



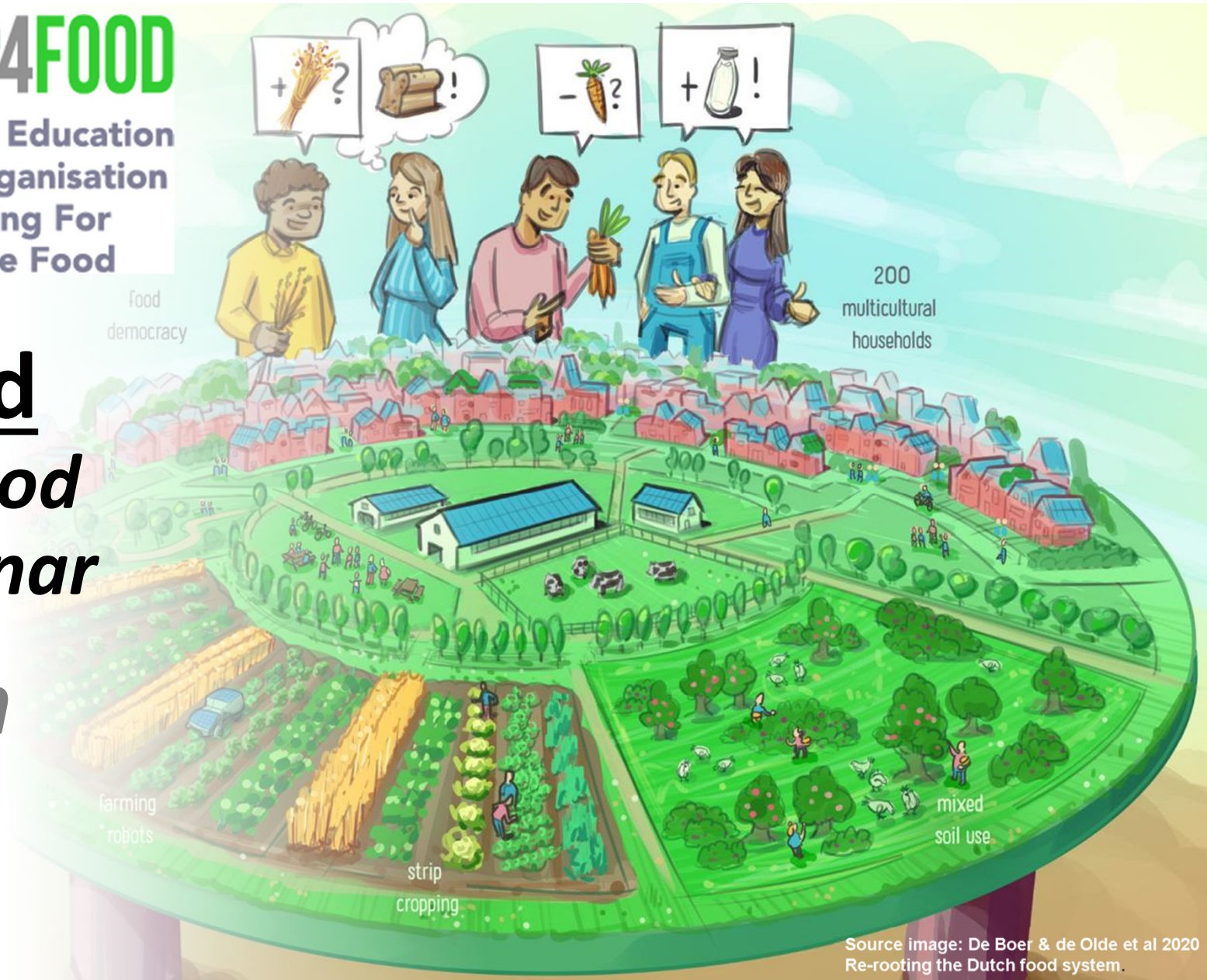
**AESOP4FOOD**

Action for Education  
Spatial Organisation  
and Planning For  
Sustainable Food

# AESOP4Food *Sustainable Food Planning Seminar*

*Fifth session*  
PHASE II / 2023

*March 30, 2023*



Source image: De Boer & de Olde et al 2020  
Re-rooting the Dutch food system.

# AESOP4food Online Seminar 2023

## COURSE SCHEDULE

March 2<sup>nd</sup> – June 1st, 2023

Thursday / 17:00 to 18:30 CET





## Phase II. Mapping

- ***Spatial participatory food (systems) mapping.*** Katrin Bohn, Bohn&Viljoen Architects, School of Architecture & Design, University of Brighton .

- ***Mapping the Short Food Supply Chains,*** Jorge Molero, Red de Municipios por la Agroecología

- ***Combining Tools for Transformative Cartographies*** Marian Simón UPM

# Agenda

- **Introduction** Marian Simón, UPM
- Jorge Molero, Red de Municipios por la Agroecología: **Mapping the Short Food Supply Chains**
- **Q&A session/Exercise**
- *Outlook on next session / compulsory reading*

## EXAMPLES OF FOOD & OPPORTUNITY MAPS FOR URBAN DESIGN PROJECTS



**Urbane Agrikultur  
in Köln-Ehrenfeld,  
Germany**

*scale: neighbourhood*  
*mapping method: participatory*



**London  
Thames Gateway,  
Great Britain**

*scale: suburban / metropolitan*  
*mapping method: design-professional-led*



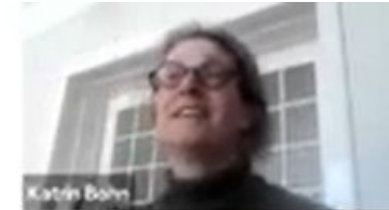
**The Urban Farming  
Project  
Middlesbrough,  
Great Britain**

*scale: city*  
*mapping method: participatory  
as well as design-professional-led*



**Carthage –  
Ville Comestible,  
Tunisia**

*scale: city*  
*mapping method: participatory  
as well as design-professional-led*

