The potential role of short food supply chains in strengthening food system resilience

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TABLE OF CONTENTS

01 **INTRODUCTION**

Definition, types and barriers

02 **BARRIERS**

Internal and External

03 **ENABLING DYNAMICS**

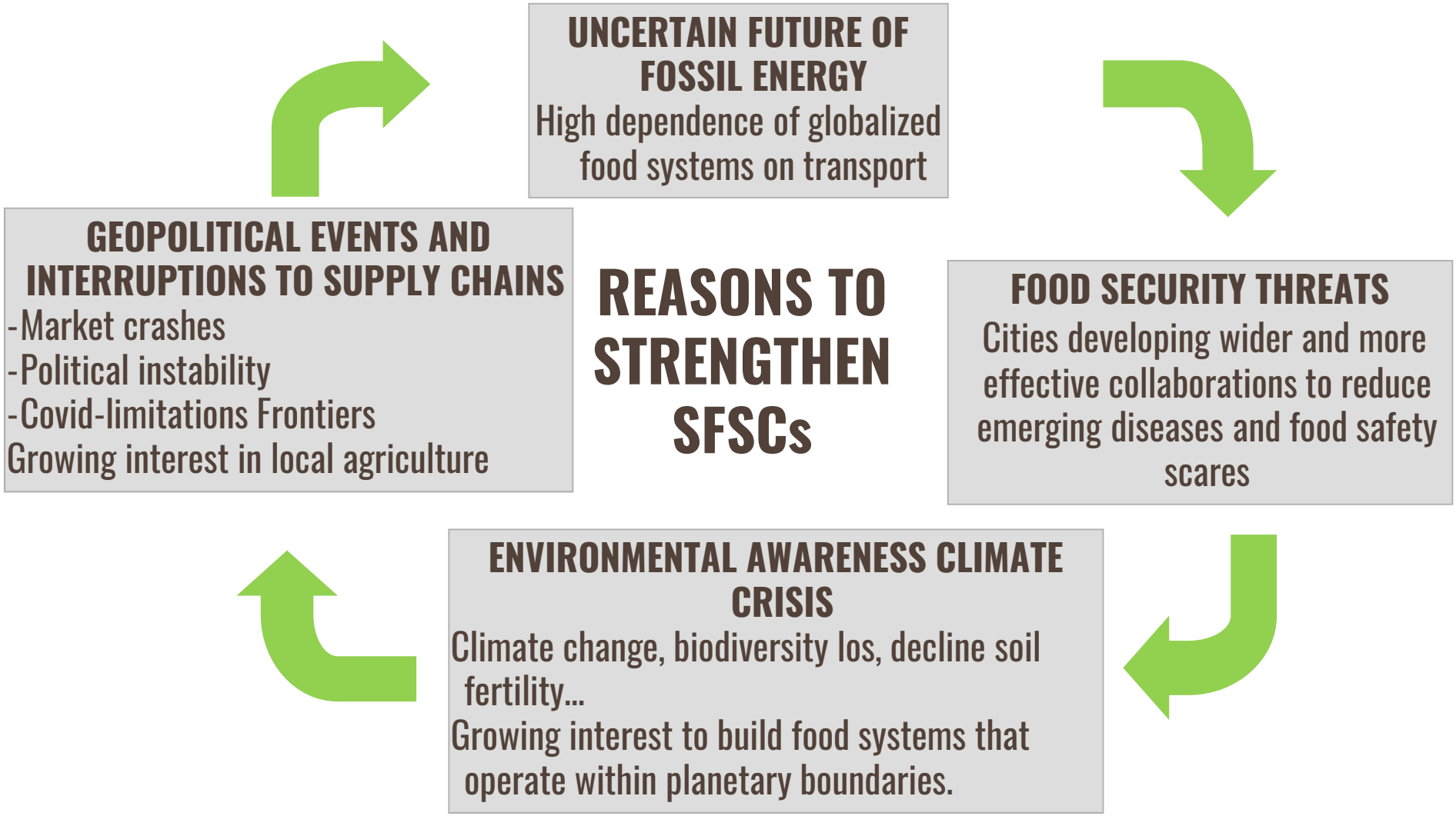
For reinforcing collaborative SFSC

04 **INNOVATIVE SOLUTIONS**

Food Hubs
Agrarian Parks

Short Food Supply Chain (SFSC) is "a supply chain involving a limited number of economic operators, committed to cooperation, local economic development, and close geographical and social relations between food producers, processors and consumers"

EU's rural development regulation (1305/2013)


UNCERTAIN FUTURE OF FOSSIL ENERGY
High dependence of globalized food systems on transport
FOOD SECURITY THREATS
Cities developing wider and more effective collaborations to reduce emerging diseases and food safety scares
ENVIRONMENTAL AWARENESS CLIMATE CRISIS
Climate change, biodiversity los, decline soil fertility...
Growing interest to build food systems that operate within planetary boundaries.
GEOPOLITICAL EVENTS AND INTERRUPTIONS TO SUPPLY CHAINS
-Market crashes
-Political instability
-Covid-limitations Frontiers
Growing interest in local agriculture
REASONS TO STRENGTHEN SFSCs

BUILDING RESILIENCE AROUND SFSCs

Re-localisation

Based on the ability to reconnect agri-food economies with local consumers to shorten distances between production and consumption.

