DISS. ETH NO. 19216

Collective agro-food initiatives and sustainable rural development: articulation between internal governance and rural governance Illustrated by geographical indications from Switzerland and Serbia

A dissertation submitted to ETH ZURICH for the degree of Doctor of Sciences

presented by

MARGUERITE PAUS

Master of Science (Diplôme d'Etudes Approfondies), AgroParisTech / University Paris 7 / National Museum of Natural History, France Master's degree in Engineering (Ingénieur Agronome), Montpellier SupAgro, France born June 16th, 1977 citizen of France and Germany

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Prof. Dr. Bernard Lehmann, examiner Dr. Dominique Barjolle, co-examiner Prof. Dr. François Hainard, co-examiner Dr. Sophie Réviron, co-examiner

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Table of contents

Summaryvi				
R	ésumé		viii	
1	General i	ntroduction	1	
	1.1 Theo	oretical background	4	
	1.1.1	Collective agro-food initiatives	4	
	1.1.2	Sustainable rural development	12	
	1.1.3	Territorial Impact Assessment	18	
	1.1.4	Facilitation	25	
	1.1.5	Conclusion	30	
	1.2 Rese	earch questions and objectives	31	
	1.2.1	General research choices	31	
	1.2.2	Research questions	33	
	1.3 Met	hodology	34	
	1.4 Serb	ian context	39	
	1.4.1	Generalities	39	
	1.4.2	Rural development context	40	
	1.4.3	Serbian agricultural and agro-food sectors	41	
	1.4.4	Geographical indications in Serbia	44	
	1.5 Stru	cture of the thesis	47	
2	Geograph	nical Indications in Transition Countries and their Governance.		
		from Serbian Agro-food Initiatives	49	
	Abstract		50	
	2.1 Intro	oduction	50	

	2.2	Gove	ernance forms of geographical indications	51
	2	.2.1	Governance structure and hybrid forms	51
	2	.2.2	Governance and territorial vs. sectoral strategies	53
	2	.2.3	Organisational forms and governance strategy	54
	2.3	Why	vertically integrate?	55
	2.4	Pres	entation of the case studies and comparison	57
	2	.4.1	Context	57
	2	.4.2	Kajmak from Kraljevo	57
	2	.4.3	Raspberries from Arilje	58
	2	.4.4	Comparison of the cases	59
	2.5	Disc	ussion	61
	2	.5.1	Concurrent sourcing and market power	61
	2	.5.2	Potential evolution of governance	63
	2.6	Cond	clusion	65
3	Б.	litatir	ng the Emergence of a Collective Initiative. Role and Leadership S	Style of
	Faci			
v			rs in Emergent Geographical Indications	•
z	Faci	ilitato		67
~	Faci	tract	rs in Emergent Geographical Indications	67
~	Faci Abst	i litato tract Intro	rs in Emergent Geographical Indications	67 68 68
~	Faci Abst 3.1. 3.2	i litato tract Intro On ti	rs in Emergent Geographical Indications	 67 68 68
~	Faci Abst 3.1. 3.2 3	i litato tract Intro On ti	rs in Emergent Geographical Indications	 67 68 68 69 69
	Faci Abst 3.1. 3.2 3	llitator tract Intro On th .2.1	rs in Emergent Geographical Indications oduction he concepts of "facilitator" and "leadership" Definition of "facilitator"	67 68 68 69 69 69
	Faci Abst 3.1. 3.2 3. 3.	llitator tract Intro On th .2.1	rs in Emergent Geographical Indications oduction he concepts of "facilitator" and "leadership" Definition of "facilitator" Analytical framework to analyse the interaction of the "facilitator-g	67 68 68 69 69 69 roup- 70
	Faci Abst 3.1. 3.2 3. 3.	llitator tract Intro On th .2.1 .2.2	rs in Emergent Geographical Indications oduction he concepts of "facilitator" and "leadership" Definition of "facilitator" Analytical framework to analyse the interaction of the "facilitator-g context"	67 68 68 69 69 69 70 75
	Faci Abst 3.1. 3.2 3.3 3.3	llitator tract Intro On th .2.1 .2.2	rs in Emergent Geographical Indications oduction he concepts of "facilitator" and "leadership" Definition of "facilitator" Analytical framework to analyse the interaction of the "facilitator-g context" Facilitation and leadership's style	67 68 68 69 69 70 70 75 77
	Faci Abst 3.1. 3.2 3. 3.3 3.3 3.3	Ilitator tract Intro On th .2.1 .2.2 .2.3 GIs a	rs in Emergent Geographical Indications oduction he concepts of "facilitator" and "leadership" Definition of "facilitator" Analytical framework to analyse the interaction of the "facilitator-g context" Facilitation and leadership's style and facilitation	67 68 68 69 69 70 70 75 77

	3	.3.4	Motivation and goals in GIs systems	79
	3.4	Meth	nod and case studies presentation	80
	3	.4.1	Materials and method	80
	3	.4.2	Presentation of the GIs and the facilitation process	81
	3.5	Resu	lts	86
	3	.5.1	Competence building	86
	3	.5.2	Structuring the group	86
	3	.5.3	Catalysing the group process	87
	3	.5.4	Mobilising external resources	88
	3	.5.5	Capacity building at institutional level	88
	3.6	Disc	ussion	
	3.7	Conc	clusion	
4	Mea	sure c	of the Territorial Impact of Agro-food Initiatives. Lessons from	n two
4.			of the Territorial Impact of Agro-food Initiatives: Lessons from	
4.	Swis	ss case		
4.	Swis	ss case	e studies	 98 99
4.	Swis Abst	ss case tract Intro	studies	
4.	Swis Abst 4.1	ss case tract Intro Terri	duction.	
4.	Swis Abst 4.1 4.2 4.3	ss case tract Intro Terri	ductiontorial impact and Swiss policy on regional development	
4.	Swis Abst 4.1 4.2 4.3 4.3	ss case tract Intro Terri State .3.1	duction torial impact and Swiss policy on regional development of the art – A prolific research field	98
4.	Swis Abst 4.1 4.2 4.3 4.3	ss case tract Intro Terri State .3.1 .3.2	duction torial impact and Swiss policy on regional development of the art – A prolific research field "Objective" methods	
4.	Swis Abst 4.1 4.2 4.3 4. 4 4.4	ss case tract Intro Terri State .3.1 .3.2	e studies duction torial impact and Swiss policy on regional development of the art – A prolific research field "Objective" methods "Subjective" methods	98 99 99 100 100 101 102 106 108
4.	Swis Abst 4.1 4.2 4.3 4.4 4.4 4.4	ss case tract Intro Terri State .3.1 .3.2 Prese	e studies duction torial impact and Swiss policy on regional development of the art – A prolific research field "Objective" methods "Subjective" methods entation of a survey - The acknowledgement of territorial impact	
4.	Swis Abst 4.1 4.2 4.3 4. 4.4 4.4 4.4	ss case tract Intro Terri State .3.1 .3.2 Prese .4.1	e studies duction torial impact and Swiss policy on regional development of the art – A prolific research field "Objective" methods "Subjective" methods entation of a survey - The acknowledgement of territorial impact Method	
4.	Swis Abst 4.1 4.2 4.3 4. 4.4 4.4 4.4	ss case tract Intro Terri State .3.1 .3.2 Prese .4.1 .4.2 .4.3	e studies duction torial impact and Swiss policy on regional development of the art – A prolific research field "Objective" methods "Subjective" methods entation of a survey - The acknowledgement of territorial impact Method Results for the Rye Bread of Valais PDO	98
4.	Swis Abst 4.1 4.2 4.3 4.4 4.4 4.4 4.4 4.5	ss case tract Intro Terri State .3.1 .3.2 Prese .4.1 .4.2 .4.3	e studies duction torial impact and Swiss policy on regional development of the art – A prolific research field "Objective" methods "Subjective" methods entation of a survey - The acknowledgement of territorial impact Method Results for the Rye Bread of Valais PDO Results for Natura Beef	98
4.	Swis Abst 4.1 4.2 4.3 4. 4.4 4.4 4.4 4.5 4.5	ss case tract Intro Terri State .3.1 .3.2 Prese .4.1 .4.2 .4.3 Discu	e studies duction torial impact and Swiss policy on regional development of the art – A prolific research field "Objective" methods "Subjective" methods entation of a survey - The acknowledgement of territorial impact Method Results for the Rye Bread of Valais PDO Results for Natura Beef	98 99 99 100 101 101 102 106 108 108 108 108 109 113 116 116

	4.6 Con	clusion	119
	Annex 1: 7	The Swiss agricultural policy	120
	Annex 2: 1	Detail of the method	122
5	Tonnitonic	al Impact of Geographical Indications. Review of Methods and	
3		l Evidences	
	-		
		oduction	
		iew of Methods	
	5.2.1	Generalities	
	5.2.2	"Objective" methods	
	5.2.3	"Subjective" methods	
	5.2.4	Discussion of the review of methods	
	5.3 Emp	pirical evidences	
	5.3.1	Case study methodology for data collection	135
	5.3.2	Evaluation of the fourteen case studies	136
	5.4 Disc	sussion and conclusion	141
6	Synthesis	and concluding remarks	145
	6.1 Gen	eral conclusions and discussion	145
	6.2 Iden	tified dilemmas and recommendations	154
	6.3 Outl	ook for further research	157
	6.3.1	Link between governance structure, territorial strategy and positive	
		territorial effects	157
	6.3.2	Role of competition in GIs' development	159
	6.3.3	Impact assessment	159
	6.3.4	Analysis of the scaling-up process	163
	6.3.5	Role of facilitation	165

References	172
Acknowledgements	193

Summary

As a result of a political and social paradigm shift that recognises other roles of agriculture besides the production of foodstuffs, collective agro-food initiatives are being increasingly investigated in Europe. In particular, these initiatives are often perceived by society and politicians as being levers that can promote sustainable rural development. This vision is shared by numerous countries with a transition or an emergent economy.

This research looks into geographical indications (GIs) as collective initiatives marketing origin-based products. The research deals with the conditions required for the GI collective organisations to create positive impacts on their territories.

A primary topic is the analysis of the governance structures of GI supply chains in a transition country. GIs in Western Europe are characterised by governance structures with hybrid forms such as cooperatives and inter-professional associations. The analysis of the governance structure of GI supply chains in a transition country, Serbia, shows a trend to vertically integrate. Nevertheless, potential exists in terms of positive territorial effects. The achievement of these positive effects strongly depends on the motivations of the diverse actors of the system, the trust they grant to each other, the individual benefits they can obtain from the cooperation, and the presence or absence of a facilitator in the GI-building process.

A second topic tackles the role of facilitators in the emergence process of a collective agro-food initiative focussed on a GI. Drawing from two Serbian case study findings, it is argued that the facilitator, along with activities traditionally identified in the management and economic geography literature, must commit him/herself to the development of a more favourable institutional context. Facilitators are not leaders in the traditional sense. However, they might lean towards a directive style to meet the agenda of donors and overcome the inertia of the group and/or institutions at hand. Finally, bottlenecks that hinder setting the collective organisation are identified in the group context, the institutional context and the facilitation itself.

The last topic to be explored is related to the measure of the territorial impacts of GI initiatives. The contributions of GIs in terms of rural development and the conservation

of natural and human heritages are one of the key arguments developed in the justification to legally protect GIs. Therefore, demonstrating the effects, both tangible and expected, in terms of territorial impacts is a methodological challenge to be addressed. This research work presents a literature review analysed through a typology of assessment methods that have been previously developed. Additionally, an original method is elaborated upon and tested with two Swiss case studies. Based on a subjective approach, this method reverses the proof apparatus through a measure of acknowledgement of the territorial effects. This method relies on the assumption that opinion leaders have the power to promote or hamper the development of agro-food initiatives. This method is then adapted to the measure of expected effects in the framework of emergent initiatives that aim to protect GIs. The results confirm the predominance of expectations towards economic effects. However, they also highlight the risks of development exclusively founded on economic values.

Résumé

Les initiatives collectives de mise en marché de produits agro-alimentaires ont fait l'objet de nombreuses recherches en Europe, à la suite d'un changement de paradigme social et politique qui reconnaît à l'agriculture d'autres rôles que celui seul de production de denrées alimentaires. En particulier, elles sont souvent perçues par la société et les politiques comme des leviers favorisant un développement rural durable. Cette vision est à présent partagée par de nombreux pays aux économies en transition ou émergentes.

Ce travail de recherche se penche sur les indications géographiques (IG), comme initiatives collectives de mise en marché de produits d'origine. Il s'intéresse aux conditions de création par les organisations collectives IG, d'impacts positifs sur les territoires concernés. Un premier thème est l'analyse des structures de gouvernance des filières sous IG dans un pays en transition. Les IG des pays d'Europe de l'ouest sont caractérisées par des structures de gouvernance de type hybrides sous formes de coopératives et d'associations interprofessionnelles. L'analyse de la structure de gouvernance des filières sous IG dans un pays en transition, la Serbie, montre une tendance à l'intégration verticale. Néanmoins, il existe un potentiel en termes d'effets positifs sur le territoire. La réalisation de ces effets positifs dépend fortement des motivations des différents acteurs du système, et de la confiance qu'ils s'accordent, des bénéfices individuels qui peuvent être tirés d'une coopération, et de la présence ou non d'un facilitateur dans la construction de l'IG.

Le deuxième thème est celui du rôle du facilitateur dans le processus d'émergence d'une initiative collective centrée autour d'une IG. A partir de deux études de cas d'IG serbes, il est mis en évidence que le facilitateur, en plus des activités identifiées dans la littérature en management et en géographie économique, doit s'investir dans le développement d'un contexte institutionnel plus favorable. Les facilitateurs ne sont pas des leaders au sens traditionnel du terme, cependant ils peuvent être tentés par un style de leadership directif, afin de répondre aux exigences des agendas des donneurs, et surmonter l'inertie du groupe et des institutions. Enfin, les facteurs défavorables à l'établissement d'une

organisation collective sont discutés vis à vis respectivement du contexte du groupe, du contexte institutionnel, et du processus de facilitation lui-même.

Le dernier thème abordé est celui de la mesure de l'impact territorial des initiatives IG. La contribution des IG en termes de développement rural et de conservation des patrimoines naturel et humain est l'un des arguments clé de la justification de la protection légale des IG. Ainsi, démontrer les effets, tangibles ou attendus, en termes d'impacts territoriaux est un défi méthodologique à relever. Ce travail de recherche propose une revue bibliographique analysée suivant une typologie des méthodes d'évaluation développées dans des travaux antérieures. En outre, une méthode originale est élaborée et testée sur deux études de cas suisses. Fondée sur une approche subjective, elle renverse l'appareil de preuves en proposant une mesure de la reconnaissance des effets sur le territoire. Cette méthode s'appuie sur l'idée que les leaders d'opinion ont le pouvoir de soutenir ou entraver le développement des initiatives agro-alimentaires. Cette méthode est ensuite adaptée à la mesure des effets attendus, dans le cadre de l'émergence d'initiative de protection d'IG. Les résultats confirment la prépondérance d'attentes vis-àvis d'effets économiques, néanmoins, ils soulignent les risques d'un développement des IG fondé exclusivement sur des valeurs économiques.

1 General introduction

In a context of a liberalised economy, farms and agro-food enterprises that are not competitive with a strategy of decreasing costs thanks to economies of scale cannot be sustainable on conventional product markets. These enterprises must adjust their portfolio and structures with innovative strategies that were classified into *broadening* (new on-farm activities, diversification), *deepening* (high quality production, short supply chains) and *regrouping* (new forms of cost reduction, off-farm income) (Van der Ploeg and Roep, 2003). The deepening strategy potentially can generate a sustainable income despite higher production costs. Indeed, consumers recognise a specific quality (e.g., organic, origin) that justifies a premium.

Additionally, the territories which host these enterprises might be the arena of collective organisational reconfigurations and learning processes, which imply network building and innovation (Murdoch, 2000). Some authors have considered these initiatives as expressions of a new rural development paradigm that emerged in Europe in the 1990s (van der Ploeg *et al.*, 2000).

At the same time, the agricultural policies of many European countries adopted a shift from an exclusively "sectoral" approach to a more "territorial perspective", with support for sustainable production (environmentally-friendly and quality products), and rural development measures, with a growing importance placed on the second pillar of the Common Agricultural Policy (CAP) (Cork declaration, 1996; Agenda 2000) (European Commission, 1996). The stakes in terms of rural development are significant within Europe, and the contribution to rural development is one of the objectives declared in the CAP, as well as in the Swiss Federal Constitution. For example, the Swiss agriculture should, according to the Swiss Constitution, substantially contribute to: a decentralised occupation of the territory, the conservation of natural resources and the maintenance of rural landscapes (Art.1 of the federal Law on agriculture Lagr, 29 April 1998). Agro-food supply chains market goods and services, provide non-market goods and services (for example, landscape), and generate externalities in rural territories. If the strategy of the producers involved in these supply chains first answers to commercial performance objectives, it is also articulated in the strategies of other actors. Indeed, local politicians or NGO representatives, for instance, have objectives in terms of rural development and expectations regarding the role that these supply chains play in the territory.

Local agro-food networks, as short supply chains or origin-based 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) (Belletti and Marescotti, 2002; Marsden *et al.*, 2000; Pacciani *et al.*, 2001).

This trade-off between economic expectations and territorial expectations is also observed in transition countries such as Serbia, where initiatives start out by marketing origin labelled products with the support of the Serbian government and foreign donors.

The general objective of this thesis is, based on a case study analysis from Switzerland and Serbia, to contribute to a better understanding of the articulation between the internal governance of agro-food initiatives and rural governance of the territory in which these initiatives are embedded. Thus, the thesis includes:

- An analysis of the internal governance of agro-food initiatives and their strategy regarding side-effects on rural territories;
- An analysis of the role of facilitators in the development of agro-food initiatives;
- The development of methodologies to assess the territorial impact of these agrofood initiatives.

These questions overlap various theories and raise the need to explore a set of concepts for a multi-disciplinary approach.

The first section of this introduction highlights the theoretical background that was used to answer the research questions and provides precise definitions of the concepts. Section 2 presents the research questions, and section 3 presents the methodology based on case study analysis. Section 4 highlights some key characteristics of the Serbian context that may explain some specific challenges for developing origin labelled supply chains. Section 5 presents the thesis outline, organised into 4 articles.

1.1 Theoretical background

The thesis mobilises a set of concepts that need to be defined, since they refer to a broad literature and have often different meanings depending of the theoretical background. For example, the term *governance* has been deployed differently in the literature. According to Rhodes (1996) it is used in social science with about six different meanings. It is an all-embracing concept, which covers a diverse set of governing influences that are not covered by the traditional term of "government". Thus, it may embrace governance by the State in its many forms, as well as that deriving from corporate procedures, business terms, conditions and contracts. Increasingly, it is also seen as involving public and social expectations and norms, as well as the conventions of good or fair practice as determined by formal and informal networks. Lewis *et al.* (2002) discussed the term in three bodies of literature that refer to different theoretical backgrounds: the enterprise in the new institutional economics, the people in place in a geographic literature exploring spatial embeddedness, and the state in the regulation approach. The authors argued that they can be related to provide a meaningful understanding of the industry and its governance. There may be confusion while using the concepts of *sustainable rural development* and

governance since they are applied to diverse objects and scales. Therefore, we first propose to dissect, precise and define the keywords of the thesis.

1.1.1 Collective agro-food initiatives

a) Collective agro-food initiatives and supply chains

We define a collective agro-food initiative as a localised network where commercial actors market foodstuffs and agri-services (agro-tourism, for instance), and where commercial actors and non-commercial actors share an intentional search of collective "surplus" (which can be economic as well as non-economic).

Collective agro-food initiatives encompass commercial actors, which are part of a supply chain. Supply chains can be defined as being the vertical sequence of institutional arrangements that links producers, processors and retailers and leads to the delivery of goods and services to consumers. It is also important to stress the notion of *value added*.

Supply chains are forms of industrial organisations, which allow buyers and sellers to progressively add and accumulate value as products and services pass from one member of the chain to the next until the ultimate consumer (Fearne, 1996; van Roekel *et al.*, 2002).

Collective agro-food initiatives might concern only one level of the supply chain (for example, the producers) and they might include actors who are not involved in a buyer-seller relation (e.g., NGO, municipality representatives).

b) Collective agro-food initiatives and collective action

The collective character of these initiatives refers to the notion of *collective action*. As Narrod *et al.* (2009) mentioned, there are several definitions of collective action in the literature but which uniformly imply the objective of meeting a commonly shared goal. Ostrom (2004), who was rewarded in 2009 with the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel for her work in economic governance, stresses that "collective action occurs when more than one individual is required to contribute to an effort in order to achieve an outcome". Macombe *et al.* (2006) put the emphasis on the collective intention: "a collective action is characterised by the intentional search of a collective "surplus" that distinguishes collective agro-food initiative the collective action is not institutionalised into a formal organisation, however a collective decision-making takes place. Indeed, beyond collective objectives, collective action is characterised by the establishment of common rules which must be negotiated (personal communication, Allaire, 2007).

Collaborative advantage relates to the desired synergistic outcome of collaborative activity suggesting that advantage is gained through collaboration when something is achieved that could not have been achieved by any organisation acting alone (Vangen and Huxham, 2003a). Individual and collective benefits may be derived from collective action within agro-food initiatives. Access to new resources, economies of scale and scope, and reduced transaction and coordination costs are some of the potential benefits for operators (Lamprinopoulou *et al.*, 2006; Réviron and Tseelei, 2008).

c) Governance structures of collective agro-food organisations

Cooperation between competing companies has been discussed by several authors in Industrial Economics, using various names. The set of arrangements between companies was named "coalitions" by Porter (1985), "strategic alliances" by Dussauge and Garette (1999); and "network alliances" by Koza & Lewin (1999). Strategic alliances consist of two or more organisations that contractually pool resources to achieve a long-term strategic purpose that is not possible for a single organisation (Judge and Ryman, 2001).

In the agri-food sector, an alliance is traditionally defined as a collaborative agreement between independent economic units sharing certain objectives that combine their resources and expertise to reach these objectives in the interest of each participant (Vandecandelaere *et al.*, 2009). At least two firms cooperate for mutual benefit and agree to share decision making power on specific issues; but they remain independent companies (Réviron and Tseelei, 2008).

The New Institutional Economics theory has also identified specific "governance" structures characterised by firms "pooling" some activities. In this case the term "governance" refers to the "governance structure" proposed by Williamson. Williamson in depth studied transactions between a buyer and a seller and was rewarded in 2009 with the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel for this work. A governance structure is the set of institutional arrangements within which a transaction is organised (McFetridge, 1994).

Williamson (1991) identified two polar forms of governance structures - markets (no vertical integration) and hierarchies (vertical integration). Moreover, he acknowledged that other forms of organisation exist and he introduced the concept of hybrid forms (Williamson, 1991). Hybrid forms are characterised by a bilateral dependence without going as far as integration. Later, Ménard (2004) specified the nature and the role of these hybrid governance structures and proposed a typology: "trust", "relational network", "leadership", and "formal government". Originally centred on the enterprise, the governance structure concept was enlarged to network forms of organisation, and Ménard identified horizontal arrangements between competitors.

d) Geographical indications as collective agro-food initiatives

Among collective agro-food initiatives, there is a growing interest in the development of Geographical Indications (GIs) initiatives. GIs are defined by the Trade-Related Aspects of Intellectual Property Rights (TRIPs) Agreement as being "indications that identify a good as originating in the territory of a Member, or a region or locality in that territory, where a given quality, reputation or other characteristic of the good is essentially attributable to its geographic origin". Though not explicitly mentioned in the TRIPS definition, GIs have a collective dimension, based on shared practices and know-how as well as common reputation.

A GI is in essence based on the link with the territory. Its basic principles (longestablished, fair local customs, "*usages anciens, loyaux et constants*", *terroirs* and typicity) aim at locally embedding the qualification of the product, as well as the process to obtain the protection, which is expected to be driven by local actors.

The concept of *GI system*, which was defined in the SINER-GI project¹, captures both the supply chain and its associated network. A GI system includes all actors and activities aiming at contributing to the production of a GI product. Therefore, a GI system includes the GI producers and the other actors along the value-chain, also including but not limited to public authorities, non-governmental organisation, research institutions, extension services and other institutions indirectly linked to the GI product (for example tourism activities in the production area).

A strategic alliance might be established between producers and processors to coordinate production and sales of a GI so that consumers are willing to pay an added value for the product. It might be supported by collective bargaining and generally some form of collective organisation (Vandecandelaere *et al.*, 2009).

Indeed, research has shown that in Western Europe, registered GIs - European Protected Designation of Origin (PDO) and Protected Geographical Indications (PGI) - present

¹ A GI system is defined in the SINER-GI project (Strengthening International Research on Geographical Indications: from research foundation to consistent policy) as: "The set of actors who are effectively engaged in creating value and improving the strategic marketing position of the GI product by spontaneous individual or organized collective action and those who are engaged in the activation and reproduction of those local resources (natural resources, knowledge, social capital) which make the GI product specific."

hybrid forms of governance structure (Réviron *et al.*, 2004) with a diversity of vertical and horizontal coordinated systems (Allaire and Sylvander, 2000; Perrier-Cornet and Sylvander, 2000; Barjolle, 2001). Formal rules and conventions frame relationships among agents and restrict the risk of opportunism. Two main types of collective organisations among PDO and PGI are observed in Europe: inter-professional association and professional association. They have been classified as "relational network" at the borderline of "leadership" in Ménard's typology (Réviron, 2009).

e) Performance of collective agro-food organisations

The satisfaction of the consumer is one dimension of a chain's effectiveness. A further aspect is the extent to which it achieves the strategic ambitions of its participants: in accessing a market, increasing the volume and value of sales, improving information exchange with consumers, etc. Barjolle *et al.* (2005) pointed out that assessing the performance of a food system is often reduced to its commercial performance. However, in the case of collective agro-food initiatives, a broader analysis is required to identify the various benefits that these food systems bring to both consumers and farmers, as well as the diverse externalities that they provide to several stakeholders within the rural society (Barjolle *et al.*, 2005). The authors proposed a general scheme of performance's assessment, which includes market and consumers' performance, organisational performance and territorial performance. The later is related to the impact assessment (see section 1.1.3) and depends on the governance strategy adopted by the actors of the agro-food network.

f) Governance strategy (territorial/sectoral) and collective agro-food initiatives

This use of the *governance* concept emerged in France in the 1990s. It is different from the one proposed in Transaction Cost Theory presented in the paragraph c) of this section, and comes from an analysis of territorial dynamics and regional institutions. The

territorial governance² is defined as being the mode of co-operation between actors within a localised network of production (réseau localisé de production) (Storper and Harrisson, 1992). According to these authors, a territorial governance includes external actors of the supply chain (regional institutions in particular), as opposed to a sectoral governance, which results from a cooperation exclusively based on an economic sector, with its own norms and competition and coordination rules.

Allaire and Sylvander (1997) deepened this approach in the case of agro-food systems and defined the governance as being a "territorial political structure" in reference to Benko and Lipietz (1992). They clarified the role of territories in agro-food systems and the role of regional institutions in the issue of quality of agro-food products. The premise is that the location of economic activities implies a cooperative process to sustain specific resources supported by localised institutional networks. Hence, the relation between the specific production system and its territory consists of governance forms (sectoral or territorial) (Allaire and Sylvander, 1997).

This approach is closely related to those developed later, either with a territorial focus (Marsden, 1998; Hirczak and Mollard, 2005) or a focus on production system (Marsden *et al.*, 2000; Maillat, 2001). Maillat identified a "functional logic" and a "territorial logic" in a typology of production systems. Maillat considered two criteria to build 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 favour 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.* (2000) highlight that some food supply chains are highly dependent upon associational (i.e. emerging and contingent networks and chains) or institutional (i.e. state regulations and the support and services offered by economic development agencies) arrangements at the local, national, or international level, while others are less closely interwoven with socio-political structures and are the result of individualistic entrepreneurialism. Marsden (2004) highlights associational interfaces are both informal and highly significant in

 $^{^2}$ In this work, the term « territorial governance » will be reserved to qualify the strategy of the collective agro-food organisation's operators and their coordination with other local actors, although it is widely used in the literature to qualify the governance of the territory itself.

establishing trust, common understanding, working patterns, and forms of cooperation and co-optation between diverse actors in the supply chain.

