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Action for Education Spatial Organisation and Planning For Sustainable Food

Case study: Mapping the Short Food Supply Chains

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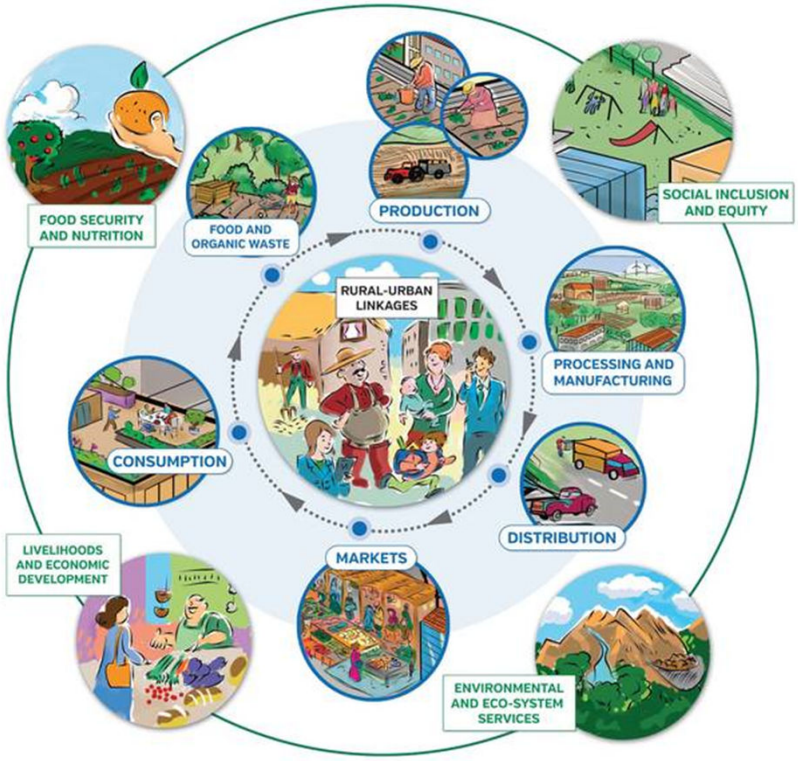
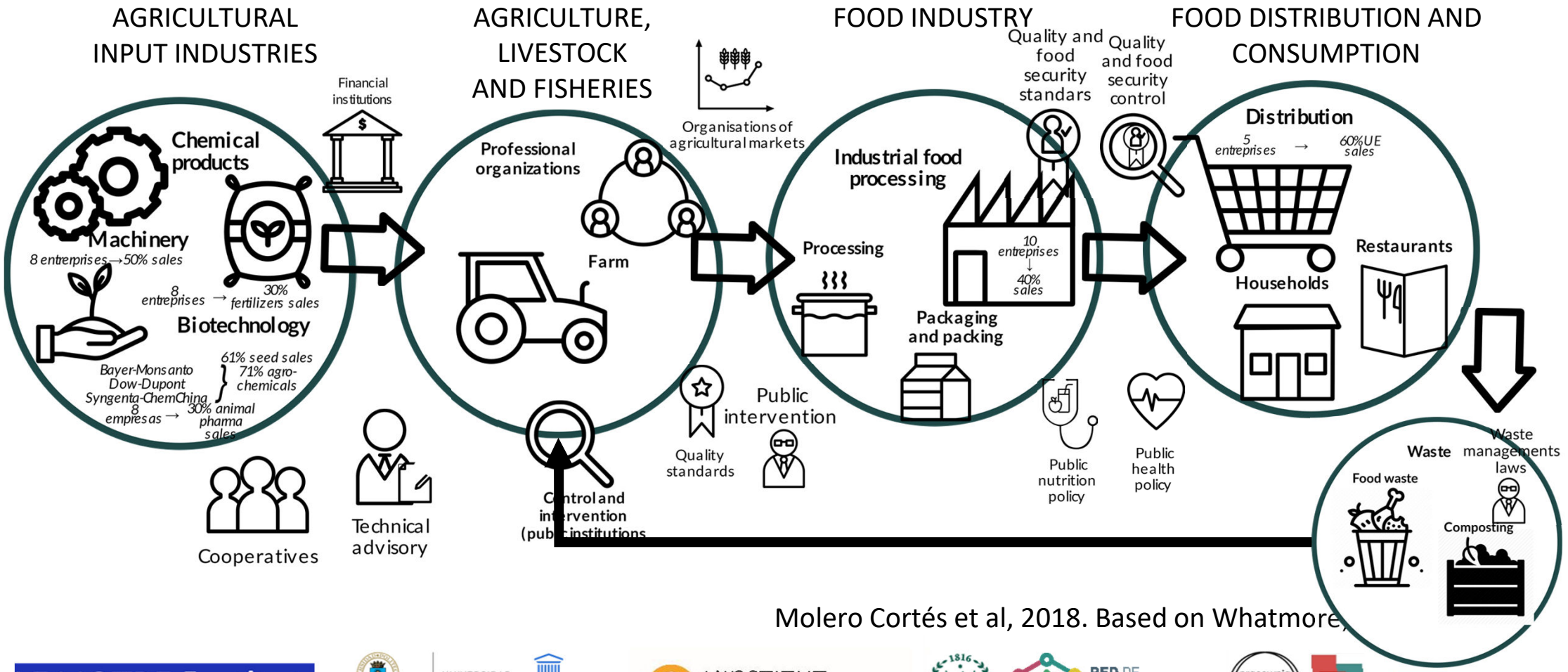
City Region Food Systems: Actors & Challenges



