and methods. management systems;
  - access to local input for R+D covered by other aspects

- **access to markets: and market success**
  - effective promotion, customer service, efficient and innovative sales methods;
  - ability to understand consumer's needs;
  - ability to organise logistics efficiently and to exploit innovative solutions and distribution channels,
  - unique value propositions;
  - ability to develop and implement new business models for ensuring access of consumers to products and augmented services, develop the market accessibility for the suppliers.
  - stock control;
  - ability to access to required raw materials within a restricted geographical area

- **access to infrastructure:**
  - ability to use existing own infrastructure in a focused way to serve consumer needs or to combine it with complementary infrastructures of other SFSC actors, cooperation culture;

- **management:**
  - to implement management systems for vision, planning, implementing), coordinating, controlling, monitoring, continuously;
  - improving; ability to motivate, authorize staff;

- **production, processing:**
  - management system, production experience, specific controlling, monitoring, continuously;
  - willingness to consider and ability to evaluate the adoption of TECI and NTI in the current production processes;
  - any additional specific resources necessary for the application of the specific innovation.