This notion of *governance* was applied in the early 2000 to the PDO supply chains. Perrier-Cornet and Sylvander (2000) stressed a high disparity between the quality supply chains with regard to their embeddedness. A priori, it is expected that PDO systems are governed at a community level, where technical agreement and economic alliance among producers take place. However, typical products are not exclusively intended to be marketed at a local level, and broader institutional frameworks must be considered. Moreover, PDO supply chains are not systematically linked to territorial governance strategy, and there is a high heterogeneity in situations (Barjolle *et al.*, 1998; Sylvander and Marty, 2000). Sylvander and Marty (2000) distinguished "territorial governance" from "sectoral governance" using the following criteria: (i) norms, (ii) relations between the enterprises and the type of competition, and (iii) relations between producers and processors. Barjolle et al. (1998) and Perrier-Cornet and Sylvander (2000) highlighted four types: pure sectoral governance (non PDO objective), PDO sectoral governance (the objective is to develop the product in a market segment), strong territorial governance and weak territorial governance. Pacciani et al. (2001) identified two theoretical strategies that actors of regional products may adopt, according to the actors' focus and the role of the territory. The authors analysed that the valorisation of the typical product with a supply chain strategy (focussed on the management of production levels, the improvement of the product's quality, and the implementation of an effective marketing) is not characterised by a direct impact on rural development, but rather on the local economy (jobs and income support). On the contrary, an extended territorial strategy (characterised by diverse activities and new interactions between multiple actors) might catalyse a comprehensive and integrated rural development strategy.

In fact, GI vertical alliances present a high level of diversity in territorial dynamics (Barjolle *et al.*, 1998; Sylvander, 2004). Sylvander (2004) proposed the following gradation: "territorial governance" is observed where decision-makers are supported by local institutions and share a common interest with local actors; "sectoral governance" where an inter-professional body holds power but where actors are driven by pure market

logic while coordinating with each other; and "corporate governance" (including enterprises that do not fundamentally adhere to origin labelled products' ideology and culture). Frayssignes (2005) qualified this typology and referred to governance "with a dominant territorial or sectoral strategy", as there is no "pure" form of governance. Moreover he built his typology on the coordination of public *vs.* private actors and their role in the trajectory of the territory (institutional *vs.* private logic).

g) Agro-food supply chains and territorial effect

Allaire and Sylvander (2000) identified that the "territorial effect" appears according to diverse cooperation systems between actors. The choice of the organisation (cooperative, inter-professional association) and its decision making mechanisms on one hand, and the territorial intermediaries (public and private coordination and partnerships) on the other hand, have been identified as being crucial factors that determine territorial effects (Allaire and Sylvander, 2000; Marsden *et al.*, 2000; Barjolle and Sylvander, 2002; Belletti and Marescotti, 2002; Frayssignes, 2005; Hirczak *et al.*, 2005; Scheffer, 2005; Jahn *et al.*, 2006). Marsden *et al.* (2000) stressed the evidence from European case studies that were investigated in the framework of the IMPACT project. The results suggest that "sustaining rural development through the evolution of reconfigured supply chains must be based upon both institutional support and associational development".

Belletti *et al.* (2005) identified that PDO and PGI may have positive effects on rural development, when they are integrated in a more global strategy, and Roep *et al.* (2006) stressed that "the role of public-private partnerships that contribute to a sustainable development of their region is often a key issue that needs to be addressed while dealing with the question of how to strengthen the inter-linkages and to create coherence and synergies between food supply chains and other regional economic activities". The research of Hirczak *et al.* (2005) highlights potential divergences of interest among private actors. The authors recommend public intervention in order to define both territorial and sectoral scales that are coherent for the development of designations of origin or quality labels (promotion of exhibitions, quality product roads, etc.), and finally to reach rural development objectives.

1.1.2 Sustainable rural development

a) Development

The term *development* has been used with different meanings in current debates (e.g., process, growth, structural changes, political implementation). "Development" often implicitly refers to an "economic development" and "growth", which dramatically reduces its scope. "Development" combines quantitative and qualitative components and means also changes and evolution in time. It is the result of a process, or the process itself. For example, in the human development report, "development" is described as "a process of enlarging people's choices" (UNDP, 1990). It might be delimited in space (regional development, often linked to regional development policies aiming at reducing disparities between regions) or refers to a type of territory (rural development).

However, the concept evolved in time according to social concerns. This evolution is reflected in the diverse terms that qualify the development. The concept of *integrated development* emerged with the threat of economic and social disintegration in the 1970-80s. The concept of *local development*, developed in the 1960s was transferred to policy applications in the 1970-80s (Stöhr, 1990). It reflects the idea of a development seen as a local process. Other expressions convey the same general principles: *development from below* (Stöhr, 1981), *community-based development*, *endogenous development* (Ray, 1999; Murdoch, 2000; Shucksmith, 2000). Favourable structures of endogenous development were identified such as: industrial districts (Becattini, 1990), innovative milieus (Maillat *et al.*, 1993), local production systems (Courlet and Pecqueur, 1992), and clusters (Schmitz, 1995; Porter, 1998).

The concept of *sustainable development* appeared for the first time in 1987 in the Bruntland report, as the society realised resources might be limited and ecological impact non-reversible. A *sustainable development* was defined as a "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland, 1987).

b) Rural

There has been a debate on the concept of *rural* and what reality, if any, is its referent (Gray, 2000). An official definition on *rural* does not exist, either in economic literature, or in statistical sources. In most definitions, *rural* is defined negatively as not being *urban* or *agglomerated*, however the frontier is not clear and the existence of a distinct type of space and/or sociality that can be labelled "rural" has been under sustained questioning since Pahl's (1966) critique of the rural-urban continuum (Gray, 2000). Several authors undertook to define the rurality. Blanc (1997) identified three different concepts in the notion of rurality, which are complementary: a social approach (rural as a perception constructed by social actors), an economic approach (rural as a territory with specific competitive characteristics), and a regional approach (rural as a structured space and performance variation between territories). Additionally, Cloke (2006) outlined three theoretical perspectives to define the essential characteristic of rurality. He refers to i) the functional concepts of rurality, ii) the political-economic concepts, and iii) the social constructions of rurality.

Because of changes in the broader socio-economic system, rural areas have been undergoing rapid changes as their economies and societies restructured. The main changes that impacted rural areas come from macro-economic transformations (globalisation, work organisation, transportation costs, etc.), political measures (public expenditures for road infrastructure, regional policies), demographic trends (increase of lifetime), and finally from individual decisions in response to these changes (Léon, 2005).

c) Rural development

As changes take place in rural areas, the concept of *rural development* evolves in time, and in particular with regard to the nature of objectives to be reached. For these reasons, the concept of *rural development* is highly contested, and no single agreed definition exists. Several dimensions are interlinked: political implementation aspects, farm families' strategies, as well as rural economical and social theory (Knickel and Renting,

2000; van der Ploeg *et al.*, 2000). The concept often includes a political and strategic vision. Therefore it is regularly linked to policy implementation or policy evaluation, and takes on a normative meaning. A significant work was for example dedicated to assess the CAP or the LEADER Programmes in terms of rural development benefits (see for example Shucksmith, 2000). Indeed, the introduction of the Rural Development Regulation (1257/99) in the European Union encouraged a shift from a narrow focus on agriculture to a more integrated and territorial approach. While economic objectives were still very important, social, cultural and environmental dimensions of rural development were also promoted.

Economic activities are embedded in social relations that constitute a set of institutions and norms, enabling the functioning of economic aspects of social relations (Polanyi, 1957; Granovetter, 1985; Anderson, 2000). Dealing with rural areas, the question set is also to analyse how associational practices amongst rural people are related to development. Indeed, many authors have highlighted the role of social structures of the rural areas, putting emphasis on networks and the mobilisation of external resources by rural actors (and farmers in particular) (Knickel and Renting, 2000; Murdoch, 2000; van der Ploeg *et al.*, 2000; Renting *et al.*, 2003; Magnani and Struffi, 2009). Lee *et al.* (2005) 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". Murdoch (2000) claims networks hold the promise of a more complex appreciation of "development" than has traditionally been evident in the previous model (endogenous versus exogenous model). According to him, the most appropriate networks are those that enable new ways of orchestrating economic development, through entrepreneurialism and capacity building (Murdoch, 2000).

Actually, the search for economic development is clear in most of the studies on rural development. However, there is confusion with regard to the importance given to the goals of social and civic development (Shortall, 2004; Shucksmith, 2000). Frequently, social or civic development is seen as a process, and funding this process is justified on the grounds that it leads to economic development (Shucksmith, 2000).

The supply chains' economic performance is likely to be linked to rural development benefits. Wealth creation is indeed a crucial aspect for rural regions, as well as the distribution among the chain of this economic value, and its re-investment (Knickel and Renting, 2000; Marsden *et al.*, 2000; van der Ploeg *et al.*, 2000; Barjolle, 2006; Jahn *et al.*, 2006). This economic performance is usually relatively easy to evaluate (turn-over, value added, employment) (see for instance the study of Renting *et al.*, 2003).

Environmental, political and social considerations are less documented despite a significant development of this research field. Social performance is often proposed to be evaluated through the concept of social capital and network (see paragraph d) of this section). In this viewpoint, social capital and networks represent resources that can theoretically be mobilised (and developed) by the actors of a territory. Finally, the political and civic development is often tackled through the concept of rural governance and partnerships (see paragraph e) of this section).

d) Social capital and economic development

Bourdieu (1983) and Coleman (1988) originally developed the term of *social capital*. However Bourdieu saw the social capital as an individual asset, the literature broadly developed the concept as a community asset. Nevertheless, both Bourdieu and Coleman emphasise that the intangible character of social capital inheres in the structure of relationships between people (Portes, 1998). Putnam's central message highlights social capital as a central pre-condition for economic development (Putnam, 1993). In this viewpoint, social development precedes economic development. There is an increasing literature which examines the differential economic performance and explains why some rural areas are performing better than others having social capital as one of the key determinants (Agarwal *et al.*, 2009; Callois, 2005; Lee *et al.*, 2005; Shucksmith, 2000).

Coleman (1988) defined social capital as being the "ability of people to work together for common purposes in groups and organisations". Svendsen and Svendsen (2000) focus their definition on the concept of trust. Ostrom (2000) sees social capital as a concept to explain how individuals achieve coordination and overcome collective-action problems

to reach higher levels of economic performance, and Woolcock (2001) refers to the norms and networks that facilitate collective action.

Finally, there is no agreed definition of social capital. Trust, reciprocity and norms of behaviour are important factors of social capital (Coleman, 1996; Fukuyama, 2002; Putnam, 1993). Nevertheless, sources and outcomes of social capital are regularly mixed up, depending on the viewpoint, with a risk of tautological statements. For example, is trust at the origin of social capital or is it an outcome? The concept was attacked due to its fuzzy definition and the difficulties to measure it (Ponthieux, 2004).

Nevertheless, the concept of *social capital* can interestingly be mobilised for the analysis of networks in terms of resources mobilisation. One interesting distinction in the multidimensional nature of social capital was made by Granovetter (1973) who distinguished "strong" from "weak" ties. Granovetter observed that it is often the heterogeneous member of a network, or the individual within it with weak ties and broken affinities, who serves as the conduit for new ideas and information into a closed group. This work was followed by a typology that distinguishes "bonding" from "bridging" social capital (Putnam, 1993; Gittell and Vidal, 1998). Woolcock (2001) notes: "the former refers to relations between family members, close friends and neighbours, the latter to more distant friends, associates and colleagues. Bridging is essentially a horizontal metaphor, however, implying connections between people who share broadly similar demographic characteristics". However, Woolcock stressed the vertical dimension of social capital that he called "linkages". According to him, the "linking" refers to the links between actors that are geographically close however with different statutes or hierarchical or complementary functions. As a result, a key function of linking is the "capacity to leverage resources, ideas and information from formal institutions beyond the community"(The World Bank, 2000).

e) Rural governance

Dealing with rural development leads to the question of *rural governance*. Rodes (1996) proposes to define governance as "self-organising networks" as referring to networks in

which private, non-profit, and public individuals and organisations interact to provide public services. Goodwin (1998) also refers to the idea that boundaries between and within public and private sectors have become blurred. And Murdoch and Abram (1998) stressed the flexibility of these non-hierarchical alliances.

Rural governance could be defined as a self-organised network involving governmental and non-governmental organisations (associations, institutions, agencies) which are located in the rural area at the special scale of the region or locality rather than the nation. Rural governance is the arena of a decision making process concerning the development of the territory. Goodwin (2003) identifies partnership as the dominant form of rural governance. Partnerships and networks buildings represent processes that take part of a civic and social development. In this light, they can be analysed as rural development practices.

f) Sustainability

The concept of *sustainability* emerged together with the one of *sustainable development* in the 1990s. There is a general agreement that it refers to a balance between environmental, economic and social considerations and embraces an institutional dimension. The overall objective is to ensure the continued existence of the human society. However, the concept is a political notion as it is linked to objectives that are bargained and constantly redefined.

Sustainability evaluations were critically developed in the last decades, and applied to all geographical levels: world (United Nations Commission on Sustainable Development, 2007), national (Altwegg *et al.*, 2004), enterprise's level (Corporate Social Responsibility). However, the studies emphasise that the *sustainability* cannot be understood as a well-defined state. It cannot be described by generally valid indicators, but has to be adapted to specific contexts. In a recent article, Aerni *et al.* (2009) highlighted this fact in the light of the example of "sustainable agriculture". The authors stressed differences in attitudes and interests that shape national debates on sustainable agriculture in Switzerland and New Zealand and demonstrated a context-specific perception.

g) Towards a definition of sustainable rural development

Sustainable rural development is a concept constantly under debate as its objectives constantly evolve with the dramatic evolution that occurs in rural areas. Rural development is a multi-level, multi-actor and multi faceted process (van der Ploeg *et al.*, 2000) and the results of the construction of common visions.

We propose a normative approach and define a sustainable rural development as a process which balances economic, environmental and social objectives. This encompasses several levels: local, regional and national and entails political aspects.

We propose to work with the normative definition established by Bill Slee in the framework of the SUS-CHAIN project (quoted in Jahn *et al.*, 2006, p.61).

"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 concepts of endogenous development ("the rural community shares a vision") and sustainable development ("a balanced emphasis is placed on social, economic and environment priorities").

1.1.3 Territorial Impact Assessment

Impacts are the positive and negative, intended and unintended, primary and secondary long-term effects. These effects can be economic, social, cultural, institutional, environmental, technological or of other types (OECD-DAC, 2002).

a) Impact of what?

Territorialised food supply chains are constructed around the notions of quality, territory and social embeddedness (Ilbery and Kneafsey, 1998; Hofer and Stadler, 2000; Murdoch *et al.*, 2000; Renting *et al.*, 2003; Ilbery and Maye, 2004). Therefore, supply chains and initiatives are relevant scales to study territorial impact in terms of sustainability. Indeed, in the beginning of the 21st century, food chains were recognised as a key element to better understand new patterns of rural development (Marsden *et al.*, 2000). Emphasis on sustainable food chains was considered as an important departure, as Cobb *et al.* (1999) stressed: "the food chain as a whole is the ultimate framework for a scrutiny of sustainability" (Ilbery and Maye, 2004). At that time, quantitative empirical evidence on the overall incidence and impact of food chains were required (Knickel and Renting, 2000).

Since then, significant research analysed the impact of agro-food initiatives in terms of "rural development" and "sustainability" (van der Ploeg *et al.*, 2002; Renting *et al.*, 2003; Roep, 2006; Tregear *et al.*, 2007). And several European research projects investigated the territorial impact of collective supply chains, especially organic and origin labelled products supply chains (European research projects IMPACT, DOLPHINS, OMIaRD, and SUS-CHAIN).

b) Impact on what?

The strategy to differentiate through quality products labelled under special protection schemes has potential effects on the performance of the supply chain itself, on the consumers, on the environment, as well as on the territory where the chain is based.

Territorial impact refers to the observed impact at a territorial level on a defined community. It refers to socio-economic issues (socio-economic impact) as well as environmental issues.

The term "territorial impact" is rarely used in the socio-economic literature, as the territory mostly refers in the English language to a spatial dimension. Shucksmith *et al.* (2005) referred to this term in their book "The CAP and the Regions: The territorial

impact of the common agricultural policy", in which the authors proposed an assessment of the CAP and Rural Development Policy in terms of social and economic cohesion, environmental sustainability and more polycentric development at the three levels macro, meso and micro. In a recent article "The Territorial Impact of the Farmers' Early Retirement Scheme" (Zografia, 2007), it was the farmers' early retirement policy instrument which was evaluated in terms of structural and social outcomes.

Panelli (2006) noted "community has a long and variable history as a unit of analysis in studies of rural society but has dominated much of the English-language literature". Moreover, the notion of community is differently understood in various cultures and languages (Panelli, 2006). It is a mid-scale concept that addresses the structural, relational (and *in some case spatial*) dimensions of a social grouping (Panelli, 2006). For instance, community studies are often most synonymous with village analysis in the British literature (Murdoch and Abram, 1998).

Nevertheless, delineating the level of the rural region and defining it precisely is a particularly difficult question. Such a definition consists of spatial aspects (boundaries) as well as conceptual issues. It also makes necessary a differentiation between internal factors (that can be adjusted) and (fixed) external factors, and between activities that are "internal" or "external" to the regional economy (Knickel and Renting, 2000).

c) Methodological aspects to assess territorial impact: general principles

To prove positive effects of collective agro-food initiatives on rural territories is a major political stake. Thus, assuming territorialised food supply chains have territorial effects leads to a methodological question: how to measure the supply chain's territorial impact? The impact assessment should enable the investigators to answer such a question: "what would be the situation if no initiative had been taken and farmers had to rely on conventional patterns of development?" (Knickel and Renting, 2000).

Réviron and Paus (2006) have highlighted that assessing territorial impact is a challenging exercise that needs: i) a clear research question (impact of what?, impact on what?); ii) a reference point (comparisons) either diachronic (time series, before/after) and/or synchronic (cross section, with/without).

As far as GIs are concerned, it is very difficult to distinguish the impact of the supply chain itself (and the dynamic of its collective organisation) from the impact of a special protection scheme (for instance a PDO protection) (Belletti *et al.*, 2005). The chain of causality is difficult to establish, given that acquiring a legal protection, reaching an economic performance, as well as building a strong collective organisation are objectives that strengthen each other.

"Before/after" studies rarely accurately measure impacts. Baseline data (before the intervention) and end-line data (after the intervention) give facts about the development over time and describe the factual for the supply chain (not the counterfactual) (Leeuw and Vaessen, 2009). The differential observed by comparing before/after data is rarely caused by the intervention alone since other factors and processes influence development, both in time and space (Leeuw and Vaessen, 2009). For example in evaluating the impact of GI initiatives, we must control the influence of changing market conditions or agricultural policy.

The "with/without" approach aims at comparing the situation observed with "what would have happened in the absence of the intervention" (the without, or counterfactual). Such comparison is challenging since it is not possible to observe how the situation would have been. It has to be constructed by the evaluator (Leeuw and Vaessen, 2009).

Randomisation of intervention is considered to be the best way to create an equivalent (other things being equal) (Duflo and Kremer, 2005; Leeuw and Vaessen, 2009). Random assignment to the participant and control group guarantees that the two groups will have similar average characteristics. Unfortunately, it is hardly possible to design such an experimental approach in the case of GIs' territorial impact evaluation, since GIs are based on voluntary participation and since the evaluation concerns various territorial effects on delimited territory (difficulties to identify an area outside the GI geographical limits all things being equal, and to quantify spill-over effects).

In parallel to the comparative design, a relevant set of indicators must be selected. In technical terms, indicators are statistical variables which transform data into useful

information (OECD, 1994). Regarding the selection of indicators, the challenge is to chose a set of indicators which best reflects the holistic assessment that is needed while dealing with development and sustainability. Moreover, official data of sufficient reach and quality is scarce at the supply chain level.

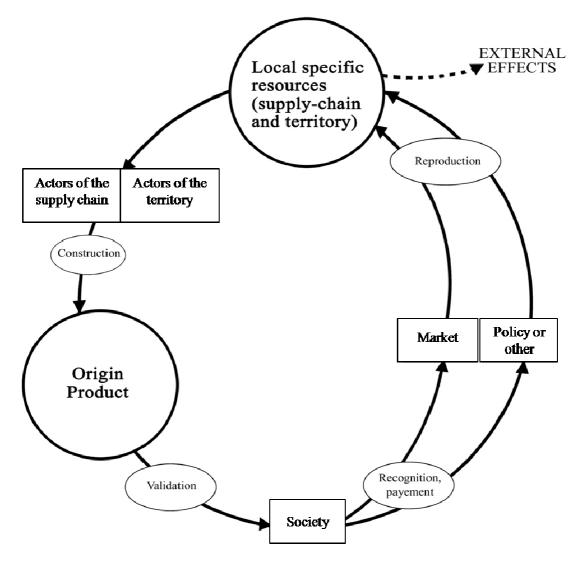
Additionally, a question challenging the researchers is whether it is appropriate to aggregate indicators or to compare profiles of supply chains.

d) Beginnings of GIs' territorial impact assessment

As reported in section 1.1.1.*d*), a GI is in essence based on the link with its territory. *De facto*, several criteria describe a territorial anchorage: origin of the capital (private families, cooperatives, and financial groups), code of practice and management of local resources, non-transferable and specific know-how, marketable and non-marketable interpersonal links, and commitment of local institutions. However, this anchorage is variable, depending for instance on the potential mobility of the enterprises.

Consequently, due to their potential links with local specific resources both of material and immaterial nature, GIs are expected to have territorial effects. In the DOLPHINS project, an "archetypal" model and a "virtuous circle" were conceptualised by Stéphane Boisseaux (in the sense of the Ideal-typic of Weber (1904/1965, p. 172), (figure 1)).





Source: From Belletti *et al.* (2003, p.77); from the conceptualisation by Stéphane Boisseaux (Boisseaux and Stucki, 2002)

Externalities are both recognised and valorised by the market (consumers willing to pay for additional attributes), and by the society (supportive policies that acknowledge the multifunctional character of the activity).

Potential effects on the territory can be linked to characteristics of the GI archetype as follow (Belletti and Marescotti, 2002) (table 1).

PDO Archetype characteristics: Ideal-typical PDO	Expected effects on the rural development and the territory
PDO typicity comes from local natural resources	Sustainable use of natural resources
PDO production factors are not reproducible nor transposable	Location of economic activities
PDO know-how is site-specific and it is based on an organised local community	Location of the know-how's handing down and support to reproduction of local social system
The name of the PDO is the name of the place	Promotion of the global image of the territory, and feed-back effects on the PDO
PDO supports the territorial identity of the producers and of the local population	Territory is the space framework which guarantees the product identity

Table 1: Link between GI archetype and potential positive effects on the territory

Source: Adapted from Belletti and Marescotti (2002)

The early works that developed the potential of GIs to improve rural livelihoods (based on local resources), and thus advance rural development were simultaneously developed in France, Italy and Switzerland. Pacciani *et al.* (2001) developed the typology of GI governance in relation with territorial effects, while the GIS Alpes du Nord (France) started to develop assessment methods. To analyse the territorial impact, synchronic comparisons were applied in the framework of the Pressures-State-Response (PSR) model (traditionally used in environmental sciences) (Larbouret, 2000; Paus, 2001; Paus, 2003). Frayssignes (2001) worked on the elaboration of assessment grids, and Barjolle and Thévenod-Mottet (2004) used a diachronic comparison to assess the Abondance cheese. An attempt of participatory approach was made through the commitment of local stakeholders to select and weigh relevant indicators (hard data) in the case of the Raclette du Valais (Paus, 2003).

As mentioned in paragraph 1.1.2.*c*), studies dealing with economic performance are more popular in the field of agro-food initiatives than those dealing with the two other pillars of sustainable development. Numerous studies on GIs investigate their economic performance (with emphasis on producers' price premium to producers, generally in comparison with their industrially-produced counterparts) (Babcock and Clemens, 2004; Barjolle *et al.*, 2007; Desbois and Néfussi, 2007; Bramley *et al.*, 2009). GIs are also

credited for having feedback effects throughout rural economies (Belletti *et al.*, 2005). However, some negative impacts are reported, such as ousting of agave producers from the Tequila supply chain or environmental degradation (Bowen and Gerritsen, 2007).

e) Development of methods

Several methods have been developed to deal with territorial impact evaluations. Roughly, two types of approaches were developed (Réviron and Paus, 2006).

One approach consists in collecting hard data with a system of indicators. A reference is chosen for a diachronic approach or a synchronic approach (comparison with a conventional supply chain). This method can be named "objective method", as it is based on hard data collection. Nevertheless, there is no objective method in the strict sense (van der Ploeg *et al.*, 2000), since it is conditioned by the choice of the indicators, their weighting and their availability. These methods provide snapshots of the states of a territory. The system of indicators can be selected and analysed by experts (de Roest and Menghi, 2002; Hirczak and Mollard, 2004).

A complementary approach is based on a measurement of perceptions. A set of items is selected and marked by experts according to the perception they have of the territorial effects (Lehmann *et al.*, 2000). The main benefit of the method is a more holistic view of rural development issue.

1.1.4 Facilitation

Recent research highlights the determinant role of external actors and leaders in the emergence and scaling-up of agro-food initiatives, as well as specific needs in terms of management (Roep and Wiskerke, 2006; Tregear *et al.*, 2007; Magnani and Struffi, 2009; Markelova *et al.*, 2009; Réviron and Chappuis, forthcoming). Moreover, "facilitators" were identified as key actors in the development of territorial benefits (Tregear *et al.*, 2007; Magnani and Struffi, 2009; Réviron and Chappuis, forthcoming).

a) Origin and definition

To facilitate means "to make easy." Group facilitation has a rich history and many influences (Hunter and Thorpe, 2006). Therefore, a multidisciplinary approach is necessary to recall the emergence and evolution of the concept of *facilitation*. For example, it is linked to the emergence of participatory approach to management and problem solving of teams in companies with the development of quality circles in Japan in the 1960s, the development of experiential and group learning approach in education, the emergence of bottom-up approach in community rural development with facilitation of problem solving groups through the rise of participatory action research and participatory rural appraisal methodologies (Hogan, 2002).

The group facilitator's job is to make it easier for the group to do its work. External facilitation is about an external agent or external agents to intervene in the structure and process of a group in order to achieve the desired outcome. By providing non-directive leadership, the facilitator helps the group arrive at the understandings and decisions that are its task. The role is theoretically one of assistance and guidance, not of control (Avery *et al.*, 1981).

We work with the definition given by Schwarz (1994), who defines the facilitator as a person who "diagnoses and intervenes to help a group improve how it identifies and solves problems and makes decisions, to increase the group's effectiveness" (p.5). By Schwarz's definition, a group member cannot formally fill the role of facilitator.

b) Profiles of facilitators

In economic geography, management, research policy, and development economics, different terms are used to describe the person who helps the group increase its efficiency and organise collaborative activities: administrator, architect, broker (Burt, 1992), catalyst (Rosenfeld, 1996), catalytic leader (Luke, 1998), community entrepreneur (Johannisson and Nilsson, 1989; Selsky and Smith, 1994; Marsden and Smith, 2005), coordinator, (initiative) facilitator (Nelson and McFadzean, 1998; Groot and Maarleveld, 2000; Huggins, 2000; Billaud *et al.*, 2004; Markelova *et al.*, 2009), local activator

(Magnani and Struffi, 2009), (process) manager (Billaud *et al.*, 2004), network broker (Huggins, 2000; Loubaresse, 2008), partnership manager (Vangen and Huxham, 2003a), political leadership (White and Runge, 1995), process catalyst and "driver" of relational process (Mandell and Keast, 2009), public entrepreneur (Ostrom, 2000).

