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Title of the PhD work
Collective agro-food initiatives and sustainable rural development: articulation between internal governance and rural governance. Swiss and Serbian cases.

Key words : rural development, collective agro-food initiatives, governance, network, performance
**Context**

In a context of liberalised economy, agro-food initiatives that are not competitive in a strategy of decreasing costs due to economy of scale can’t be sustainable on conventional products markets. These initiatives have to innovate and differentiate with specific strategies of economy of scope, or specific quality products (organic, origin, fair-trade …) that justify a consumer’s premium. These initiatives are considered by some authors as expressions of a new rural development paradigm that emerged in Europe in the nineteen’s (van der Ploeg, Renting et al. 2000).

At the same time, rural and agricultural policies of European countries (in a geographical sense) shifted more and more to sustainable production supports (respect of environment, quality) with a less sectoral approach for a more territorial approach (Cork declaration, 1996; agenda 2000) (European Commission 1996).

Rural collective initiatives market goods and services but they also provide non market goods (and services) and externalities. Theses activities are taking place on a territory. “Alternative” food supply chains, as short or geographical indication supply chains, have potentially a strong impact on a delimited territory, as many of the partners of the chain are located in a delimited area (producers and consumers for short chains, producers and processors for origin products.).

**Research questions**

How to optimize the articulation between internal governance and rural governance in order to maintain or create positive effects in terms of sustainable rural development?

**First hypothesis**

<table>
<thead>
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<th>Hypothesis 1</th>
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<td>Collective localised food supply chains – or initiatives - have positive potential effects in terms of sustainable rural development.</td>
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**Definition of rural development**

I work with the normative definition proposed by Bill Slee in the framework of the SUS-Chain project (quoted in (Jahn, Peter et al. 2006).

Rural development is the growth, advancement and evolution of rural communities, businesses and people. It is the outcome of a nurturing environment where:

1- The rural community shares a vision which is supported regionally, provincially and nationally;
2- The government supports the community vision with an appropriate economic, social and regulatory climate;
3- A balanced emphasis is placed on social, economic and environment priorities;
4- The rural community, private sector, government departments and different levels of government work closely together as partners with common goals.

This definition encompasses the concept of endogenous development (“the rural community shares a vision”) and the one of sustainable development (“a balanced emphasis is placed on social, economic and environment priorities”).

The first hypothesis leads to methodological questions:

*How to measure the effects of the supply chain in terms of rural development?*

Many researches have already been carried out to highlight the impact of these collective supply chains, especially organic food supply-chains and origin labelled products supply-chains. It was one of the purposes of the IMPACT project, the DOLPHINS project, the OMIARD project and the SUS-Chain project.

Several methods have been developed to deal with the question of the evaluation of impacts. Roughly, there are two approaches to assess the effects on rural development (Belletti, Marescotti et al. 2005; Réviron and Paus 2006) :

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1) One approach consists in collecting hard data with a system of indicators. A supply chain is chosen as reference. It can be the same supply chain at a previous time (diachronic approach) or a comparison with a conventional supply chain (synchronic approach). This method can be called “objective method”, though there is no objective method (van der Ploeg, Renting et al. 2000). It is still conditioned by the choice made to choose the indicators, their importance (who decides which indicators are important?) and their availability. The system of indicators can be chosen and analysed by experts (de Roest and Menghi 2002; Hirczak and Mollard 2004).

This approach is limited if the idea of neo-endogenous development is introduced in the definition of rural development, as the stakeholders of the territory are not taking part of the evaluation.

I proposed a methodology based on hard data to deal with the three dimensions of sustainable development and to introduce the idea of neo-endogenous development. I built up a system of indicators and aggregation where stakeholders of the territory are taking part of the evaluation. Indicators are chosen and weighted by stakeholders of the territory, and measured by experts (Paus 2001; Paus 2003).

2) A complementary approach is founded on the perceptions stakeholders have of the contribution of the supply chain. The principal benefit of the method is a more holistic view of rural development issue. A set of items are selected and marked by leaders of opinion and stakeholders. These stakeholders are identified on the base of their potential role to favor or hamper the development of the initiative. This method is based on a comparison with a benchmarking approach (Réviron and Paus 2006).

The conclusion of the literature review is that both approaches need to be crossed to provide a holistic view of the effects on rural development. Theses methods are providing snapshots of the states of a territory.

Numerous studies analyse the factors of success explaining the positive impact in terms of rural development (Allaire and Sylvander 2000; Barjolle and Sylvander 2002; Belletti and Marescotti 2002; Frayssignes 2005; Hirczak, Moalla et al. 2005; Scheffer 2005; Jahn, Peter et al. 2006).

