



TERRITORIALIZED SUSTAINABLE FOOD SYSTEMS

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OUTLINE

- How to decline the title and provide a useful toolkit
 - Theoretical approach(es)
 - Tools of analyses
 - Case-study on TSFS
 - Policy for TSFS



HOW TO DECIPHER «TERRITORIALIZED SUSTAINABLE FOOD SYSTEMS»

◦ Questions: 4 pillars / 4 terms

- Territorialized (spatial)
- Sustainable (environmental/social/economic)
- Food (sectorial)
- Systems (interaction)

◦ Answers

- RURAL WEB + SYAL/LAFs





FIRST PREMISE ON THE TERMS: «TERRITORIALIZED» AND SUSTAINABLE

Definition of sustainable rural development

WHAT IS SUSTAINABLE RURAL DEVELOPMENT?

(SOURCE: EUROPEAN COMMISSION)

- **Sustainable rural development** is generally recognized as the product of those human activities that use the resources of rural territories to increase welfare. Development can be considered as sustainable if it meets the needs of the present generation without compromising the ability of future generations to meet theirs.
- Rural development is the key tool for encouraging diversification and innovation in rural areas. It aims to reverse depopulation processes, stimulate employment and equality of opportunities, respond to growing requests for better quality, health, safety, personal development and leisure, and finally improve the quality of life



SUSTAINABLE RURAL DEVELOPMENT (SRD) – NEW ROLES FOR AGRICULTURAL SECTOR

- *‘Sustainability has a broader meaning encompassing the viability of localities and communities on which the maintenance of both the environment and economic activity ultimately depends. For those concerned with the economic and social development of rural communities, this is obviously crucial (Murdoch, 1994)*
- *SRD is a territorially based development that redefines nature by re-emphasizing food production and agro-ecology and that re-asserts the socioenvironmental role of agriculture as a major agent in sustaining rural economies and culture (Marsden, 2003)*



Rural puzzle...



... and interplay problems



ENDOGENOUS DEVELOPMENT

- Different conception of spaces and different theories of local development
- What does endogenous mean?
- Endogenous versus exogenous and the theories of **diversified-relational space (Capello, Nijkamp 2010)**
 - **Aim:** explanation of development in local areas. These are development theories, interested in explaining tangible and intangible elements influencing development trajectories.



DIVERSIFIED-RELATIONAL SPACE

- **diversified** since it allows to have polarities on which development insists
- **relational** since local, stable and long term relations have a role in explaining **development**.
- Space is no longer a physical and administrative space; it becomes a more non-material space.
- Economic development can take place also thanks to a more efficient spatial organization of production.
 - Untraded interdependencies and relational assets (Storper, 1997)
- *Space becomes territory!*



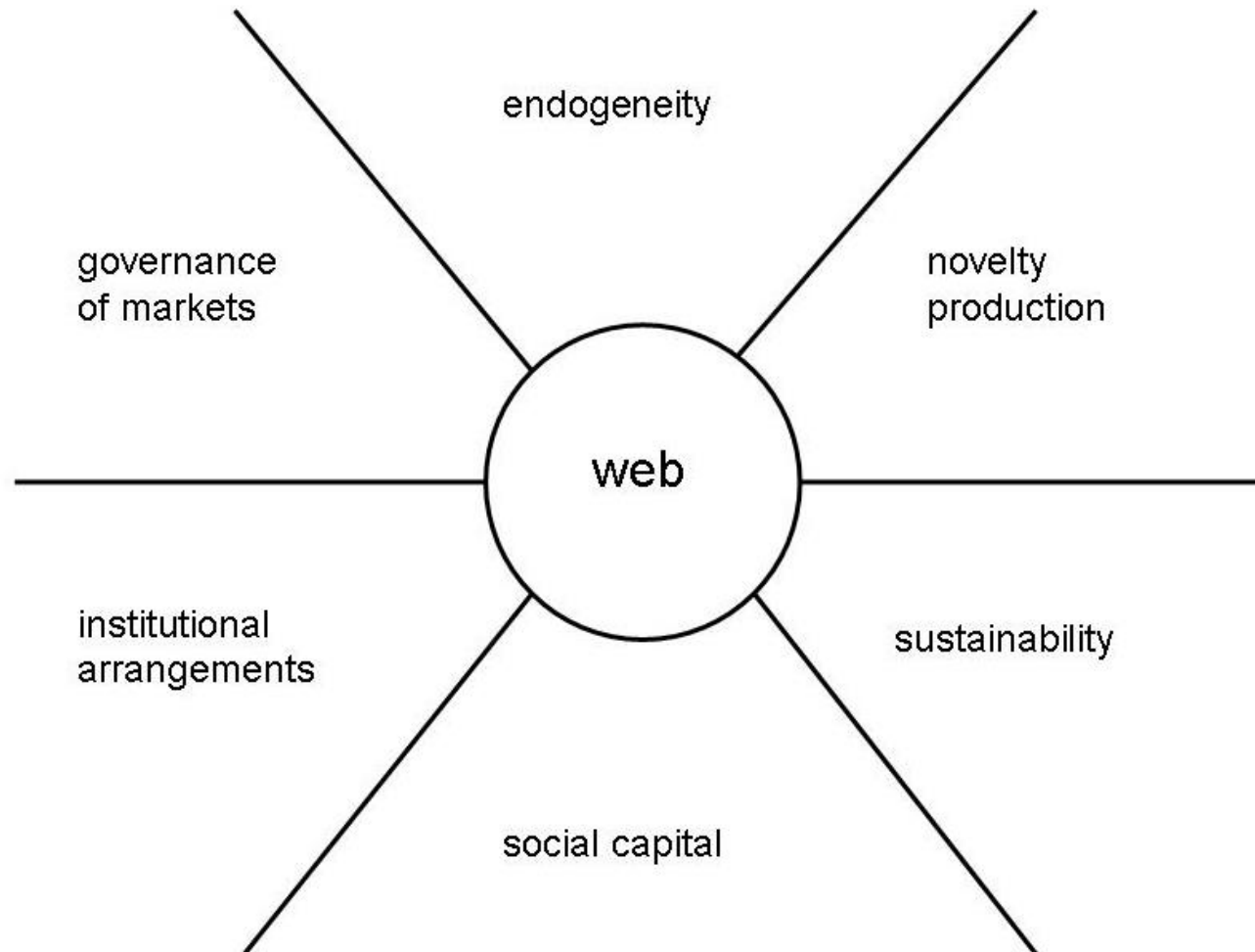
THEORIES OF LOCAL ENDOGENOUS DEVELOPMENT

- Theories of endogenous local development divide into two broad strands:
 - On the one hand **neo-Marshallian** inquiry, which views local growth as resulting from externalities acting upon the static efficiency of firms, has been expanding and consolidating for years.
 - Example: [industrial districts](#)
 - On the other, the **neo-Schumpeterian** literature, which has arisen more recently, interprets development as resulting from the impact of local externalities on the innovative capacity of firms
 - Example: [milieu innovateur](#)