Some of these terms (coordinator, administrator, and partnership manager) refer to a particular facet of the facilitator's profile. For instance, according to Burt (1992), brokers are intermediaries, bridge-makers or negotiators, they facilitate and channel interaction, and sometimes they take part in it, sometimes they actually initiate it.

c) Facilitator and entrepreneur

Moreover the brokers' literature is often linked to the "entrepreneurship" literature. Following Schumpeter, Sverrisson (2001) defines entrepreneurs as actors who operate within existing social structures but transcend them. They "combine existing resources in new ways" and thus create the basis for novel economic activities, innovation and, if successful, economic growth (Schumpeter, 1934). Sverrisson defines entrepreneurship as "the act of creating connections and establishing networks among firms, people, artefacts, areas of knowledge and political resources". In this sense, brokers are entrepreneurs.

Nevertheless, facilitators are not autonomous entrepreneurs. Johannisson and Nilsson (1989) employ the term "community entrepreneur" to refer to an entrepreneur who plays a catalyst role in the initiation and management of local initiatives for economic development. They argue that local mobilisation calls for "community entrepreneurs". According to them, it is the mission of community entrepreneurs to create a context for traditional or autonomous entrepreneurs and to bridge business and community values and practices.

In the same study, Johannisson and Nilsson identify the main differences between community entrepreneurs and autonomous entrepreneurs: the community entrepreneur considers the development of the community as a main personal goal; moreover s/he uncovers and helps build the self-respect and competence of other community members, whereas the autonomous entrepreneur considers the community as a means of attaining personal goals. Community entrepreneurship is about building socio-economic network with social and/or geographical proximity which help mobilise the various resources needed for the action. Therefore, compared with business entrepreneurs, the community entrepreneurs may be more dependent upon a broader set of resources from different parts of the local society and may use more time to obtain engagement and legitimacy before the venture becomes launched (Alsos *et al.*, 2007).

d) Qualities and skills required

Facilitators are process-people who must have a variety of human, process, technical skills and knowledge, together with a variety of experiences to assist groups of people to journey together to reach their goals (Hogan, 2002). Moreover, the community entrepreneur must have a need for achievement and be able to learn by practice (Johannisson and Nilsson, 1989).

Indeed, the achievement of the facilitator's missions depends on particular skills and qualities s/he has to develop. Qualities traditionally associated with leadership - such as intelligence, toughness, determination and vision - are required for successful facilitation, but are not sufficient. A high degree of emotional intelligence and relational skills: self awareness, self-regulation, motivation, empathy, patience, honesty and deference (Coleman, 1996; Goleman, 1998; Vangen and Huxham, 2003a) as well as genuineness in the interest in the group development are also required to undertake facilitative activities. In order to achieve his/her missions, facilitators need interpersonal skills (such as communication, active listening, clarifying, questioning, summarising) (Nelson and McFadzean, 1998) and the ability to see the common ground. Moreover, they need an understanding of the cultural norms and values of the group members (Alsos *et al.*, 2007) as well as an understanding of business environments (e.g., technical and economic constraints, market data) (Nelson and McFadzean, 1998).

Catalysing the group process requires the ability to create valued interaction and exchange between participants (Huggins, 2000). This encompasses skill to communicate and to design mechanisms for communication between operators, as well as the ability to work with others and effectiveness in leading changes. Moreover, organising capabilities and technical competencies in terms of time management, planning and preparation are needed (Nelson and McFadzean, 1998). Persuasiveness and the capacity to get people to understand what is going on are also needed (Ackermann, 1996).

Managing power relations involves rational skills such as objectivity and judgment (Nelson and McFadzean, 1998), as well as sensitiveness to protect minority points of view, ability to engender respect, and understanding of power influences and strategies of different groups of actors.

Moreover, facilitators need the ability to extract benefits from their social structures, network and membership and nurture their networking capabilities in order to make the attempts to acquire resources from the public and voluntary sector (Johannisson and Nilsson, 1989), which can assist in innovation for instance. Finally, they speak the jargon of various organisations (research and political languages for instance).

e) Personal values of the facilitator

According to Johannisson and Nilsson (1989), a community entrepreneur is supposed to consider the development of the community as one of their main personal goal, while Zerbinati *et al.* (2005) state that community entrepreneurs have a regional-development objective and co-ordinate activity in the broader local community. Réviron and Chappuis (forthcoming) emphasise the importance to identify the personal value hold by the facilitators, his/her motivations and the importance granted to non-economic values. Indeed, the personal values of the facilitator may influence how the resources within the system are configured, and Alsos *et al.* (2007) identified a potential clash between the strategic adaptation to a pure commercial project and the broader community objectives.

f) Interaction facilitator – group - context

According to Schwarz (1994), a group structure is characterised by a group mission and vision, a group culture, goals, tasks and membership, roles, and norms. The vision identifies what the group should look like and how it should act as it seeks to accomplish its mission. In an effective group, members can articulate their mission and vision (Schwarz, 1994). A group must have an effective group culture. According to Schwarz (1994), group culture means the set of fundamental values and beliefs shared by the members of a group that guide their behaviour. Norms stem from the values and beliefs that constitute the group's culture. Markelova *et al.* (2009) also emphasise that shared

norms and social capital, along with past successes working together, facilitate collective action for smallholders market access.

Despite inherent difficulty in specifying collaborative goals (Eden and Huxham, 2001), an effective group should have clear goals that are consistent with the organisation's mission and vision and allows members to select the means by which they achieve their goals. Appropriate membership (various in knowledge and skills, large enough to handle the task, stable in composition) is also a key feature of the group structure (Schwarz, 1994).

g) Leadership and organisation

Among the group, roles must be clearly defined, as well as the leadership (Schwarz, 1994). Several hundred definitions of leadership have been presented over the years (Bass, 1990). There is a strong link between leadership and organisation, as most definitions include one or more of the elements of goal attainment, group or organisation, structure and interpersonal relationships (Andersen, 2005). The definition of leadership by Tannenbaum *et al.* (1961) embraces the key concepts: "interpersonal influence, exercised in a situation, and directed through the communication process, toward the attainment of a specified goal or goals".

1.1.5 Conclusion

This section shows that crossing internal governance and territorial expectations opens a large research field to improve the virtuous circle of origin products. It invites to analyse very precisely the initial steps of collective organisations, when the operators, helped by their facilitator and pushed by their leaders' vision, make crucial decisions regarding their economic, social and environmental objectives. Additionally, it opens the issue of assessing these territorial effects, in a perspective of internal monitoring and societal justification of public support. This thesis is centred on these issues.

1.2 Research questions and objectives

1.2.1 General research choices

We follow the rationale of Lewis *et al.* (2002), that mobilising different theoretical fields that address the issue of governance can provide a meaningful understanding. In our case not of industry and its governance, but of the territorialised, collective agro-food initiative and its internal governance articulated with the rural governance of the territory.

In our research agenda, the term "governance" refers to three theoretical fields:

- The *governance structures* primarily developed by Williamson (new institutional economics) (Williamson, 1991);
- The concept of *governance strategy* within agro-food organisations, in particular the PDO alliances developed by Allaire and Sylvander (1997), which agrees with the concepts of "associational and institutional interfaces" developed by Marsden (2004), or the typology of Maillat (2001) regarding the developmental logic of production systems;
- Rural governance, which refers to rural sciences (Goodwin, 2003).

Each of these three fields emphasises a different meaning of the term "governance", but refers to the concepts of network, partnerships and to particular mechanisms of coordination, management and monitoring, as well as collective decision-making.

In the frame of this work, we will not analyse social networks through the lens of the network theory, nor the social network analysis and its related metrics (e.g., centrality, density). However, we share the basic assumptions of network analysis: membership and participation in formal and informal networks may lead to positive outcomes for individuals and communities that participate in those networks. Indeed, we assume that networks can link different sectors of development and different spatial scales, thereby producing developmental processes that are neither internal to a local area nor imposed from outside (Lee *et al.*, 2005).

We define the internal governance of a collective agro-food initiative as the selforganised network that defines the cooperation level between actors, the relations of power, the type of organisation, and the common strategy. In an established GI, this internal governance is characterised by one or several of the following assets: an organisational pattern (usually an inter-professional association); collective management of the quality; a common communication; and a common code of practice. In emergent GIs, however, generally none of these assets are established. Nevertheless, some of them might be in process. Therefore, the internal governance in emergent GIs must be analysed with regard to a process perspective (network building, creation of collective decisionmaking, etc.).

Governance with a territorial dominance is seen as the most interesting strategy when dealing with rural development objectives. This strategy extends cooperative actions to other private sectors in the territory, as well as to public sectors (in a broad sense, including the voluntary sector). Territorial governance is seen as a governance strategy that takes the objectives of other territorial actors into consideration to develop synergies. Therefore, it strengthens the link of the supply chain to the territory. The overall objective of this strategy is to develop the virtuous circle presented in section 1.1.3 d).

Creating internal governance within agro-food initiatives might be explained by various factors, such as institutional factors or transaction costs. Nevertheless, how this organisation develops can also be considered through the role that facilitators and leaders play. Indeed, though we define internal governance as a self-organised network, we believe that the network does not appear due to an *"invisible hand"* of collective action (Paus and Réviron, 2010a). We rather assume that collaborative networks do not spontaneously appear and that a facilitator/community entrepreneur is required. A large portion of this thesis' work has focused on the role of facilitation and the key characteristics of facilitation as compared with leadership.

Agro-food initiatives have a territorial impact (as do all territorialised activities) and produce externalities that might meet both societal demands, as well as those formulated

by politicians and opinion leaders. A large part of this thesis is dedicated to the issue of impact assessment, in order to nurture the development of knowledge regarding GIs in the framework of an international debate. As the contributions of GIs in terms of rural development and conservation of natural and human heritages are the most recent arguments developed to justify a protection of GIs at national and international levels (Sylvander *et al.*, 2006), there is a need to investigate the territorial impact of GIs and develop evaluation methods. As seen in paragraph 1.1.3.c), however, many methodological difficulties remain.

1.2.2 Research questions

Based on the virtuous circle presented in section 1.1.3.d), several overall questions can be set:

- What characterises the construction process of a GI?
- How can the societal recognition of territorial effects be assessed?
- Can the external effects of collective, localised agro-food initiatives be measured?

A starting point for considering these issues is to deal with the articulation of these diverse processes. This approach specifies the above questions and raises new research questions across the issues.

The following research questions are addressed in the thesis:

A- Does the internal governance of GIs have the same determinants in transition countries as in the Western Europe and Switzerland?

B- Is there a link between internal governance and the potential territorial effects? Is there a pattern that should be promoted in order to develop a territorial strategy and positive effects in terms of territorial impact?

C- What is the role of external facilitation in the emergence of a GI?

D- What methods must be developed to measure the territorial impact (economic, environmental and social effects on a territory), as well as the recognised effects on the territory? And how can territorial impact be assessed in emergent GIs?

1.3 Methodology

Our research combines both qualitative and quantitative approaches. The use of qualitative research strategies (case studies, participant observation) is less developed in agricultural economics compared with rural sociology or extension (Bitsch, 2005). However, qualitative research was developed to solve real-world problems (Sterns *et al.*, 1998), especially in developing and transition countries (Bitsch, 2005).

Our research relies on case study investigations and comparisons. These case studies were documented through semi-structured interviews of stakeholders and experts, as well as narrative interviews and participative observations. We used a triangulation approach (Yin, 1984) to gather and combine different types of data in order to ensure data integrity. As Pettigrew (1990) highlighted, the aim of the triangulated approach is to draw on the particular strengths of various data collection methods. Combining interviews with documents and direct observations that provide access to group processes enabled us to identify discrepancies between what people say and what they actually do.

The quantitative research is based on the measurement of indicators (mainly to characterise the supply chains), as well as semi-structured interviews linked to Likert scales in a benchmarking approach (impact assessment). We mobilised qualitative research methods in order to understand behaviour and context, as well as their evolution, and for this purpose, to understand the meanings and motivations of actors. As Eisenhardt (1989) stated, the case study is a research strategy that focuses on understanding the dynamics present within single settings.

The general approach of the thesis is based on a comparison of case studies. While case studies as a teaching device spread from the Harvard Business School into agricultural

economics decades ago (Stuhler and Arthur, 1975), their discussion as a research approach began in the late-1990s in agribusiness journals (Sterns *et al.*, 1998; Westgren and Zering, 1998) (Bitsch, 2005). Tellis (1997) noted a frequent criticism of case study methodology: its dependence on a single case renders it incapable of providing a generalisable conclusion³. However, Yin (1984) argued that, more relevant than the size of the sample (2, 10 or 100 cases do not transform a multiple case into a macroscopic study), a rigorous case study design results in general applicability.

We selected the cases according to criteria of relevance regarding the research question (filter) and criteria of research of diversity (sorter). We refer to the methodology developed in the SINER-GI project, which consists of two steps (van der Meulen, 2006):

- 1) Filter the potential candidates

Three criteria were mandatory for selecting the cases and maintaining their candidature for the second step. First, there should be a collective project (at different stages of advancement and not necessarily of primary producers) around the agro-food product. A collective project could be defined by a collective intention and a coordination of behaviour.

Second, there should be sustainable rural stakes in the area of production (exodus of the rural population, degradation of resources, etc.). And finally, the initiatives should have a sufficient body (number of potential participants).

In addition to the three abovementioned criteria, the need for good contacts established with local partners was discussed in the SINER-GI project. Pettigrew (1990) states that, "Network building is a critical activity for empirical researchers," and we verified this need of "planned opportunism" in our research.

- 2) Sort the cases according to defined criteria

Depending on the research question, the selected cases should reflect the variety which is expected to be the explanative factor (presence/absence of facilitation process for example).

³ For a general discussion about case studies criticism, see Flyvbjerg, B. (2006). "Five Misunderstandings About Case-Study Research." Qualitative Inquiry 12(2): 219-245, ibid.

Moreover, Pettigrew (1990) suggests choosing cases where progress is transparently observable.

Transition countries were a very interesting research field because of the presence of many emergent GIs. Three Serbian GI initiatives were selected and investigated. We had potential strong local partnerships and support in Serbia. Logistical activities (translation, field transportation, organisation of meetings) were highly facilitated through these partners, thereby easing the access to informants and data, opening doors to meetings for first-hand observation, as well as enabling exchanges on the Serbian context.

The aim of the research is not to directly compare initiatives from Switzerland and Serbia. However, it is worth noting certain commonalities between the two countries:

- Switzerland and Serbia are two small continental countries with a comparable demographic size (less than 10 million inhabitants), and comparable internal market sizes.
- Both countries have marginal mountainous areas, and general issues of rural development arise, as do political concerns regarding their development (loss of and aging of rural population).
- Both countries are not members of the European Union. However, their institutional environment is influenced by the European Union (development of Intellectual Property policies with regard to the WTO *and* European Union regulations).

Differences mainly stemmed from the institutional context (see section 1.4) and from the time-lag in setting up GI initiatives. In Switzerland, most of the GIs have a collective organisation already settled.

Cross-comparisons of cases are undertaken at multiple levels. The comparisons enable us to highlight between different contexts, explain variations and point out factors of both failures and successes.

- In chapter 2, two Serbian cases are compared with the European pattern. The organisational governance forms observed in Serbia are compared with those

observed in South-Western Europe and Switzerland (the latter acting as a reference point). The objective is to explain the observed results of an emerging phenomenon (established system vs. emergent system). The theory of hybrid forms of GI organisations, empirically developed from European case studies, is not confirmed in a transition context. Therefore, there was a need to form tentative hypotheses on the strategy chosen, its causes and results. The case study research was based on a *existing theory/ data collection/ theory revision and mobilisation of new theories* cycle (Peterson, 1997).

- In chapter 3, two Serbian GI cases are compared in order to examine the reciprocal relations between the context and the facilitation process. Various research fields (management, economic geography) were used to develop the concept of "facilitator" in the case of GIs. The purpose of the comparison was to establish the outlines of a research field that had not previously been documented, and support some hypotheses in order to draw an analytical generalisation. This exploratory phase has already produced some results: It stressed the role of the institutional context and pointed out factors of failures and successes at the local level.

- In chapter 4, the focus is on the development of an innovative method for assessing territorial impacts. We made comparisons at two levels. First, each initiative of the two selected Swiss cases was compared with its main competitors in a benchmarking approach. Second, we compared the results of the two benchmarking approaches. The case study approach was a means of testing and illustrating the innovative method, as well as discussing results. The comparison ensured that commonalities among initiatives and recognised territorial effects were highlighted.

- In chapter 5, a comparison was made between eleven emerging GIs and their related production systems in various countries in order to define a typology of expected territorial effects and territorial strategies linked to the establishment of GIs. As in chapter 4, the objectives of the comparison were both to test and illustrate the method that was adapted to emerging GIs, as well as to draw preliminary results.

During the fieldwork in Serbia, in-depth interviews were carried out and recorded at several levels (national, regional, local) and over a broad range of stakeholders. Key

informants were met once or twice per year in 2007, 2008 and 2009. Interviews were usually undertaken by a team of two researchers. This enabled us to exchange complementary insights on data and also increased confidence in the findings due to the combination of different perspectives (Eisenhardt, 1989). Documentary and archive data were used when available, but few documents were available. Observational materials, visits, informal conservations and exchanges were also part of the material. Questionnaires were developed during the first phase of fieldwork, in order to characterise the initiatives and draft the general context (interviews were carried out with representatives of public institutions and private agencies charged with supporting economic and social regeneration).

This investigation enabled us to collect process-related data (an emphasis on action as well as structure over time) with an iterative approach. Thus, the research was characterised by a frequent overlap of data analysis with data collection.

Concepts developed from the Serbian data are presented in chapters 2 and 3. Additionally, chapter 3 was discussed with the main respondents, who were able to correct errors of fact and validate the interpretation.

The cases presented and discussed in the following chapters are all documented in reports and/or data cards (interviews, hard data collection, benchmarking approaches).

The Swiss cases were investigated in the framework of the European research project SUS-CHAIN.

The kajmak from Kraljevo is documented in great detail in a report written in the framework of the European research project SINER-GI (Paus and Estève, 2007). The prsuta of Uzice case is fully reported in an FAO publication in the framework of the programme "Quality Linked to Geographical Origin" (Bernardoni and Paus, 2008). Finally, the raspberries of Arilje were documented in a data card available on the SINER-GI website (http://www.origin-food.org), where the data cards of the two other Serbian products can also be downloaded.

1.4 Serbian context

The Serbian agriculture and agro-food sectors present characteristics that make the research field particularly interesting with regard to the emergence of GIs.

1.4.1 Generalities

Serbia is considered to be a transition economy (The World Bank, 2002). Moreover, the Republic of Serbia is not yet a member of the WTO, however Serbia's chief accession negotiator recently emphasises that Serbia would like to finalise negotiations by the end of 2010.

Primary production from agriculture, hunting and forestry accounted for 15% of total Serbian gross domestic product (GDP) in 2006, while agriculture and the food processing industry combined amounts to 25%. Exports of primary agricultural products accounts for 26% of total export (Bogdanov *et al.*, 2007).

Under central planning, farms delivered their products either directly to processing companies or to state-owned independent procurement organisations. The overall transition to market economies and changes in the political system have made significant impacts upon the various components of the food chain and related market relations (Csáki and Forgacs, 2007). Numerous agro-food small and medium enterprises emerged in the last years. These SMEs were created due to two main factors: restructuring of rural households that focused on processing of agricultural products, and initiative of entrepreneurs (former traders for instance) (Matetić and Ceranić, 2009). Privatisation in food processing has also been followed by a revolution in the retail sector created by the emergence of foreign-owned retail companies in the recent years (Csáki and Forgacs, 2007).

Despite the significant role played by the agro-food sector in the Serbian economy, recurrent changes in agricultural policies and uncertainties with regard to agricultural measures did not help the agricultural sector to develop in the period of transition.

1.4.2 Rural development context

The Serbian countryside plays a key role in the social and economic life of the country. Using the broadest definition of rurality, rural Serbia is home to more than half of the country's population (Bogdanov, 2007).

Nevertheless, it is estimated that 70% of villages are demographically endangered by depopulation and poor infrastructure (Wibberley, 2005). Indeed, infrastructures in many rural areas are in poor condition. Employment opportunities are limited, mainly due to a lack of both diversification and the creation of new and innovative opportunities. Poverty in rural areas is a significant and persistent problem (Ministry of Agriculture Forestry and Water Management, 2007). As consequences, rural areas in Serbia are particularly sensitive to a negative demographic trend, with a massive rural exodus and agricultural abandonment, especially in marginal areas. The farmer population is aging, with an average age of 55. In this context, developing high-value supply chains for agricultural products is of crucial importance.

Moreover, for Serbs, the rural economy matters not just because of the contribution it makes to the wealth of the nation (it is estimated to contribute up to 41% of the GDP) (Bogdanov, 2007), but also because it is the source of social and environmental values and outcomes (Ministry of Agriculture Forestry and Water Management, 2007). For these reasons, GIs are seen as a potential tool to revitalise the rural areas and promote the cultural values, in combination with the development of agro-tourism.

Until recently, there was no wider rural development policy. Indeed, in Serbia, rural development and agriculture are intertwined and agriculture is still seen as backbone of rural economy. In 2005, a sector for rural and agriculture development within the Ministry of Agriculture Forestry and Water Management (MAFWM) was created. And in 2008, the MAFWM established regional centres for rural development in order to identify the local needs in terms of extension services and education.

1.4.3 Serbian agricultural and agro-food sectors

a) Serbian agriculture: generalities

The agriculture of Serbia reached its peak through the 1980s of the last century. During the 1990s, there was an extreme decrease in all aspects of the agricultural development. The analysis of the agricultural sector is generally affected by outdated and scarce data that restrict the ability of the government and donors to establish appropriate policies (the last agricultural census dates back to the year 2002, the next census is planned to take place in 2011).

According to the last census in 2002, the total number of agricultural holdings was about 780,000 with an average size of private farms of 3.5 ha of land. For the reasons explained in the above paragraph, the agricultural population decreased for more than 1/3 between the two censuses in 1991 and 2002.

Land tenure of holdings is characterised by about 85% of owned or owned-like possession. Most of the farms are not specialised and production is mainly oriented to subsistence. Some large farms are predominantly market oriented, especially in meat and milk sectors. Small farms lack investment potentials. The credit system is not used by the majority of agricultural households due to the high interest rates requested. Indeed, there is no special institutions and tools for crediting agriculture adapted to the specific properties of this branch of the economy (Bogdanov *et al.*, 2006).

Policies do little to assist the poorest farmers, particularly those with little marketed output. However, in the recent years, the government intended to ensure a more stable environment and defined a strategy for its agricultural policy. The prevailing objectives of the Serbian MAFWM (Ministry of Agriculture Forestry and Water Management, 2007, p.10) are twofold:

- the creation and maintenance of a dynamic and highly competitive agro-food sector (*cf.* contribution of the agro-food sector in the economy)
- The maintenance of the largest possible number of rural households in the countryside.

However, competitiveness is sought for the agricultural sector as critical. To reach a highly productive and dynamic agricultural sector, support will target fully employed

professional farmers to modernise their farms and be competitive at international level. However, the authors expect that the fully employed farmers will be further reduced in the future, nevertheless, they do not indicate at what speed. However, they noted that all objective evaluations lead to the conclusion that "part-time agriculture" will be substantially increased in Serbia during the next few decades due to the creation of new opportunities for employment in rural areas. According to the authors, the potential in terms of good quality agricultural and food products linked to distinctive quality facts as "organic" represents a competitive advantage. In Serbia, as in other European countries, the society increasingly recognises the important role that farmers play in looking-after and protecting the natural environment. According to the authors, the production and trade of specific quality products such as PDO and PGI leave enough room for small and flexible enterprises to manoeuvre.

In the following sections, we present an outline of the situation of the three agro-food sectors of the studied case studies: beef meat, raspberries and dairy production.

b) Cattle production and beef meat processing

Livestock production has a long history in Serbia, especially in Central Serbia. Nevertheless, from the mid 1980s, number of cattle continuously decreases. Since the 1990s, the number of cattle has decreased in Serbia at the average yearly rate of 2% (Ševarlić *et al.*, 2006). Some of the problems linked to the transition period are the absence of any long-term livestock husbandry development strategy, technological obsolescence of processing capacities, poor relationships between livestock producers and processors, and an absence of positive agrarian policy measures (Muncan *et al.*, 2007).

Nevertheless, livestock is seen as a strategic branch in Serbia, especially in hilly and mountainous areas in Central Serbia, where economic opportunities are rare. Family farms are central to future development and should be combined with an enlargement and production specialisation (Muncan *et al.*, 2007). Serbia's slaughtering industry has capacity that exceed domestic needs, but with obsolete technology and very low hygienic, sanitary and veterinary standards. However, since 2005 the government has helped

financially the introduction of HACCP in slaughterhouses and industrial meat processing plants (Muncan *et al.*, 2007).

c) Raspberry production

Raspberry production has a relatively recent history in Serbia, as it was introduced at an industrial level in the 1970s. However, it increased dramatically, and in 2006, the Serbian production of raspberries reached 80,000 tons. This represents about 30% of the world's international trade, mostly in frozen form. 90% of berry fruits are produced in Central Serbia (Bogdanov *et al.*, 2005). Small farms and part-time farming constitute the majority of fruit-growing farms.

d) Cow milk production

Despite a declining trend in cattle population, there has been a rather stable production of cow milk (around 1,6 billion litres in 2007) as the milk production per cow increased (2,670 litres per cow in 2007) (Dragica *et al.*, 2009). Milk is produced on commercial farms, private and state owned, as well as on small family farms.

Majority of family farms own cows (generally one or two) and they make cheese and cream for their own consumption and they sell the remaining milk to the local green markets (Ševarlić *et al.*, 2006). It is estimated that about 221,000 farms are involved in milk production in 2007 (Dragica *et al.*, 2009).

It is estimated that more than half of the milk production is delivered to dairy plants for further processing (Dragica *et al.*, 2009). The dairy industry was the first Serbian food processing industry that completed the privatisation process. The greatest share of industrial dairy plants in Serbia has been taken over by the English Investment fund Danube Foods Group, which owned the three largest (among which Imlek is leader) and two medium dairy plants, which process together about 23% of the total milk produced in Serbia (Ševarlić *et al.*, 2006; Dragica *et al.*, 2009). Beside this group, the association of private dairy producers encompasses around 200 small and medium dairy plants.

Large industrial dairies set standards and minimum quantities that small farmers cannot achieve. And in the future, fewer and fewer small farmers are expected to be able to meet rising quality standards and many small farmers are expected to leave the milk production (Ševarlić *et al.*, 2006). A reduction of half the number of dairy farmers was reported to be expected but with no precise term. Danube Foods Group intended to decrease by around two the number of farms for milk purchasing between 2006 and 2009 (compensate by an increase of milk production per farm).

The newly emerged small-sized milk-processing enterprises represent an alternative. They pay lower prices to farmers, than did large companies (e.g. Imlek); however the delay of payment is generally shorter.

1.4.4 Geographical indications in Serbia

a) Institutional context

Serbia has a long history in intellectual property policies. The Republic of Serbia is member of the World Intellectual Property Organization (WIPO) from 27 April 1992, signatory to the Paris Convention on the Protection of Industrial Property and parties to the Madrid Agreement on the International Registration of Trademarks. Serbia is also signatory to the Madrid Protocol on the International Registration of Marks from 17 February 1998 and to the Lisbon Agreement on the protection of Appellations of Origins from 1 June 1999 (Paus and Estève, 2007). The relevant national regulatory framework is composed of the Law on Geographic indications of 1 April 1995, the Trademarks Law of 1 January 2005, and the Law on Indication of Geographical Origin of May 2006 which was replaced by a new law in March 2010.

In view of entering the WTO and the European Union, Serbia has started in 2006 to establish a new PDO/PGI system. The Law of May 2006 replaced a law that had been adopted in 1995 and which allowed the implementation of a PDO/PGI system similar to the European model but lacked, in its application, several fundamental principles (no collective character of the PDO/PGI, no certification and controlling procedures, no opposition procedure before registration, etc.) (Barjolle and Klingemann, 2006). Indeed, the registration procedure does not include an opposition procedure before the final registration (however a request for opposition can be applied after the registration by any

"interested person"). Moreover, at the present time, there is no certification body. Nevertheless, the new Law of 2010 provides certification, controlling and labelling procedures under the authority of the MAFWM. Therefore, the certification and labelling schemes are under construction.