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

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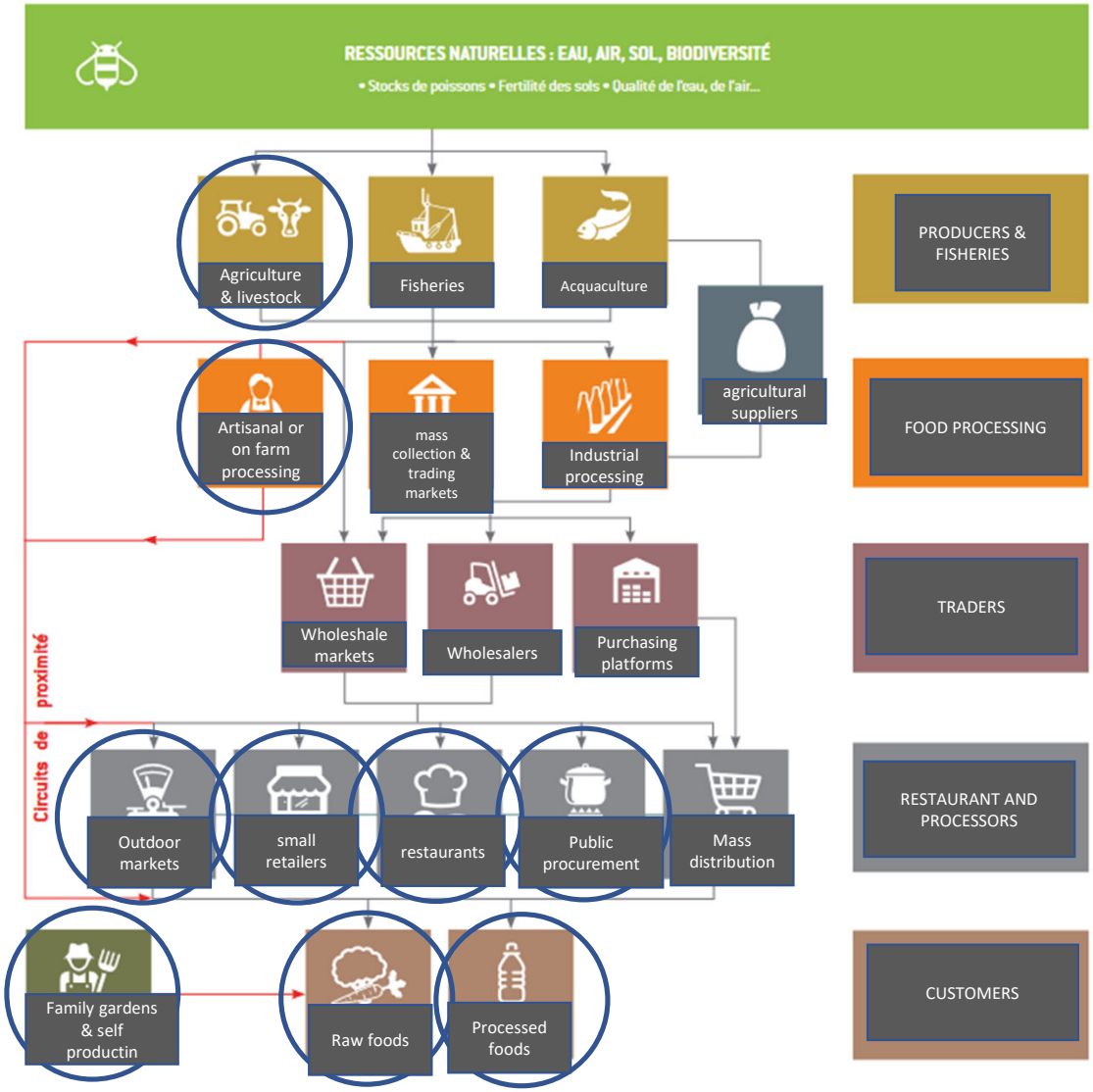