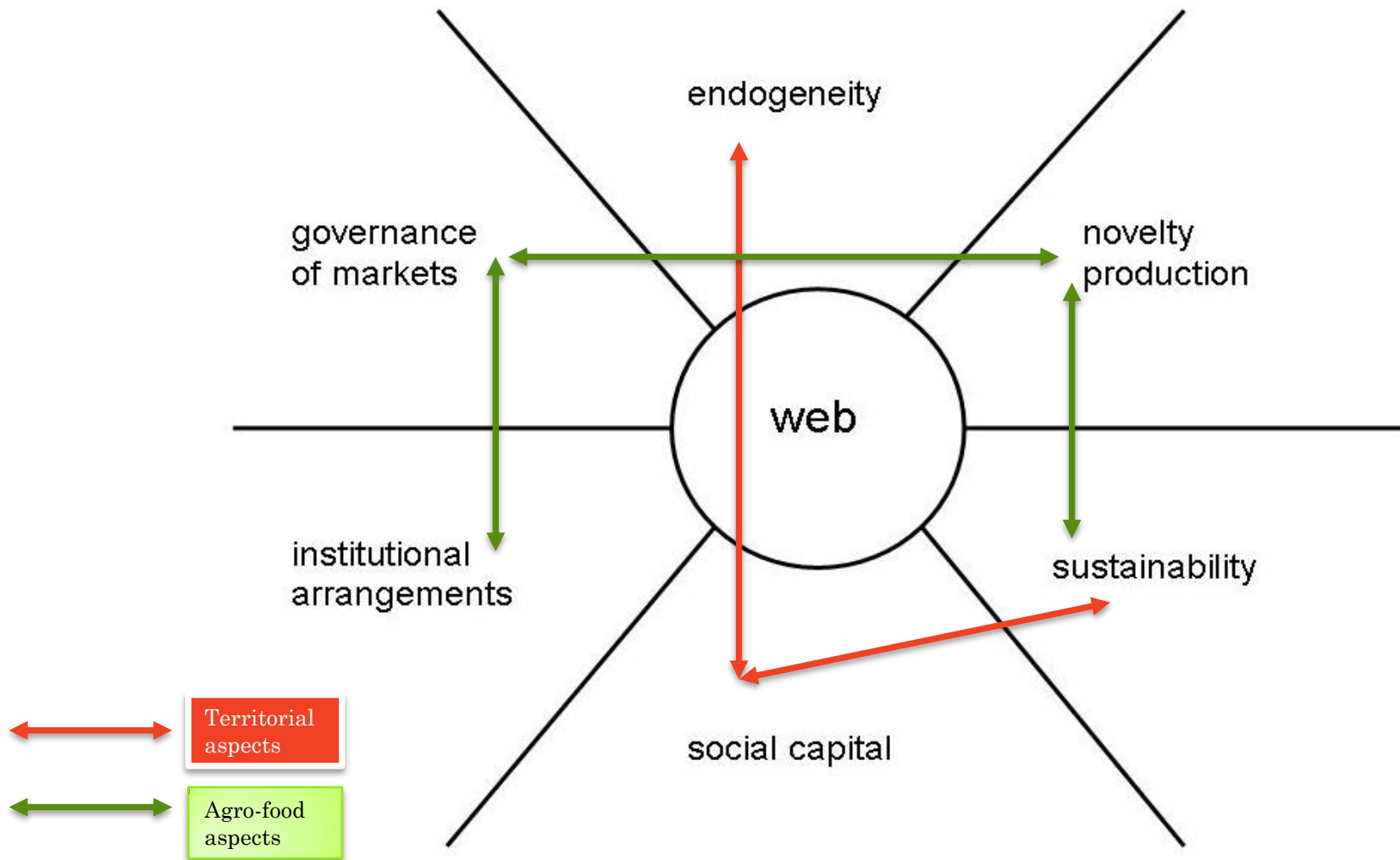
THE RURAL WEB: SIX INTERRELATED DIMENSIONS

(VAN DER PLOEG, MARSDEN, 2008)



THE RURAL WEB: SIX INTERRELATED DIMENSIONS

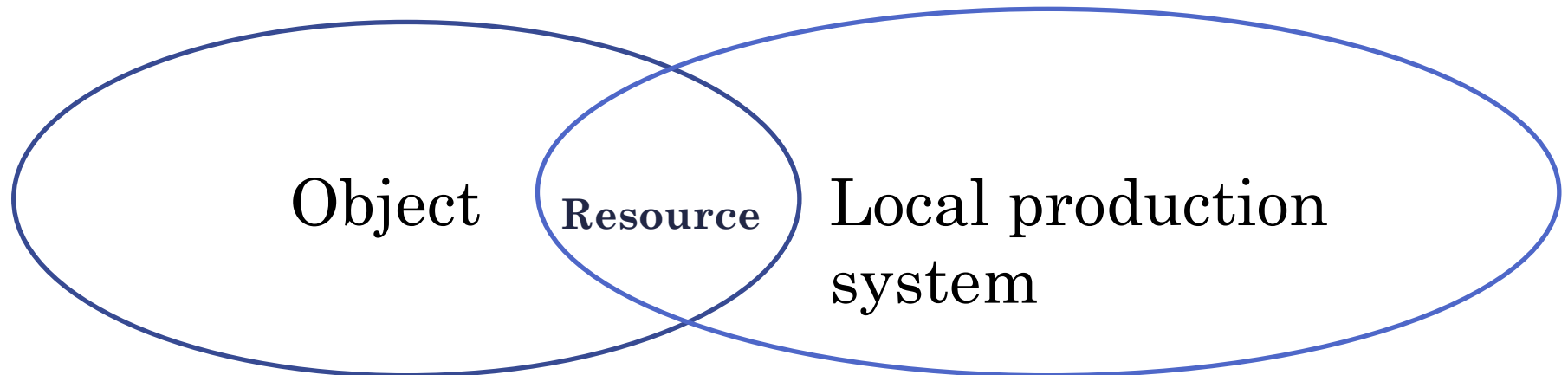
(VAN DER PLOEG, MARSDEN, 2008)



The 'rural web' can be understood as the relational system through which the human and non-human components of a rural territory interact in a sustainable way.

RESOURCES ARE NOT: THEY BECOME

(DE GREGORI 1987; CREVOISIER, KEBIR, 2004))



Two perspectives on resources:

- 1) Constructivist (Kebir, Crevoisier, 2002) - Need to move from orthodox approaches (“given” resources) towards institutional approaches (“built” resources)
- 2) Cognitive (Camagni, 2004) – resources call for identification processes, value creation and recreation through the support of local “milieu”



SECOND PREMISE ON THE TERMS: «SUSTAINABLE» AND «FOOD»

**From modernisation paradigm
towards multifunctional agriculture**

DIFFERENT MODES OF FOOD PROVISIONING (SOURCE: WISKERKE, 2012)

- **Global**, industrialised and corporate food systems dominant in (most) industrialised countries and gaining ground in (most) developing countries
- **Localised**, traditional, and artisan modes dominant in (most) developing countries but also gaining ground in (many) industrialised economies



IMPACT OF GLOBALISED FOOD SYSTEM: THE “PLACE-LESS” ECONOMY

- **Disconnecting** of producers of goods and services on the one hand, and consumers on the other;
- **Disembedding** - the place of production has gradually lost its influence over the quality and nature of many products, meaning that the local or regional character has largely disappeared;
- **Disentwinning** - the disconnection of producers of goods and services from each others, which has created different spheres of activity.