Political instability in Serbia was not in favour of a sustainable and long-term debate on GIs. At the institutional level, there is a fragmentation and a lack of coherence in the implementation. There is a lack of coordination between the Office for Intellectual Property of the Republic of Serbia and the relevant Ministries (Agriculture, Trade). The roles and responsibilities are not clearly defined concerning the approval of the GI application and the potential modifications within a code of practice. For the time being, the MAFWM - Department for Primary production, Processing viticulture and wine production – is in charge of PDO or AO for wines; and the Serbian Office for Intellectual Property is in charge of the registration of all other GIs. Until the implementation of the Law of 2006, the Office for Intellectual Property had the right to refuse application without further consultations. Today, other competent ministries (e.g., MAFWM, Ministry of Trade) are consulted (Paus and Estève, 2007).

The recent changes that occurred in 2010 are going in the direction of a more accurate institutional framework (for example control and certification procedures). The institutions will be increasingly involved in the subject through the European integration process and the growing influence of the European Union regulations which will also make the GI institutional framework evolve.

b) GIs on the field

Geographical names are traditionally used in Serbia to designate agro-food products. Despite an increase of market shares by retailers at the consumption level, the food sector is still very much embedded in a relational perception of food quality with an important place for the direct relationship between producer and consumer. The notion of *terroir* in Serbia is not used as such but it is meaningful. Nowadays, it is also linked with identity claims and "folklorisation" of the rural areas (Paus and Estève, 2007). The general

requirements for GIs are the geographic area, the methods of production as well as some data on climatic and soil specificities. The human factor is almost not taken into account in the requirements to register a GI.

Regarding the geographic area, the issue of territorial delimitation of GIs meets the political rivalries of municipalities. This leads to difficulties to delimitate GIs' areas (denominations are very often referring to names of municipalities)

Regarding collective action, there are two points to be mentioned. First, individuals can apply for a GI, and there is no requirement in the registration process regarding a collective procedure. Second, farmers and agro-food processors view cooperatives with suspicion. Indeed some old cooperatives and former *agrokombinats* still exist though they do not function anymore. This situation has a significant negative impact on the farmers' perception of the cooperative system. Lack of trust is a major constraint for the creation of new model of cooperation or association. On the other hand, as a social group, the farmers are still isolated, and their interests and needs are not sufficiently articulated through appropriate forms of organisation (Bogdanov and Moslavac, 2007). Therefore there are both constraints and opportunities to develop new forms of collective action in the context of GIs' development.

c) GIs' expectations (Paus and Estève, 2007)

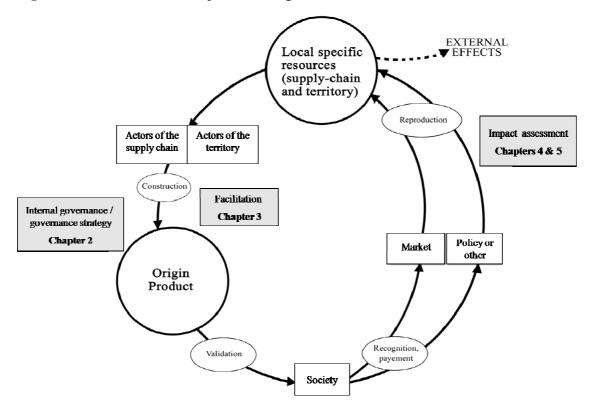
The GI debate is oriented toward food safety and European norms. For many Serbian stakeholders, quality in food production and food quality policy are synonymous to hygienic norms and standards of production (such as EUREPGAP or HACCP). Nevertheless, the GI system is seen as a potential tool for rural development as most of the traditional products are produced in remote places. The most important outcome expected with the registration of a GI is the economic outcome: better prices and access to market. The public stakeholders are clearly aware of these priorities (MAFWM, Intellectual Property Office) and GIs are seen in the first place as a tool for capturing a commercial benefit.

For this reason, the MAFWM is more and more interested in the GI issue from the point of view of agricultural and rural development.

1.5 Structure of the thesis

The dissertation is organised into four chapters, each of which addresses the research questions presented in section 1.2 (figure 2).

Figure 2: Overview of the chapters with regard to the "virtuous circle"



Each chapter has already either been published or is submitted for publication. Therefore, the chapters are presented in the form of self-contained papers.

Chapter 2 (Paus, 2008) addresses the question of whether the territorial strategy of a GI is possible when processors source themselves as a large part of the production. The chapter first deals with the concept of governance in the field of GIs before tackling the theoretical aspect of the reasons for a firm to vertically integrate. Two Serbian case studies on emerging protected GIs are then analysed with regard to the advantages of concurrent sourcing.

Chapter 3 (Paus, 2010) focuses on the facilitation process during the emergence of a collective initiative for GIs. Drawing from two Serbian case study findings, it is argued that the facilitator, along with activities traditionally identified in the management and economic geography literature, must commit him/herself to the development of a more favourable institutional context. Facilitators are not leaders in the traditional sense. However, they might lean towards a directive style to meet the agenda of donors and overcome the inertia of the group and/or institutions at hand. Finally, bottlenecks that hinder setting the collective organisation are identified in the group context, the institutional context and the facilitation itself.

Chapter 4 (Paus and Réviron, 2010b) presents a review of methods for assessing the territorial impact of environmentally-friendly or origin-based initiatives. The paper proposes a typology of detected methods based on two different approaches: methods that provide a snapshot of the impact (and focus on the object), and methods that assess the acknowledgement of the territorial effects. The authors developed a subjective method based on a reversal of the proof apparatus through an approach of the perception of the territorial effects by external opinion leaders. Two Swiss case studies are investigated and discussed.

Chapter 5 (Barjolle, Paus and Perret, 2009) applies the method described in the previous paper to fourteen GI case studies. Combined with a synchronic approach based on a benchmarking of case studies, a diachronic approach was developed and adapted to emergent GIs. The authors conclude that in general, expected impacts of GI systems are mainly linked with economic or economic-related issues. However, the review of the case studies also shows that if the economic concerns are the only motives in the implementation of the GI protection schemes, there are some crucial risks.

The four papers are followed by a summary of the main findings and conclusions of the thesis. Finally, insight into further topical research and needs is presented.

2 Geographical Indications in Transition Countries and their Governance. Evidence from Serbian Agro-food Initiatives

Marguerite Paus

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Abstract

With the Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement of 1994, the issue of protecting Geographical Indications (GIs) spread across both developing and transition countries. In Western Europe, registered GIs present hybrid forms of governance with a high level of diversity in territorial dynamics. In transition countries, hierarchies emerge within GIs. This article addresses the question of whether positive territorial effects of a GI are possible when processors themselves source a large part of the production. The paper deals with the concept of governance in the field of GIs, and tackles the theoretical aspect of the reasons a firm vertically integrates. Two Serbian case studies of emerging protected GIs are then analysed with regard to the advantages of concurrent sourcing. The potential effects of this strategy on small producers are balanced.

Keywords: geographical indications, governance, vertical integration, transition countries.

2.1 Introduction

Geographical Indications (GIs) are defined by the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement as being "indications that identify a good as originating in the territory of a member, or a region or locality in that territory where a given quality, reputation or other characteristic of the good is essentially attributable to its geographic origin". When the TRIPS agreement was passed in 1994, the issue of protecting GIs spread over developing and transition countries, and an impressive development of GIs arose.

Although collective organisation (and a common code of practice) is not mandatory according to the TRIPS agreement, it is an implicit criterion in the European vision of GIs. Moreover, according to the European experience, collective organisation might have both economic and social benefits (Réviron and Chappuis, forthcoming). Simultaneously,

economic development is very welcome in rural areas that face depopulation and land abandonment.

According to the European experience, the membership of primary producers in the GI's alliance is generally a necessary condition for territorial governance. Going one step further, this article focuses on the question of whether positive territorial effects of a GI are possible when processors themselves source a large part of the production. The first part of this article deals with the concepts of governance structure and strategy regarding GIs and the implicit link made between the organisational form of the GI and its strategy (sectoral *vs.* territorial). In the second part, the factors which give a processor the incentive to partially vertically integrate production are discussed. In the third section, we present two case study analyses conducted in Serbia for two products: kajmak (a kind of cream) from Kraljevo and raspberries from Arilje. In both cases a vertical integration strategy is initiated by some operators.

In the last portion, we analyse the reasons for the concurrent sourcing of the products investigated and discuss the potential territorial impact.

2.2 Governance forms of geographical indications

Two fields of application of the term "governance" are commonly used in the literature related to GIs supply chains analysis. Hence, it is necessary to specify this concept.

2.2.1 Governance structure and hybrid forms

Concept of governance structures and hybrid forms

The first use of the term "governance" refers to the "governance structure" proposed by Williamson and is embedded in the New Institutional Economics, which focuses on transactions between a buyer and a seller. Williamson (1991) stressed two polar forms of governance structures - markets and hierarchies - and identified intermediate or hybrid forms. Hybrid forms are characterised by a bilateral dependence without going as far as integration. Later, Ménard (2004) specified the nature and the role of these hybrid governance structures and proposed a typology: "trust", "relational network", "leadership", and "formal government".

Geographical Indications and hybrid forms

Research has shown that European Protected Designation of Origin (PDO) and Protected Geographical Indications (PGI) come under the hybrid forms with a diversity of vertical co-ordinated systems (Perrier-Cornet and Sylvander, 2000). Barjolle (2001) explained the reasons why hybrid form is chosen as governance structure in the case of PDO cheeses in France and Switzerland, with regard to market imperfections. Réviron *et al.* (2004) completed this work and analysed in origin labelled food products the particular hybrid organisation that the authors called "vertical alliance".

PDO and PGI present a high level of diversity in their organisational forms (Allaire and Sylvander, 2000; Barjolle, 2001). Réviron and Chappuis (forthcoming) identify three types of collective organisations among PDO and PGI in Europe: inter-professional association, professional association and cooperative. They are classified as "relational network" at the borderline of "leadership" in Ménard's typology.

Raynaud *et al.* (2005) addressed the issue of the link between the supply chain governance and the type of quality enforcement mechanisms. Verhaegen and van Huylenbroeck (2002) relate the type of hybrid form and quality control issue. They identified three types: 1) framework governance: quality implies non-observable and non-standardised attributes but there is no strive for quality increase nor product standardisation, 2) coordinating governance: intended quality is developed by one level of actors in the chain, 3) participating governance: quality requires deployment of uniform resources and/or uniform production processes. Réviron *et al.* (forthcoming) combine the typology of Verhaegen and van Huylenbroeck (strive for quality) with Ménard's typology (type of hybrid forms). Their analysis highlights the development of a given hybrid form is strongly linked to the original strive for common quality negotiated within the agro-food initiative.

Vertical integration is rarely observed in PDO or PGI in Western Europe. Nevertheless, Barjolle (2001) mentioned a vertical integration between a ripening centre and a large retailer, which markets Gruyère cheese (vertical integration downstream on the supply chain) and coexisting with a network of small-scale dairies.

2.2.2 Governance and territorial vs. sectoral strategies

The second use of the term "governance" appeared in the late-1990s in the French literature on quality products. Several researchers introduced the term "governance" to qualify the strategy of the agro-food enterprises' network. Allaire and Sylvander (1997) defined the governance as being a "territorial political structure" in reference to Benko and Lipietz (1992).

This approach is different from the one proposed in Transaction Cost Theory and comes from an analysis of territorial dynamics and regional institutions. Different combinations are observed, and the authors distinguished "territorial governance⁴" from the "sectoral governance" using the following criteria: (i) norms, (ii) relations between the enterprises and the type of competition, and (iii) relations between producers and processors. PDO supply chains are not systematically linked to territorial governance strategy, and present a high heterogeneity of situations (Barjolle *et al.*, 1998; Sylvander and Marty, 2000).

Pacciani *et al.* (2001) identified two theoretical strategies that actors of regional products may adopt, according to the actors' focus and the role of the territory. The authors analysed that the valorisation of the typical product with a supply chain strategy (focussed on the management of production levels, the improvement of the product's quality, and the implementation of an effective marketing) is not characterised by a direct impact on rural development, but rather on the local economy (jobs and income support). On the contrary, an extended territorial strategy (characterised by diverse activities and new interactions between multiple actors) might catalyse a comprehensive and integrated rural development strategy. Sylvander (2004) proposed the following gradation: "territorial governance" is observed where decision-makers are supported by local institutions and share a common interest with local actors; "sectoral governance" where an inter-professional body holds power but where actors are driven by pure market logic while coordinating with each other; and "corporate governance" (including enterprises that do not fundamentally adhere to origin labelled products' ideology and culture). Frayssignes (2005) qualified this typology and referred to governance "with a dominant

territorial or sectoral strategy", as there is no "pure" form of governance. Moreover he

⁴ In this article, the term « territorial governance » will be reserved to qualify the strategy of the GI's operators and their coordination with other local actors, although it is widely used in the literature to qualify the governance of the territory itself.

constructs his typology on the coordination of public *vs*. private actors and their role in the trajectory of the territory (institutional *vs*. private logic).

2.2.3 Organisational forms and governance strategy

A link between the structure of governance (hybrid form) and the governance strategy (territorial *vs.* sectoral) is established in the literature. Moran *et al.* (2000) opposed in the wine sector two forms of organisation, which both have a sectoral strategy: a New Zealander (centred around one firm) to the Burgundian (organised in a decentralised network). Réviron and Chappuis (forthcoming) discuss the types of organisation capable of creating value added and obtaining premiums for producers.

Inter-professional association is mostly associated with territorial governance, whereas professional association with sectoral governance. Nevertheless, although the structure of governance might have effects in terms of rural development, the choice of the organisation does not guarantee territorial effects (Réviron and Paus, 2006). For example, Barjolle *et al.* (2007) acknowledge the ability of Swiss and French PDO/PGI cheese inter-professional organisations to create and distribute value added among partners through an efficient marketing strategy and organisational performance. In this study it was shown that the Cantal initiative does not achieve good results mainly due to an organisational failure and despite an inter-professional association.

To summarise this section, GIs observed in Western Europe present hybrid forms that combine both sectoral and territorial governances. In transition countries, different forms of organisation (formal government, hierarchies) are observed within GIs and have to be replaced in a context of transition to market economy.

2.3 Why vertically integrate?

There is a large literature on the "to buy or to make" choice and a great number of possible motives for vertical integration exist (Perry, 1989).

Reasons to vertically integrate from the transaction cost theory

Coase (1937) asserts that integration depends on the relation between costs of production and transaction costs. Coase defines the "integration" when the organisation of transactions, which were previously carried out between the entrepreneurs on a market, become organised by one. According to Williamson (1971) the hierarchy form is developed when transactions are frequent, incertitude prevalent and investments specific (asset specificity). Integration is set as a response to contractual incompleteness and asymmetry of information.

Advantages and disadvantages of vertical integration

Den Ouden *et al.* (1996) classified the advantages and disadvantages according to achievement of economies (cost savings) and market power (summarised in Table 1). The uncertainty over production sourcing (quantities and qualities) may provide an incentive for vertical integration. Market failure with respect to asymmetry of information about quality is for example identified by Hennessy (1996) as a possible reason to vertically integrate.

Concurrent sourcing - i.e. simultaneously make and buy the same good - is a strategy discussed in a recent article by Parmigiani (2007). Early work mentioned in this paper suggested that firms concurrently source in times of demand uncertainty or in order to gain an increased understanding of the production process and thus better monitor suppliers (benchmark). The author concludes that concurrent sourcing is a distinctly different choice, rather existing along a make/buy continuum, and chosen by firms when conditions warrant.

Advantages	Disadvantages
Economies	
Reduction of transaction costs when incertitude is prevalent and investments specific (asset specificity) Technological economies Better opportunities for investment and enhanced ability for differentiation growth through reduced uncertainty Economies of internal control and coordination (Synchronisation of supply and demand, reduce the uncertainty on supply) Economies of Information (market partners, prices, quality etc.)	opportunities
Economies of stable relationships	Reduced flexibility to change partners
Market Power	
Elevate entry barriers and mobility barriers Raise rival costs by foreclosure Practise price discrimination Offset bargaining power and input price distortions	Foreclosure of access to supplier or buyer
Defend against foreclosure	

Table 1: Summary of Potential Advantages and Disadvantages of Vertical Integration

Source: adapted from den Ouden et al., 1996; completed with Wandel, 2000

Vertical Integration and Institutional Environment

Governance structures change in response to disturbance in the institutional environment (Williamson, 1991). According to North (1994), formal and informal constraints (i.e. rules, laws, norms of behaviour) play a determinant role in the organisational choice. The organisations that come into existence will reflect the opportunities provided by the institutional matrix.

We assume that the transition context gives an advantage to vertical integration (Wandel, 2000; Gorton and White, 2006; Swinnen, 2007), which is not *a priori* the case in the EU and Switzerland (Barjolle and Chappuis, 2000).

In the next sections, we investigate the reasons why entrepreneurs partially produce their raw material, with regard to two Serbian GI case studies. The case study research aims at testing the theoretical results and enriching them (Eisenhardt, 1989).

2.4 Presentation of the case studies and comparison

Two Serbian GIs were selected according to two criteria: 1) initiative among local actors to register the GI product under the new Serbian law (2006) on Indication of Geographical Origin, and 2) emergence of a strategy among processors to partially vertically integrate. Therefore, the objective of the case study approach is to confront the empirical results to the theoretical framework on governance structure within GIs and the "to buy or to make" choice presented in the above sections. Field research was conducted in the summers of 2007 and 2008. It consisted of 71 semi-structured interviews (some informants were interviewed in 2007 and in 2008), observations and archives. Informants (actors of the supply chain, local and national stakeholders) were asked about basic activity characteristics, organisation of the supply chain, key stakeholders in the initiative to protection the GI product, as well as their rural development vision and stakes.

2.4.1 Context

In the Republic of Serbia, half of the population lives in rural areas, where one third is employed in agriculture. Many Serbian rural areas suffer from a lack of job opportunities, low diversification of economic activities and a heavy drain of inhabitants due to agrarian exodus. Primary production from agriculture, hunting and forestry accounts for 15% of the Serbian GDP (25% with agro-processing); and exports of primary agricultural products account for 26% of total exports.

In a description of the Russian food marketing system, Wandel (2000) highlights that privatisation and liberalisation have led to changes in the legal structure of firms, to the dissolution of old firms, and the emergence of new actors, such as small-scale processors and traders. This description is also relevant for the Serbian food marketing system.

2.4.2 Kajmak from Kraljevo

Kajmak is a dairy product made from the layer of fat created when milk is boiled and then cooled. In Serbia, its contents are defined in a by-law⁵ and it is one of the traditional

⁵ Book of regulations on quality and other requirements for milk, dairy, composite dairy products, 2002.

products whose quality and reputation are linked to its geographic origin. The traditional area of kajmak production spreads over South-West Serbia, with some regions being particularly famous (e.g., Zlatibor, Kraljevo).

The kajmak from Kraljevo is currently the object of a registration procedure as a PDO product. The initiative is being led by a local NGO, which plays the role of facilitator in order to establish a collective organisation among producers.

Almost every household with cows produces kajmak, most of which is produced for selfconsumption. In the municipality of Kraljevo, the estimated number of producers marketing their kajmak is around 600, with a total yearly production of about 300 tons. The classic unit of production is a household with 2 to 10 cows. The kajmak is marketed either on the green market or through a cooperative or traders.

Nevertheless, sanitary norms are putting the producers under pressure. Fulfilling these norms requires investments that many households cannot afford. Consequently, the structure of the production system is rapidly changing. For small producers, the alternative of kajmak production is the delivery of milk for which fewer investments are required. Moreover, many producers are already either producing kajmak or delivering milk, according to the price and the payment delay they can obtain (opportunistic behaviour, lack of contractual agreement).

In the short-term, it is expected that many household producers will stop producing kajmak and instead deliver their milk to dairies. Indeed, small-scale dairies are flourishing since 2007. They produce (or plan to produce) kajmak in an artisan manner. Dairies were founded either by former traders who gained the investment capacity from their previous trade activities, or by large producers who reached a high level of productivity and quality in their milk production. The strategy of several dairies is to partially collect milk from small producers and partially produce milk themselves.

2.4.3 Raspberries from Arilje

Raspberries from Arilje are growing in the Moravica valley. Raspberries production is one of the two economic pillars of the Arilje municipality (the other being the production of computer components). Due to specific conditions (soil, climate), raspberries from Arilje are said to have different taste, aroma and content (dry matter and pectin) from other raspberries (even though the varieties are not local). Ninety-five percent of the raspberries production is dedicated to the frozen channel for food industry with about 30% of the world market share. Aware of the high reputation of their raspberries, the Arilje municipality and a processor association initiated in 2008 the protection of raspberries form Arilje as PGI.

Diversification in fresh raspberries to be sold in Serbian urban supermarkets is starting. Nevertheless it occurs timorously due to a lack of incentive to innovate on a new market, the world price for frozen raspberries staying high. Indeed, this activity requires investments and innovation at the level of both producer (technical knowledge, investments in seedlings - imported from Poland - and materials, such as nets) and processor (storage, packaging and transport logistics). This diversification choice of the processors is accompanied by a partially vertical integration, i.e. they invest in land and plantations. In this case, processors have an agreement with a reduced number of producers, and offer 10% premium in comparison with the frozen outlet.

Additionally, both international public and private sector regulation have significantly grown in the past years and Serbian fruit producers have to meet increasingly national and international public and private standards of buyers (Zarić *et al.*, 2007). The requirements are following the trail to the processor level and finally the production level.

2.4.4 Comparison of the cases

We shall now analyse in both cases the processors' incentives for concurrently sourcing their production, i.e. to simultaneously making and buying their raw material.

Advantages of the concurrent sourcing

In both cases, we observed partially vertical integration, at different levels of the supply chain and by *emerging small-scale entrepreneurs firms*. Initiators of vertical integration are large producers, processors or former traders. Three advantages of the concurrent sourcing are stressed. 1) *Monitoring of the quantities* of the raw material. It is particularly the case for kajmak, where uncertainty over quantity is high due to opportunistic

behaviour, and numerous and rapid changes in the supply structure. Moreover small-scale farmers are often poorly organised and risks and transaction costs of involving them in coordinated supply chains are relatively high (van der Meer, 2006). 2) Management of the quality of the products. Fresh raspberries are fragile fruits and the incentive for processors to partially integrate the production is high in order to avoid bad quality deliveries, which could be refused by retailers. In the case of kajmak, the quality of the milk is a crucial factor to achieve a high quality kajmak and a good productivity (linked to fat percentage). For these reasons, uncertainty over quality plays a key role in the strategy of integration. Maintaining the reputation associated with the GI product and its particular quality is crucial, and all steps involved in the production process are concerned, from the production of the raw material to the transport of the final product. This is related to the idea that part of the quality is made "on the field", as Valceschini (1993) emphasised in his analysis of quality processed vegetables. 3) Technical improvement and innovation is observed in both cases (for instance in genetics for cows and new material to conduct the seedlings for raspberries). These innovations that small farms cannot afford are bound to be made by the largest farms and processors.

Role of the environmental context

In European GIs, hybrid forms help circumventing the market failures (Barjolle, 2001; Réviron *et al.*, 2004). We investigated why vertical integration appears in "transition" countries and why the European model is not applicable as such. As Williamson (1991) highlighted, the institutional environment plays a key role in the determination of governance forms. In transition countries, several difficulties hinder the direct emergence of hybrid forms. First, there is a lack of contractual arrangement and trust. Hybrid forms are based on implicit or explicit contracts. Nevertheless, explicit contracts between small producers and processors are not common in Serbia. Furthermore, an implicit contract is based on trust, and trust is lacking because of traumatic experiences during both the communist and the transition period (Swinnen, 2007). Williamson (1971) highlighted that vertical integration would be more complete in a low-trust than high-trust culture. Second, uncertainty over quality is high due to the insufficiency of common rules concerning quality control and the monitoring of quality norms and standards.

Additionally, enforcement of legal resource to punish opportunistic behaviour is inadequate (Dries *et al.*, 2007) and the Serbian GIs' legal basis and its implementation are under construction. In this context observed in post-communist countries, vertical integration and concurrent sourcing in GIs are an answer to circumvent the market failures and a lack of institutions and their enforcement.

In this part, we investigated the reasons why entrepreneurs partially vertically integrate and the associated advantages. In the last section, we discuss the potential benefits and risks for the producers, as well as the potential territorial impact.

2.5 Discussion

Several studies on GIs outside of Europe have revealed new forms of vertical coordination, including reverse leasing and vertical integration. Bowen and Gerritsen (2007) investigated Tequila and blue agave production under reverse leasing arrangements, which is a form of contract farming. These authors identified negative impacts concerning conditions for small producers (in terms of income and share of value added), as well as negative environmental impacts. Réviron and Tseelei (2008) investigated the case of sea buckthorn juice and oil (registered in 2007) from the Mongolian Uvs province. The main processor, a former state company, produces a large share of sea buckthorn berries on its own plantations (vertical integration). The authors pointed out the role of the leading company in establishing a collective organisation with smaller processors, and stressed the potential positive economic and environmental effects. However, in the cases presented in section 4, the potential effects in terms of rural development.

2.5.1 Concurrent sourcing and market power

In the case of raspberries, the market is driven by retailers that have the power to return the goods if they do not fulfil the quality requirements of private standards. Concerning the kajmak, the major part of the production is still marketed through green markets and restaurants, but the trend is rapidly shifting in favour of retailers. Moreover, the pressure in terms of improving sanitary requirements is very high and threatens small producers, which lack investment capacities and technical information.

According to these facts, it seems that the major driver in the exclusion of producers and household processors does not come from the pressure brought to bear on prices by the emerging small-scale entrepreneurs, but from downstream on the supply chain (retailers) and institutional environment (e.g. sanitary requirements). Consequently the small-scale processing units might play an interesting role by positioning their product on differentiated segments such as origin products. Hence, the units offer an opportunity for producers to deliver small quantities of high quality raw material. These processing units know the retailers' requirements, have higher investment and innovation capacities and have clearly chosen a quality strategy. In this context, managerial and technical innovations are likely to be swapped between integrated sets of producers, as well as household processors who may have to increase the quality of their production.

On the other hand, integrating a portion of the production may lower prices. Consequently, non-integrated producers may be exposed to predatory pricing tactics, or even the refusal to supply. This system may be sustainable under the condition that processors share the rent of the quality product with producers that partially source them. Additionally, a growing number of newly-established small-scale processors (in the cases of both kajmak and raspberries) are an interesting balance in terms of market power, since the competition among buyers is increasing (for instance, there were 60 cold stores in 2007 and 72 in 2008, which represented 3 times the production capacity in the Arilje area). Moreover, difficulties in obtaining agricultural raw material (exit of a large number of farmers, limitation of the integrated production capacities due to a lack of land or working forces) could lead the processors to a position that does not allow them to offer prices that are too low.

In the case of kajmak, the impact on traditional household production is more balanced. Though they might benefit from a transfer of knowledge and technical information, household producers will lose a significant part of the market, and will have to negotiate with small-scale dairies about the code of practice in the framework of a PDO application, as well as the potential building of a collective promotion.

2.5.2 Potential evolution of governance

Sylvander and Marty (2000) highlighted that the diversity of governance strategy (sectoral vs. territorial) expresses a research area on compromise in the negotiation process. The weight of sectoral norms in negotiations (sanitary rules, for instance) and the prevalence of territorial institutions determine a great deal. In the cases presented, the weight of public and private norms in terms of food safety and normalisation is increasing. In the long-term, the strategy might be normalisation for the frozen raspberries from Arilje and certification for the fresh market. The kajmak from Kraljevo might tend to a certain level of standardisation (sanitary rules, commonly-defined quality), but stay faithful to a strategy based on quality certification and direct marketing.