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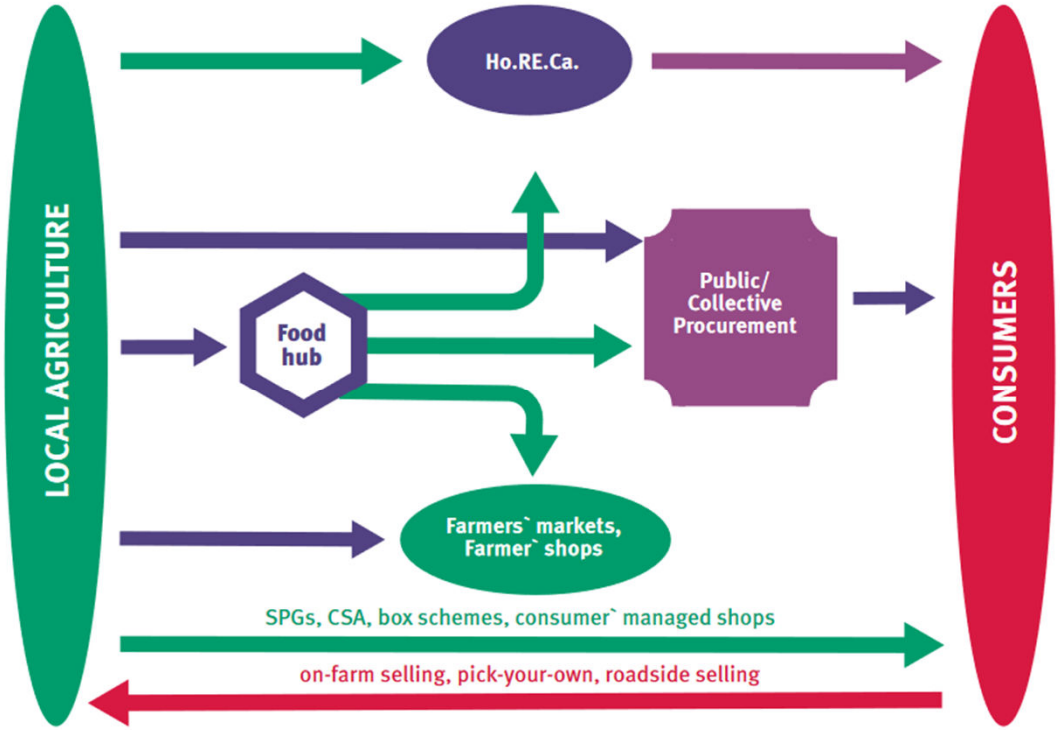
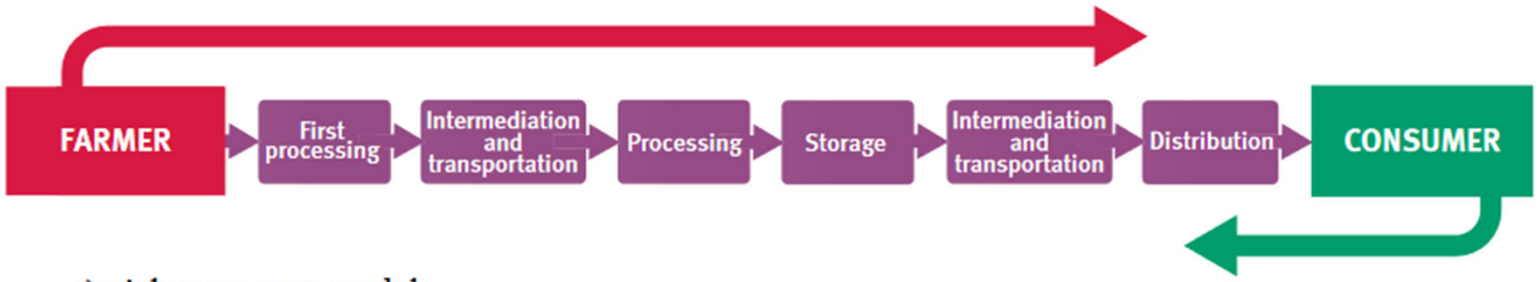
A map of SFSCs typologies