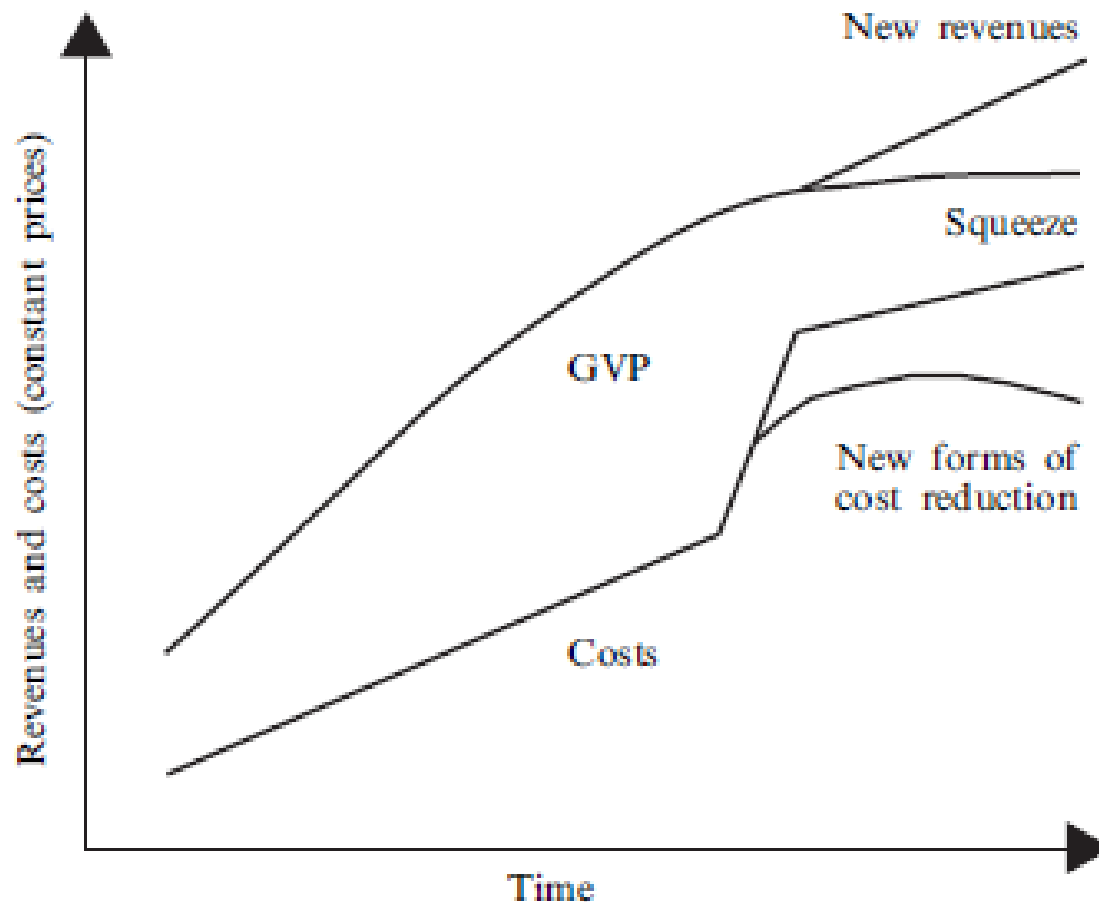
... THE ANSWER

- More sustainable place-based strategies have been developed which embody multifunctional agriculture
- Re-territorialisation gave rise to the New Rural Paradigm (OECD, 2006)
- Re-territorialisation results in new linkages among sectors, producers and consumers, and markets
- What are the driving forces?
 - Three engines may be identified...



1. SRD AS AN ANSWER TO THE PRICE-COSTS SQUEEZE ON EUROPEAN AGRICULTURE

(SOURCE: VAN DER PLOEG ET AL., 2002)



Note: GVP—gross value of production.

Figure 1. Postwar agricultural development and the contours of rural development.

2. CRISES IN AGROFOOD SYSTEM

- Food scandals, animal diseases, environmental problems in agriculture have influenced its image and perceptions in the society



3. GROWING DEMANDS FOR RURAL GOODS AND SERVICES

- New resources are recombined with the existing ones along new lines that secure ecological sustainability and new robust economic constellations able to second rural and urban consumers' needs.

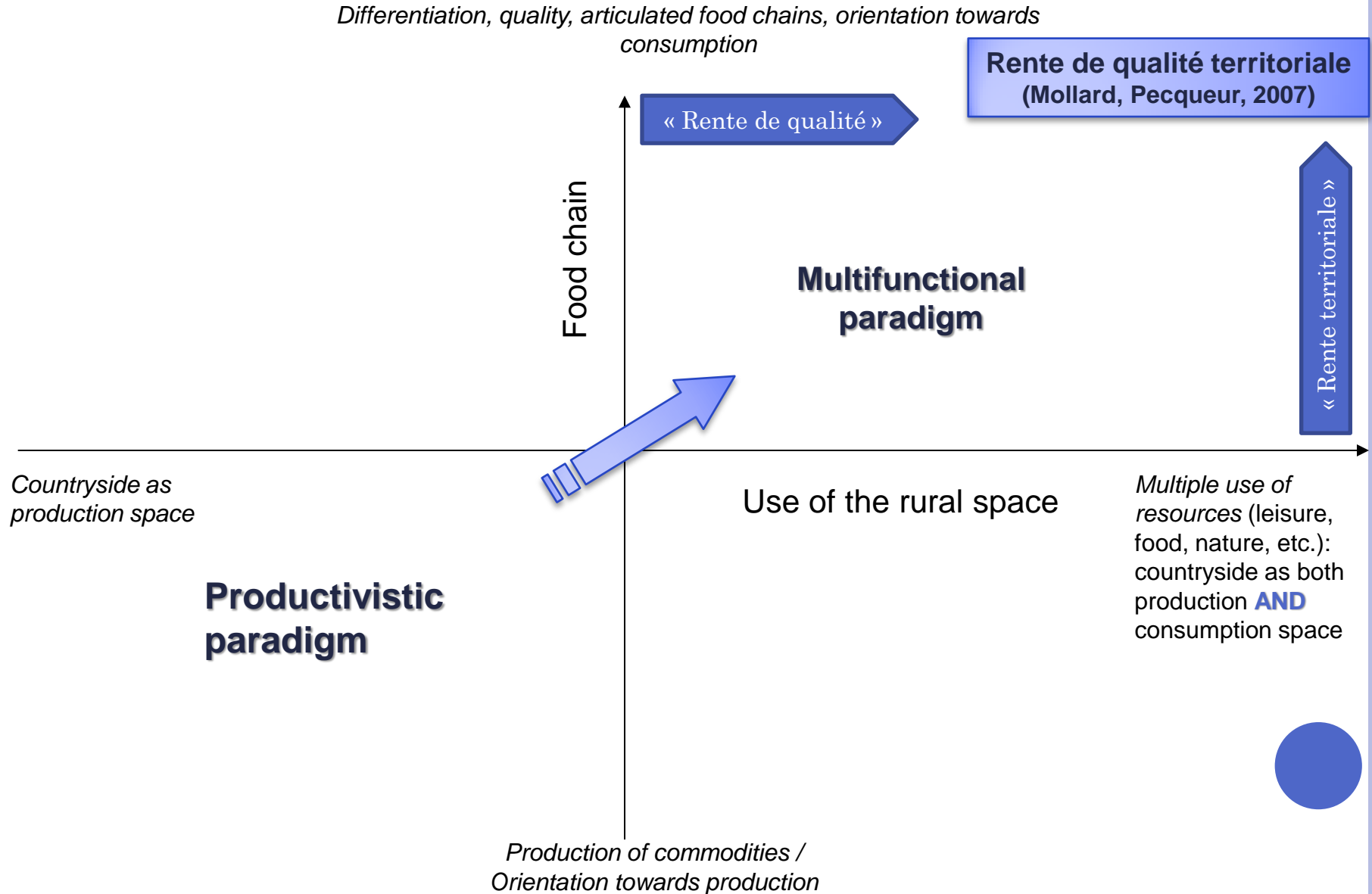


THE EUROPEAN AGRICULTURAL MODEL

(VAN DER PLOEG, 2010)