According to the European experience, vertically-coordinated systems with allied independent producers and processors are the most favourable governance structure in terms of value added creation and its distribution among commercial actors, as well as positive effects in terms of rural development. In transition countries, these hybrid forms face difficulties due to several factors at the local and national levels. For example, processors had to implement their own procurement practices in an environment of poor legal enforcement of business relationships (Swinnen, 2007). Williamson (1991) points out, for instance, that an improvement in the contract law regime would shift the costs of hybrid governance down and consequently favour hybrid forms. Swinnen (2007) poses the question of whether vertical integration is a transition-specific phenomenon since there is less need for integration when markets start to work better (enforcement of contracts by the development of public institutions, and new market actors). According to Swinnen, it seems likely that vertical integration will neither be reinforced, nor will retreat, but that a hybrid path will develop in the medium-term. That is what we observe in the case of raspberries from Arilje, which present both a vertical integration strategy and the emergence of contracted purchasing.

In the studied GI cases, the individual strategy of vertical integration is combined with an emerging collective strategy (a network with common explicit and implicit rules, organisational innovation). Nevertheless, whereas vertical integration is market-driven,

the establishment of an inter-professional collective organisation is operated with a topdown approach (local NGO for kajmak, municipality for raspberries). These external actors play an important role in the process by increasing awareness among operators regarding the quality and the reputation associated with their products, and by stressing their shared values. Consequently, despite the difficulties at the local and national levels, collective organisations continue to emerge. At the local level, establishing such organisations requires overcoming the reserve of small farmers, who, in part for historical reasons, have been suspicious of co-operative arrangements (Gorton and White, 2006).

Enforcing a collective strategy needs a specific management form, where common decisions can be negotiated: a code of practice, control modalities, a quality bonus, as well as collective promotion and a research and development programme. Indeed, the presence of a "private government" or "authorities" is a core element in the architecture of hybrid organisations (Ménard, 1997). For the time being, in the kajmak initiative, a local NGO is playing the role of facilitator and (to a certain extent) conflicts referee. A working group composed of household producers has been established and negotiates the code of practice, which is a centrepiece achievement of any collective organisation (Réviron and Chappuis, forthcoming) because it defines what is authorised and what is not. These technical decisions have crucial consequences on positioning the product on the market, on the composition of the alliance, and on the subsequent effects on rural development (de Roest and Menghi, 2002). A critical point in the kajmak initiative is the participation of small-scale dairies that set priorities for an individual strategy. In the case of raspberries, the municipality, together with a processors' association that comprises twelve companies and is represented by the Innovation Centre of Arilie, are working on a code of practice with the Fruit Institute of Cacak. In both cases, the role of the collective action after the establishment of a code of practice and the potential consecutive registration - which is often seen by operators as an ultimate objective - will have to be redefined (common promotion and research activities, for instance).

At the national level, the success of registered GIs also depends on the extent to which public regulations are credibly enforced (e.g., registration procedures, certification and controls). The public authorities must strike the right balance between legislation and command-and-control measures on the one hand, and stimulating stakeholders to find proper solutions on the other (Van Huylenbroeck, 2003).

2.6 Conclusion

In developing and transition countries, a large number of subsistence farms have to deal with new rules decreed by the institutional environment (liberalisation of trade, changing consumer demands and legislation, for instance, food safety and quality, and environmental issues). In the long-term, this domestic production either disappears or joins with the marketable production. Quality products, and in particular protected geographical indications, might offer an alternative to shift from domestic production to a market economy. In Serbia, subsistence agriculture faces former State agrokombinats, as well as emerging small-scale entrepreneur processors. These processors might sustain the market access of small producers with a strategy of differentiation based on quality attributes such as origin. Furthermore, regarding the rapid structural changes taking place in the agricultural and trade sectors, these processors have incentives to partially vertically integrate the production. The greatest incentive seems to be the need to avoid uncertainty over the quality of raw materials. This search for high-quality raw materials is coupled with technical changes and innovations, which might be transferred to producers, while respecting the common rules which define the traditional product and its production methods.

Finally, the observed trends are lightly influenced by institutional context. The absence of relevant national and local institutions in terms of quality control and technical assistance to small producers is critical. Nevertheless, vertical integration at the firm level might be a stage that occurs before other forms of governance structure appear at the supply chain level. This new form of governance, based on a collective strategy and public-private partnerships, could empower small-scale producers, as well as sustain their future activities.

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The views expressed in this contribution are the sole responsibility of the author and do not necessarily reflect the views of the European Commission. Neither the European Commission nor any person acting on behalf of the Commission is responsible for the use which might be made of this information. **3** Facilitating the Emergence of a Collective Initiative. Role and Leadership Style of Facilitators in Emergent Geographical Indications

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Abstract

This research focuses on the facilitation process during the emergence of a collective initiative for geographical indications. Drawing from two Serbian case study findings, it is argued that the facilitator, along with activities traditionally identified in the management and economic geography literature, must commit him/herself to the development of a more favourable institutional context. Facilitators are not leaders in the traditional sense. However, they might lean towards a directive style to meet the agenda of donors and overcome the inertia of the group and/or institutions at hand. Finally, bottlenecks that hinder setting the collective organisation are identified in the group context, the institutional context and the facilitation itself.

Keywords: facilitator, leadership, geographical indications, collective organisation, transition countries

3.1. Introduction

Several research studies have clearly identified the ability of Geographical Indications⁶ (GI) to create value – economic, as well as social, cultural and environmental (Frayssignes, 2005; Barjolle *et al.*, 2007; Barjolle *et al.*, 2009; Paus and Réviron, 2010b). One of the crucial success factors of these positive effects is the building of an efficient collective organisation (Barjolle and Sylvander, 2002; Barjolle *et al.*, 2007). However, this is not an official pre-condition for the registration of a GI, except in the European Union. Nevertheless, registering a GI in the national legislation of many countries usually implies negotiations among producers for the definition of the product and its production methods, as well as for the delimitation of the territory. As a result, the registration

⁶ Geographical Indications have been recognised by the World Trade Organisation (WTO) since 1994. The Trade-Related Aspects of Intellectual Property Rights Agreement defines Geographical Indications as, "Indications that identify a good as originating in the territory of a Member, or a region or locality in that territory, where a given quality, reputation or other characteristic of the good is essentially attributable to its geographic origin."

procedures require a more or less formal structure of animation and networking to help producers define their objectives and reach agreements in the negotiation process.

In agricultural socio-economics, research underlines the determinant role of external actors and leaders in the emergence and scaling-up of agricultural and agri-food initiatives, as well as specific needs in terms of management (Roep and Wiskerke, 2006; Tregear *et al.*, 2007; Magnani and Struffi, 2009; Markelova *et al.*, 2009). Relatively few studies tackle the issue of GI initiatives in Western Europe (Prost *et al.*, 1994; Letablier and Delfosse, 1995; Risoud and Parguel, 2002) or developing countries (Galtier *et al.*, 2008; Réviron, 2009), and none exclusively focuses on the facilitator.

This article explores the missions that facilitate the emergence of a collective organisation that valorises a GI. Drawing from two cases of emergent GI initiatives in Serbia, specific activities led by facilitators are identified. The manner in which GI facilitators enact leadership is explored and the types of challenges and dilemmas that they face in the emerging phase, and typical methods with which they respond to these challenges, are discussed.

The paper starts with a review on the concept of "facilitator". The second section tackles the characteristics of GI collective organisations. Two Serbian case studies are then presented. Finally, the results section is followed by a discussion about the leadership enacted and the success and failure factors of the process identified in the context, group and the facilitation itself.

3.2 On the concepts of "facilitator" and "leadership"

3.2.1 Definition of "facilitator"

Numerous practical guides are dedicated to the intervention of a "facilitator" (Schwarz, 1994; Robson and Beary, 1995) and the building of collective action (often published by cooperation agencies). Some manuals expressly target the field of agro-food chains and have been published for leaders and managers of associative agro-enterprises, as well as for technicians (see van der Vorst *et al.*, 2007).

Over the last decade there has been a wealth of academic research on the subject of brokers in the field of economic geography and regional sciences (Johannisson and Nilsson, 1989; Selsky and Smith, 1994; Huggins, 2000), political sciences (Joldersma, 1997), as well as public administration and management (Vangen and Huxham, 2003a; Zerbinati and Souitaris, 2005; Loubaresse, 2008; Munro *et al.*, 2008), with a particular interest in environmental issues over the last decade (Egri and Herman, 2000; Sverrisson, 2001).

Several terms are used in the literature to describe the person who helps the group increase its efficiency and organise collaborative activities: (network) broker (Burt, 1992), catalyst (Rosenfeld, 1996), community entrepreneur (Johannisson and Nilsson, 1989; Selsky and Smith, 1994; Marsden and Smith, 2005), (initiative) facilitator (Nelson and McFadzean, 1998; Groot and Maarleveld, 2000; Huggins, 2000; Billaud *et al.*, 2004; Markelova *et al.*, 2009), local activator (Magnani and Struffi, 2009), partnership manager (Vangen and Huxham, 2003a), public entrepreneur (Ostrom, 2000).

Some of the terms (e.g. partnership manager) refer to a particular facet of the profile of facilitator, who might come from state government, local municipality or authorities, extension services, chamber of commerce, NGO (international or local), academic research, or private sector. Schwarz (1994) defines the facilitator as a person who "diagnoses and intervenes to help a group improve how it identifies and solves problems and makes decisions, to increase the group's effectiveness" (p.5). By Schwarz's definition, a group member cannot formally fill the role of facilitator.

3.2.2 Analytical framework to analyse the interaction of the "facilitator-group-context"

Drawing from the model of Schwarz (1994), which analyses group effectiveness according to its structure, context and process, a scheme is proposed to analyse the relationships between the group, the facilitator and the context (figure 1). The interaction of the facilitator with the group and its environment is analysed through the lens of: i) the missions and roles of the facilitator, ii) the skills and expertise needed to perform, iii) the facilitator's personal values.

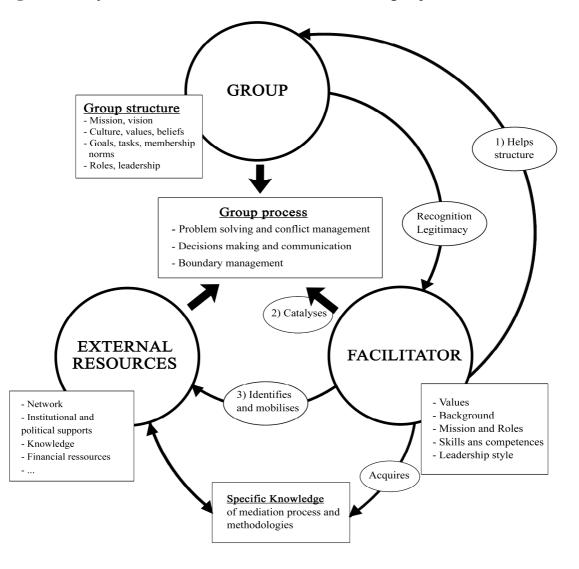


Figure 1: Analytical framework of the interaction "facilitator-group-resources"

Source: author, adapted from Schwarz (1994)

External facilitation encompasses a panoply of missions and skills. The facilitator's main task is to help the group increase its effectiveness by improving its process (i.e. problem solving, conflict and boundary management, decision-making and communication) (Schwarz, 1994). These activities can be grouped into three types of missions: structuring the group, catalysing the group's process, and mobilising external resources. Additionally, facilitators have to acquire knowledge through continuing education.

1) Structuring the group

Facilitators must create cohesion among the group by finding a connection between previously disparate people. Each group member has personal values, objectives, interests and expectations that have to be bridged and reorganised to build a consensus. Individual perspectives influence the process (Phillips and Phillips, 1993; Nelson and McFadzean, 1998); facilitators must be acquainted with these perspectives and offer a common language that all members are comfortable with in order to help refine individual perspectives and allow a common vision to emerge from the group (Schuman, 1996; Joldersma, 1997; Vangen and Huxham, 2003b).

Facilitators foster the inclusion of less powerful actors (Shucksmith, 2000) and advocate participative methodologies that generate ownership of decisions and actions, and creates an infrastructure through which all members can participate in spite of differences in skill levels (Vangen and Huxham, 2003a). Facilitators devote effort both to attracting the partners that are necessary and to supporting those who want to be partners (Vangen and Huxham, 2003a). Nevertheless, as Vangen and Huxham (2003a) stress, overcoming a reluctance to participate can be a time-consuming activity, as those who are desired by those already involved do not always see the value of active involvement.

Aware of the importance of social motives, the facilitator supports a vision which combines commercial with territorial performances (Marsden and Smith, 2005). S/he encourages members to work on behalf of the collaboration, while acknowledging that they need something in return (Vangen and Huxham, 2003a).

Finally, the role of brokers in creating an environment of trust and fairness is mentioned at length in the literature (Roberts, 1985; Bryman *et al.*, 1996; Huggins, 2000; Vangen and Huxham, 2003b).

2) Catalysing the group's process

Facilitators communicate specific information with members. Bringing members together and keeping them informed requires the group to be animated, for example in the organisation of workshops and meetings. Facilitators encourage a group towards action and assign responsibility for specific actions. Facilitators might intervene during the establishment of rules and arbitrate disputes. Indeed, rivalries between individuals and organisations can be mitigated by the presence of a facilitator acting as a neutral listener (Schuman, 1996). Providing judgments about the degrees of equality that can or should be achieved, and managing power relations are also part of the facilitation tasks (Vangen and Huxham, 2003a).

Accompanying the group process also means performing a brokerage of technological and organisational novelties (Sverrisson, 2001). Facilitators promote innovative ideas regarding both the collective organisation and technical practices.

3) Mobilising external resources (networking brokerage)

Networks help to mobilise the various resources needed for action and can be seen as a resource pool for group members (Johannisson and Nilsson, 1989). Consequently, the successful broker is characterised by network building (Svendsen and Svendsen, 2004), and the enhancement of a local coalition of public and private stakeholders, as well as a "service delivering network" (universities, local authorities, etc.) (Sverrisson, 2001).

As it may be difficult for facilitators to be knowledgeable about all issues, social and networking skills are deemed necessary for mobilising and organising both internal "local" and external "global" resources. Brokers build bridges among people, and thus between bodies of knowledge (Sverrisson, 2001). Brokers also play the role of translator. For instance, they bridge together the technical needs of the group with the knowledge building of research institutions, thereby enhancing technology development (Slingerland *et al.*, 2006). Moreover, in addition to innovative technological practices and transfer, networking opportunities sometimes metamorphosis into opportunities for organisational change (Sverrisson, 2001).

Facilitators share internal information with the outside and share external knowledge and expertise with the group members. S/he is in a legitimate position to elicit information from the group, as well as from particular individuals (Schuman, 1996).

Finally, building networks increases the probability of finding financial resources and enforces both legitimacy and support (from local authorities, for instance). Partnerships with local governments and state development agencies may prove important, providing start-up money and material resources, as well as administrative capacities, training, networking and support services in order to facilitate self-help, entrepreneurialism and capacity building (Murdoch, 2000; Roep and Wiskerke, 2006).

4) Acquiring knowledge

Facilitating is demanding, and facilitators require training to understand the purpose of the work, and to be helped as they begin practicing the profession (Nelson and McFadzean, 1998). Groot and Maarleveld (2000) highlighted that to become an effective group facilitator, the emerging facilitator should receive education and training focused on managing group processes and mediation techniques (creative and interactive learning-methods, mediation tools, techniques on how to bring about a group dynamic). Moreover, as the facilitator is involved in a range of reciprocal relations, s/he must learn to ambulate between different action spheres (Alsos *et al.*, 2007) and speak the jargon of various organisations (e.g. academic and political language).

The achievement of these missions depends on the development of particular skills and qualities. Qualities traditionally associated with leadership - such as intelligence, toughness, determination and vision - are required for successful facilitation, but are not sufficient. A high degree of emotional intelligence and relational skills, as well as genuine interest in the group's development are required (Coleman, 1996; Goleman, 1998; Vangen and Huxham, 2003a).

Personal values of the facilitator

Community entrepreneurs are supposed to consider the development of the community as one of their main personal goals (Johannisson and Nilsson, 1989; Zerbinati and Souitaris, 2005). Facilitators' personal values may influence how resources within the system are configured, and Alsos *et al.* (2007) identified a potential clash between strategic adaptation to a pure commercial project and the community's broader objectives.

Ideally, the facilitator is a person acceptable to all members of the group, substantively neutral, and has no decision-making authority (Schwarz, 1994). Obtaining recognition

and legitimacy is likely to be critical for the group structure and process. In this context, what style of leadership do facilitators adopt to successfully complete the described missions?

3.2.3 Facilitation and leadership's style

Leaders provide followers with meaning by constructing and communicating a vision or image that articulates the followers' values while allowing them to express their identity through a shared collective vision (Mumford and Van Doorn, 2001; Alimo-Metcalfe and Alban-Metcalfe, 2005). As such, facilitators must develop both leadership skills and style. However, the traditional leadership semantic that explores hierarchical dyadic relationships (leader-follower) is not relevant when dealing with collective action. In the leadership literature, new approaches provide insight on leadership in collaborative settings.

Armistead, Pettigrew and Aves (2007) state that in the context of understanding leadership with partnerships, transformation theory (Bass and Avolio, 1994) offers an attractive model of partnership practice. The transformational leader is one who persuades through negotiation, participation, and empowerment (Bass, 1985). S/he inspires others to support his/her mission (Bass, 1985) and is concerned with aligning the personal values of followers to the goals of the organisation. The transactional leadership is based on an exchange of support for rewards (Bass, 1997). Quinn (1988) associates transformational leadership behaviour with the managerial roles of innovator (creative problem solving, change and adaptation), broker (exercising power and influence resource acquisition), and facilitator (conflict management, participative decision-making), and also associates transactional leadership behaviours with coordinator (task analysis and coordination, financial control) and monitor (information management, critical thinking). Egri and Herman (2000) identified that facilitators frequently perform roles involving both transformational and transactional leadership behaviours.

Vangen and Huxham (2003a), however, claim the hierarchical relationships and dichotomies that are the focus of classic leadership research (democratic versus autocratic/authoritarian (Lewin *et al.*, 1939), participative versus directive, relationship-

oriented versus task-oriented, or transactional versus transformational), are often less important in collaborative settings. Instead, they focus on approaches such as informal or emergent leader (Hosking, 1988; Feyerherm, 1994; Purdue and Razzaque, 1999), shared leadership (Bryson and Crosby, 1992; Judge and Ryman, 2001), and relational leadership (Murrell, 1997). Mandell and Keast (2009) argue along the same lines as Vangen and Huxham, that the traditional use of the terms "leader" or "leadership" does not apply to collaborative networks, and propose the term "process catalyst" to define the leadership activities that take place in collaborative networks. Thus, can facilitators be leaders?

Contrary to informal leaders (Feyerherm, 1994), the significance of facilitators stems from their formal position at the centre of collaboration (Vangen and Huxham, 2003a). Indeed, facilitators are usually appointed to organise collaborative activities and are a resource for collaboration rather than a member of it. Therefore, their position might not lead through the exertion of formal positional power (Vangen and Huxham, 2003a). Nevertheless, power is less an attribute of an actor than of a relationship between actors (Marsden, 1983; McAreavey, 2006), and the power gained due to their central position in the network facilitates exchanges between unconnected peripheral actors and helps to motivate them. As Mandell and Keast (2009) noted, the key in terms of influence is not the use of power, but rather the ability to encourage and assist people to come to an agreement.

The challenge also exists for facilitators to make their position comfortable and welcome in a group of professionals who know each other very well (Vangen and Huxham, 2003a). Facilitators lack formal control (over people, events, agenda), but may exercise indirect control involving the use of social status or control over information (Marsden, 1983). A certain degree of authority and credibility (recognised expertise and knowledge) is needed (Huggins, 2000). As Nelson and McFadzean (1998) emphasise, a neutral position is necessary for effective facilitation, and yet neutrality and credibility sometimes come into conflict. Vangen and Huxham (2003a) use the concept of the "pragmatic leader" (Mumford and Van Doorn, 2001) to illustrate that inevitably, the partnership manager influences which, and the manner in which, substantive issues become part of the group's joint efforts, despite the fact that in theory, facilitators should have no direct role in content definition (Phillips and Phillips, 1993; Schuman, 1996). Vangen and Huxham (2003a) pertinently noted that: "finding ways to avoid collaborative inertia is [...] an essential aspect of their leadership role. Many [partnership managers] enact this by actively pushing the collaborative agenda forward. Not surprisingly, some lean towards taking an active lead rather than facilitating the members to agree and jointly implement their own agenda" (p.70).

The previous section presented the missions of facilitators and discussed their leadership styles. The next section presents the characteristics of GI organisations and extends the concept of facilitator in the particular case of GI settings.

3.3 GIs and facilitation

Established GIs usually exhibit a form of collective organisation. However, GI registration and the establishment of a code of practice can be reached without building a collective organisation.

3.3.1 Governance structure of established GI organisations

A large collection of case studies illustrated regularities regarding the organisational patterns in established GIs (Réviron, 2009). The collective organisation may be a professional or inter-professional association⁷, often called a consortium. During the process of GI registration, membership conditions and representativeness are crucial issues. The collective structure may ease the reaching of agreements among producers on questions related to production systems and marketing strategies, and activities carried out by collective organisations are manifold (i.e. management of the control system to guarantee a defined quality, collective promotion).

⁷ An inter-professional association gathers members from various levels in the supply chain, for example milk producers, cheese processors, *and* ripeners (Réviron 2009).

3.3.2 Reasons for producers to join the collective organisation

Following Ostrom (1990) and Cetindamar *et al.* (2005), Réviron and Tseelei (2008) identified the benefits of partners who joined a GI collective organisation, and also distinguished individual benefits from macro-benefits. Individual producers benefit from the collective effort of promotion (inside and/or outside the region), a certification system by an external body (individual costs decrease), and a set of information (e.g. quality reached by competitors). Moreover, Réviron and Tseelei (2008) mentioned the pride that producers felt in belonging to the prestigious GI world group. They also identified better access to public authorities and lobbying, fighting against name usurpation and avoiding a drift to lower quality standards as macro-benefits.

Additionally, pooling resources might enable some producers to increase their negotiating power (for instance, with veterinary inspection regarding hygienic regulations) (Paus and Estève, 2007), as well as to enter new markets (export opportunities to the EU, for instance, where GIs have gained in reputation through the EU quality schemes of Protected Designation of Origin (PDO) and Protected Geographical Indication (PGI)) (Bernardoni and Paus, 2008).

3.3.3 GI systems and facilitation

External facilitation is often described as a determinant for the success or failure of a collective action (Rosenfeld, 1996; Huggins, 2000; Varughese and Ostrom, 2001), and has been identified by Vandecandelaere *et al.* (2009) as a potential key component of successfully implementing a GI's protection and marketing. GIs are characterised by collective property. The group, that is, the holder of the right to use the geographical name, might be institutionally formalised or not, and variously heterogeneous (from two producers to several thousand producers constituting different strategic groups).

External facilitation in GIs takes different forms according to countries (culture, institutional empowerment, legislation) and products (local market or export, small or large production, etc.).

In France, the group holder of the right to use the geographical name is represented by a management structure called the "Organisme de Défense et de Gestion" (a body for

defence and management), and is piloted by a manager. This body became mandatory by French regulation in 2006⁸. The definition of this body refers to the criteria of representativeness of all operators and a democratic decision-making process. All operators involved in the production process of the GI product are members.

However, in most countries, producers are not formally organised. The concept of a "GI system", which was defined in the SINER-GI project⁹, captures both the facilitation notion and its associated network.

3.3.4 Motivation and goals in GIs systems

Various motivations and objectives are held by the actors of the GI system: the facilitator him/herself, the producers, the local authorities, and the funders, who all have various economic and non-economic values. Developing existing quality products, saving rural activities, enhancing local development, and optimising production rights are some of the objectives identified in a comparative European study led by Barjolle and Sylvander (2002). An international comparison of GI systems (Barjolle *et al.*, 2009) shows several additional motivations, such as fighting against misuses and imitations, managing and regulating the relevant market, preserving traditional know-how and specific biological resources, countering rural exodus from marginal areas, and maintaining or developing SMEs.

In France, the basic missions of the "Body for Defence and Management" are to define the product, its rules of production, and the key points to be controlled. Moreover, the manager of the body, who has an institutionalised position in the collective organisation, has to manage the implementation of the code of practice, the defence of the name, product and *terroir*. The manager also has to work for the promotion of the product and the elaboration of control plans. Finally, a recent French study highlighted the

⁸ Ordonnance n°2006-1547 du 7 décembre 2006 relative à la valorisation des produits agricoles, forestiers ou alimentaires et des produits de la mer.

⁹ A GI system is defined in the SINER-GI project (Strengthening International Research on Geographical Indications: from research foundation to consistent policy) as: "The set of actors who are effectively engaged in creating value and improving the strategic marketing position of the GI product by spontaneous individual or organized collective action and those who are engaged in the activation and reproduction of those local resources (natural resources, knowledge, social capital) which make the GI product specific."

commitment of these bodies in establishing sustainable development actions (Ollagnon and Touzard, 2007).

The South-western European GI systems are well entrenched and institutionalised, and not as easily transposable as they are in developing and transition countries. Moreover, there is no obligation in the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement to set up a collective organisation for GI. Nevertheless, GI protections are often supported by a facilitation structure and accompanied by the building of a collective organisation (Vandecandelaere *et al.*, 2009). Cases were reported, for instance, in the Dominican Republic (Galtier *et al.*, 2008) and Bali (Fournier, 2008) for the registration of coffee. In Serbia, several products with the potential of being registered were investigated, and a facilitation process was established for the most promising.

3.4 Method and case studies presentation

3.4.1 Materials and method

A multiple case study approach was carried out, first to compare, then to draw, theoretical inferences (Eisenhardt, 1989). The approach is intended to lead to the development of practice-oriented theory and simultaneously contribute to practice and theory. The comparison of two GI systems (kajmak from Kraljevo and ham from Uzice) aims at examining the patterns of facilitators' missions and leadership style. As Parry (1998) and Conger (1998) argued, along with Bryman *et al.* (1996), qualitative research captures the process of leadership (seen as a social process) and its contextual factors better than more quantitative methodologies.

Information was collected during four fieldwork periods in the summers of 2007, 2008 and 2009. During the fieldwork, 37 key informants were contacted, and 58 qualitative, indepth interviews (semi-structured, unstructured, and biographical) were conducted. The data collected over the last three years, enabled us to analyse the facilitation process.

The approach of this work cannot be considered pure action-research, as we were not involved in drafting the strategy or in any decision-making. However, we benefited from an insider's view as an external partner in the facilitation process in its real-life context.

3.4.2 Presentation of the GIs and the facilitation process

The general institutional framework is similar for the two cases, and both initiatives were promoted in the framework of a national programme by the same regional NGO.

Kajmak from Kraljevo (Paus and Estève, 2007)

Kajmak is a dairy product made from the layer of fat created when milk is boiled and then cooled. In Serbia, its contents are defined in a by-law¹⁰, and it is one of the traditional products whose quality and reputation are linked to its geographic origin. The traditional area of kajmak production spreads over South-Western Serbia, with some regions being particularly famous (e.g., Zlatibor, Kraljevo). There is no clear delimitation of the territory of production for the so-called "kajmak from Kraljevo". In the municipality of Kraljevo, an old kajmak is produced in the mountains, as opposed to young kajmak in the lowlands, which is recognised as being the so-called *kraljevacki kajmak*. Nevertheless, kajmaks produced in the lowlands of the neighbouring municipalities benefit from close natural conditions and know-how, making the borders of the production fuzzy.

Almost every household owning cows produces kajmak, most of which is produced for self-consumption. In the municipality of Kraljevo, the estimated number of producers marketing their kajmak is around six hundred, with a total yearly production of about 450 tons. The kajmak is marketed either on the green market or through a cooperative (formerly *agrokombinat*), or traders. Sanitary norms are putting producers under pressure. Fulfilling these norms requires investments that many households cannot afford. Consequently, the structure of the production system is rapidly changing. In the short-term, it is expected that many household producers will stop producing kajmak and

¹⁰ Book of regulations on quality and other requirements for milk, dairy, composite dairy products, 2002.

instead deliver their milk to dairies. Indeed, small-scale dairies that produce kajmak in an artisan manner are flourishing.