They all stress the importance of:
1) the strategy of the supply chain and
2) the associational interfaces with private and public actors (see hypothesis 2)

The strategy of the supply chain is an expression of the internal governance of the supply chain.

**Definition of internal governance**:
I work with the following definition: internal governance of a supply chain is the self-organised network between the actors of the supply chain, that defines the cooperation level, the relations of power, the type of organisation, the common strategy, and the definition of a code of practice.

**Typology of internal governance**
Many researchers proposed a typology of supply chains according to their governance forms. Perrier-Cornet and Sylvander identified the “pure sectoral governance”, “sectoral governance PDO” and the “strong territorial governance” and the “weak territorial governance” according to the territorial objectives of the actors of the supply chain (Perrier-Cornet and Sylvander 2000).

Maillat uses the terms of “functional logic” and “territorial logic” in a typology of four categories to describe territorial systems of production. Maillat retains two criteria to build up his typology: the degree of integration of the value added chain and the intensity of exchange relations between firms in the region. The types that favor the most endogenous development have a territorial logic (collective learning, development of resources specific to the territory, no exclusion of other project for the region) (Maillat 2001). Marsden et al highlight that some food supply chains are highly dependent upon associational or institutional arrangements at the local, national, or international level, others are less closely interwoven with socio-political structures and are the result of individualistic entrepreneurialism (Marsden, Banks et al. 2000).

The “territorial governance” - or the “governance with a territorial dominance”, as there is no “pure” form (Frayssignes 2005) -, is seen as the most interesting when dealing with rural development objectives. It is extending the cooperation actions to other private sectors in the territory, as to public sectors (in a broad sense, including voluntary sector), that embedded the supply chain in the territory.
Second hypothesis

<table>
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<th>Hypothesis 2</th>
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<tr>
<td>A performing articulation between the internal governance and the rural governance optimize these positive effects on rural development.</td>
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Definition of rural governance:
Rural governance is a self-organised network involving governmental and non governmental organisations in the rural area. The rural governance is the arena of a decision making process concerning the development of the territory. Partnership is identified as the dominant form of the rural governance (Goodwin 2003).

According to the literature (Curtis, Britton et al. 1999; Marsden, Banks et al. 2000; Murdoch 2000; Lee, Árnason et al. 2005), an optimised articulation (network) built on robust and productive partnerships could be defined when:
- the capacity of local actors to gain access to markets and to other economic opportunities is heightened (market-based incentives),
- new quality conventions are recognised,
- innovation and collective learning are facilitated,
- training and support are provided in order to facilitate self-help, entrepreneurialism and capacity building,
- common understandings are formulated,
- communication is improved (from outside to inside and from inside to outside) (information is provided and disseminated),
- resources are pooled (financial, practical, material or symbolic),
- the capacity to influence decision making at the regional or national level is increased.

The reinforcement of the articulation/network is both a cause and an effect of the development of food supply chains (Marsden, Banks et al. 2000).

Rural development is a multi-level, multi-actor and multi faceted process (van der Ploeg, Renting et al. 2000) and the results of the construction of common visions. The potential of partnerships completely meet the objectives described in the definition of rural development proposed by Bill Slee.

In this definition, the first point -the sharing of visions- is a precondition of the occurrence of the second one and the fourth one : the support of the state and the partnership working with common goals.

Accordingly, I will focus on:
- the identification of the vision stakeholders of the rural development have and share or don't share,
- The motivation they have in elaborating a partnership,
- The role of the facilitator.

<table>
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<th>Sub-hypothesis 2a:</th>
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<tr>
<td>The network does not appear spontaneously (role of the facilitator)</td>
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It is in more marginal rural areas that most care must be taken in pursuing a network approach for there is a danger here that some of existing weakness of such areas might be reproduced; thus the state or development agencies must continue to play a rather traditional developmental role while seeking to strengthen the networking capacities of such areas (Murdoch 2000).

<table>
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<tr>
<th>Sub-hypothesis 2b:</th>
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<tr>
<td>Interests and purposes of the facilitator or partners of the supply chain / collective organisation may not match the interests and purposes of the actors of the supply chain concerning the rural development issues.</td>
</tr>
</tbody>
</table>

The territorial objectives may not be formulated by the actors of the supply chain but by outsider initiators, which do not have any commercial goals, such as authorities, development agencies (Brunori, Réviron et al. 2007). The role of the facilitator is crucial and he may have objectives
concerning the development of the collective action and the rural development that do not match those of the actors of the supply chain.