- *The issue is not the strengthening of competitiveness of all types of agriculture. The question is which types of agriculture support food security, sustainability and balanced territorial development. More generally: which types of agriculture are in line with the **European Agricultural Model**? In short, different types of agriculture should be selectively supported, and 'farm viability' needs to be enhanced in a well-targeted rather than generic way*
- *In this respect the European Parliament took a stance (in its resolution of the 8th of July of 2010) that is far better targeted, in as far as it centred on (1) **"high-added-value farming with high-quality primary and processed products [...], (2) farming open to regional markets and (3) farming geared to local markets [...]"** (point 29, see also consideration Q). The Resolution of the 23rd of June of 2011 is also far more precise (and outspoken) than the Proposal from the Commission where it defines **"agronomically sound and sustainable agricultural systems as vital to guaranteeing competitiveness on local, regional and international markets"** (point 4).*
- ***Competitiveness does not stand on its own.** It crucially depends on other, increasingly decisive features such as quality, sustainability, animal welfare, contributions to the quality of life, and trust (i.e. the **acceptance on the part of society at large**).*

FROM PRODUCTIVISTIC PARADIGM TO MULTIFUNCTIONAL PARADIGM - TWO GATES: PRODUCT AND TERRITORY



WHICH (TERRITORIALISED) STRATEGY?

- Supply chain strategy: the general objective of the supply chain strategy is the competitiveness of local system, through the *management of product reputation rent connected to origin, or increase the rent of origin by means of collective actions* (Belletti and Marescotti, 2006).
- Extended territorial strategy: food production as a segment of a more integrated strategy aiming at producing a basket of food and services (Pecqueur, 2000)





THE SYAL APPROACH

A GOOD EXAMPLE OF TERRITORIALIZED SUSTAINABLE FOOD SYSTEMS

**SYAL = SYSTÈMES AGROALIMENTAIRES
LOCALISÉES
=
LAFs = LOCALIZED AGROFOOD SYSTEMS**

[HTTP://SYAL.AGROPOLIS.FR/](http://syal.agropolis.fr/)

Source:

- **AREPO position paper (2015)**
- **Barjolle (1999; 2006; 2014)**
- **Casabianca (2014; 2015)**
- **Belletti and Marescotti (2006; 2014; 2015)**
- **Vandecandelaere et al. (2011)**
- **Sanz Canada (2015)**

FIRST DEFINITION

- SYAL (systèmes agroalimentaires localisées) : “Production and service organizations (units of agricultural production, agrifood enterprises, markets and stores, restaurants services, etc.), that are linked by their characteristics and by their relationship to a specific territory” (Muchnik 1996, Muchnik and Sautier, 1998)
- The originality of the LAFS focus arises largely from the analysis of **social networks that develop links between local resources, including agriculture, the food and the territory** (AREPO, 2015).
- This concept has become widespread and various groups and initiatives have contributed to the process: a scientific interest group in France (GIS LAFs), the European Research Group (ERG) LAFs, the “American LAFS network” and six international congresses.



MAIN ISSUES IN THE INTERNATIONAL LITERATURE ON LAFs (SANZ CANADA, 2015)

- Links between specific territories (*terroir*) and identity-based foods:
 - A. Causes of the local identity of foods →
Territorial anchorage of LAFs
 - B. Effects of the development of LAFs on the territory: role of collective action and **territorial governance networks** (organizational proximity – Torre, 2015) of LAFs and his contribution to rural and territorial development



A. ANCHORAGE FACTORS OF LOCAL AGRO-FOOD SYSTEMS

- Result of **historical** processes of localisation at varying speeds as a social construction:
 - relevance of historical and anthropological analysis
- LAFS as a tool for **avoiding the processes of delocalisation** of agricultural and food production
- Which **categories** of anchorage factors determine the diversity of LAFS?:
 - Related to **natural heritage**: soils, climate, local biodiversity, landscape...
 - Related to **cultural heritage**: knowledge, know how, skills, local gastronomy , identity...
 - **Socio-economic and institutional networks**: social capital, local institutions, regulatory tools of collective action...



B. TERRITORIAL GOVERNANCE OF LOCAL AGRO-FOOD SYSTEMS

- The development of an institutional network in the territory, linked to the value-added process for the identity-based products:
 - Implicitly entails cooperation between economic agents who have interests in the different stages of the local food chain and who pool complementary assets
 - Creates a framework of *territorial intelligence*
- Areas of territorial governance transcending the objective of obtaining differentiation-related revenues:
 - The dissemination of innovations and knowledge
 - The collective promotion of identity-based food products
 - Actions aimed at strengthening the typicality of the product and its image on the market
 - Encouragement for the creation and development of collective trade networks
 - The formation of human and social capital



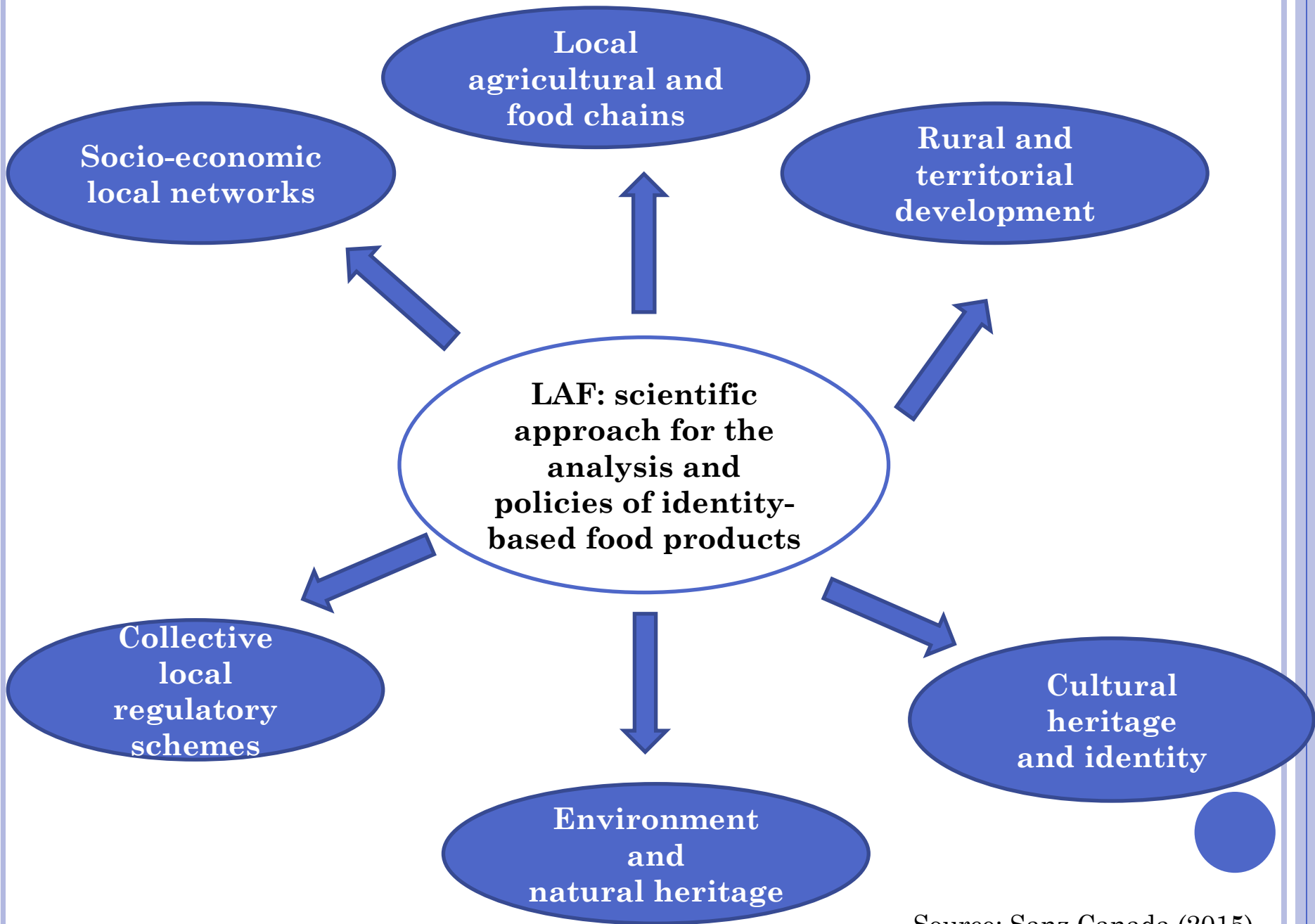
OPERATIONALISE LAFS APPROACH MEANS...