Ham from Uzice (Bernardoni and Paus, 2008)

The smoked beef ham from Uzice/Zlatibor is exclusively produced in the Municipality of Cajetina (Zlatibor district). Traditionally, the process takes place in a very circumscribed area that is concentrated in the village of Mackat and its surrounding area. There are about forty producers of ham from Uzice, producing about 800 tons yearly.

A former state enterprise (Industrija Mesa Zlatibor) that used to produce the ham from Uzice on a large scale registered it as a PDO in 1995. Though the appellation *Uzicka Prsuta* was officially reserved to this single enterprise, which went bankrupt in 2009, other enterprises – both industrial and family businesses – sell their ham under this denomination. The leading enterprise sells its ham under the appellation *Zlatiborska Prsuta* in supermarkets and specialised grocery shops.

The delimitation of the ham from Uzice's production area is consensual and restricted to the Cajetina municipality. Producers of *prsuta* are not a homogeneous group. Rather, they are industrial and semi-industrial producers who market through formal channels, artisan producers who have a commercial strategy, and artisan producers who produce small quantities marketed locally. Despite diverse motivations regarding GI protection, the initiative of a new procedure to register the ham from Uzice has been largely approved. The issue of the provenance of the raw material, however, remains unresolved. To restrict the provenance of the meat to the production area would hinder the full utilisation of current capacities. However, it is seen by the local authorities as a powerful instrument to boost livestock breeding and rural development.

Launching of the collective initiatives

Both initiatives for protecting the ham from Uzice and the kajmak from Kraljevo were part of a programme which aimed at supporting the development of GIs in Serbia. Launched in March 2006 by the Serbian Ministry of Agriculture, Water Management and Forest (MAWMF), the programme "Traditional Agricultural Products of Western Serbia and Geographical Indications' protection" (2006-2008), had the global objectives of creating new dynamics in disadvantaged rural areas of Western Serbia, and identifying, protecting and promoting traditional agricultural and agro-food production, which is considered as one of the more valuable asset of the mountainous and hilly areas of Western Serbia. A local NGO, the Ibar Development Association (IDA), was awarded by the MAWMF for the realisation of the programme.

The activities assigned by the MAWMF were to launch an information campaign directed at producers and local institutions, and to provide technical support over 12 months for the registration of two products in the national register at the Serbian Intellectual Property Office. Thus, the main role assigned to the facilitator was to technically support the redaction of a code of practice and the application for registering the kajmak from Kraljevo and the ham from Uzice.

In Kraljevo, IDA had to launch the project on the foundation of a previous attempt of collective action, an agro-cluster in the framework of a World Bank project (2004-2006) led by Worldwide Strategy Inc. (WSI). In 2005, the cluster members agreed on the relevance of branding the kajmak and cheese of Kraljevo in order to reach hygienic improvements and protect their reputations. Following this proposal, the local coordinator contacted a professor of the faculty of economy in Belgrade, and a local meeting entitled "agricultural cluster and branding of kajmak and cheese of Kraljevo" was organised in February 2006, where the GI concept was presented. Contacts were also made with SEEDEV, a Serbian consulting agency for rural development, and the MAWMF. At the end of the mandate of WSI, in November 2006, the cluster was registered as an association, following the willingness of producers to seal their involvement in a recognised organisation. However, one-and-a-half years of investment by members of the clusters were poorly rewarded, and many members disengaged from the initiative.

In Cajetina, there was no official collective organisation when the project started. The previous registration of the product as PDO involved one single "authorised user", the former state enterprise. A collective action did, however, materialise since 2001 with the "prsuta festival", which enables producers to benchmark their quality through a tasting

commission composed of experts. In 2004, the Municipality of Cajetina decided to financially support and coordinate the festival. The year 2006 was a turning point, as financial support was provided by USAID for the fairground location, and a successful press conference publicising the event was held in Belgrade.

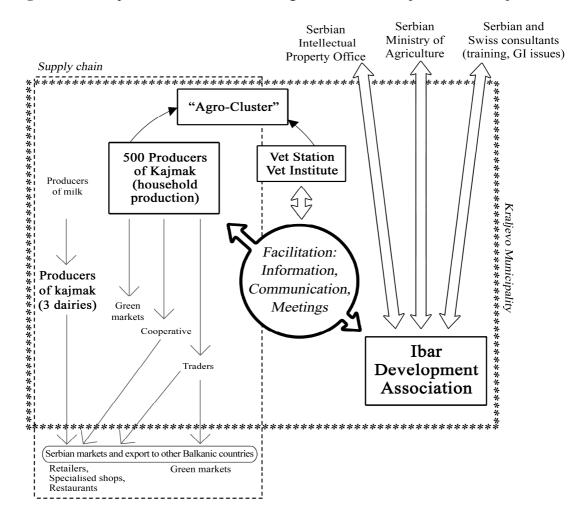


Figure 2: Description of the facilitation design in the case of kajmak from Kraljevo



Who plays the role of facilitator?

The main objectives of IDA are to improve the livelihood of rural inhabitants in Serbia with respect to traditional habits and values. The founder and executive director of IDA

has a generalist background with an education in engineering. He then specialised in rural development projects and has a genuine concern for farmers' well-being. According to the director, the protection of GIs has the potential to foster rural development and prevent rural exoduses by improving the marketing and consequently the income of producers. The director works on the programme part-time.

In Kraljevo (figure 2), two local people were hired as part-time assistants on the programme to support the initiative's facilitator, who had full legitimacy to facilitate the registration process of the kajmak from Kraljevo, and to continue the WSI's work.

In Cajetina (figure 3), a member of IDA was appointed as a delegate to facilitate the ham registration. The assistant contacted a deputy in Cajetina who was involved in the organisation of the "prsuta festival", and together they assumed the role of facilitation.

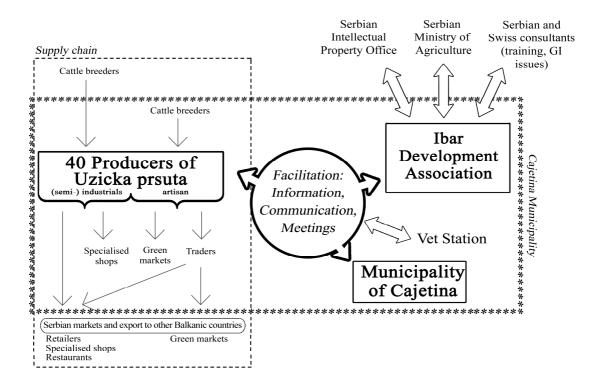


Figure 3: Description of the facilitation design in the case of Ham from Uzice

Source: Author

3.5 Results

3.5.1 Competence building

Before and during the project, the facilitator in Kraljevo attended training courses on how to analyse the needs of a rural community, how to build capacities, how to collect data among farmers, etc. Having no particular knowledge of GIs while starting the project, the facilitator was backed-up on this issue by SEEDEV, and in 2007 participated in a two-week training course on GIs in Switzerland. The IDA field assistants, however, trained on-the-job.

In both initiatives, the facilitation activities were oriented towards four main missions: 1) structuring the group, 2) catalysing the group's process, 3) mobilising external resources, and 4) building capacities at institutional level.

3.5.2 Structuring the group

In order to enable all interested producers to participate, the facilitator allocated substantial time to the organisation of informative meetings that were largely announced and covered by the local media, including radio and TV.

Between April and July 2007, five local meetings were dedicated to producers in different villages of the Kraljevo municipality. The objective was to raise awareness among producers and dairy owners regarding the potentials of kajmak, as well as to open the initiative to interested producers - including producers from the mountainous part of Kraljevo, and from outside the municipality – as they were considered by IDA as potential legitimate users of the appellation. In Cajetina, an informative meeting targeting the producers of prsuta took place in March 2007, with thirty-three producers participating.

During meetings organised in the Kraljevo municipality, IDA collected information about the participants' initial concerns. The household producers' motivations were primarily to stabilise and/or increase the price of their kajmak sales. Other concerns were to ensure the survival of artisan products and traditional know-how, and to gain negotiation power with veterinary institutions. In Cajetina, however, no systematic data collection of producer motivation was undertaken.

Enrolling participants was a key activity and in both cases, overcoming a reluctance to participate was a time-consuming activity that was not fruitful. In Kraljevo, the group strongly homogenised compared with the cluster composition, and was centred on small household producers, despite the increasing role of dairies. The IDA executive director focused his efforts on facilitating the involvement of dairies and traders, and he often personally invited them to participate in meetings, with no success. In Cajetina, the important actors were officially involved, however, leading companies developed either a defensive strategy (ownership of the name), or lacked interest (marketing tools already highly developed).

3.5.3 Catalysing the group process

The strategy following the informative phase was to set up a representative working group of both kajmak and prsuta producers. Representatives were not formally elected, but were selected on a voluntary basis according to their geographical location.

Contrary to the prsuta working group, in which diverse strategic groups of the forty producers were represented by five producers, the kajmak working group gathered only household producers. Indeed, about twenty producers are officially part of the working group, among which half attended the three meetings organised between September 2007 and September 2008.

The objectives of the working groups were: (i) to define their product, and identify and characterise the local production practices; (ii) to define the geographical and technical borders of their group; and (iii) to apply for the protection of their product.

Agendas for the working group meetings were drafted by the facilitators, which also suggested issues to be tackled, and provided the necessary material for discussion (sharing other existing GI's documentation, such as codes of practice for other products and potential status of association). In Cajetina, the invitation letters were jointly sent by IDA and the municipality.

Decisions were made according to the consensus that emerged during the working group meetings, and no official votes were organised. In the case of prsuta, these decisions were communicated by post to all producers in order to gather comments. In Kraljevo, where producers are numerous, the strategy was to organise a restitution meeting.

3.5.4 Mobilising external resources

In both cases a large external network was built to support the initiative, and informative meetings were dedicated to local community organisations and institutions.

To prove the link between the *kraljevacki kajmak* and its *terroir*, the veterinary institute in Kraljevo was mandated by IDA to carry out chemical analysis. IDA also organised meetings with representatives of veterinary authorities in order to discuss the issue of sanitary regulations. Veterinary institutions, the inspection body, representatives of the MAWMF, the intellectual property office, and municipalities of Kraljevo and Cajetina, respectively, were invited to take part in the meetings and registration process. Contacts were maintained with SEEDEV, as well as with foreign associations specialising in GIs issues. Moreover, to sustain financial resources, contacts were established with foreign agencies (e.g. USAID).

In addition to the above traditional activities undertaken in the external facilitation process, the facilitator focused on the mission to help create a favourable institutional context.

3.5.5 Capacity building at institutional level

IDA developed its network with the objectives to both mobilise resources (financial, scientific, administrative), and more broadly to create a favourable national institutional context. Indeed, establishing GIs requires appropriate institutions for the process to be

credible for consumers and producers. The IDA executive director and his network pushed for an adequate legal and institutional framework to enable the recognition, regulation and protection of collective property rights on GI (figure 4). The director also dedicated time to raising awareness in national and local public administrations (for example, organising a training session, as well as regular bilateral meetings).

Figure 4: Analytical framework of the interaction "facilitator-group-resources-context" in the case of GI initiative



Source: Author

Capacity building at the institutional level was not recorded in the literature. Nevertheless, it is clearly an activity that facilitators have to take over in developing and transition countries where institutional failures hinder the development of public labelling.

3.6 Discussion

The discussion is organised as follows: first the leadership style of the facilitator is discussed, and then factors that hindered the facilitation process are discussed.

The IDA executive director promoted a democratic approach to leadership; his objective was to raise interest as greatly as possible and include all the potential GI users. This approach was more difficult to implement in the case of kajmak, as the geographical area is larger and the number of potential users is twenty times higher than in the case of prsuta. According to the IDA executive director, each actor has a positive role to play in the initiative, and, "it is important not to destroy opportunities for someone".

In Kraljevo, there were strong expectations among the local community for the *kraljevacki kajmak* to be registered. Johannisson and Nilsson (1989) noted the risk that mobilisation projects can create expectations that are difficult to meet. To maintain his credibility and his trust capital among the community and backers, the IDA executive director had to obtain visible results. Confronted with a lack of cohesion, collaborative inertia and the absence of an emergent leader, the director had to adopt a more directive leadership, or as Vangen and Huxham noted (2003a), a pragmatic leadership in order to meet the time and objective requirements of the project. The director thus became the driving-force, leading the registration procedure (IDA might be registered as an authorised user of the GI). As the director expressed, "it is better to work in consultation, but I do not have enough energy, and I do not feel energy from others". However, the director did feel a "moral obligation" to complete the code of practice. This finalisation would meet the working groups' expectations, respond to critics within the community,

encourage producers to continue working jointly, and maintain his position and reputation among the local community and funders. This result supports the findings of Vangen and Huxham (2003a), which highlighted and legitimised the "simultaneous enactment of both the facilitative (spirit of collaboration) and directive (collaborative thuggery) roles".

In Cajetina, the leadership is more closely related to shared leadership (Bryson and Crosby, 1992; Murell, 1997; Judge and Ryman, 2001), or distributed leadership (Gronn, 2002), where responsibilities may overlap or be complementary (Gronn, 2002). This was made possible by the partnership between the deputy of the municipality and the IDA local animator, in what is called a co-facilitation (Knight and Scott, 1997; Hogan, 2002 p.85-112). Nevertheless, mediation activities reached their limits when faced with the operators' resistance to joining. However, the co-facilitators did not adopt a directive leadership style. This might stem from less personal pressure on the facilitator to obtain results (that is, shared responsibilities for the collaborative effort), and the fact that the same local community benefits from other projects implemented by the municipality. The facilitation duo is not willing to decide on an application at the intellectual property office until producers have collectively expressed their commitment and agreement to register the code of practice.

We argue along with Vangen and Huxham (2003a), that facilitators might lean towards a more directive style rather than facilitative and supportive. Though democratic and participatory leadership is both required and expected, the examined cases show that it is not sufficient to generate a collaborative action. Nevertheless, adopting a directive style is linked with personal risk that community entrepreneurs must accept. The risks they have to cope with mainly concern social discredit and time investments that may be in vain (Johannisson and Nilsson, 1989), both of which can lead to what Purdue and Razzaque (1999) noted: "the energy and commitment that community leaders put into their roles likely lead to burnout". The study demonstrates that the values of the facilitator and the structure of the group determine the leadership style of the facilitator. However, it also demonstrates that the structure of the structure of the structure of the facilitation itself (co-facilitation), and the

institutional context are crucial factors that determine the leadership style of the facilitation process. This aspect of context-sensitivity was noted by Bryman *et al.* (1996).

Protecting GIs seems to be unanimously seen as a "good and important thing" by kajmak and prsuta producers. In these cases, there is no actor formally opposed to a registration, and few internal conflicts are related to the protection. In that sense, individual interests in the protection meet the collective objective. However, despite this positive judgment, both groups are bound by inertia. Drawing on the case studies, it was identified that the success of the facilitation process and the achievement of the objectives rely on the product and supply chain context, the group, the institutional context, and finally the facilitation strategy itself.

Product and supply chain context

Specific difficulties were identified in the case of kajmak. One of the prerequisites for launching the registration of a GI is the specificity of the product. The kajmak from Kraljevo is famous among consumers; however, its geographical border is fuzzy and its variability is high. The current delimitation of the *kraljevacki kajmak* is driven by the avoidance of political problems. Despite awareness of this shortcoming, no negotiations were held, due to time limitations, political rivalry and producers' disagreements, which aimed to include producers from other municipalities. Moreover, the supply chain is undergoing structural and technical changes (sanitary regulations, technological innovations, entrance of new actors) that make the specification of the product and its production methods more difficult to define and negotiate. As new practices arise, discussions about the technological process and its associated materials (for example, open-top vessels, duplicators) should enable producers to bridge their technical expertise. However, the brokerage of technological novelties (Sverrisson, 2001) was not completed due to the absence of dairy representatives in the working group. Finally, the local political context was rather unstable, and no effective partnership was established with the municipality.

It was expected that the prsuta initiative would more easily meet the objectives of registration and set up a collective organisation. As Huggins (2000) identified, a relatively low number of overall participants and a degree of spatial proximity appear to greatly increase the chance of gaining critical momentum for collaborative activity. Additionally, Huggins identified commonality with the nature of the business involved as an important factor in developing a sense of belonging, trust and social capital building. The prsuta initiative presents all these favourable characteristics. Moreover, the prsuta initiative benefits from local public support, which seems to be a key element in the sustainability of collaborative action centred on GI.

Group context

Producers' commitment started to decline when the informative and working groups' meetings were not followed by a significant move toward the agenda. Producers consider protecting GIs to be "a good thing", "an interesting initiative", and "a valuable project". Overall, they support the idea and were globally disappointed with the time necessary to achieve registration. However, they also adopted a rather passive attitude. GI registration is not a priority in their agenda, as they have to cope with more urgent issues: investment to fulfil sanitary requirements in the case of kajmak, or slaughterhouses in the case of prsuta. Competing agendas are a recurrent issue in transition and developing countries, where production systems undergo dramatic structural changes.

Moreover, many producers in transition countries show resistance to cooperation (postsocialist economies) (Gorton and White, 2006). After the collapse of the *agrokombinats* and during the last fifteen years, companies were interested in strengthening their individual market strategies. Additionally, no clear individual benefits resulting from collective actions have yet been identified by producers. In the case of prsuta, they either target a local market which does not need a labelling strategy, or target national markets with a strategy of trademarks with a strong image. For both cases, producers or traders state that the market for good quality products could largely be expanded. Direct competition is avoided through market segmentation and the opportunities of market expansion limit interest in a collective strategy. The main driving force of producers to join remains potential (short-term) profit, which cannot be achieved in the early stages of a GI building. Moreover, completing the code of practice and registering the name are often seen as a final goal. Incentives to collaborate beyond the registration procedure are vague and no leader emerged from the producers group, making the task more difficult for the facilitator.

Lack of dynamism in the institutional context

Some of the main problems pointed out by producers are the lack of controls, punishments of infringements, and certification. Confidence in the capacity of the state to enforce the law in a short-term perspective is lacking. Indeed, contrary to individual strategies like trademarks, GIs require the involvement of the public sphere to gain credibility. Therefore, producers see the development of a strong individual trademark as a more secure strategy. Correctly, producers do not identify any potential benefit if their approaches are not followed by competitive advantages associated to credibility.

Some GIs in developing and transition countries achieve excellent results in terms of coordination of their actions (organisational innovations, collective marketing strategy, etc.) (Réviron, 2009). However, these examples all concern products mainly dedicated to export. As products of origin are often a source of currency and act as a sort of "ambassador" of the home country, their export often receives significant support from national institutions. Moreover, standards are defined and controlled by a board and/or by the destination countries. The results of this study highlight that products intended for national or regional markets meet greater difficulties in their development. Developing a sound institutional context is essential for labelling schemes that rely on a public-private partnership, as is the case for organic production or PDOs. External facilitation might be needed in this task, and is a necessary activity recognised by international donors. However, the research highlights that this mission should not be exclusively entrusted to "local" facilitators who must maintain commitment among producers and help move their agenda forward. Moreover, a change of scale with a move to the national level presents difficulties that "local" facilitators might not be prepared to face.

The facilitator itself

Part time-employment and insufficient training hinders the facilitator from performing a subtle mix of activities and developing specialised skills. Though GIs are an intellectual property tool, dealing with GIs requires an interdisciplinary approach (legal framework, marketing, technical and organisational knowledge), and the facilitator has to be aware of these different dimensions, as well as the potential consequences of the decisions taken during the registration process (e.g., exclusion of producers, exclusivity of the name).

Moreover, GI facilitators are not only process-solving catalysts, but must also participate in the production of outcomes. Understanding GI potentialities and limits is crucial, as facilitators must transfer their knowledge to producers in order to help them choose the most suitable labelling scheme for their product. Finally, facilitators might be the subject of instrumentation by some stakeholders in the qualification process.

The facilitation itself

In both case studies, the enacted facilitation strategy consisted on a large informative phase, followed by the formation of a working group. Since a group facilitator's purpose is to help participants achieve both their individual and common goals, and in order to avoid producer disengagement, it is recommended that facilitators first focus on a restricted number of potential active participants (Paus and Réviron, 2010a). As Ostrom (2000) mentioned, individual incentives depend on producers' expectations, the viability of the rules established, their beliefs concerning overall net benefits, and the distribution of benefits and costs. Therefore, the first step in any facilitation process should be the systematic examination of individual expectations and goals in order to help establish priorities and identify common goals.

3.7 Conclusion

This paper illustrates that GI facilitation requires a broad range of skills: technical skills (to elaborate the code of practice and legitimacy among producers), social skills (conflict resolution, negotiation), commercial skills (to address the need of a marketing strategy), management skills (meeting deadlines, project elaboration), and networking skills

(external support). GI facilitators must help structure the group, catalyse the process and identify and mobilise external resources. Eventually, in developing and transition countries a large effort has to be dedicated to strengthening institutional networks, and facilitating changes not only in the group process, but also at the institutional level. Providing a favourable and credible context (legal framework, certification and controls) is necessary for the producers to make sense of their joint representation to collectively protect and promote their product under a GI. This task should be held by an "institutional" facilitator whose task differs from "local" facilitators.

The paper also presents some challenges faced by GI facilitators. Contrary to some external facilitation processes where knowledge of the content is not required, GI facilitators must handle the interdisciplinary concept of GI and acquire both knowledge and expertise. Moreover, facilitators are generally supposed to focus on the process rather than on tasks. Nevertheless, sponsors and local communities expect tangible outcomes, such as the registration of the code of practice. In order to respect the time schedule, and to avoid the risk of being discredited by both sponsors and the local community, the temptation for the facilitator to lean towards a more directive style of leadership and focus on tasks is common. Striking a balance between a neutral role which enables him/her to receive legitimacy from all the potential members, and involvement in the process and outcomes (e.g. drafting the code of practice) is a salient challenge. The study suggests that distributive leadership in the facilitation process could help prevent a shift in leadership style, foster the commitment of producers and the emergence of producers' leaders. Moreover, the study suggests the need to undertake concrete activities during the facilitation process, such as promotion during local festivals and competitions, in order to keep producers committed. The time-frame of a project aiming at supporting the emergence of a GI should consider these difficulties.

This research focused on the first stages of GI-building process. Further research is necessary to precisely gauge both the changing roles of persons playing a facilitative role and the emergence of leaders among producers during the facilitation process, especially after registration and during the delicate transition period.

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4. Measure of the Territorial Impact of Agro-food Initiatives: Lessons from two Swiss case studies

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[Authors' translation, article in French]

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Abstract

This paper focuses on methods for assessing the territorial impacts (economic, social and environmental) of collective initiatives that market food products with an environmentally-friendly or origin claim. A clear reference point must be defined and a relevant set of indicators selected to succeed in this challenging endeavour. This issue has led to an active and rich research corpus, which mainly deals with organic and origin products. We further distinguish between "objective" and "subjective" methods. The results of a recent survey on the "subjective" methods employed in two Swiss case studies are presented.

Keywords: agro-food initiatives, territorial impact, environmental friendly products, origin products

4.1 Introduction

For more than ten years, collective initiatives that market food products with an environmentally- friendly or origin claim have been developing in Switzerland. These initiatives have benefited and often still benefit from external support – both financial as well as non-financial – from public or private institutions, at the national, regional or local levels. These backings are justified by the positive effects expected in the concerned territories in economic, social and environmental terms.

However, how can these territorial impacts be checked? A prolific field of research has developed during recent years to monitor organic and origin-based products.

This article highlights the methodological difficulties of measuring territorial impacts by presenting the main studies realised to date. It then proposes an original method based on a reversal of the proof apparatus through an approach of the perception of the territorial effects by external opinion leaders. This approach is illustrated by two Swiss cases: the label *Natura Beef*, which is beef from suckling cow production, run by an association of

more than 3,000 producers, and the *Rye Bread of Valais PDO*¹¹, an initiative piloted by an inter-professional association that encompasses 2 mills, 60 bakers and 80 producers. The paper proceeds as follows. First, we present the stakes in Switzerland regarding rural development issues. Then we review the methods adopted by diverse authors and discuss the results and limits. This is followed by a presentation of the "subjective" method we tested, and the results of the two Swiss cases analysed. Finally, we examine the results and limits of the methodology.

4.2 Territorial impact and Swiss policy on regional development

In this paper, the territorial impact is defined as being the positive and/or negative effects produced by an initiative that markets agro-food products on its territory (strictly defined as in the case of PDO or more broadly delimited to national borders as in the case of *Natura Beef*). These effects contribute in a positive or negative way to the development of rural territories.

In Switzerland, the issue of the sustainable development of rural territories is inseparable from both the regional development policy and the agricultural policy that is focused on environmental performance (*Annex 1*). Several political instruments – sectoral and territorial – were established in order to promote the development of rural territories¹². The cantons have a large autonomy and many of them have developed a strategy for the agricultural and agro-industrial development, added by an agricultural law and means to support collective projects. At the national level, the Confederation recognises the multifunctionality in agriculture, that it defends at the WTO¹³ (Swiss Federal Council, 1992; Lehmann and Stucki, 1997). The agricultural law points out the objectives to substantially contribute to secure provisions for the population, to the conservation of natural resources and the upkeep of rural scenery and to a decentralised housing settlement of the country¹⁴ (Annex 1). The recent introduction of the 93.1.c article in the

¹¹ PDO: Protected Designation of Origin

¹² Nevertheless, in terms of budget, the regional policy is limited in comparison to the agricultural policy (100 millions of CHF compared to 3.5 billions in 2006).

¹³ The Seventh Report on Agriculture of the Swiss Federal Council uses for the first time the term "multifunctionality" in 1992 : « les prestations non économiques de l'agriculture (multifonctionnalité) » pp. 298-300.

¹⁴ Art.1 of the Federal Law on Agriculture LAgr adopted on 29 April 1998.

agricultural ordinance ensures a financial support of "projects in favour of regional development and promotion of indigenous and regional products in which agriculture contributes in a predominant manner". The federal law on investment in mountain areas (LIM), the cross-border cooperation programs INTERREG, the REGIO PLUS program and since recently the law on the creation of parks complement this set of tools in favour of multifunctional initiatives. The new Swiss agricultural policy (AP2011), currently under discussion, is even more committed in favour of rural initiatives in compensation for the cut in market supports.

The issue of the capability to assess the performance of these initiatives is therefore set for a better allocation and evaluation of public support. These issues opened a prolific research field that is presented below.

4.3 State of the art – A prolific research field

For researchers, assessing the differential of territorial impact between agro-food marketing initiatives is a challenging endeavour. It implies to examine a precise research question that includes both a reference point (in space or time) and a relevant system of indicators (selection of indicators, presentation of the results, aggregation).

The methodology developed to assess the territorial effects cannot be purely objective. The selection of the comparison point and the indicators, though searching for objectivity, results from a process that implies some subjective points of view (van der Ploeg *et al.*, 2000). During recent years, studies have investigated global performances of rural initiatives with two main evaluation principles: the "objective" methods and the "subjective" methods. They formalise different conceptual approaches and purposes. A combination of those two approaches has been previously used to measure - in a complementary way - notions reckoned to be difficult to assess because of their numerous components, as for example the "happiness"¹⁵.

¹⁵ "Objective" data that aim at measuring the wealth of a country and the level of comfort its citizens might logically benefit from, as the Gross Domestic Product or the Human Development Index, are combined with subjective well-being indicators, that report the assessment of the citizens themselves about their situation, as the "Subjective Well-Being Measurement" [see Diener, E. and E. Suh (1997). "Measuring quality of life; economic, social and subjective indicators." Social Indicators Research 40(1-2): 189-216, White, A. (2007). "A global projection of subjective well-being: a challenge to positive psychology." Psych-Talk 56: 17-20.]

4.3.1 "Objective" methods

Methods principle

"Objective methods" provide a snapshot of the impact differential between two states, allowing the comparison between farms, regions or supply chains. This differential can either be calculated for two different moments in time (diachronic evaluation, the reference is the object "before") or for two objects "other things being equal" (this reference must be specified by the evaluators) (synchronic evaluation). These methods are based on a comparison of indicators, which can be directly measured (hard data such as numbers, prices, and percentages). The main sources are statistical data, accounts data, enquiries and field observations. Nevertheless, more qualitative indicators can also be introduced (for example education level). Often, researchers establish a ranking system based on expert and stakeholders interviews.