Sub-hypothesis 2c:
The facilitator improves the global performance of the initiative by combining several competencies. The facilitator has to combine competencies in several domains to support the actors of the initiative:
- micro-marketing (definition of the unique selling proposition and the sell potential),
- technical (building of the code of practice, definition of norms),
- legal (knowledge concerning the protection scheme available),
- managerial (management of the conflicts),
- animation (communication and inclusion of less powerful actors (Schuckmith 2000)).
These competencies are require to optimize the performance (according to the criteria above).

Sub-hypothesis 2d:
An absence of a formal identified facilitator is alleviated by an informal partnership or a leadership from a charismatic actor of the supply chain.

Woolcock argues the absence or weakness of formal institutions is often compensated for by the creation of informal organizations, in particular in minorities or marginalised groups (Woolcock 2001). There is a risk a charismatic actor of the supply chain takes the leadership with authority and elaborates a strategy of corporate governance.

Third hypothesis

Hypothesis 3
The effects on rural development may change when the initiative is scaling-up

The hypothesis implies an historical approach of the initiative (Marsden, 2000; SUS-CHAIN project) to underline potential change(s) in the strategy and the main drivers of these changes. The actors of the supply chain may have a territorial project that disappears during the scaling up process. On the contrary the actors of the supply chain may have only commercial objectives at the first stage of the scaling up process and meet rural development objectives in further stages (Brunori, Réviron et al. 2007).

Figure 1: trajectories of initiatives and effects on rural development
Methods and expected results

I focus my research on the collective supply chains / initiatives of geographical indications. I will study several cases in Switzerland and Serbia and work on comparisons of case studies. The objective is to highlight invariant in different contexts and point out factors of success.

Why geographical indications?
Due to their links with local specific resources both of material and immaterial nature, GIs are expected to have effects on rural development.

Why Switzerland and Serbia?
Switzerland and Serbia have a comparable internal market size. There are 10 millions inhabitants in Serbia (with the autonomous regions of Kosovo-Methohija and Voivodine) and 7.5 inhabitants in Switzerland. Marginal areas are numerous in both countries, with large mountainous areas. In these areas there are clear demographic issues (loss of population, aging of the population). Moreover both countries are not members of the European Union, but their institutional environment is influenced by the European Union. The elaboration of the institutional frame working with geographical indications issues is not at the same stage in Switzerland and Serbia. Finally, there is a strong local support in Serbia. Indeed a Serbian NGO is interested in geographical indications and will provide information and organisational support (meetings, translation…).

How to select the cases?
To select the cases, I used the methodology proposed by Hielke van der Meulen in the WP4 of the SINER-GI Project (van der Meulen 2006).

How to filter the cases?
I selected 2 criteria to exclude cases. If these criteria are not fulfilled, the case is excluded.
- There is a collective project of producers (not necessarily primary producers). Put in other words: it seems people coordinate their behaviour. I use the definition proposed in the WP3 of the TRANS project (Macombe, Rault et al. 2006): a collective action is characterized by the intentional search of a collective “surplus” that distinguishes collective action from simple addition of individualistic actions. Therefore it is needed to identify a collective intention.
- There are sustainable rural development stakes in the area of production (marginal areas, aging of the population, degradation of resources, etc.)

How to sorter the cases?
I used the grid established in the SINER-GI project to select the diversity of cases according to my research objectives (see hypothesis 2 and 3).

Table 1: grid established in the SINER-GI project to select the case studies

<table>
<thead>
<tr>
<th>Motivation of producers / processors</th>
<th>Public and Private support (local, regional, national)</th>
<th>Legal framework Protection scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>New initiatives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Established initiatives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2: “candidates” case studies in my PhD work

<table>
<thead>
<tr>
<th>In Switzerland</th>
<th>Motivation of producers / processors</th>
<th>Public and Private support (local, regional, national)</th>
<th>Legal framework Protection scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rye bread of Valais PDO (established)</td>
<td>++ (survival of the bakers and mills)</td>
<td>++ (part-time manager paid by the chamber of agriculture)</td>
<td>++ (PDO registration in 2004)</td>
</tr>
<tr>
<td>Bovine meat from Hérens (new)</td>
<td>+ (necessity of new market outlet for the local meat)</td>
<td>++ (local animator paid by a research project)</td>
<td>++ (collective quality label owned by the regional ministry of agriculture)</td>
</tr>
</tbody>
</table>
In Serbia