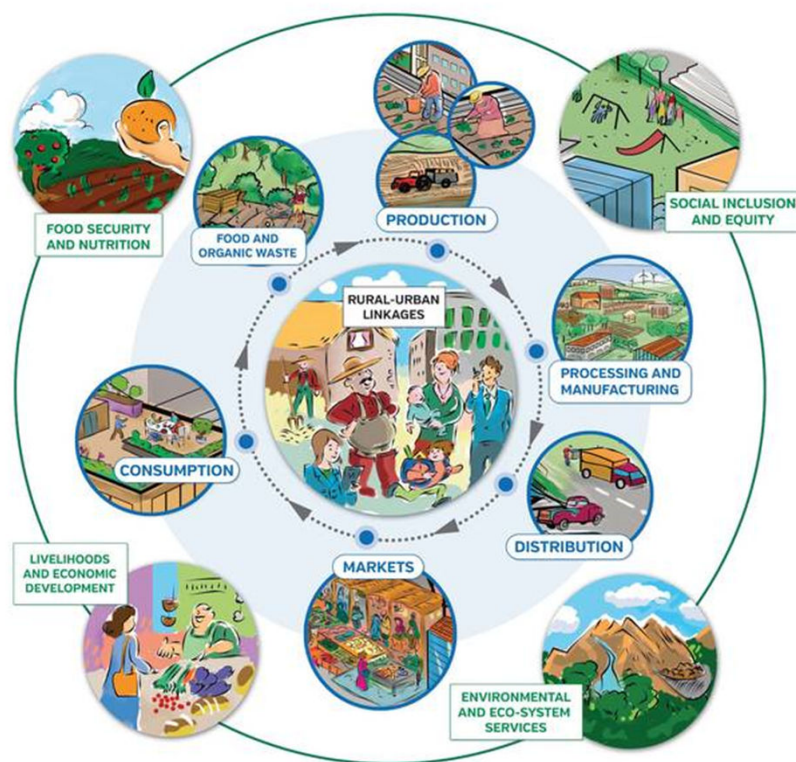


- Place-based/time-based/citizen-based/purpose Maps
- Co-design
- OPPORTUNITY maps
- With who? For whom?

# Case study: Mapping the Short Food Supply Chains

Jorge Molero, RMAe 30/03/2022

# City Region Food Systems: Actors & Challenges

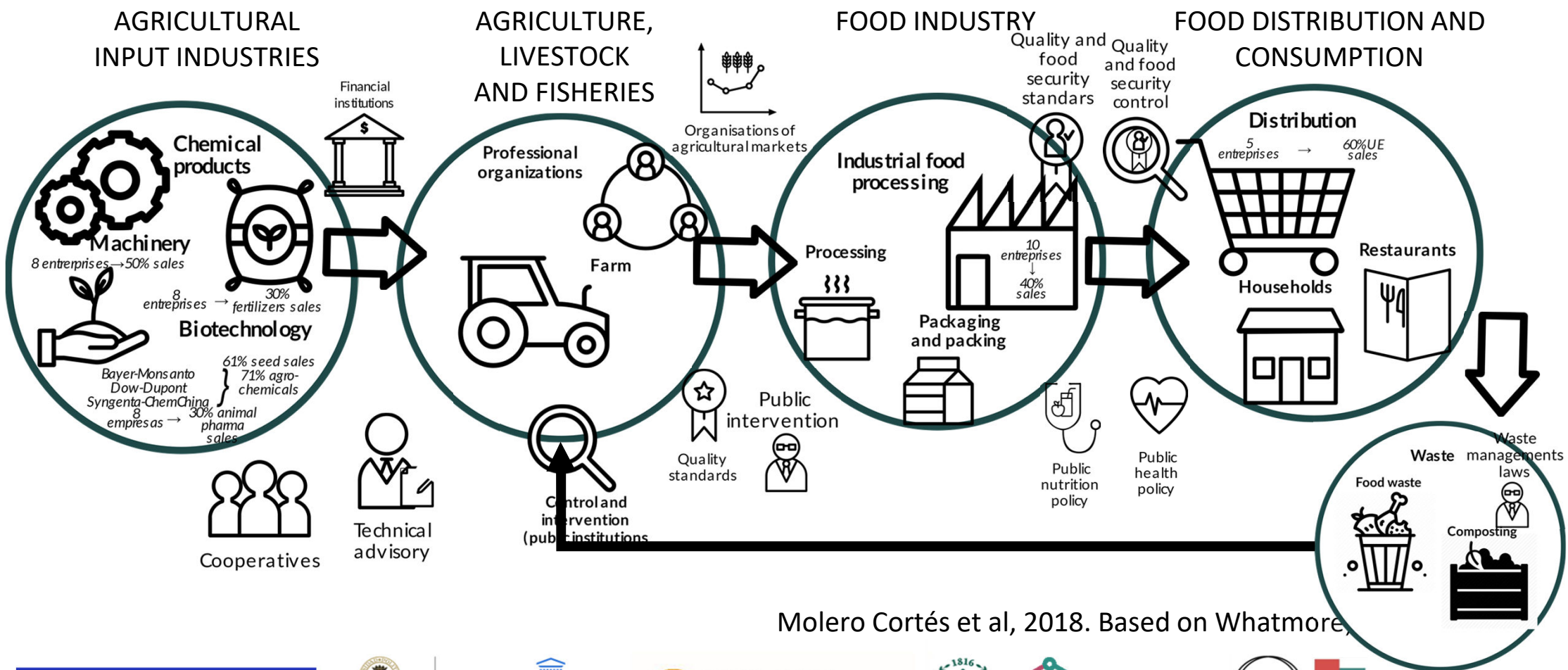


**City Region Food System** is defined as “

- all the actors, processes and relationships
- that are involved in food production, processing, distribution and consumption
- in a given city region”.