Several scales of analysis are possible. The assessed lever can thus be an agricultural or rural policy, as intervention that affects the performance of the "agriculture and rural development" system. The European Commission has for example proposed a frame of analysis with qualitative and quantitative indicators to evaluate the social and economic dimensions of agriculture (European Commission, 2001). The objective is to develop tools to direct the policies and make them more transparent for the public.

At the farm level, numerous methods have been developed to assess sustainability, be it environmental sustainability (van der Werf and Petit, 2002) or the three pillars of a sustainable development (IDEA¹⁶ in France, RISE¹⁷ in Switzerland for instance).

Regarding the intermediate scale of rural initiatives and agro-food supply chains, the impact evaluation on production territories runs into many methodological difficulties. The scale is relevant; however the selection of indicators and data collection are more challenging than for the farm level. Statistics at this level are scarce. Nevertheless,

¹⁶ Indicateurs de Durabilité des Exploitations Agricoles or Farm Sustainability Indicators method, that was developped by the Bergerie Nationale (France) cf Vilain, L. (2000). La méthode IDEA, indicateurs de durabilité des exploitations agricoles. Guide d'utilisation. Dijon.

¹⁷ Response-Inducing Sustainability Evaluation, a tool for a holistic sustainability assessment at the farm level, developed by the Swiss College of Agriculture Zollikofen. The RISE team is currently working on an extension of the evaluation to the up-stream sector of agriculture. cf Häni, F., F. Braga, A. Stämpfli, T. Keller, M. Fischer and H. Porsche (2003). "RISE, a tool for holistic sustainability assessment at the farm level." IAMA International Food and Agribusiness management review 6(4): 78-90.

several research teams attempted to measure effects of supply chains. Most of the identified studies investigated agro-food initiatives that differentiate by origin-based or organic production. Indeed, these claims might refer to intrinsic qualities of products, as well as specific production, processing and marketing systems. These systems have a potential positive or negative impact on their territories.

Réviron and Paus (2006) proposed in the framework of the European project SINER-GI¹⁸ a literature review of studies realised in Europe, which attempt to measure the impact of origin-based supply chains. Indeed, designations of origin are initiatives particularly interesting with regard to regional development. They are locally delimited and the positive effects potentially expected can be formalised. In the European project DOLPHINS¹⁹, an archetype of origin labelled products was established and the links between its theoretical characteristics and effects on rural development were analysed (Belletti and Marescotti, 2002). In addition, political objectives, linked to the justification of the legal protection of geographical indications, explain the high number of studies carried out in PDO supply chains.

Denominations of origin are in essence based on the link with the territory. Their basic principles, typicity, historicity and the tie to the *terroir*, embedded the qualification of the product at the local level, as well as the process to obtain the protection, which is expected to be driven by local inter-professional actors. *De facto*, several criteria describe a territorial anchorage: origin of the capital, PDO code of practice, non-transferable and specific know-how, marketable and non-marketable interpersonal links, and commitment of local institutions. Perrier-Cornet and Sylvander (2000) highlighted that the territorial dimension of PDO is associated with the governance type of the supply chain, which can be sectoral or territorial. In the first case, the logic of the PDO alliance is mostly entrepreneurial and commercial. In the latter, the embeddedness is a crucial non economic objective that governs the decision making of partners and ensures a mobilisation of an external network.

¹⁸ European specific targeted research project (policy-oriented) SINER-GI. "Strengthening international research on geographical indications: from research foundation to consistent policy".

¹⁹ "Development of Origin Labeled products: humanity, innovation and sustainability. European Union concerted action QLK-2000-00593 financed by the fifth framework of the European Community for the research, technological development and demonstration activities (1998-2002)

Most of the studies conclude that PDO alliances are capable of generating positive effects on the territories. However, these effects are not guaranteed with obtaining the PDO or the PGI²⁰ and mostly depend on the internal organisation of the alliance that pilots the label and on the values shared by members (Barjolle and Sylvander, 2002; Barjolle *et al.*, 2007). Similarly, it appears difficult to distinguish what comes under the legal framework of the protection from the effects that come under the intrinsic dynamic of the collective organisation (Belletti and Marescotti, 2006). In the next section of this article, we will not stress the conclusions of the research studies but their methodological choices.

Evaluation of the territorial performance: economic, environmental and social dimensions

Many studies mostly deal with the economic performance via differential calculations of income, jobs and investments. Barjolle and Thévenod-Mottet (2004) analyse the effects of the PDO registration of Abondance cheese. With a diachronic comparison, they investigate the evolution in terms of volumes, spatial distribution and industrial concentration of the production. Dupont (2003) highlighted positive economic effects of the PDO cheese supply chain Comté, by comparing it with its generic copy. Coutre-Picart (1999) quantified the economic weight of PDO cheese supply chains of the northern Alps in France and its knock-on effect in term of local dynamics (value added, salaries, employment and investments, creation of value up-stream on the supply chain). Another comparison between PDO cheese supply chains in the northern Alps and the French national cheese supply chain (Chatellier and Delattre, 2003) showed in particular that the PDO cheese supply chains have the same income per work unit despite lower subsidies. Hauwuy et al. (2006) used economic indicators to compare the cheese PDOs in the northern Alps with the national supply chain and notably highlighted local effects on the agricultural activities and their dynamics (specialisation, livestock evolution). Barjolle et al. (2007) compared various cheese PDO initiatives in France and Switzerland. The authors analysed quantitative data regarding prices at different levels of the supply chain. They concluded that, under certain conditions regarding the internal organisation, PDO

²⁰ Protected Geographical Indication

supply chains can obtain a premium at the consumer level and distribute this extra value to the producers. Desbois and Néfussi (2007) compared PDO and non-labelled products by analysing the data of the Farm Accountancy Data Network (FADN), an instrument for evaluating the income of agricultural holdings and the impacts of the Common Agricultural Policy. They highlighted for the French dairy production significant differences in the prices paid to the producers, in favour of the PDO. Moreover, they stated that this added value is not totally absorbed by higher production costs.

This issue of economic performance is essential to guarantee the viability of producers and enterprises directly involved in the initiative, all the more since under some conditions²¹, a multiplier effect on regional development can be highlighted (Knickel and Renting, 2000).

In addition, in the framework of the European project IMPACT, a comparison of several local agro-food initiatives was carried out in six European countries. Selected criteria of impact evaluation concerned value added, number of farms and number of jobs (van der Ploeg *et al.*, 2002).

Nevertheless, socio-economic aspects are far from being the only important aspects of the territorial impact, and many studies set out to measure ecological impacts (de Roest and Menghi, 2002; Hirczak and Mollard, 2004; Riccheri *et al.*, 2007), landscape impacts (Gauttier, 2006) or both (Hauser, 1997; Paus, 2003; Thévenod-Mottet and Klingemann, 2007). Other authors took an interest in the social dynamic of the involved actors in the creation of the initiative (Marsden *et al.*, 2000; Belletti and Marescotti, 2004). Frayssignes (2005) analysed four French cheese "poles" of PDO supply chains in their territorial context, including productive, landed, identity and political aspects. He concluded that the limited economic importance of cheese PDO supply chains has to be put into perspective at the regional level; however he stressed the importance of other measurable indicators such as a milk price potentially higher and a promotion of

²¹ Multiplier effects turn out to be interesting in terms of rural development if flows take place in rural areas, which is not always the case. Moreover, some additional conditions must be fulfilled. Callois recently highlighted the negative influence of a fall of transport costs on induced effects in the industry in rural areas. cf Callois, J.-M. (2006). "Quality labels and rural development: a new economic geography approach." Cahiers d'Economie et Sociologie Rurales 78: 32-51.

agricultural trade. Tregear *et al.* (2007) recently discussed the trade-off between economic and socio-territorial objectives.

In this type of study, to consider what are the social expectations and what is the definition of rural development by territorial actors themselves sets methodological difficulties (Paus, 2003). The performance criteria should be defined by the stakeholders involved in the rural development and not by external observers.

"Objective methods" are valuable since they rely on sound statistical data (*hard data*). However, due to lack of data, they do not ensure a systematic analysis of the entire territorial effects of an initiative. "Subjective" methods enhance the analysis by using a higher number of indicators. In addition, they highlight the crucial role played by the external network of an initiative. This network bases its supports on an assessment of positive effects over producers and regional development.

4.3.2 "Subjective" methods

Methods principle

All territorial impacts cannot be taken into account with an "objective" methodology. The indicators' system becomes too complex, due to a high number of variables that are difficult to measure. "Subjective" methods adopt a radically different reasoning. They rely on the notion of multifunctionality as a recognition mechanism and an acknowledgement of the roles played by the supply chain to answer to societal expectations. They also rely on a comparison of preferences, which measures the acknowledgement level of the positive or negative effects by external or internal actors. The two types of methods are based on the hypothesis that the agro-food initiatives produce market and non-market goods, and have a territorial impact (positive or negative). The so-called "subjective methods" underlie that to maintain or develop (positive) effects of agro-food initiatives, these effects have to be acknowledged by the society, and in particular by opinion leaders. The object of the study is not the territory and its true states, but the perceived effects and the level of acknowledgement by external actors who have the power to support or hinder the initiative.

Evaluation of the territorial performance: economic, environmental and social dimensions

Interviewed actors can be experts, as it was the case in the OMIaRD and SUS-CHAIN projects (Jahn *et al.*, 2006). In the framework of the OMIaRD project, a DELPHI inquiry was realised with experts from 18 European countries on the issue of organic marketing initiatives and their effects in terms of rural development. The small size of organic initiatives was identified as a factor limiting the impact on rural development in comparison with non organic initiatives. There was no shared assessment among experts regarding the contribution of organic agriculture in terms of rural development, except on the issues of soil fertility, local environment and landscape (Padel *et al.*, 2003).

Another approach consists in putting questions to decision-maker stakeholders. This approach was applied in 2000 for the Swiss Canton Valais (Lehmann *et al.*, 2000). The objective was to answer a question sets by regional authorities: what would disappear and would be lost if the agriculture of Valais started to decline following a drastic direct pavements' cut? This question was then reformulated as follow: what are the effects of the diverse regional agro-food supply chains that would be lost on the Valais territory in case of a decline of the agricultural activity? Opinion leaders from diverse social groups were asked to grade on Likert scales the territorial effects of several agro-food supply chains (for a presentation of the method, see the next section entitled "presentation of a survey").

In a study on the organic agriculture in Australia, Lockie and Halpin (2005) used 5 points Likert scales in order to compare the motivations of conventional and organic farmers. The main marks' differences between these farmers concerned the questions of the use of chemical products (health), the environment's quality (biodiversity, energy) and animal health, as well as the products' quality (sanitary and nutritional). The question about rural development, asked through the items "contribution to the regional economy" and "local employment" was one of the less quoted motivations, identically by both conventional and organic producers.

Contrary to "objective" methods, "subjective" studies ensure to measure systematically various indicators. They also highlight opinion divergences or on the contrary consensus on the contribution of initiatives to rural development. We will develop this point and

give an illustration in the next section, based on a measurement of acknowledgement regarding the territorial impact of two Swiss initiatives.

4.4 Presentation of a survey - The acknowledgement of territorial impact

In 2006, we conducted a study aiming at identifying the "perceived" effects of two cases (*rye bread of Valais PDO* and *Natura Beef*)²² in comparison with their main competitors. The cases were analysed by the Swiss team in the framework of the SUS-CHAIN project.

4.4.1 Method

According to our typology of methods presented in the last section, the method we have chosen comes under "subjective" methods. We consider that territorial effects of an initiative can be measured through the level of acknowledgement by actors that are external to the initiative: regional and federal institutions, environmental associations, journalists, etc. The objective of the study was to evaluate the perception that backers and opinion leaders have regarding positive and negative external effects. So, it is not an objective measure with an expertise about sustainability, but an approach based on Likert scales, which are confirmed tools for the measurement of attitudes²³. A Likert scale consists of a series of declarative statements with which the subject is asked to indicate its level of agreement or disagreement aid of a grid (see example in Annex 2). The main interest of this method is to quantify attitudes and to identify divergences or consensus within groups. The main methodological difficulty is the choice of items. They have to be unambiguous, univocal and a meticulous test had to be realised before the inquiry as such. Altogether 21 items were used, distributed between three grids of analysis: economic, environmental and social, based on the classical paradigm of the sustainable development. The measure of the territorial impact was divided into two components: the

²² The full case studies can be consulted on the website of the project www.sus-chain.org/results and chapters 7 & 14 in Roep, D. and H. Wiskerke (2006). Nourishing Networks : Fourteen lessons about creating sustainable food supply chains. Wageningen, Agriboek, Rients Koopmans, ibid.

²³ Developed from Likert, R. (1932). "A technique for the measurement of attitudes." Achieves of Psychology.

marking of items (acknowledged performance) combined with the size of the initiative and the relevant territory. Details about the method are presented in Annex 2.

Thirty people were selected regarding various criteria for interview. First, all interviewees can be considered as experts with sound knowledge both of the Swiss agricultural policy and of the products and their production methods²⁴. Experts were also selected for their power to facilitate or hinder the development of the initiative through their financial, political, or scientific support. Experts were also selected for their power to promote a positive or negative image of the supply chain. Finally, we made sure that diverse institutions and positions were represented: representatives of national and regional authorities (ministry of agriculture, intellectual property), representatives of agricultural, environmental and consumers associations, researchers and journalists.

The next sections present the results of the two Swiss cases. These results are formulated with information about the surfaces or the number of producers. Indeed, the variables "size" and "diffusion" of the initiative must be considered in a measure of territorial impacts.

4.4.2 Results for the Rye Bread of Valais PDO

The Valais region is a mountainous region in the south of Switzerland. For centuries, the valaisan peasants lived in virtual self-sufficiency. Bread was made from rye, the only flour-bearing cereal adapted to the rigours of the alpine climate. The rye bread had the great advantage of being suitable for keeping over long periods. The peasants could take the great loaves with them on their migrations with their cattle from the valley to the mountain pastures. Those days are gone but the rye bread of Valais enjoyed a revival. This is linked to changes in eating habits and the importance attached to whole grains in a

²⁴ Boisseaux (2007) recently introduced the term "travelling elite" to qualify the experts working with protected designations of origin in Switzerland. He showed the high professional mobility of these executives that is accompanied by in-depth knowledge in complementary domains (for instance, promotion from a job at the Swiss Federal Office of Agriculture as expert on quality products, to a job related to the promotion and the representation of interests, to cantonal authorities). This observation seems valid more generally for what concerns employment in the agricultural and agro-food sectors in Switzerland, though the phenomena is particularly observed in the specific domain of PDOs. cf Boisseaux, S. (2007). Le dispositif des Appellations d'origine contrôlées et Indications géographiques protégées en Suisse, 1990 - 2006. De nouveaux pouvoirs aux interstices de l'action publique, Université de Lausanne, Université Pierre-Mendès-France de Grenoble. Thèse de Doctorat en Science Politique: 461 p.

healthy and balanced diet but also to an exemplar construction of a regional collective organisation (Réviron, 2005). The bread is mainly sold in Valais but starts being marketed in other Swiss cantons. In 2007, the initiative counted 80 rye producers, 63 bakers and 2 mills, for a production of 700 tons of rye (a bit more than 100 ha). The rye bread of Valais was registered as PDO in 2004, despite strong oppositions of competitors that were selling an industrial version of the product.

What are the acknowledged effects in terms of regional development? What are the consensus and differences when compared with the effects of other initiatives marketing bread?

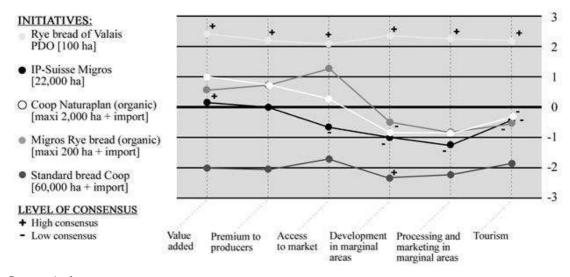
The final product *Rye Bread of Valais PDO* was indeed compared with its four main competitors on the Swiss market of bread consumption:

- A standard bread made of unbleached flour from *Coop*²⁵. Conventional bread is still the reference of the market. 30,000 producers produce 390,000 tons of bakery wheat. Because of the very specific Swiss agricultural policy, which links direct payments to ecological requirements, this standard production is environmentally-friendly produced and could receive an ecological label in other European countries.
- An *IP-Suisse* bread made with unbleached flour form *Migros. IP-Suisse* is an ecological label that was launched in 1991 by an association of producers. At the present time, the association has 5,800 producers, who farm 22,500 ha of bakery wheat and produce 118,000 tons. The main commercial outlets are the retailer *Migros* (whose all breads are *IP-Suisse* labelled or organic) and the bakery processor *Hiestand AG*.
- A *Coop* Naturaplan whole-flour organic bread. Naturaplan breads are organic breads, which are sold in the *Coop* supermarkets. Most of the breads are special whole flour breads, using Swiss and imported organic cereals.
- A *Migros* round-shaped rye bread. It is an industrial copy of the rye bread of Valais
 PDO. Produced by *Migros*, it is an organic bread made of Swiss and imported organic rye.

²⁵ *Coop* and *Migros* are the main trade names on the retailing sector in Switzerland. Together they market more than 75% of fresh agro-food products consumed at home (dairy products, fruits and vegetables...).

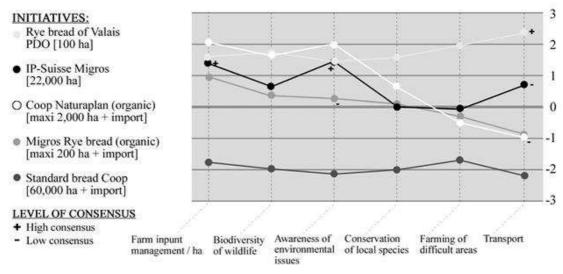
The graphs 1, 2, et 3 present the results of the Likert surveys²⁶.

Graph 1: Likert scale and economic results. Comparison of the initiative rye bread of Valais PDO with its main competitors



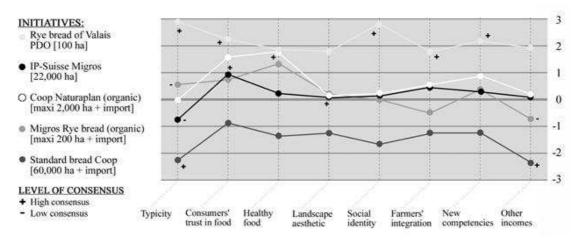
Source: Authors

Graph 2: Likert scale and environmental results. Comparison of the initiative rye bread of Valais PDO with its main competitors



Source: Authors

 $^{^{26}}$ For a detailed presentation of the results, please consult the case studies reports in www.sus-chain.org .



Graph 3: Likert scale and social results. Comparison of the initiative rye bread of Valais PDO with its main competitors

Source: Authors

• The *rye bread of Valais PDO* obtained the best grades considering almost all items. It highlights the positive effect in terms of image of a well positioned PDO initiative, with a high consensus among interviewees. The economic impact is acknowledged as regards to the added value creation, the market access, the premium paid to producers, as well as the synergies with tourism. The territorial impact in a mountainous remote place is valued. Environmental results are close to the one obtained for organic. This may be linked to the excellent image of extensive farming in mountainous areas more than with a precise knowledge of the code of practice (organic production or high standard integrated pest management production "extenso", superior to the Swiss legal requirements).

• The *IP-Suisse* bread received also impressive results regarding economic and environmental issues with a large impact considering the concerned acreage (22,000 ha, a quarter of the bakery cereals' acreage in Switzerland). Its contribution to the development of marginal areas is less acknowledged due a production spread out all over the Swiss territory. The gap in terms of image between the rye bread of Valais and its copy is considerable. The copy is made in an industrial way with organic flour mainly imported. Its image and claim seem fuzzy. A consistency is observed between the PDO and its copy regarding their appreciation as healthy food (rye flour).

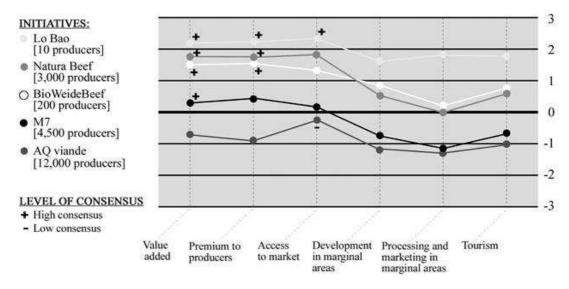
• Standard breads received negative grads for all items, despite the fact that the Swiss cereal production respects ecological requirements due to the Swiss agricultural policy (*see Annex 1*).

4.4.3 Results for Natura Beef

Natura Beef is a large initiative (almost 4,000 producers spread over Switzerland) born in the 1970s with the introduction of the suckling cow system, as answer to milk quotas (Damary, 2006). The product is nowadays mainly marketed by the retailer *Coop* in the entire Swiss territory.

The beef meat Natura Beef was compared with four of its main competitors on the Swiss home consumers market (*graphs 4, 5 and 6*):

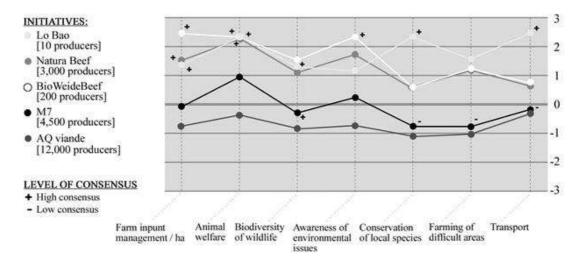
- *AQ viande*, developed by the Swiss Producers Union, is mainly a guarantee of traceability. It is considered the standard for the studied market. Thanks to the eco-conditionality of direct payments, almost the entire production meets the basic criteria of integrated production.
- Bio WeideBeef, organic meat label mainly sold through Migros outlets.
- *Lo Bao*, a small initiative in the Vaud canton, based on the farming of a typical Swiss mountain breed (the Herens breed).
- M7, label with animal-welfare extra standard steered by Migros.



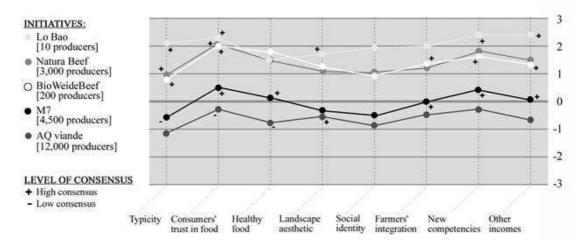
Graph 4: Likert scale and economic results. Comparison of the initiative Natura Beef with its main competitors

Source: Authors

Graph 5: Likert scale and environmental results. Comparison of the initiative Natura Beef with its main competitors



Source: Authors



Graph 6: Likert scale and social results. Comparison of the initiative Natura Beef with its main competitors.

• The ratings of *Natura Beef* were positive for numerous items and at large very consensual compared with its competitors. Its economic contribution in terms of added value, access to market and premium to producers is acknowledged. However, its role in marginal rural areas is less significant due to the spread of producers over the Swiss territory. At the environmental level, animal welfare and input management are acknowledged as being very satisfactory. At the social level, the contribution to healthier food is recognised by the interviewed people.

• *Bio WeideBeef* is acknowledged as environmentally-friendly. However, *Lo Bao* presents a profile with averages for all the territorial items above the latter. This is due to its significant local positioning, the choice of the Herens breed which has a strong image and its small-size organisation that is very active.

• *M7* and *AQ viande* are lagging behind the other initiatives. *AQ viande* received numerous negative marks, what is rather unjustified with regard to the Swiss production rules.

Source: Authors

4.5 Discussion

Presenting two cases that have very different marketing profiles and sizes ensures interesting conclusions, both regarding the performance of the initiative itself and the method used for its assessment.

4.5.1 Comparative analysis of the results

The results presented above show interesting commonalities. First, small initiatives that are well positioned and strongly localised (*Rye Bread of Valais PDO* and *Lo Bao*) received high marks for all items with a high consensus on items. Indeed, they are considered to be very efficient in all dimensions: economic, environmental and social. This performance is linked to their territorial anchorage and the consistency between their marketing claims and the attributes of the territory where they are embedded. The excellent image that such initiatives have among opinion leaders ensures important public support, particularly at the regional level (Réviron, 2005). The territorial impact is significant at the local/regional level. However, it is limited due to the small size of the initiatives.

Second, in both cases, large initiatives (*IP-Suisse* and *Natura Beef*, which has more than 3,000 producers) are well-marked. However, they are weakly localised, with the sustainability of their claim focussing on either environmental aspects (*IP-Suisse*) or animal welfare (*Natura Beef*). Both initiatives were developed thanks to the private initiative of some producers and are based on a sales strategy in partnership with large retailers. These initiatives obtain high marks for economic and environmental considerations, which is in keeping with their objectives. On the other hand, with the involved farmers being spread across the entire Swiss territory, the territorial impact is diffuse. Both initiatives are not much supported by public authorities. Nevertheless, they received technical backing from research institutes for perfecting innovative production methods.

In both cases, organic products received the best marks regarding environmental considerations such as the control of inputs per ha. But the difference with PDO products or products with environmental arguments – which are widely developed in Switzerland,

see Annex 1 – is surprisingly small (less than 1 point, see graphs 2 and 5). In addition, the limited surface impacted by organic production compared with *IP-Suisse* and *Natura Beef* confines the global environmental impact. Moreover, the amount of imported raw materials in organic bakery products sold in Switzerland is high. This damages the marking of the organic production as far as any potential positive effects only partially concern the Swiss territory. This sets the issue of relocating organic production, which is currently under discussion by professionals on the Swiss organic supply chain.

Finally, standard supply chains (standard bread made of unbleached flour, AQ viande) are badly marked for all items, and received many negative marks. This is, among other reasons, linked to doubts about mixing with imported materials. This negative result is surprising with regard to Swiss requirements in terms of animal and plant production, particularly proof of ecological performance and rules for animal-friendly livestock husbandry (see Annex 1). This lack of a positive image for standard Swiss products, despite a demanding agricultural policy, as well as the efforts and involvement of producers since 1992, sets the question of the effectiveness of communication regarding the specific qualities of Swiss products. This image problem is currently the subject of several studies of both professionals and consumers (Réviron, 2007).

The selection of compared products/systems of production is related to methodological choices, which we will now discuss.

4.5.2 Methodological aspects

First, as noted in the introduction of the section relating to the state of the art, the reference point is crucial. Any approach offers comparisons more than it assesses absolute performance. This measure of differences ensures that often surprising values with regard to a preconceived vision are highlighted. Nevertheless, in our study we have chosen to compare production systems of the main products present on the Swiss home consumer market. Results would have been shifted if we had selected a different group of products. This is standard for a benchmarking approach.

Regarding the type of persons interviewed, one should be vigilant about the risks of selfcomplacency. Some of the interviewees support initiatives and could be tempted to overgrade them in order to justify their support. Therefore, it is advised to include people in the sample that have power in terms of influence but no direct power of financial support (journalists, for instance). Moreover, it is necessary to highlight opinion divergences.

We consider that this type of studies could be realised among other population groups (such as consumers). A study was recently carried out with the same method among actors of the *Rye Bread of Valais PDO* supply chain (Gle, 2006). This study made it possible to highlight differences in the assessment made by millers and bakers. In addition, a notable difference from our results appeared. The bread made of unbleached flour was not marked negatively, as all professionals also produce standard products (bakery wheat, white flour, bread made of unbleached flour). They all considered these products to be Swiss.

Second, the approach we selected is of interest for its being systematic. All items are independent of each other and adding them together is ruled out. An initiative can be considered very efficient regarding some items and less so for others. The objective is not to be bound to be efficient for all items. This approach enables us to compare different initiatives, which is not possible with "objective" methods due to a lack of assessment tools. Nevertheless, it seems relevant to combine the two approaches when possible (value added, premium paid to producers, input use, proportion of local species and varieties). This would make it possible to verify if the image is in keeping with real achievements. Discrepancies should encourage the initiatives to correct the concerned items as soon as possible. This should be done in order to avoid any disappointment, which could be prejudicial to the image of the initiative as a whole. That is how the *Rye Bread of Valais PDO* is currently leading technical tests on the use of autochthonous varieties of rye. Indeed, one of the risks of the method, subjective in essence, is to report an erroneous – possibly shared – perception.