<table>
<thead>
<tr>
<th>Motivation of producers / processors</th>
<th>Public and Private support (local, regional, national)</th>
<th>Legal framework Protection scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Kajmak from Kraljevo</strong></td>
<td>++</td>
<td>+ (Serbian PDO/PGI law)</td>
</tr>
<tr>
<td></td>
<td>(the ministry of agriculture and SEEDEV are supporting the project by providing a “coaching” WWS was unsuccessful to implement a collective project)</td>
<td></td>
</tr>
<tr>
<td><strong>Smoked meat of Zlatibor</strong></td>
<td>++ (3 dynamic cooperatives)</td>
<td>+ (Serbian PDO/PGI law)</td>
</tr>
<tr>
<td></td>
<td>(the ministry of agriculture and SEEDEV are supporting the project by providing a “coaching”)</td>
<td></td>
</tr>
<tr>
<td><strong>Kajmak from Užice / Zlatibor</strong></td>
<td>+/-?</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Kajmak of Paljevo</strong></td>
<td>+/-?</td>
<td>-?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>+</td>
</tr>
</tbody>
</table>

First hypothesis
I combine objective and subjective methods to measure the effects on rural development.

Objective method:
One of the key issues when dealing with rural development is the creation of additional value for the rural regions (Knickel and Renting 2000; Marsden, Banks et al. 2000; van der Ploeg, Renting et al. 2000; Jahn, Peter et al. 2006) As rural development is a multi-level process (van der Ploeg, Renting et al. 2000), I will analyse the issue of value added at several levels:
- Level of product: Value added at the level of the product (gross margin) and the distribution along the supply chain. Location of the creation of value added, location of capture (out of the rural area?) Value added may be difficult to calculate, so I could focus on farm price and consumer price (Barjolle 2006; Jahn, Peter et al. 2006).
I will compare the premium of the origin product (if there is any) with generic, substitutes or other origin products.
- Level of farm: Value added at the level of the farm (deepening agri-food supply chain, broadening-rural area, regrouping-mobilization of resources) (van der Ploeg, Long et al. 2002).
- level of region?

Subjective methods:
I conduct interview with Likert scales to analyse the recognised effects.

Second and third hypothesis

Story telling
I collect story tellings by stakeholders to understand the history of the collective action and to map networks and their evolution.

Networks analysis
I work with the definition of “networks” from Lee et al, they understand networks of social relationships as “articulating the flows of information, resources, and identities that are implicated in the production of rural development specifically, and “communities” more generally “(Lee, Árnason et al. 2005). The basic assumption of network analysis (membership and participation in formal and informal groups may lead to positive outcomes for individuals and communities) are reflected in a range of
theoretical perspectives. It is possible to combine these theories (Lockie 2006). To analyse the networks, I refer to three theories, mobilizing only the tools I need from each theory:

- Actor-network theory (ANT) and the translation cycle (Callon and Latour)

This theory has already been largely mobilized to analyse networks in agro-food sectors (Murdoch 2000; Henderson, Dicken et al. 2002; Brunori, Réviron et al. 2007)

ANT suggests a need to identify and evaluate firstly, the centres of calculation that attempt to speak on behalf of farmers and non-human nature in the construction of the network; secondly, the strategies and intermediaries (or technologies) used to enroll farmers and other entities within these networks; thirdly, the means through which farmers and other entities either resist or pursue enrolment and lastly, the ability of networks to establish stability and durability (Lockie 2006; Brunori, Réviron et al. 2007).

- Social network analysis (SNA)

I use the concept of centrality to understand the role of the charismatic leader and the facilitator.

- Social capital

I use the granovetterian distinction of “weak” and “strong” ties that recognized the multidimensional nature of the link between the actors of the supply chain and their partners. - and the related distinction of bounding, linking and bridging social capital (Granovetter 1973; Woolcock 2001)

Measure of performance

How to measure the performance of the articulation/network?

- indirect assessment with interviews
- direct assessment with indicators (cf above)

Analyse of the motivations and objectives of the actors

Semi-directive interviews and Likert scales to answer the following questions:

- Actors of the supply chain

What are the objectives of the initiative?
How do the actors of the initiative qualify their strategy (sectoral, territorial, and corporate)?
What does sustainable rural development mean?
What are the expected effects of their activities in terms of rural development? Have they any?
- private and public agencies linked (or potentially linked) to the supply chain

1) Identify key institutions and agencies (politics, researchers, other economic actors) that are partners or potential partners
2) Interviews

What are their motivations to support GIs
What is their vision of rural development? Sustainable development?
How is the strategy of the initiative analysed?
What are the recognized effects of the initiative? What are the expected effects?

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