# Mapping the WHOLE food system

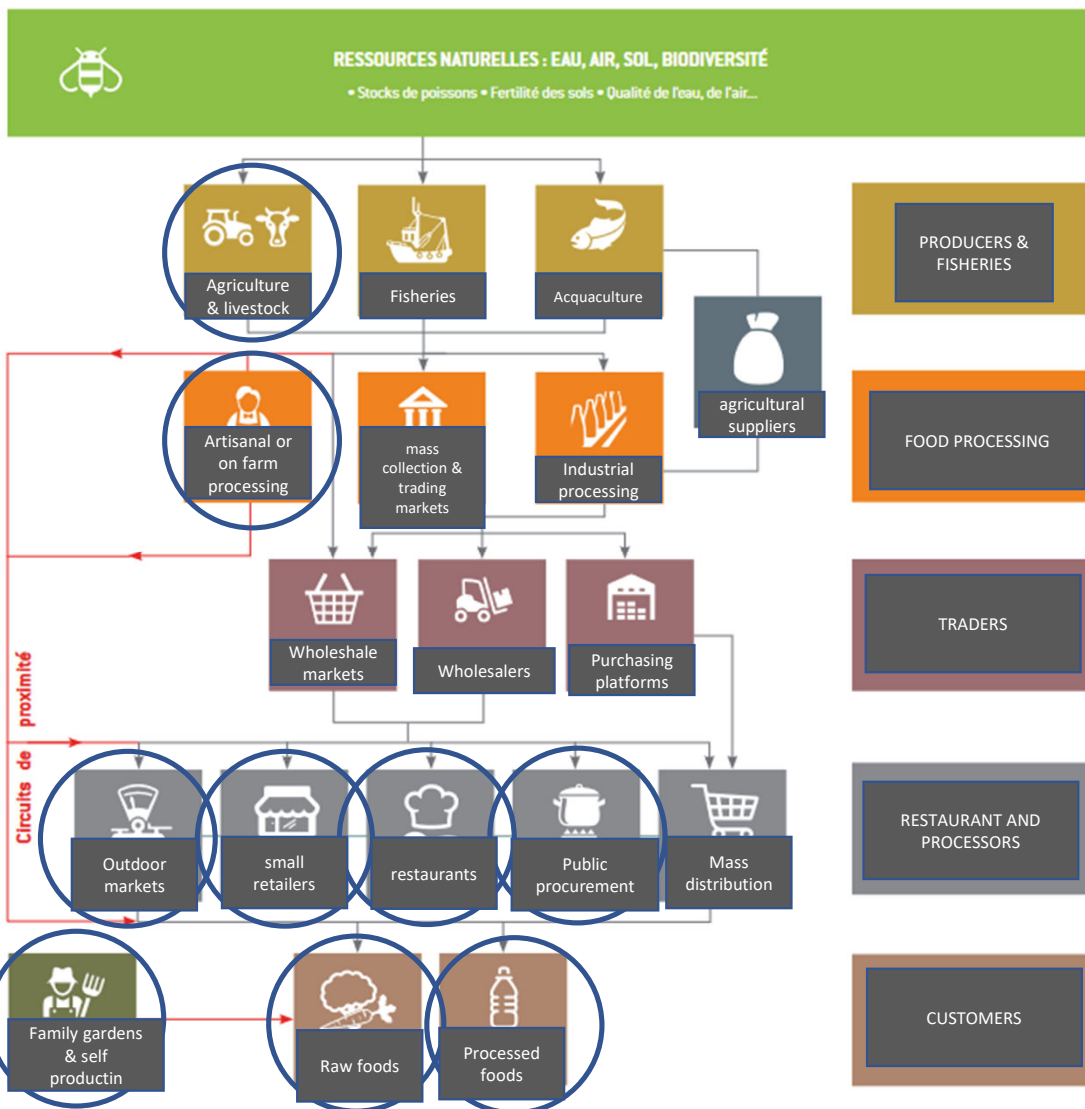


Molero Cortés et al, 2018. Based on Whatmore,



# What are Short Food Supply Chains?

- They are Supply Chains, Short in term of
  - Number of nodes = intermediaries
  - Distance = km
- Balanced
  - in economical relations
  - risk management



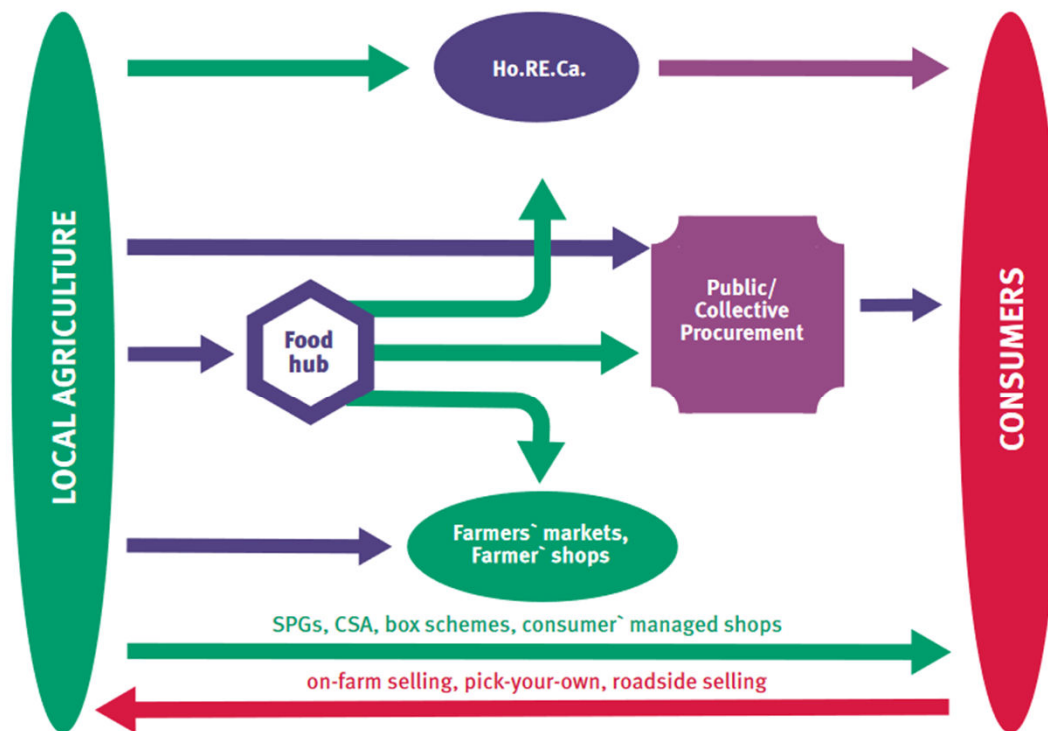
# Actors of the Food Systems



Ils influencent le système :