(AREPO, 2015)

- **(i) Understanding the nature and dynamics of the links** (natural and material, socio-techniques and cultural, socio-economic and institutional) **between the main elements in a LAFS.**
- **(ii) Specification of territorial resources** is fundamental to trigger the innovation process contributing to rooting production activities.
- **(iii) Activating territorial resources and projects building up:** the territory acts as a factor that connects, like a stakeholder with the qualities and the intelligence to organise collective strategies.

Multidisciplinary
approach





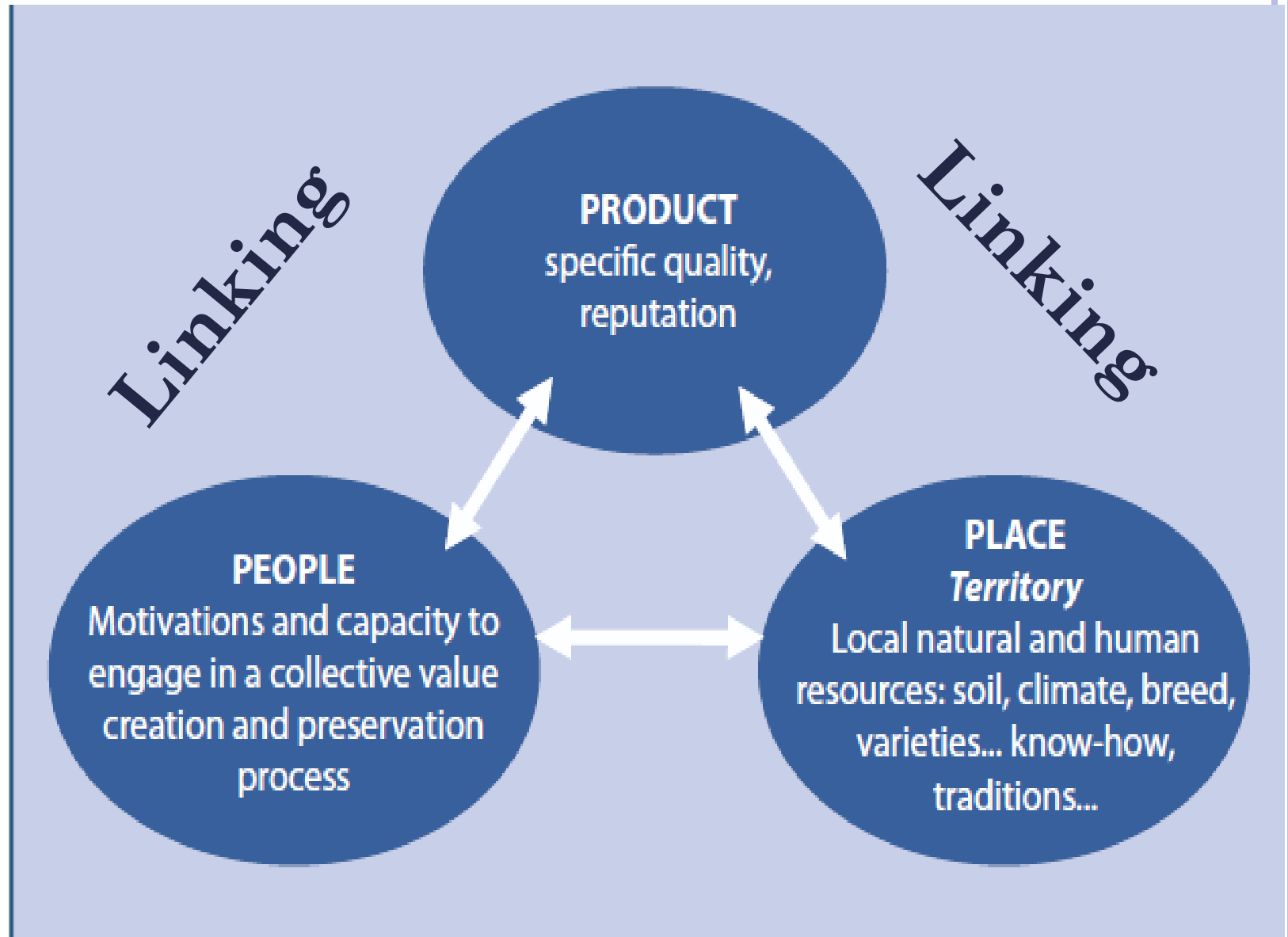
Source: Sanz Canada (2015)



A CASE-STUDY OF TERRITORIALISED SUSTAINABLE FOOD SYSTEMS

**Geographical indications: Linking people, place
and products (Vandecandelaere et al., 2010, FAO
Rome)**

VALORISATION OF ORIGIN AND QUALITY PRODUCTS



Linking People, Product and Place

Example: Chivito Criollo del Norte Neuquino, Argentina

local specific breed in arid mountainous region (altitude ranging from 600 to 2400 m)



Product

Specific quality,
reputation in the
market

- Characterization of the local race
- Elaboration of the code of practice
- Protection of the GI and marketing