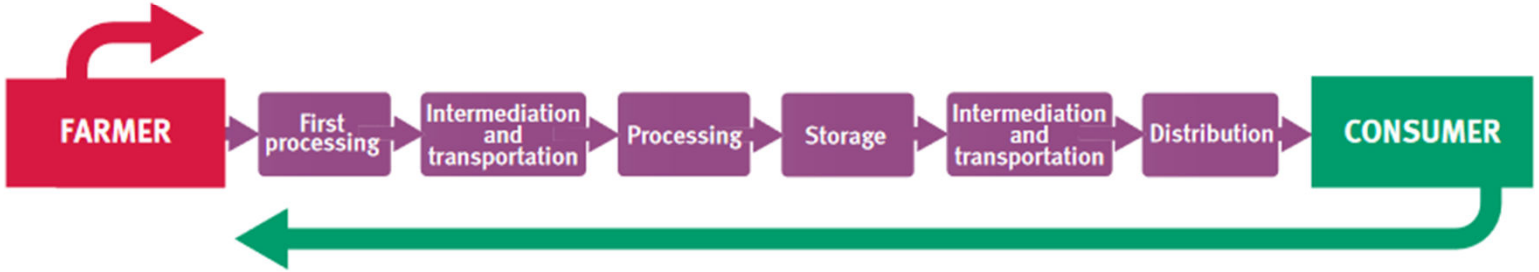
United Nations Industrial Development Organization, 2020