# A map of SFSCs typologies



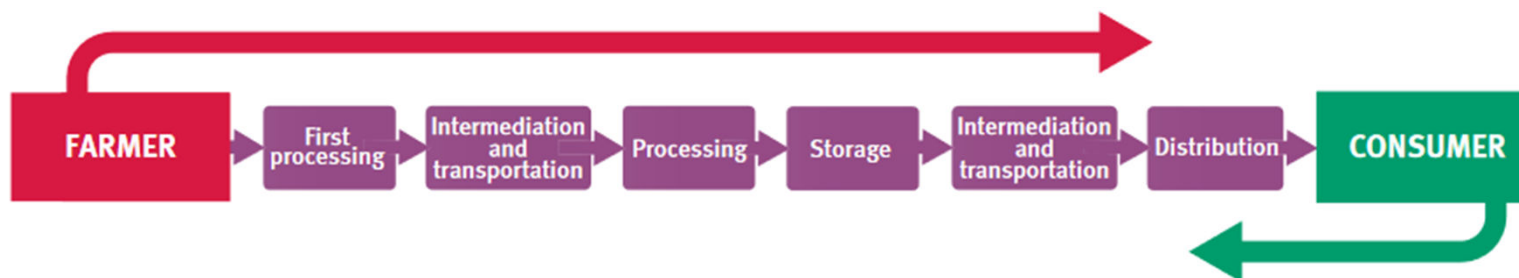
United Nations Industrial Development Organization, 2020