People

Motivations and
capacity to
engage a
collective
process

*"we want the
young can stay
and live this
life"*

Place



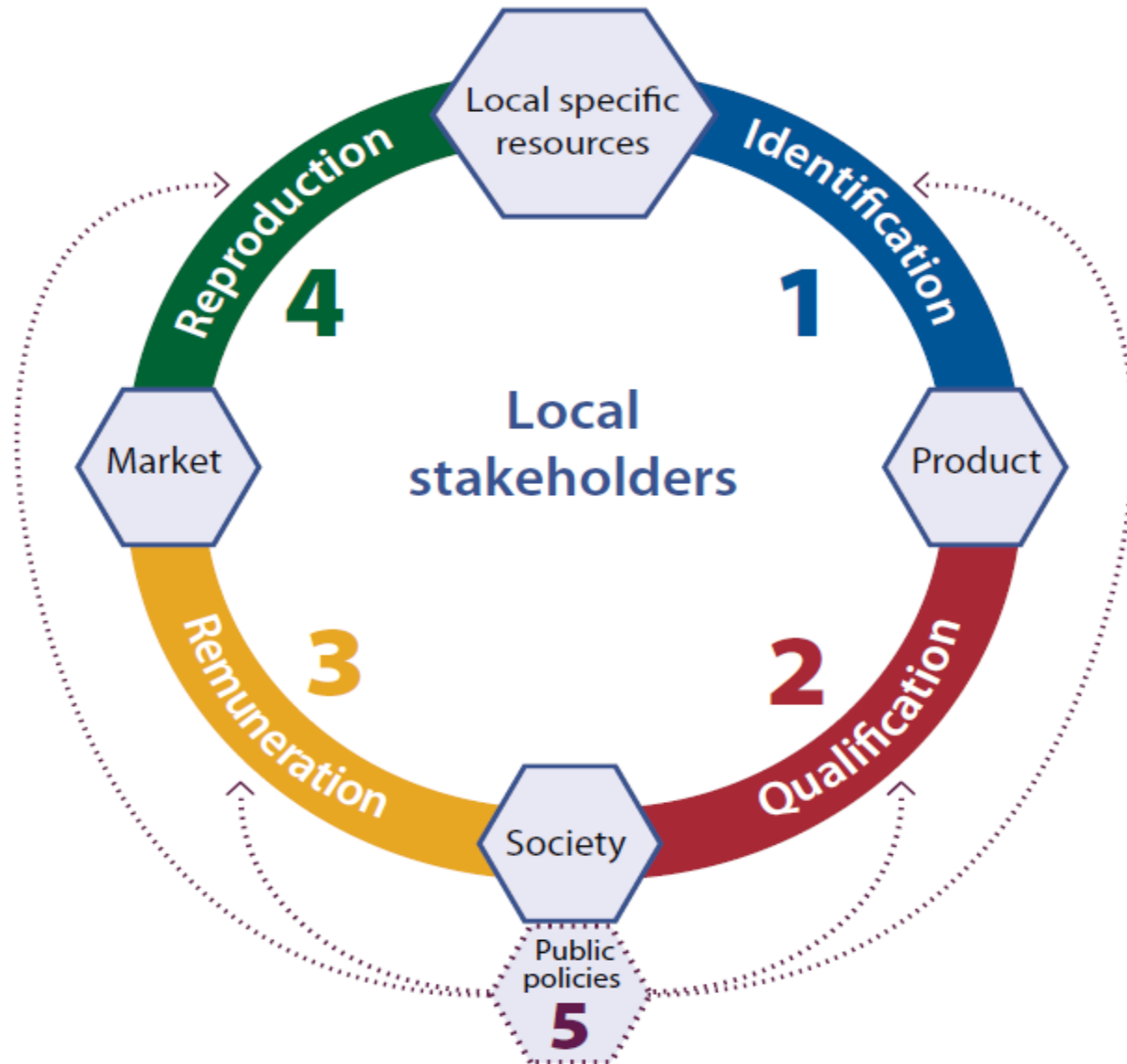
GI

Local natural
and human
resources:
soil, climate,
breed,
varieties,
know-how...



THE ORIGIN-LINKED QUALITY VIRTUOUS CIRCLE

(VANDECANDELAERE ET AL., 2010)



1. IDENTIFICATION:



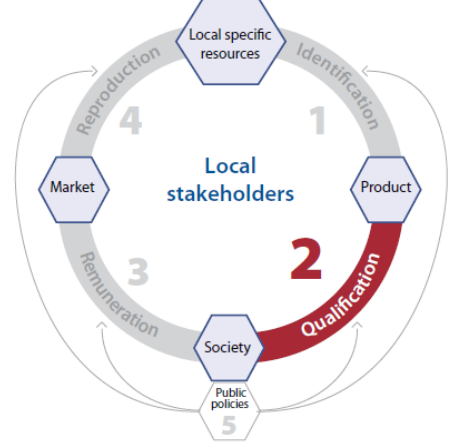
MEANING

- Specific qualities linked to origin
- Mobilization of the producers in a participatory approach

IDENTIFICATION OF THE GI GROUP

- **Delimitation:** Who is in the GI group? Who is out?
- **Decision-making process** in the GI group:
 - How are the power relationships between the actors?
 - Who are the actors who have the most negotiation power along the supply chain (study of the alternatives)?
 - How is the repartition of the value added between the actors?
 - Which are the barriers to entry at each level in the supply chain?

2. QUALIFICATION: THE CODE OF PRACTICES (CoP)



SETTING UP THE RULES

- The name of the product (with a geographical reference – rarely a “traditional name” can be considered as GI)
- Description of product including the principal characteristics
- Methods to obtain the product
- Definition of geographical area
- Link between quality product and geographical environment / “causal interactions”
- Evidence that the food is originated from the delimited area (references)
- (Name of the certification body)

FUNCTIONS

- Internal / external trust
 - Internal : COP = convergence of the practices
 - External : Transparency for consumers
- Communication
 - A sign (GI name) = A credible signal

THE IMPORTANCE OF COLLECTIVE ACTION

- *The code of practice (CoP) is a document establishing the rules for the use of a geographical indication (GI). Its elaboration is a very important step, leading to the voluntary “standard” or specifications with which local producers who want to use the GI have to comply (Vandecandelaere et al., 2010).*
- **WATCH OUT!!!** Do not forget the Ostrom’s 7 variables:
In a recent paper (“Analyzing collective action”), E. Ostrom underlines seven variables predicted to affect the likelihood of collective action:
 1. number of participants involved
 2. whether benefits are subtractive or fully shared, i.e. public goods or common-pool resources;
 3. heterogeneity of participants
 4. face-to-face communication
 5. information about past actions
 6. how individuals are linked (bonding, bridging, linking ties)
 7. whether individuals can enter or exit voluntarily



3. REMUNERATION



- The remuneration phase as well as the qualification phase of the virtuous circle require the coordination of GI producers, in order to generate governance actions that include all stakeholders of a GI system. The establishment of a collective organization supporting the GI system at all stages (setting up rules, controlling processes, product commercialization and conflict resolution) is recommended.
 - **Success factors:** a) Taking into account the market and its requirements in the qualification phase; b) involving all the value chain actors in strategy; c) reducing the costs thanks to the collective action.





4. REPRODUCTION

- In order to ensure the reproduction of local resources for a sustainable GI system and for all the territory, it is important to assess the impacts of the rules (code of practice) and the collective actions undertaken over time. Expected positive economic, social and environmental impacts are not automatic, and negative effects can appear, depending on the way the system is construct and managed.
 - **Success factors:** Taking into account the sustainability from the beginning, evaluating it along the time, and make the CoP evolve as necessary



3 POSSIBLE WAYS TO RAISE GI RESILIENCY

1. Within the reproduction phase it is favourable to assess the impact of the GI system and to develop it within a **sustainable development perspective**.
2. Various reasons and events may justify the need to **make the rules evolve** at some point in the process.
3. **Territorial extended strategies**. One strategy to increase sustainability is to extend the benefits outside the GI production system to all the territory: Local stakeholders may use the reputation of the GI product to attract people in the GI territory and sell other products and services.