a) general representation

b) farmers`market model

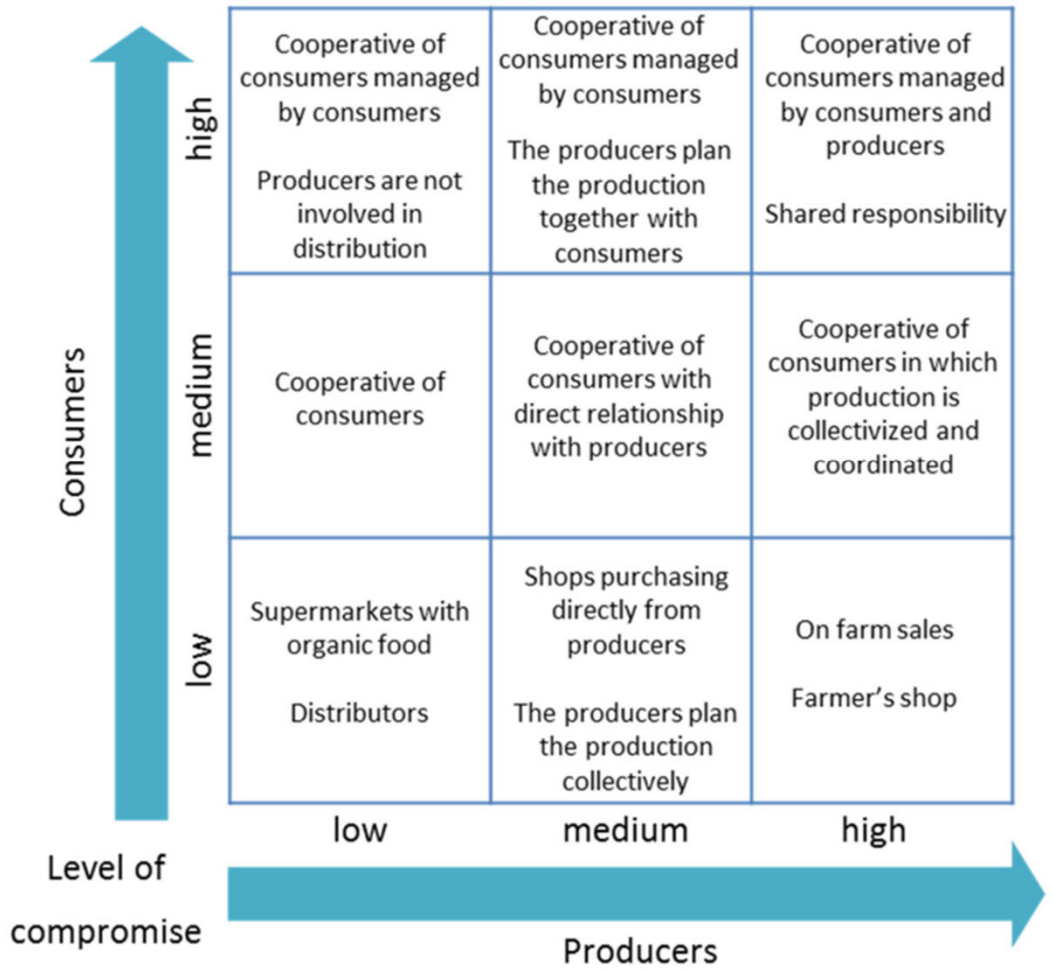


c) pick-your-own model



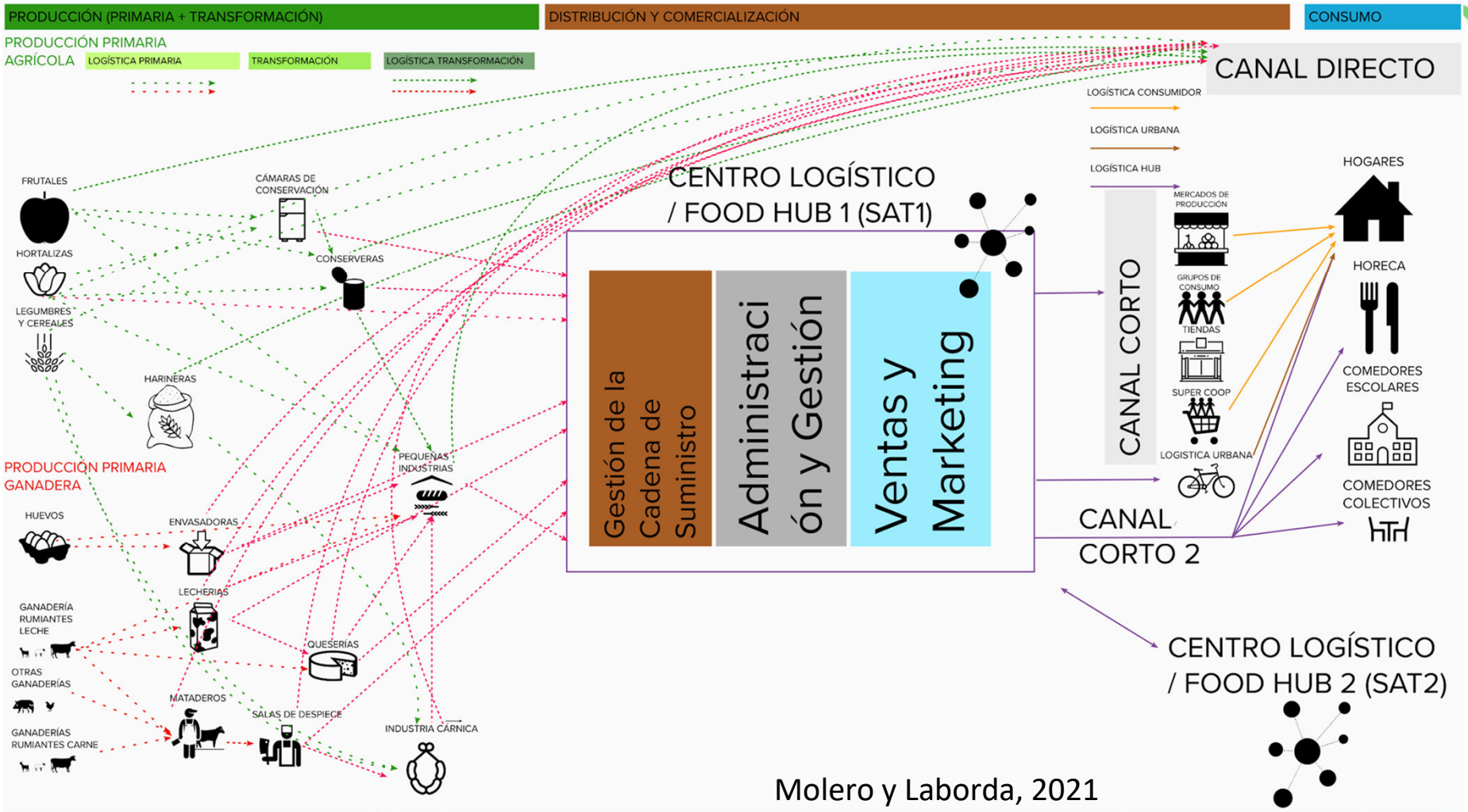
United Nations Industrial Development Organization, 2020

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?