Ecosystem services

Based on conserving local knowledge, local varieties, commons and biodiversity to improve the provision of ecosystem services.

Re-conecting city-countryside

Based on maintaining periurban agriculture and small scale farming to increase food security and quality foods.

Food democracy

Based on increasing transparency, trust, equity, more participatory and horizontal throughout the agri-food chain to improve the overall sustainability of local and regional agri-food system.

TYPES OF SFSCs

FACE TO FACE

Consumer purchases a product direct from the producer/processor on a face-to-face basis.

Farmers´ market, farm shops, roadside sales, CSA

SPATIAL PROXIMITY

Products are produced and retailed in the specific region of production, and consumers are made aware of the 'local' nature of the product.

Public procurementHotels, restaurants and commercial (HoCaRe),

SPATIALLY EXTENDED

Information about the place and processes of production is communicated to consumers who are outside of the region of production itself, and who may have no personal experience of that region.

Protection of Designated Origin, Protected Geographical Indication

Marsden et al. (2000), Renting et al. (2003), Kneafsey et al., 2013

CHARACTERISATION OF FARMS INVOLVED SFSCs

- Small scale farms in terms of economic size and surface.
- Located in periurban agrarian lands or densely populated metropolitan regions.
- They sell through different types of SFSCs to reduce risk.
- Mostly involved in sales proximity in the urban market than long distances.
- Fruit and vegetables, tendency organic food.

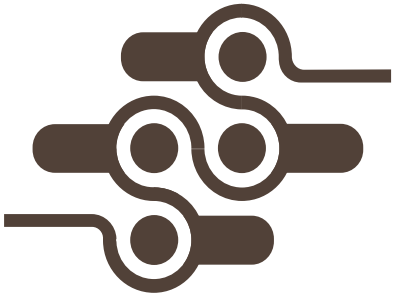
Yacamán et al., 2019 and Yacamán et al., 2020.

FACTORS THAT HAMPER SCALING UP OF SHORT FOOD SUPPLY CHAINS

INTERNAL BARRIERS LOCAL PRODUCERS
Difficulties to invest in new technology, equipment, infrastructure
Low earnings for the amount of work- Farmers Markets
Lack of diverse local production- Public procurement
Lack of infrastructure for storing fresh foodstuffs
Some producers are reluctant to join collective initiatives: associated with a loss of control, a lack of acknowledgment, and/or low/irregular payment
Low expertise in branding; time needed to develop collective vision and difficulties in reaching agreement; cost
Lack of specialised knowledge such as IT, logistics and accountancy skills, social media
Smal farms lack scale: problems to supply enough produce consistently to meet the demand