REPRODUCTION AND SUSTAINABILITY

- Reproduction encompasses social, economic and environmental sustainability.
 1. the **economic component**, reproduction is linked essentially to distributive aspects. The value created by means of remuneration activities, should be fairly distributed along the value chain between the local production system and the external one and between different actors involved in production, processing and distribution.
 2. Regarding the **environmental component**, reproduction means ensuring the preservation or even the improvement of natural resources, by guaranteeing equilibrium between exploitation and development over time, while maintaining or increasing biodiversity.
 3. Regarding the **social and cultural components**, reproduction means promoting traditions and the cultural heritage, reinforcing the sense of local identity and self-esteem within the local population and fighting against factors contributing to rural exodus: poverty, lack of information and access to markets.



SUSTAINABILITY ASSESSMENT

○ **Economic dimension**

- Market stabilization
- Turn-Over
- Prices / Incomes
- Value added in the region

○ **Social dimension**

- Local employment
- Empowerment of the producers
- Fair distribution of the value along the chain
- Exclusion / Gender balance
- Self-esteem
- Local and traditional knowledge
- Networks and inclusion

○ **Environmental dimension**

- Natural resources
- Biodiversity
- Over-use of certain resources

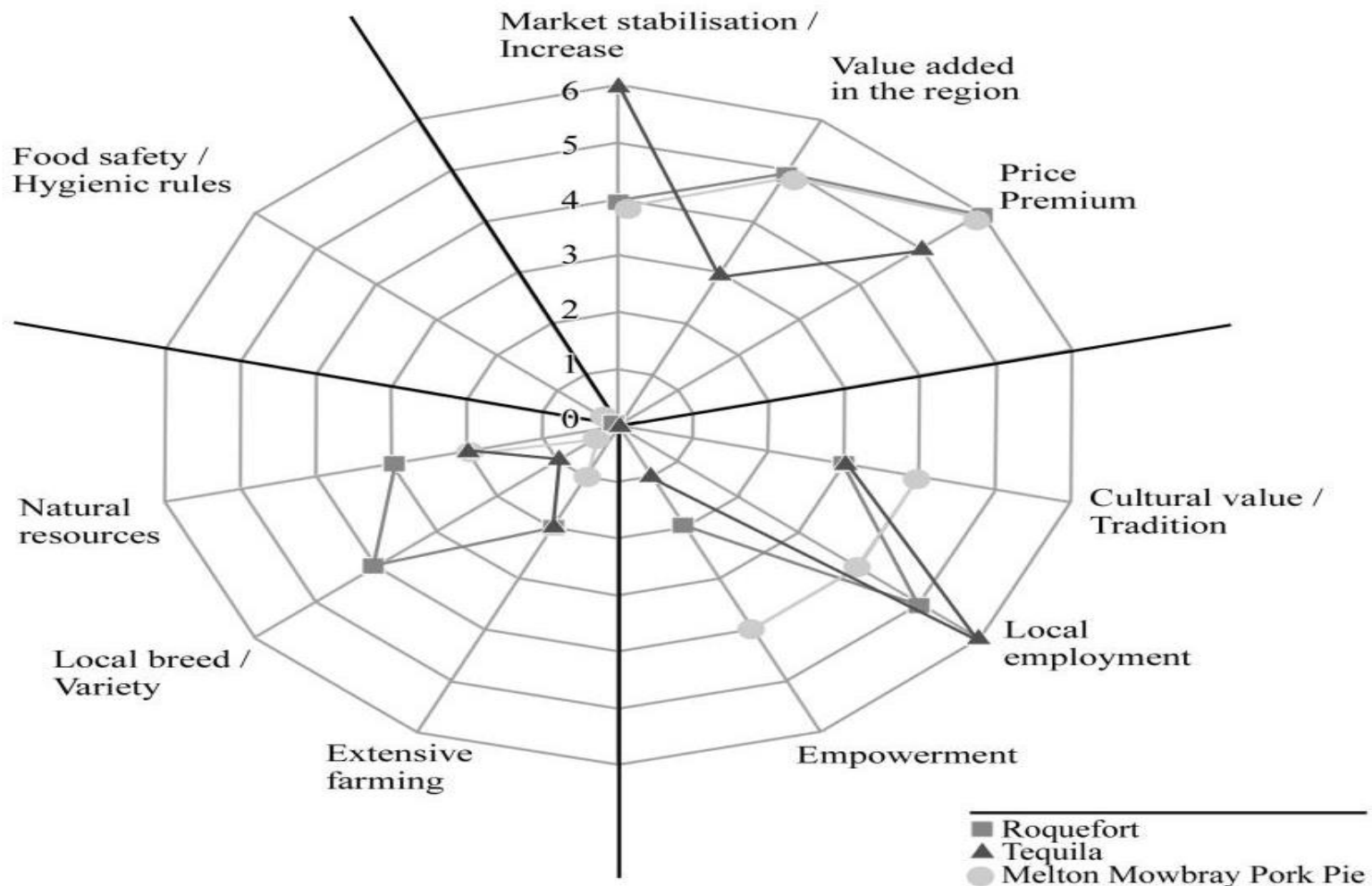


TOWARDS A «GLOBAL» ANALYSIS

- The problem concerning the aggregation of different indicators is more severe when they belong to different areas and yield opposite outcomes: how can various factors (economic, social and environmental) be synthesized?
- By using a **LIKERT scale**, for each item, a scoring can be done between the modality 0, which corresponds to a totally non-relevant item for the considered GI system, and 6, which corresponds to the most expected effect. 1 means that the impact is almost not expected.
- A visual and synthetic presentation of aggregate indicators can show total performance in a multidimensional way, and can ease the monitoring benchmarking over time



EXAMPLE OF A SIMPLIFIED VISUAL INTEGRATION GRAPH ON IMPACTS OF GIS (PAUS, REVIRON, 2010)