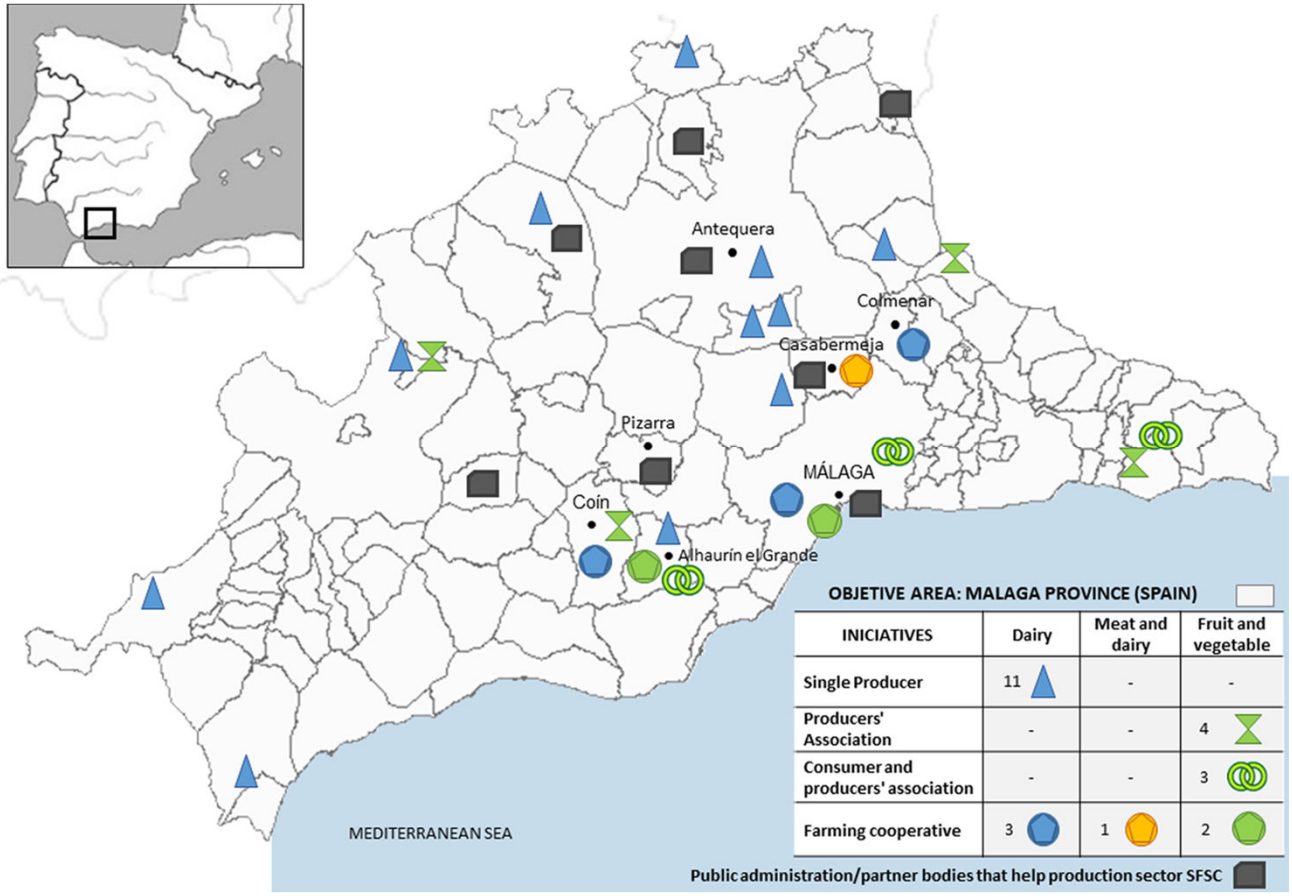
FAO, 2018, p 134

Do not forget!

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

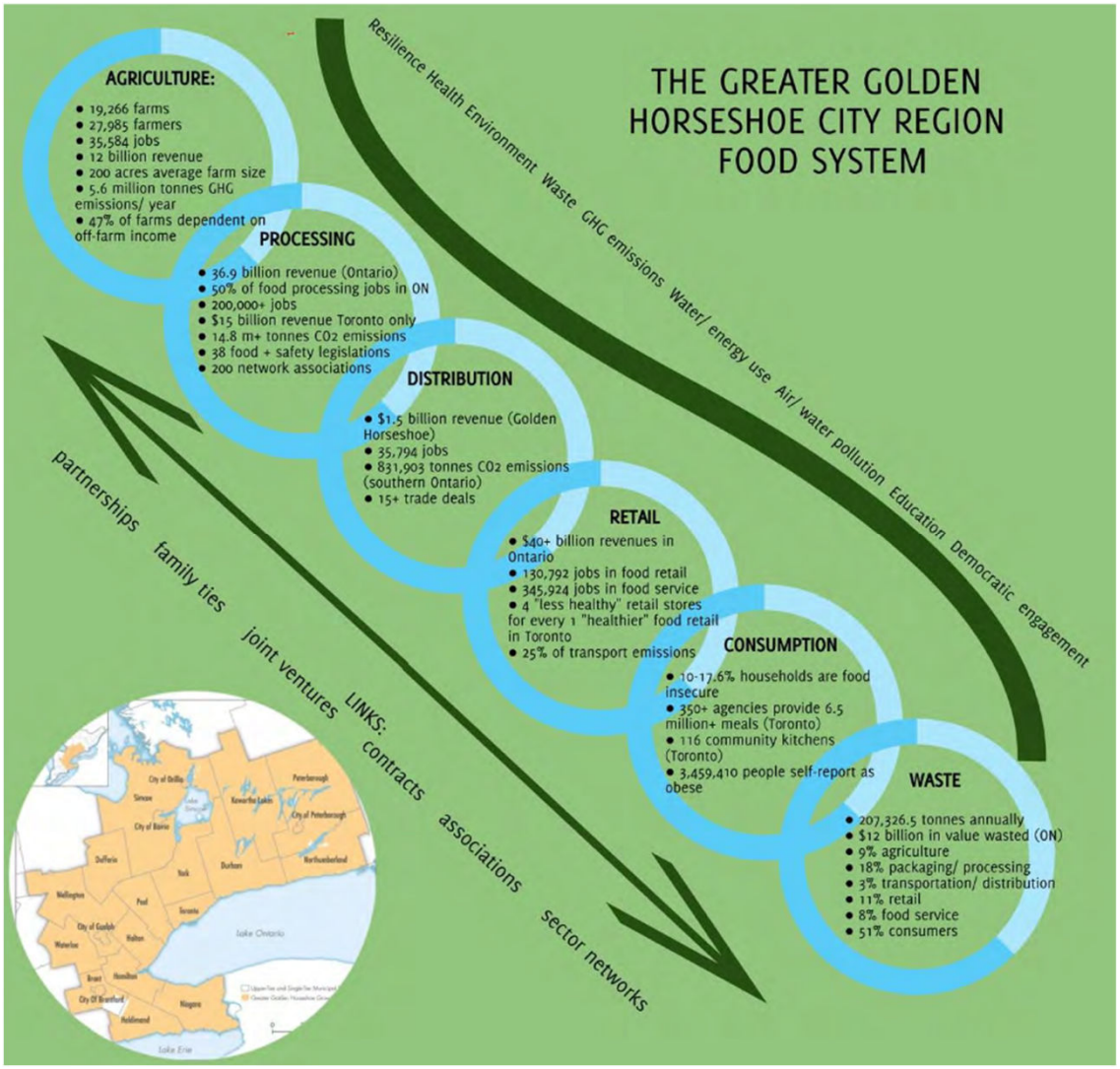
PHASE	STEP	Who?/What?		Where?	How?	Why?	For whom?	How much/many?
QUALITATIVE ANALYSIS	**Step 1: Identify elements & Step 2: Organise and group the elements**	People & Organizations		x	x	x	x	
		Infraestructure: Land & Others		x	x	x	x	
		Products		x	x	x	x	
	Step 3: how do the elements relate to each other?	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