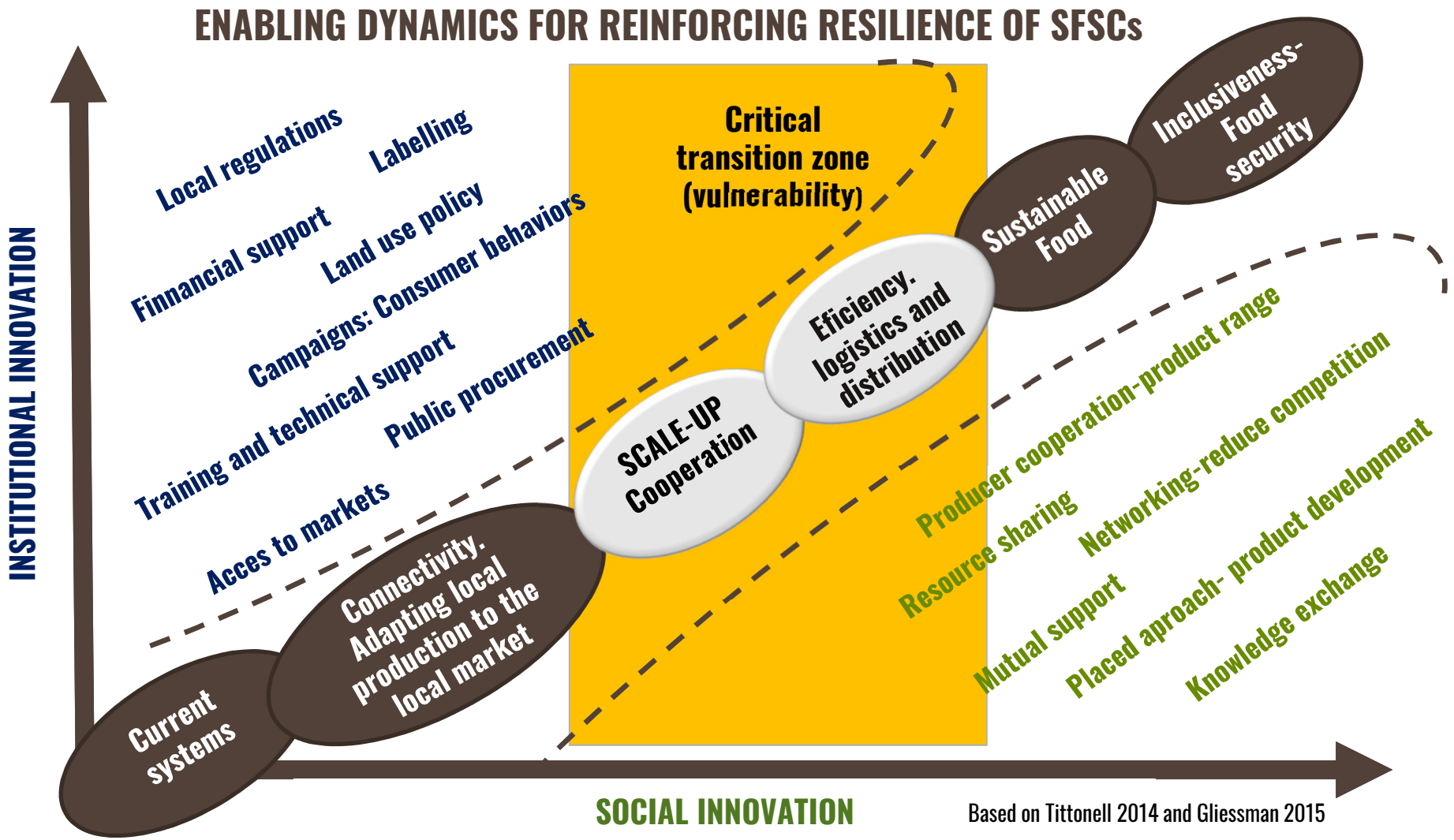
FACTORS THAT HAMPER SCALING UP OF SHORT FOOD SUPPLY CHAINS

EXTERNAL BARRIERS
Transport costs and dispersion of delivery points
Orders in summer are insufficient (public procurement)
Environment aware consumer
Lack of kitchens in schools
Low adaptation of school menus to the seasonal variation of local production
Lack of affordable land near urban populations
High price for local food- discourage local and organic diets
Regulatory barriers: Hygiene rules, to sell direcly, etc
Little participation in sterring commitee farmers markets