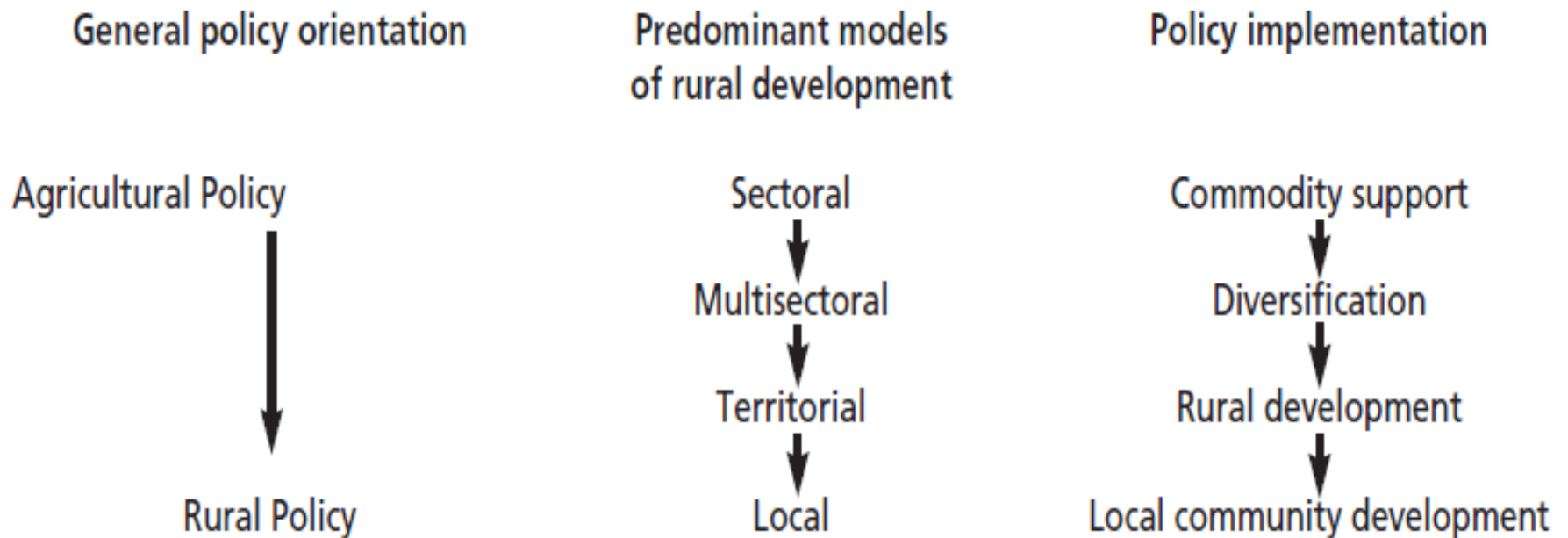




A «COHERENT» POLICY FOR TERRITORIALIZED FOOD SYSTEMS

- **The role of Rdp in stimulating farms in the SYALs**
- **Questioning on consumption of Rural development policies**

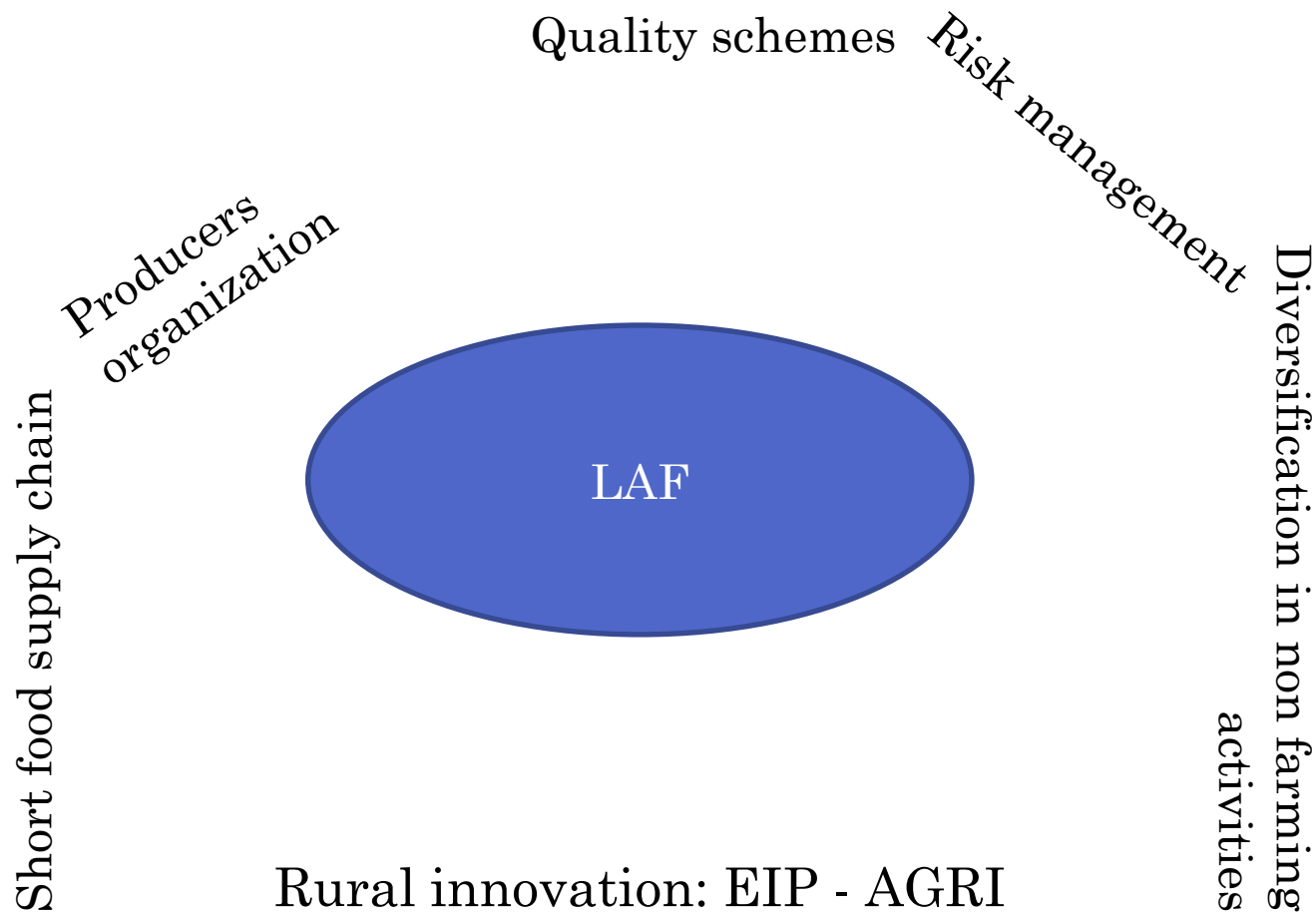
EVOLUTION OF EU RURAL DEVELOPMENT POLICY




Source: the authors



STRENGTHENING THE HOUSE OF THE LAFs THROUGH RDP ...



RDP AND COLLECTIVE ACTION (AC)

1. Between supply chain strategies ...
 - **CA 1:** producers' organization to develop alternative food networks (measure 9 + 16)
 - **CA 2:** valorisation of quality (measure 3)
 - **CA 3:** collective investments (measure 4)
 - **CA 4:** conjoint actions to reduce climate change and for sustainable provision of biomasses (measures 16.5 + 16.6)
 2. ... and territorial extended strategies
 - **CA 5:** Collective action to develop rural innovation (EIP-AGRI and Operational Groups) (measures 16.1 + 16.2)
 - **CA 6:** Community led local development (Leader) (measure 19)
- 



Is there
any money
for me?

How to
apply?

Of course!



Just
take a
look ...

... TO THESE DOCUMENTS...



- Transaction costs of consuming Rdp
- Call for analyse access to Rdp on the basis of multivariate analyses
- Role of family farming



CONCLUSIONS AND RECOMMENDATION

- TSFS as a not easy object of analysis:
 - LAFs approach analyses not only local food chain governance, but involves research into **territorial governance**, taken as a whole, and the generation of **territorial externalities**
 - *Terroir* is approached in LAFS theories as a ‘**region-resource**’ (a diversified-relational space), defined as a group of interrelated territorial specific assets opposed to a ‘**region-support**’ approach: territory as only a place for the localization of economic activities (Sanz, Canada, 2015)
- Let our shoes getting dirty! (desk + field analyses)
- Targeting rural development policies towards the component “**food**”, the component “**terroir**” and the component “**intelligence**” of a TSFS
- Interdisciplinary approaches pays off



THANK YOU FOR YOUR ATTENTION...

(The hero)