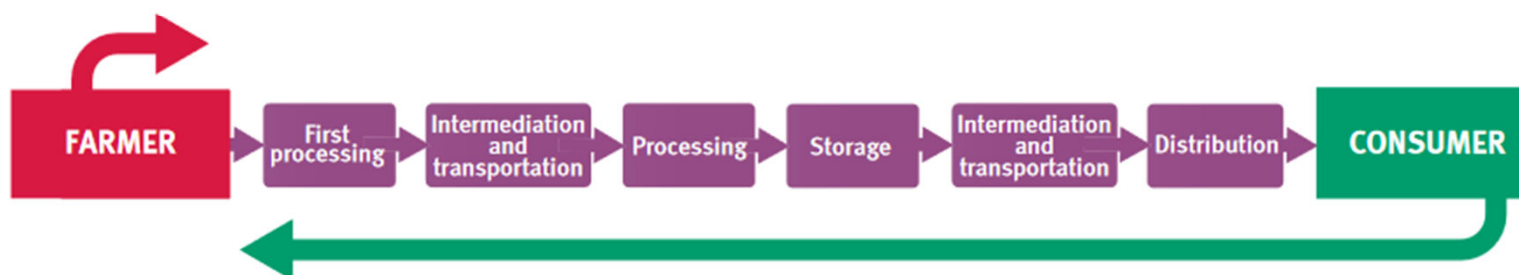
a) general representation



b) farmers' market model

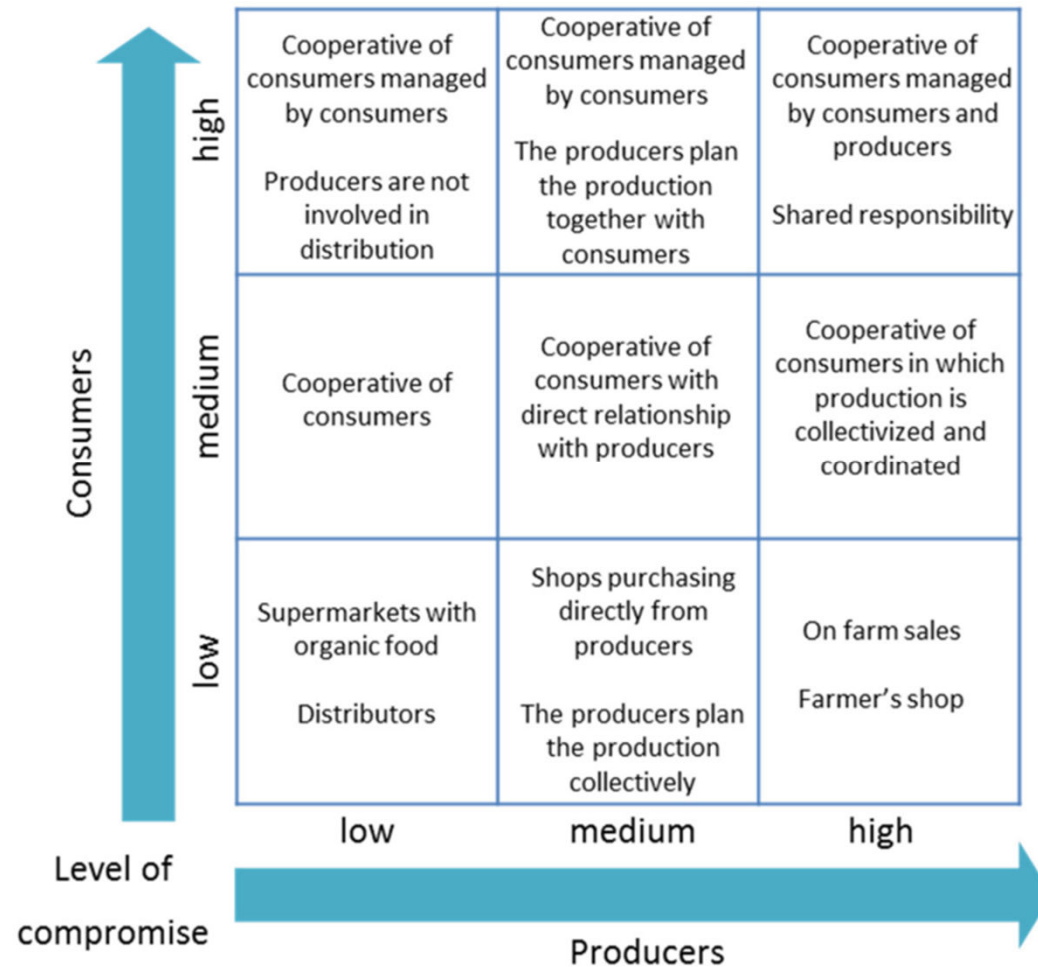


c) pick-your-own model



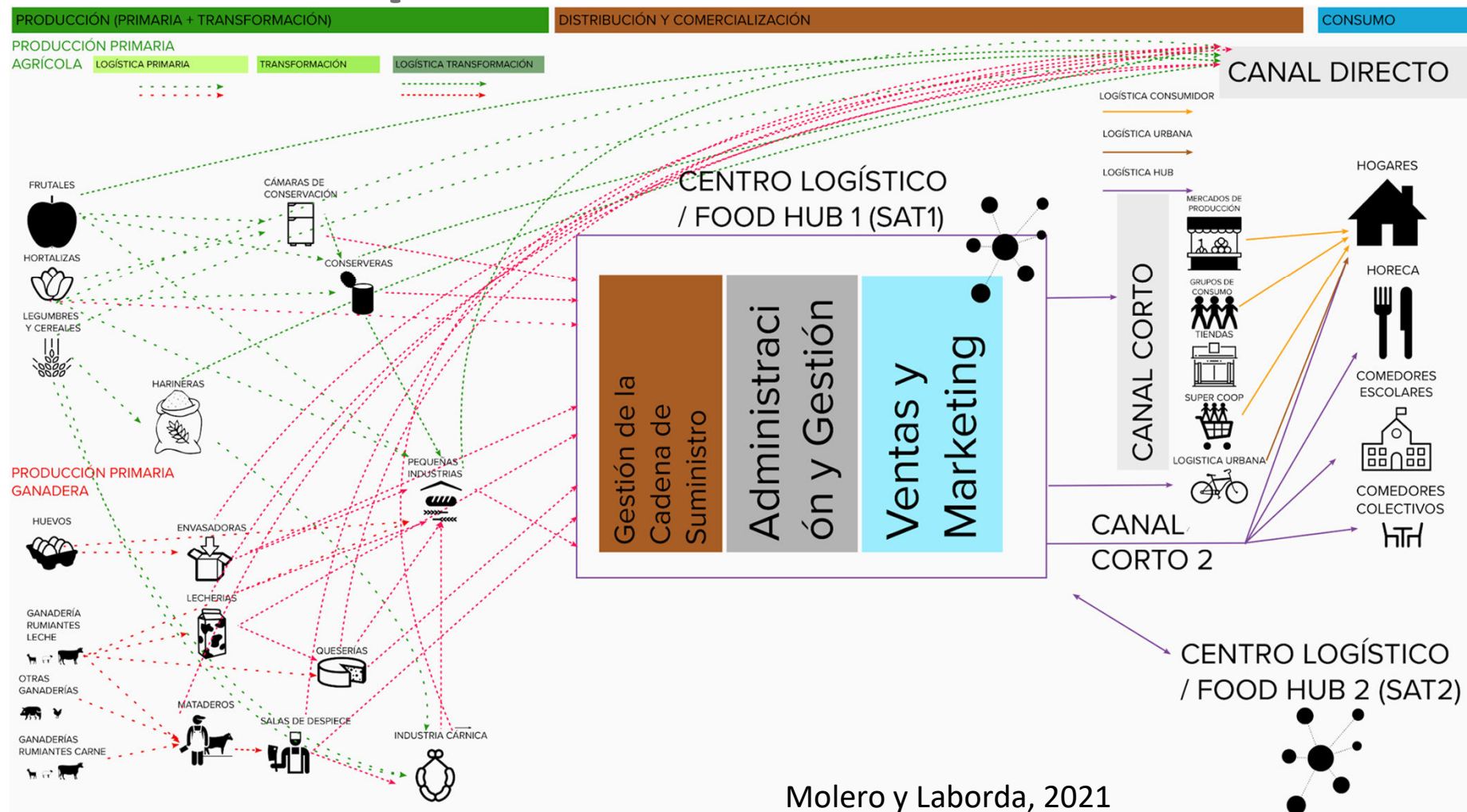
United Nations Industrial Development Organization, 2020

# Main actors of SFSC and typology



Jarzebowski et al, 2020

# A more complex vision...



Molero y Laborda, 2021



# Use guiding questions on Food Systems (1)

## **A. Food production in the city region:**

- What and how much food is produced LOCALLY in the city region?
- Where are inputs and resources LOCALLY sourced from?

## **B. Food processing and manufacturing:**

- Which companies prepare/manufacture LOCALLY the food consumed in the city region?

## **C. Food wholesale and distribution:**

- Who supplies LOCALLY the food to businesses/markets that sell food to consumers?

## **D. Food marketing, catering and retail:**

- Where do citizens buy their food? Please differentiate between citizens of different socio economic conditions and urban-rural areas.

FAO, 2018, p 134

# Guiding questions on Food Systems (2)

## **E. Food consumption:**

- What do people in the city region eat? What is the composition of their actual diet and food basket
  - Main products!
- Can people access LOCAL food and where?