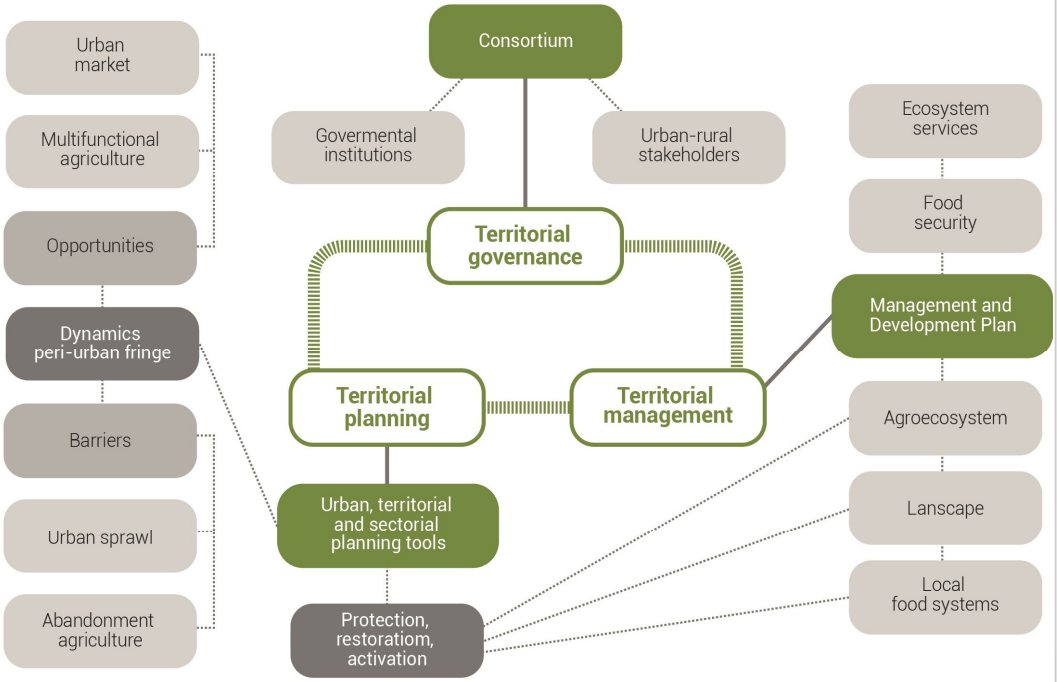


BUILDING RESILIENCE WILL REQUIRE TO STRENGTHEN SFSCs

From a collective aproach with emphasis on policies and social innovation


ENABLING DYNAMICS FOR REINFORCING RESILIENCE OF SFSCs
INSTITUTIONAL INNOVATION
SOCIAL INNOVATION
Local regulations
Labelling
Finnancial support
Land use policy
Campaigns: Consumer behaviors
Training and technical support
Public procurement
Acces to markets
Critical transition zone (vulnerability)
Current systems
Connectivity. Adapting local production to the local market
SCALE-UP Cooperation
Eficiency. logistics and distribution
Sustainable Food
Inclusiveness- Food security
Producer cooperation-product range
Networking-reduce competition
Resource sharing
Mutual support
Placed aproach- product development
Knowledge exchange
Based on Tittonell 2014 and Gliessman 2015

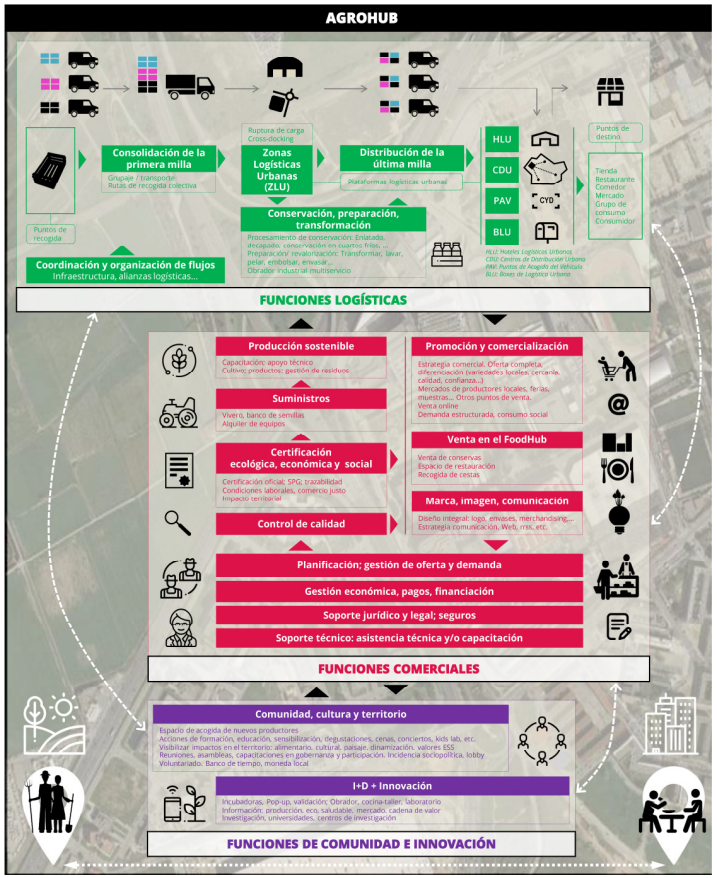
INSTITUTIONAL INNOVATION-SYSTEMIC APPROACH: AGRARIAN PARKS



MODEL OF AGRARIAN PARKS. Yacamán, 2018

www.paqueagrariofuenlabrada.es

SOCIAL INNOVATION-ASSOCIATIVE FOOD HUBS



Yacamán Ochoa, C., Mata Olmo, R., Matarán-Ruiz, A. (2020).

ECONOMY OF SCALE

-**IMPROVE THE ACCES TO THE MARKET OF SMALL PRODUCERS**

-**REDUCTION OF LOGISTICS COST**

-**IMPROVES CAPACITY TO SUPPLY** quantity, variety and queality of food throughout the year and to different consumers' need.

-**CONCENTRATION OF SUPPLY**: Necessary to adree the expansion of sustainable public procurement

- Reduction of **CARBON FOOTPRINT**

CONCLUSIONS

- SFSCs have an important role in achieving environmental, social, and economical goals.
- It is strategic to scale up SFSCs to improve resilience of the food system.
- To scale up SFSCs we need to apply a systemic, collective and multi-actor approach.

THANKS!

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