INICIATIVES	Dairy	Meat and dairy	Fruit and vegetable
Single Producer	11	-	-
Producers' Association	-	-	4
Consumer and producers' association	-	-	3
Farming cooperative	3	1	2

Rucabardo-Palomar and Cuellar-Padilla, 2018



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Product analysis: In season tomato supply

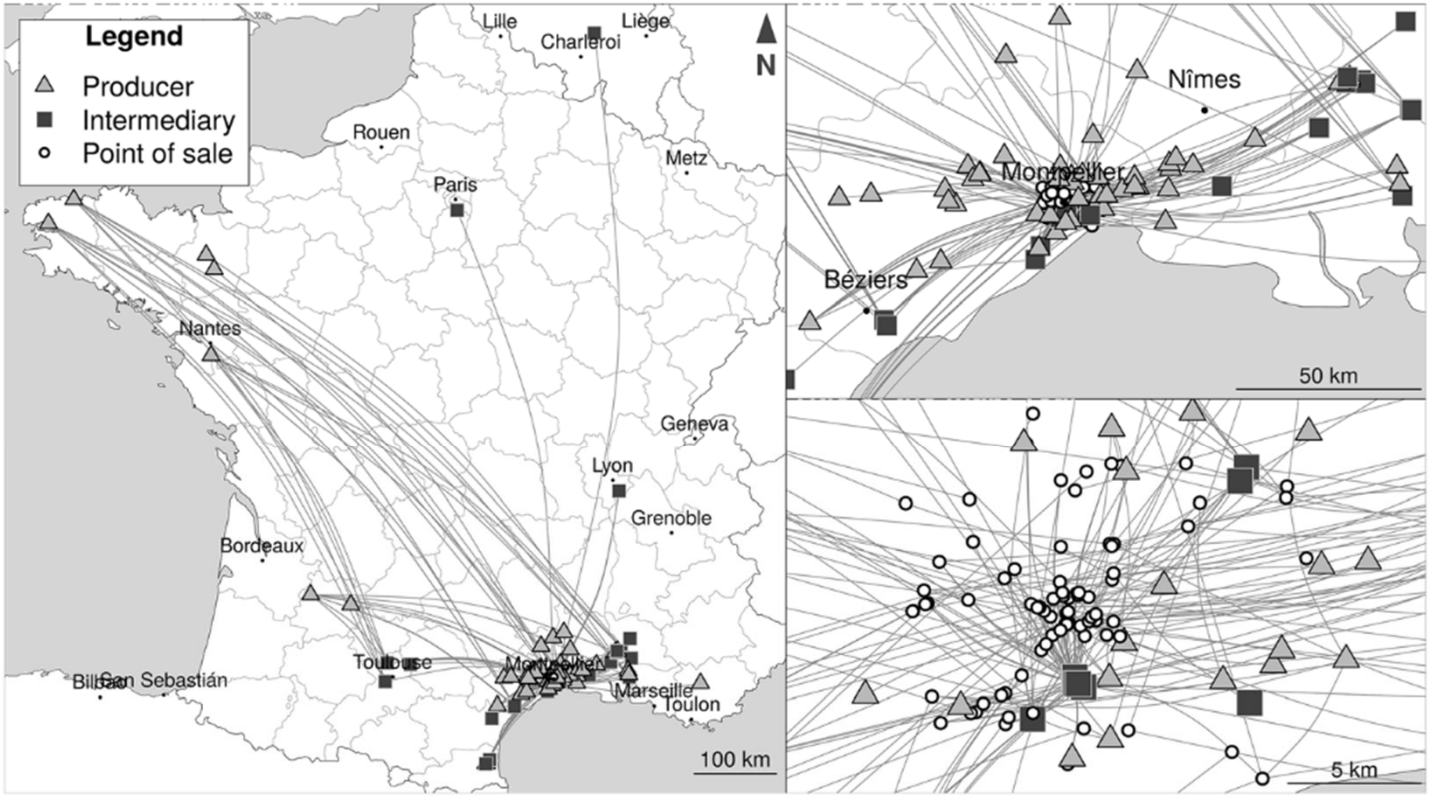
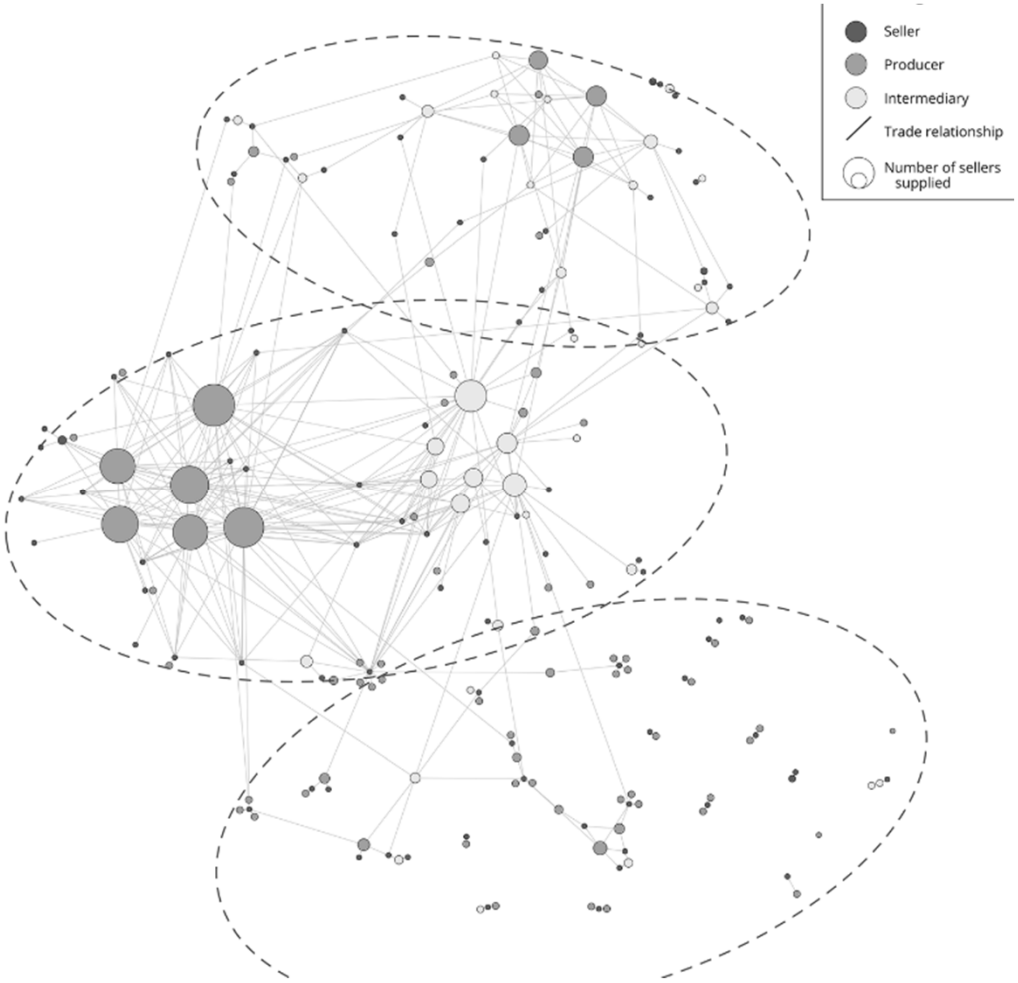


Fig. 4 Flows of in-season tomato supply for Montpellier. Source: IGN (2018) and authors. Realised with igraph 1.2.5, sf 0.9.4 and cartography 2.4.1 R packages

Chiffoleau et al, 2020



Analysis of sub-networks

Chiffoleau et al, 2020

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

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