## **F. Food and organic waste**

## **G. What policies and plans influence the CRFS?**

## **H. Who governs the food system?**

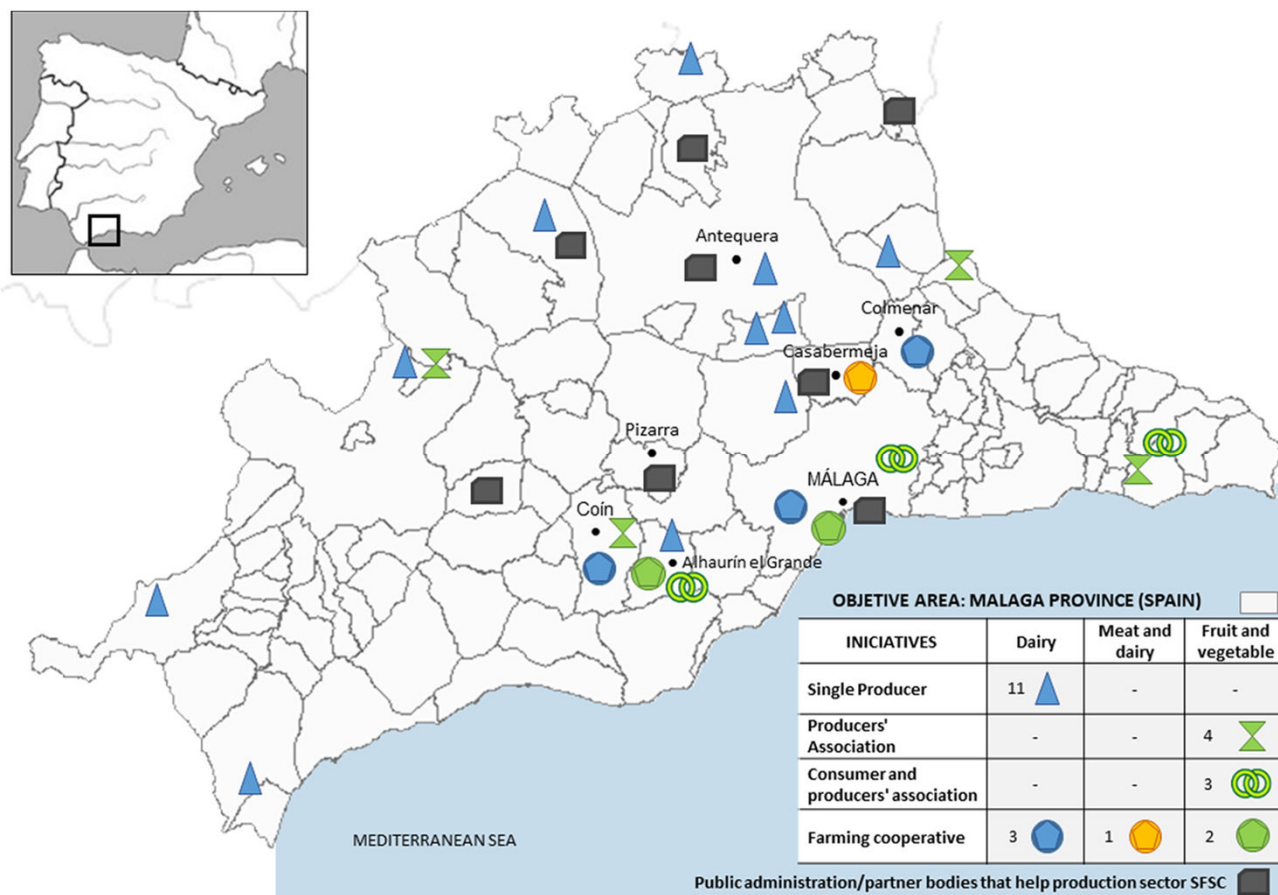
# Do not forget!

- Map physic and VIRTUAL networks
- Relevance and statistical significance
- Diferent analysis
  - Whole food analysis
  - Product analysis
  - Main product analysis



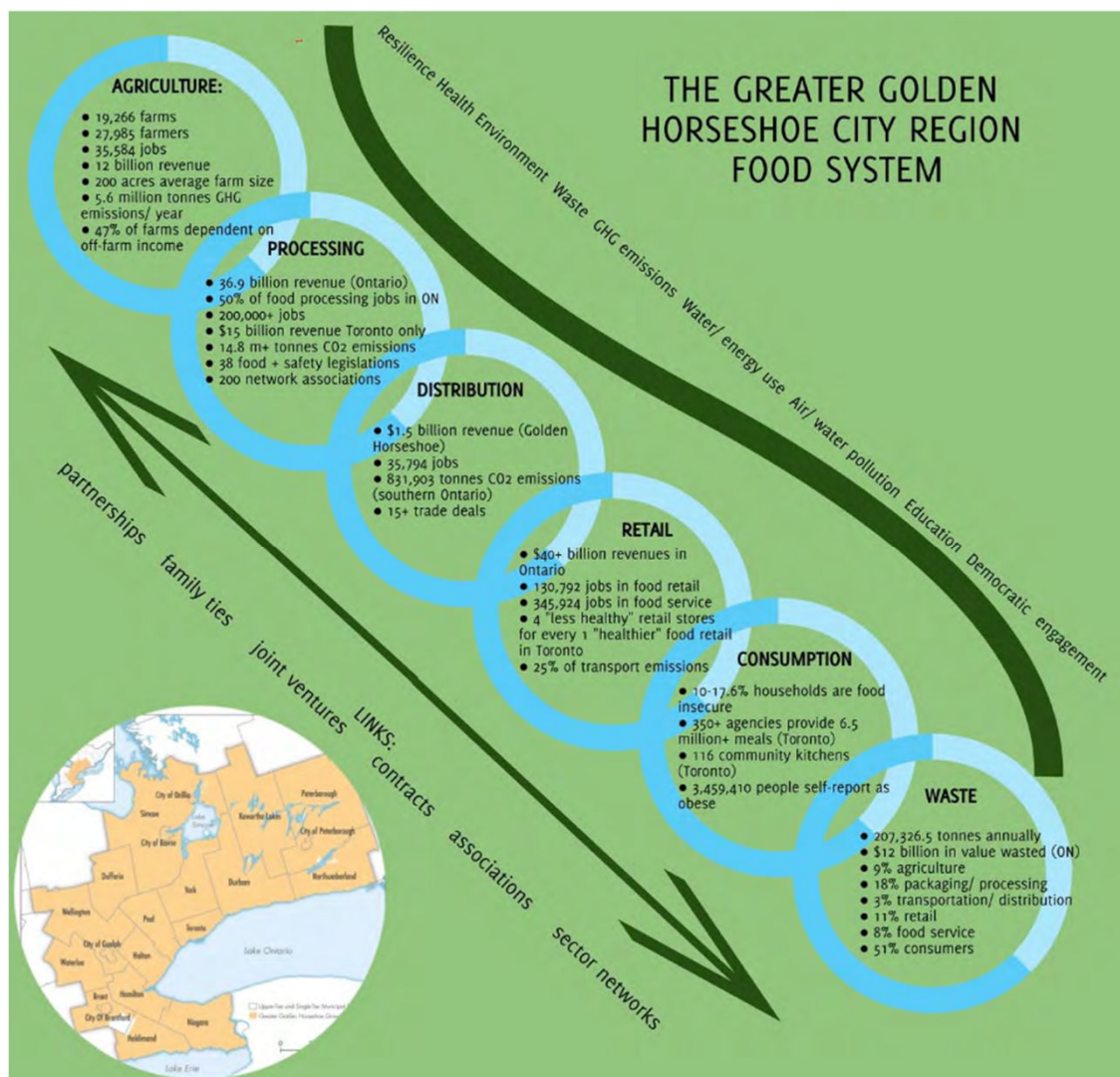
PHASE	STEP	Who?/What?		Where?	How?	Why?	For whom?	How much/many?
QUALITATIVE ANALYSIS	Step 1: Identify elements & Step 2: Organise and group the elements	People & Organizations		x	x	x	x	
		Infrastructure: Land & Others		x	x	x	x	
		Products		x	x	x	x	
	Step 3: how do the elements relate to each other?	Flows and streams			x	x	x	
		Processes			x	x	x	
		Social relations			x	x	x	
		Power, regulations, laws			x	x	x	
RESULT	Qualitative MAP			x	x	x	x	
QUANTITATIVE ANALYSIS	Step 4: Collect Data	Elements	Producers	x				Number, €, kg
			Consumers	x				Number, €, kg
			Ho.RE.Ca	x				Number, €, kg
			Food-Hubs	x				Number, €, kg
			Public/collective Procurement	x				Number, €, kg
			Farmers markets	x				Number, €, kg
			Farmers shops	x				Number, €, kg
			SPGs, CSA, Box-schemes, consumer managed	x				Number, €, kg
			On-farm selling, pick your own-roadside selling	x				Number, €, kg
			Self production	x				Number, €, kg
	Relationships/Flows			x				
	Step 5 Make sure that the units of data are linked to each other							
	Step 6 Add the data to the system map							
RESULT	Qualitative +Quantitative MAP			x	x	x	x	x

# SFSC Elements Mapping



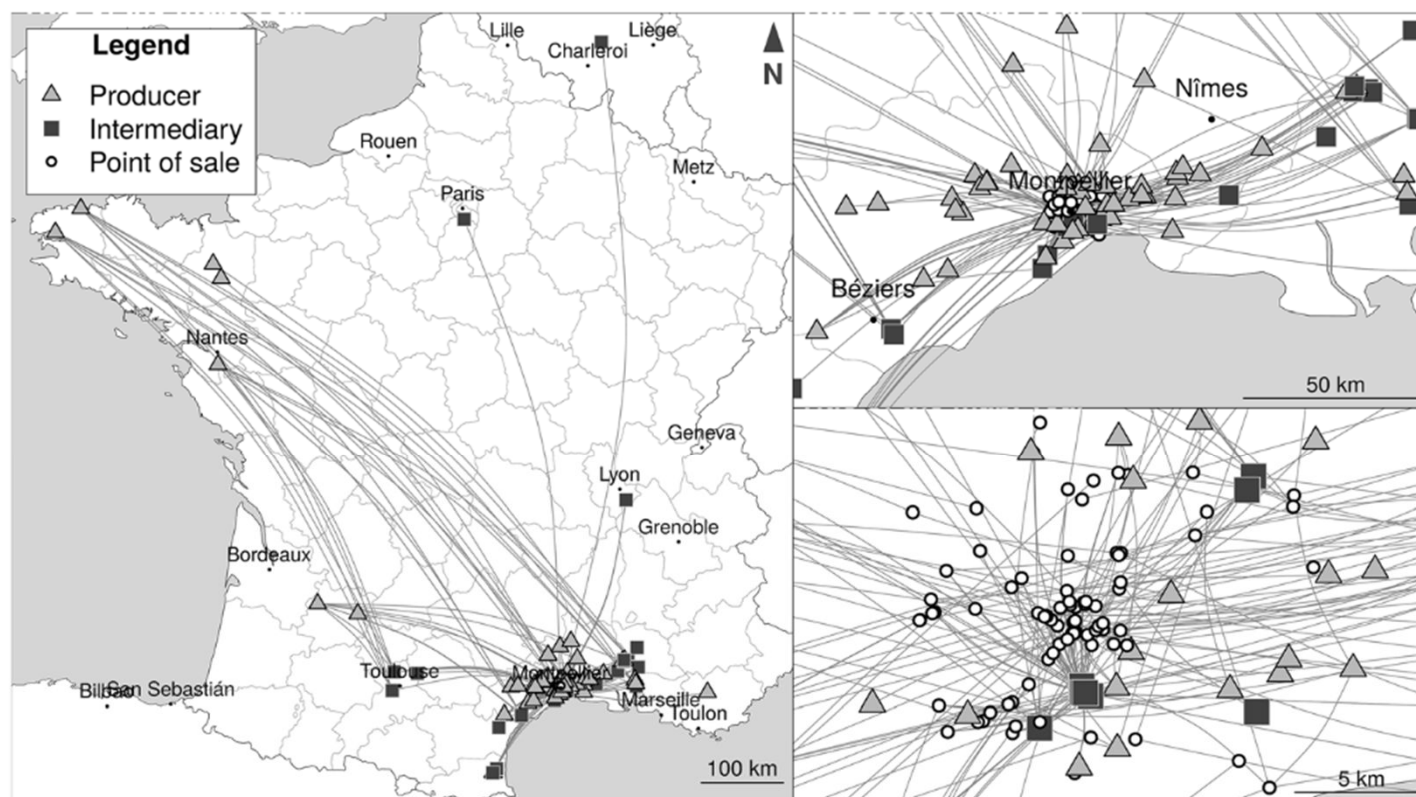
Rucabardo-Palomar and Cuellar-Padilla, 2018

# Mapping the WHOLE Food System

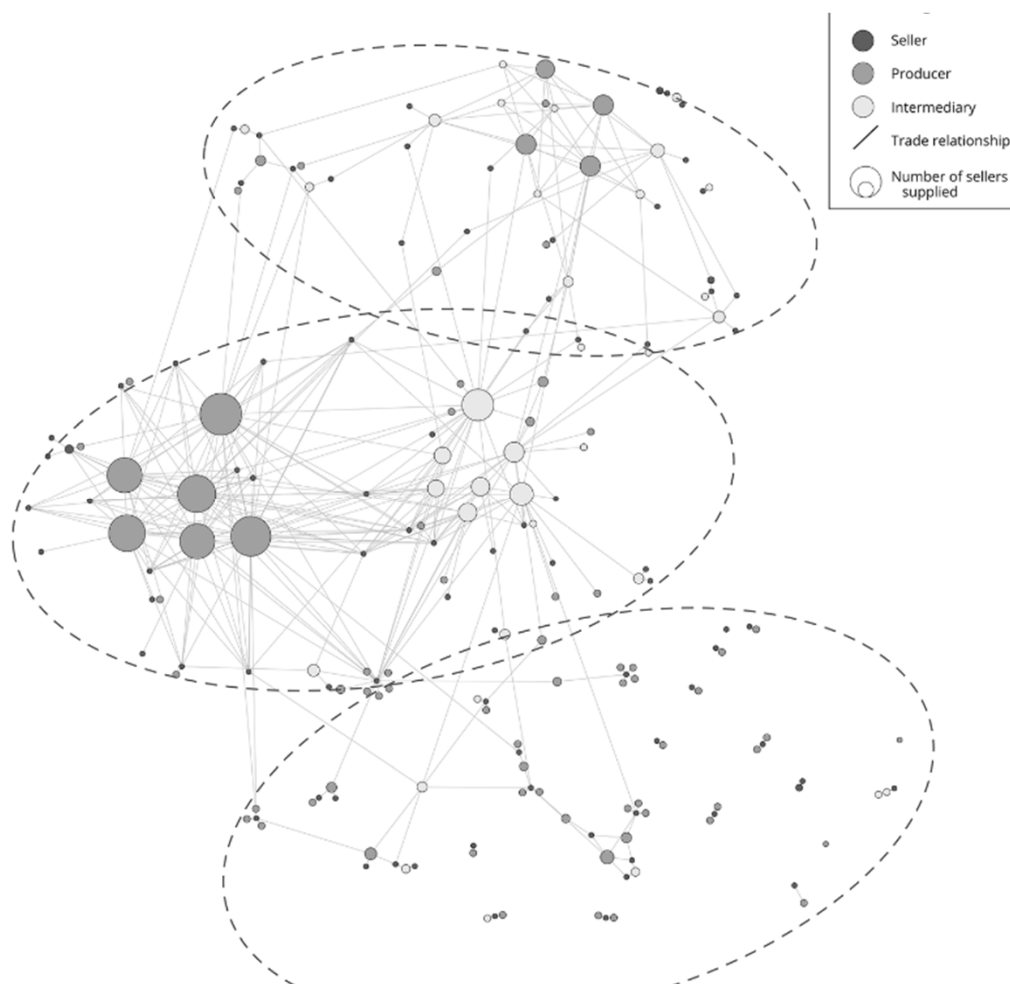




# Product analysis: In season tomato supply



**Fig. 4** Flows of in-season tomato supply for Montpellier. Source: IGN (2018) and authors. Realised with igraph 1.2.5, sf 0.9.4 and cartography 2.4.1 R packages  
Chiffolleau et al, 2020



# Analysis of sub-networks

Chiffolleau et al, 2020

# References



FAO, RUAF Foundation & Wilfrid Laurier University, 2018. CITY REGION FOOD SYSTEM TOOLS/EXAMPLES Food for the Cities Programme/RUAF-CityFoodTools Project. <https://www.fao.org/in-action/food-for-cities-programme/toolkit/introduction/en/>

SHORT FOOD SUPPLY CHAINS FOR PROMOTING LOCAL FOOD ON LOCAL MARKETS, 2020. United Nations Industrial Development Organization, 2020

Chiffoleau et al, 2020. Coexistence of supply chains in a city's food supply: a factor for resilience? Review of Agricultural, Food and Environmental Studies

FAO, 2018. Sustainable food systems. Concept and framework. <https://www.fao.org/3/ca2079en/CA2079EN.pdf>

Rucabado-Palomar, T., & Cuéllar-Padilla, M. (2020). Short food supply chains for local food: A difficult path. *Renewable Agriculture and Food Systems*, 35(2), 182-191. doi:10.1017/S174217051800039X





Figure 4: Food systems main stakeholders



**Building consensus  
and at the same  
time  
Achieving  
transformative  
practices**

Source: Collaborative Framework for Food Systems Transformation

Figure 4: Food systems main stakeholders



**Which stakeholders  
are engaged?**

**Which stakeholders  
are critical to  
achieve SFS?**

Source: Collaborative Framework for Food Systems Transformation

# AGENDA 6th session on April 13, 2023



- **Introduction** *Marian Simón Rojo, Universidad Politecnica de Madrid*
- **Combining Tools for Transformative Cartographies** *Marian Simón*
- Q&A
- *Next session + compulsory reading*

# Compulsory reading + Task

- Jensen, P. D., & Orfila, C. (2021). ***Mapping the production-consumption gap of an urban food system: An empirical case study of food security and resilience***. Food Security, 13, 551-570. (5min)

Section 1 of 9

Food from where?

Please note down two different days

Email \*

Valid email address

This form is collecting email addresses. [Change settings](#)

Name \*

Short-answer text

Location (City-town) \*

Short-answer text

Location (Country) \*

Short-answer text

<https://forms.gle/a5YAEWcbZqbenWig6>