4.6 Conclusion

Assessing the territorial effects of initiatives marketing agro-food products with an environmental or origin-based claim is a prolific research field. This research establishes the link between economic activity and territorial impacts, and could be extended to other activities and other countries. A new field of work is currently developing in order to *a priori* identify the increase of expected territorial impacts. Indeed, external actors (NGO, public authorities) who support initiatives based on geographical indication expect potential territorial impacts (Barjolle *et al.*, 2009).

This question is tightly linked to the territorial anchorage of those initiatives and to the building of external networks that facilitate their development with financial and non-financial (technical, marketing) support. Our study strongly relies on the existence of those external networks to indirectly assess perceived effects in terms of rural development. The main interest of this study is its systemic nature, which on the one hand enables us to measure items for which there is no tool for "objective" measure, and on the other hand, enables us to compare initiatives with their main competitors. In addition, being a quantitative analysis, it is based on small-size samples and highlights consensus and opinion divergences. These results should encourage initiatives to identify their strengths and weaknesses and to decide on possible adjustments, which would thus enable backers and opinion leaders to value, verify, compare and justify their support.

Acknowledgements

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Annex 1: The Swiss agricultural policy

Initiated in 1992, an important reform of the Swiss agricultural policy was based on a separation of price and income policies. Product prices were reduced and direct payments were introduced. Direct payments were rapidly linked to environmental performances. Today all farmers must comply with a set of environmental requirements (PEP = proof of ecological performance) if they are to receive any direct payments.

The PEP consists of the following requirements:

- animal-friendly housing system: respect for the measures of the ordinance on animal welfare;

- well-adjusted fertiliser balance and regular soil analyses (maximal tolerance of 10% for nitrogenous and phosphate fertilisers);

- appropriate share in ecological compensation areas²⁷: 3.5 % of the utilised agricultural area (UAA) in the case of special crops (e.g. fruits and vegetables, vineyards, aromatic and medicinal plants), and 7 % for the rest of the UAA;

- organised crop rotation for farms larger than 3 ha of open arable land: a minimum of four different crops per year, observance of idle periods and maximal proportions for crops;

- adequate soil conservation for farms larger than 3 ha of open arable land, including in the mountainous area I: soil conservation index of 50 points (market gardening: 30 points);

- specific use of plant treatment agents: restriction for pre-emergence herbicides, granules and insecticides. Observance of limits and of the recommendations made by the forecasting and warning services. Untreated control group in case of use of growth regulators for grains or fungicides for rape, and when special permissions are granted.

²⁷ Farmers must devote this part of their utilised agricultural area (UAA) to strips of meadows along paths and surface waters, hedges, bushes, overgrowth and forest edges... This policy goeas beyond farming practices and is clearly nature oriented.

The importance of direct payments in the income of Swiss farmers is so high that 95% of the land is farmed according to the PEP conditions.

In addition to these general direct payments, farmers can participate on a voluntary basis in specific programmes with additional requirements and receive ecological direct payments (organic agriculture, outdoor paddocks, etc.)

In 1996, the contract between the Swiss society and its agriculture was embodied in the Constitution after a popular vote that won the support of 78 % of the voters.

Art 104 stipulates that "the Confederation shall ensure that agriculture substantially contributes by way of a sustainable and market-oriented production:

a) to secure provisions for the population;

b) to the conservation of natural resources and the upkeep of rural scenery;

c) to a decentralised housing settlement of the country."

The objectives embodied in the Constitution clearly acknowledge the other agricultural roles beyond the role of food production.

Annex 2: Detail of the method

The interviewees were invited to answer the following question: "according to you, *do this product and its marketing initiative contribute in a positive/negative way to...*", with a marking from -3 to +3 (see graph 7). The two investigated products were compared with their main competitors on the Swiss consumer market in a *benchmarking* approach. Coloured round stickers (orange, blue, red, yellow, black) were used to mark the products on one grid. The correspondence between the coloured stickers and the products were randomly chosen for each questionnaire. Wrappings of the products were put at the interviewees' disposal.

Graph 7: Example of questionnaire (economic aspects) and answers for the initiative rye bread of Valais PDO.

•Unbleached flour Standard, •IP-Suisse, •industrial organic rye bread, •rye bread of Valais PDO, •organic Naturaplan		
		\bigcirc
Does the initiative contribute in a positive or negative way to:		
Economic aspects	0 + ++ +++	Comments and perspectives
the creation of value added in the supply chain		
the creation of a price premium to producers		
sustain a market access to producers		
develop the economy of rural marginal areas		
maintain processing and marketing activities in marginal areas		
tourism		

For the environmental dimension, the following items were proposed for the marking: Biodiversity of the wild fauna and flora, Conservation of local domestic species/varieties, Farm input management per hectare, Increased awareness of the supply chain actors regarding environmental issues, Distance of transport, Animal welfare, Farming of difficult areas.

Items that characterise the social aspects were the following: Integration of farmers in the society, Promotion of a healthy food, Social and cultural identity, Typicity of agro-food

products, Skills and know-how of the actors in the initiative, Consumers' trust in food in general, Increase of incomes for farmers (direct sales, agri-tourism, off-farm work), Landscape aesthetic.

Surveys were realised during a seminar where participants were invited to legitimate the items and mark them individually. In a methodological point of view, the objective of the survey was also to highlight convergences and divergences and avoiding intra-group "leader-effect" phenomena and inter-participant imitations. Bilateral meetings were realised to complete the sample. An indicator regarding the consensus level was built in order to qualify average values. Answers were considered as being consensual when more than 75% of interviewees answered in the interval [average +/- 1 point]. Conversely, answers were considered as being not consensual when more of 50% of interviewees answered outside the interval [average +/- 1 point].

5 Territorial Impact of Geographical Indications. Review of Methods and Empirical Evidences

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Abstract

This paper focuses on methods for assessing the territorial impact (economic, social and environmental) of geographical indication systems. First, in a review of methods, methodological difficulties and choices are discussed and major studies are briefly presented. We highlight that it is necessary to identify a clear reference point and a relevant set of indicators and that this question has led to an active and rich research corpus. Second, we present some of the results of a recent European research project, SINER-GI. We analyse the impacts of 14 case studies in a common methodology. The results show significant differences of the stakeholders' priorities between established geographical indications and geographical indications in progress. For a first group of geographical indications in progress, which we called "enthusiasts", the most important expected impacts are the market stabilisation or increase, the value added in the region, but also the preservation of local breeds or varieties. For a second group of geographical indications in progress, that we called "socio-environmentalists", the expectations on economic issues are less important than the social and the environmental ones. Finally, for a third group of geographical indications in progress, that we called "undecided", we find that the highest scores are given to the expected economic impacts.

We can conclude that in general, observed or expected impacts of geographical indication systems are mainly linked with economic or economic-related issues. However, the review of the 14 case studies also shows that if the economic concerns are the only motives in the implementation of the GI protection schemes, there are some crucial risks.

Keywords: geographical indications, food chains, impact evaluation, territorial impact, case study

5.1 Introduction

In this paper, we define territorial impact as being observed effects of the implement of a Geographical Indication (GI) system or protection scheme in the three dimensions of the sustainable rural development (economic, social and environmental) and partly on human health.

For established GI systems²⁸ or protection schemes, effective impacts can be assessed but the factors that are causing the impacts are always complex to identify. For example, many comparative studies show the great influence of general factors such as political support or other policy concerns (Barjolle and Sylvander, 2002). The link between GIs and potential positive effects in terms of rural development has been investigated for a decade (Allaire and Sylvander, 1997; Pivot, 1998; Larbouret, 2000; Pacciani *et al.*, 2001). The relationship between environmental values and GI systems, which includes ecosystem pollution, biodiversity, landscape etc., is the least studied dimension. Nevertheless, researchers have started exploring it with great interest (see for example Gauttier, 2006; Garcia *et al.*, 2007; Riccheri *et al.*, 2007; Cavrois, 2009).

Furthermore, it is difficult to distinguish what is caused by the legal protection versus the GI system itself (Belletti and Marescotti, 2006). However, different methods have been developed to assess the impacts of GI initiatives (Paus and Réviron, 2010b).

In many non-European countries, GI systems are in progress and are not yet established. In this case, it is not possible to assess their effective impacts. It is only possible to identify and assess factors that could potentially by impacted by the GI system or protection scheme. These potential impacts are often related to the main motivations of initiators, facilitators or backers of GI systems and protection schemes.

One of the objectives of the European research project SINER-GI²⁹ (2005-2008) was to establish a common methodological framework to analyse GI impacts. Indeed, in a

²⁸ A GI system is defined in the SINER-GI project as:

[&]quot;the set of actors who are effectively engaged in creating value and improving the strategic marketing position of the GI product by spontaneous individual or organised collective action and those who are engaged in the activation and reproduction of those local resources (natural resources, knowledge, social capital) which make the GI product specific"

²⁹ SINER-GI - Strengthening International Research on Geographical Indications: from research foundation to consistent policy. European research project funded by the European Commission and the Swiss Government

previous research project³⁰, common grids of analysis were successfully developed to compare registered European GIs and identify key factors of success and failure (Barjolle and Sylvander, 2002). The aim of this paper is first to review the literature available on impact assessment. Second, we will present a summary of some of the case studies conducted in the frame of the European research project SINER-GI. Third, we will compare the potential impacts across the 14 SINER-GI case studies according to a common methodology and discuss limits and conclusions which can be drown.

5.2 **Review of Methods**

This section proposes a literature review on the impacts of GIs on the related territories, largely based on the review made by Réviron and Paus (2006). The numerous studies aiming at assessing the pure economic performance of GIs (generally with regard to one specific indicator, e.g. price premium) and the economic impact on consumers are not classified in our typology. However, it is worth mentioning the recent extensive review undertaken by Brameley *et al.* (2009) where they discuss prices and welfare analysis (see also Anders *et al.*, 2009; Mérel, 2009) and willingness to pay for GIs in the light of different methods (e.g., hedonic pricing, conjoint analysis).

After highlighting the methodological difficulties and choices, major studies are briefly presented.

5.2.1 Generalities

"Objective methods" provide a picture of the impact differential between two states allowing the comparison between farms, regions or supply chains. This differential can either be calculated for two different moments in time or for two objects "other things being equal".

1. The first approach - the diachronic evaluation - consists in looking at the situation of a GI system at different periods of time (e.g. before registration and afterwards).

³⁰ DOLPHINS, Development of origin labelled products, humanity, innovation and sustainability. Concerted action QLK-2000-00593 financed under the fifth framework programme of the European Community for the research, technological development and demonstration activities (1998-2002)

2. The second approach - the synchronic evaluation - compares two similar products, one with and the other one without a GI. These methods are based on the comparison of indicators which can be directly measured (hard data such as volumes, prices, number of employees). The main sources are statistical data, accounts data, enquiries and field observations. Nevertheless, more qualitative indicators can also be introduced (for example education level) with data collected during expert and stakeholders interviews.

"Subjective methods" are based on comparison of preferences that measure the level of recognition of positive or negative effects of initiatives by external or internal actors. Interviewed actors can be experts or decision makers. These methods potentially measure a large number of indicators and highlight the divergence or convergence in opinion about the impact of GI systems (Paus and Réviron, 2010b).

5.2.2 "Objective" methods

Many research studies base their assessment on "objective methods". The first fives studies presented hereafter are diachronic evaluations ("before/after historical approach"). Methods 6 to 11 are synchronic ("with/without approach").

1. Hauser (1997) simulated the evolution of the rural territory after a modification of the code of practice of Saint Marcellin PDO^{31} cheese that would oblige the producers to use less than 50% of maize silage in the winter feed ration. The study shows that this new limitation would reduce the risk of land abandonment and that compared with a set of individual decisions, the mechanism of the code of practice would increase the impact on the territory.

³¹ PDO means Protected Designation of Origin. It corresponds to the legal regime of *sui generis* protection implemented in the European Union (European regulation 510/06). For more detail see Thévenod-Mottet, E. (2006). WP1 report: GI Legal and Institutional Issues. Strengthening International Research on Geographical Indications: from research foundation to consistent policy SINER-GI Project, European Commission - Sixth framework programme. 2006.

2. Barjolle and Thévenod-Mottet (2004) used the transaction costs theory to evaluate the impacts of the PDO registration of Abondance cheese on the spatial distribution of the supply-chain and the type of production (on-farm vs. dairy production). The study shows that among all the different explanatory factors, three are directly linked with the PDO registration: the delimitation of the area of origin, the notoriety of the product and the possibility to distinguish the labelling according to the different types of production (on-farm processing vs. processing in dairy units). Furthermore, the registration did not help to keep traditional cheese dairies in the area where the cheese was first produced and it did not slow down the industrial concentration of cheese production. On the other hand, the PDO did play a role in the increase of farm production.

3. Suh and MacPherson (2007) analysed, with a diachronic approach, the impact of the registration of the GI "Boseong green tea" on production volumes and sales. Production increased from 500 tons in 1997 to 1200 tons in 2005 and the market price increased by 90% between 2002 and 2006 whereas prices for domestic tea grown elsewhere in Korea hardly changed at all. These results highlight the effectiveness of the GI in a context of rising import competition through trade liberalisation. Moreover, the authors emphasised the impact of the GI on tourism and the preservation of regional cultural heritage (green tea festival, train tours).

4. Bowen and Valenzuela Zapata (2009) examined the social, economic and ecological impacts that the agave-tequila industry has had on one community in tequila's region of origin. They show that two main factors, the cycles of surplus and shortage of agave and the changing production relations in the agave-tequila industry have led to negatives effects in terms of sustainability. According to the authors, economic insecurity among farm households, increased use of chemical inputs and overall decline in fertilizer application are due to the failure of the GI for tequila to value the ways in which the *terroir* of tequila's region of origin have contributed to its specific properties.

5. Based on a comparison between a study realised in 2000 (Zaugg, 2001), which aimed at calculating the value added creation within the Tête de Moine PDO supply chain, Isler

(2007) extended the study to data of 2006. The comparison shows a job creation in the region at each level of the supply chain (linked to the production as well as to the promotion of the product), despite a negative trend at national level in the same sector. It is assessed that 60% of the value added stays in the region. It highlights the importance of job creation – however small in quantitative terms - in remote areas.

6. *Economic concept of the territorial rent*. Hirczak *et al.* (2005) used this concept to determine whether a bundle of local products (basket of goods) can have a positive impact on the territory in terms of attractiveness and image and can be part of a strategy of local development. The study shows that the basket of goods can be an interesting and efficient tool for territorial development and that a PDO product may be the leader product of the basket.

7. *Comparison between PDO supply chains and the national supply chain.* Coutre-Picart (1999) compared several PDO cheese supply chains of the northern Alps in France with the national cheese supply chain in order to determine whether the PDO supply chains have a positive economic impact in the region. The study highlights a clear economic performance of the PDO cheese supply chains, with effects on the territory in terms of value added, employment and investments. Chatellier and Delattre (2003) used the same method and found that the PDO cheese supply chains of the northern Alps have the same income per work unit (compared with the national cheese supply chain) despite lower subsidies.

Desbois and Néfussi (2007) compared PDO and non-labelled products with the data of the Farm Accountancy Data Network (FADN), an instrument for evaluation the income of agricultural holdings and the impact of the Common Agricultural Policy. Regarding the French dairy production, the authors highlighted a significant difference in the prices paid to producers, in favour of the PDO. Moreover, they stated that this added value is not totally absorbed by higher production costs.

8. Comparison between a PDO and an industrial supply chain within a same area or in similar administrative areas. De Roest and Menghi (2002) compared the PDO

Parmigiano-Reggiano cheese supply chain with the industrial milk supply chain regarding economic and environmental performance. The milk price, the farm structure, the employment per heads of cattle and the balance of nitrogen where used as indicators. The results show that the PDO supply chain generates higher employment levels both on dairy farms and in the cheese dairies because of labour intensive practices. Moreover, the results show a lower loss of nitrogen per hectare due to a specific farming system (different cow feeding regimes). Furthermore, the study illustrates the importance of strong links between the actors and local culture and history for the success of a quality product.

Dupont (2003) used the same method and compared the PDO Comté cheese with the industrialised emmental cheese. In a combined diachronic/synchronic approach, the study highlights various positive effects of the PDO supply chain: increase in production, higher premiums to the producers, higher farmer incomes, slow down of rural exodus, preservation of an outstanding landscape, development of agro-tourism.

Paus (2003) conducted a study in which she researched on indicator weighting and aggregation issues for a better communication of global impacts of PDO supply chains. In that perspective, she compared the Raclette cheese supply chain (in the process of being registered as a PDO) and the consumption milk supply chain (in the nearby valley) in the different dimensions of sustainability. She found that the Raclette cheese supply chain favoured the upkeep of land and helped maintain local knowledge and regional specificity through the production of typical cheese in many small dairies. No significant differences were found in terms of environmental impact. This result might be explained by the fact that the Swiss agricultural policy is very demanding regarding environmental requirements.

Hauwuy *et al.* (2006) combined this method and the one mentioned above (comparison with the national supply chain) to find out whether the cheese PDOs in the northern Alps have impacts in terms of agricultural dynamics, use of space, environmental performance and social relations. They found that the cheese PDO supply chains have a positive impact on agricultural dynamics in the production areas, that the incomes are similar to the French average despite the smaller farm sizes (milk quotas), that the annual worker units employed are higher and the direct subsidies lower. On the other hand, the presence

of a PDO supply chain does not seem to reinforce the direct participation of the farms in tourist activities such as direct sales or agri-tourism. These activities are stimulated, but mostly carried out by non-farmers.

Vakoufaris (2010) stressed that "the impact of Laotyri Mytilinis PDO cheese is on one hand very important for Lesvos island but on the other hand not radically different when compared with the impact of Graviera, a close substitute and non-PDO cheese, which is also produced in the area by the same actors". Nevertheless, he mentioned an increase in production of more than 100% between 1998 and 2005 (to 626 tons) for the PDO cheese, while during the same period, the production of the substitute dropped from 957 to 696 tons. However, no price premium at producers' levels was observed.

9. Overlay of environmental indicators and the number of PDO products in the same territory. Hirczak and Mollard (2004) used this method of space overlays to determine whether the PDO differentiation offers a significant increase of environmental quality in the geographical areas concerned. The results show that a positive correlation can be observed between the cheese designations and the environmental quality. The density of producers is one of the favourable factors; however this link is neither univalent, nor systematic.

10. *Benchmarking of PDOs.* Barjolle *et al.* (2007) studied the economic performance of PDO cheese supply chain in order to determine whether a PDO protection is a guarantee for creating and sharing value added with producers. The comparisons of quantitative data regarding prices at different levels of the supply chain of various PDO cheese in France and Switzerland shows that the PDO cheese organisations can obtain a premium at the consumer level and distribute this extra value to the producers. However, this performance is not guaranteed by the PDO registration and is the result of collective action.

Frayssignes (2005) compared French PDO cheese supply chains and analysed their contribution in terms of territorial development. He introduced two concepts: the concept of territorial anchoring and the concept of "pole AOC". He found that the PDO supply chains only had a relatively small impact on the local economy. Nevertheless, he

highlighted positive effects such as price premium and valorisation of the profession of farmer.

Wiliams and Penker (2009) compared two case studies, the PGI Welsh Lamb and the PDO Jersey Royal Potato. The authors could not identify profound direct links of the two products to ecological, economic and social effects. However, they found many indirect links. The GI evaluated were stronger tied to economic and social values than to ecological considerations. Moreover, the authors stressed that no significant territorial disadvantages were uncovered.

11. Analysis of the environmental components of the code of practice of the Swiss PDO/PGI products. Thévenod-Mottet and Klingemann (2007) analysed the code of practice of the Swiss PDO/PGI products in order to identify the rules with potential positive direct or indirect effects on the environment. The results show that even though the Swiss ordinance on PDOs and PGIs does not require more environmentally friendly production methods than for standard Swiss products, some rules included in the code of practice could have positive external impacts on the environment. For instance, biodiversity could be enhanced by the obligation to use rare or ancient varieties or homemade leaven and the requirement to feed the cows with grass.

5.2.3 "Subjective" methods

Some research studies base their assessment on "subjective methods". The idea is to ask informed people to grade initiatives regarding various items in order to evaluate their perception on the positive or negative external effects of the marketing of a product.

12. *Benchmarking and Likert scale*. Lehmann *et al.* (2000) studied the side-effects on the territory of various regional agro-food supply chains in the Valais canton, Switzerland, using the Likert scale method. Paus and Réviron (2010b) used the same method to compare the effects of Rye Bread of Valais PDO on rural development with its main competitors. The study highlights the excellent grades obtained by the PDO supply chain

for the economic, social and environmental dimensions and shows the positive effects of a well positioned PDO initiative, with a good consensus among the interviewed persons.

13. Analysis of the practices linked to sustainable development in PDO and PGI organisations. Ollagnon and Touzard (2007) conducted a survey to characterise practices linked to sustainable development in PGI and PDO organisations in France. The results of the 141 PDO and PGI investigated show that the organisations predominantly conduct economic activities (on average 3.9 actions per organisation, mostly collective promotion, fairs, websites). However, they also claim to conduct on average 2.4 actions linked to the environment (most frequent actions mentioned: reduction of pollution through changes in the code of practice, soil preservation, setting up of good practices), 2.9 actions linked to heritage and culture (e.g. festive events), and 3.6 actions linked to social cohesion and solidarity (e.g., trainings, participation in the social life of the territory). The results show that the investigated GI organisations undertake numerous and various voluntary actions in the fields of sustainable development and management of resources.

5.2.4 Discussion of the review of methods

The literature review presented above provides interesting methods and strong results and shows that the assessment of effects of GI system or protection scheme has become an important research programme. Case studies investigated mainly come from southern Europe, where the culture of protecting GI is historically embedded. As for example, France has a century of history in promoting official origin-based quality signs (Sylvander *et al.*, 2007). Nevertheless, a growing interest in impact evaluation rose in countries that recently established GIs' policies, such as Switzerland and emerging markets (e.g. the Republic of Korea). The research studies clearly identify the ability of GI production systems to create or reinforce positive effects on rural development, which are very welcome in marginal areas. Nevertheless, it also shows that the protection cannot in itself guarantee rural development benefits.

Behind the apparent diversity of studies, clear methodological choices can be identified according to their objective/subjective approach, diachronic/synchronic evaluation and to their reference point. However, no single well established method for measuring the impacts of the implementation of a GI system or protection scheme exists. Distinguishing the impact of the supply chain (and the dynamic of its collective organisation) from the impact of a special protection scheme (for instance a PDO protection) is challenging (Belletti *et al.*, 2005). The chain of causality is difficult to establish, as acquiring a legal protection, reaching an economic performance as well as building up a strong collective organisation are objectives of GIs' actors that strengthen each other.

Many methodological difficulties arise, such as the choice of a reference point for the synchronic approach, the collection of reliable data, the choice between objective or subjective methods, the sampling procedure adopted in the subjective method, and the separation of causes as many factors work together.

Each method has its limits: the specific point of view of the analysis, the size of the territory, the dimensions taken into account for the impacts (economic, social, and environmental), the number of indicators investigated and their prioritisation and aggregation, the size of the survey sample, the level of participation of external or internal stakeholders.

To overcome some of these limits, participative approaches in the case of GIs' impact assessment have recently been applied (Reboul, 2010). Coming from the evaluation toolbox of development projects, this approach has an interesting potential, in particular in situations of data scarcity.

5.3 Empirical evidences

5.3.1 Case study methodology for data collection

In the frame of the European research project SINER-GI, a large team of researchers investigated fourteen case studies in different countries around the world (at diverse

stages between "Origin product" and "recognised GI", according to the common grid of definition defined at an early stage of the SINER-GI project (Thévenod-Mottet, 2006)).

The fourteen case studies are the following:

- Roquefort (cheese, France)
- Melton Mowbray Pork Pie (pie, United Kingdom)
- Tequila (distilled product, Mexico)
- Paprika of Kalosca (spice, Hungary)
- Rooibos tea (herbal tea, South Africa)
- Argentinean Pampean Beef (fresh meat, Argentina)
- Brazilian Pampean Beef (fresh meat, Brazil)

- Chontaleño cheese (cheese, Nicaragua)
- Pico Duarte coffee (coffee, Dominican Republic)
- Jinhua ham (pork, China)
- Basmati (rice, India and Pakistan)
- Kraljevacki kajmak (dairy product, Serbia)
- Bleuets du Lac Saint-Jean (berry, Canada)
- Florida Oranges (fruits, United States of America)

5.3.2 Evaluation of the fourteen case studies

We elaborated a common conceptual framework for the assessment of case study results after the case studies had been completed. In order to achieve this harmonised assessment, we established a grid of scoring, in two steps:

- First, we selected relevant items. Per definition, those items had to be comparable and assessable for all the case studies.
- Second, we did a scoring of each item, based on case study reports, in discussion with the person responsible for the case study or its reviewer.

After a complete review of all the case studies, the following items were identified as relevant, comparable and assessable:

On the economic level	On the social level	On the environmental level
- Market stabilisation /	- Local Employment	- Local breed / variety
increase	- Empowerment of	- Extensive farming
- Price premium	producers	- Natural resources
- Value added in the region	- Cultural value / Tradition	

The sanitary / hygienic rules also appeared to be an important item, in terms of potential effects of the GI recognition process.

Then, for each item, a scoring was 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.

It is important to clarify that, as most of these are new or emerging GI systems, almost all the impacts are expected. But certain impacts are prevalent in the motivation of the initiators / supporters.

The results show that for the established GIs (figure 1), the economic impacts are the most important, and in the social dimension, the local employment is the most relevant indicator for stakeholders. In fact, the price premium, the value added in the region and the local employment received the highest scores.

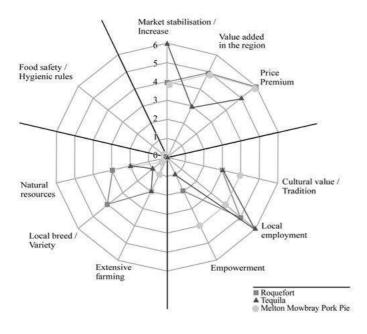


Figure 1: Impacts for established geographical indications

Source: authors

For a first group of GIs in progress, which we called "enthusiasts" (figure 2), the most important expected impacts are the market stabilisation or increase, the value added in the region, but also the preservation of local breeds or varieties.

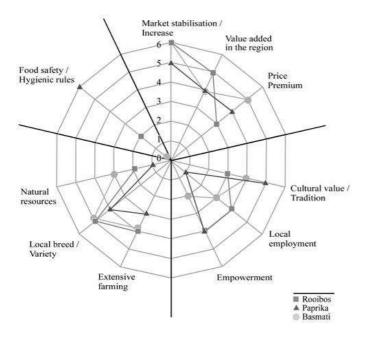


Figure 2: Expected impacts for geographical indications in progress, "Enthusiastic"

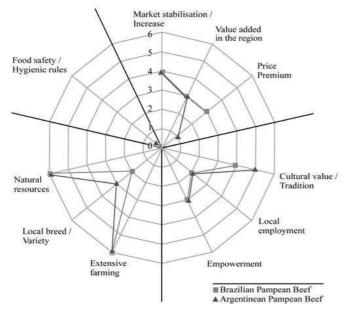
Source: authors

All the dimensions received high average scores. For these products, it seems that the motivation of all actors is high, and that the expectations are high for the three dimensions of sustainability.

For a second group of GIs in progress, that we called "socio-environmentalists" (figure 3), the expectations on economic issues are less important than the social and the environmental ones. The initiatives mainly stem from a demand of recognition of specific farming practices. Indeed, these extensive and traditional farming practices are well

adapted to the area. The two beef meats from the South American Pampa are in this second category.

Figure 3: Expected impacts for geographical indications in progress, "Socioenvironmentalists"



Source: authors

For a third group of GIs in progress, that we called "undecided" (figure 4), we find that the highest scores are given to the expected economic impacts. Nevertheless, for certain products, key actors consider the food safety and hygienic rules as being important drivers. Indeed, the evolution of general standards might put GI products under pressure. In general, issues related to the environment or society are considered as less important for the local stakeholders.

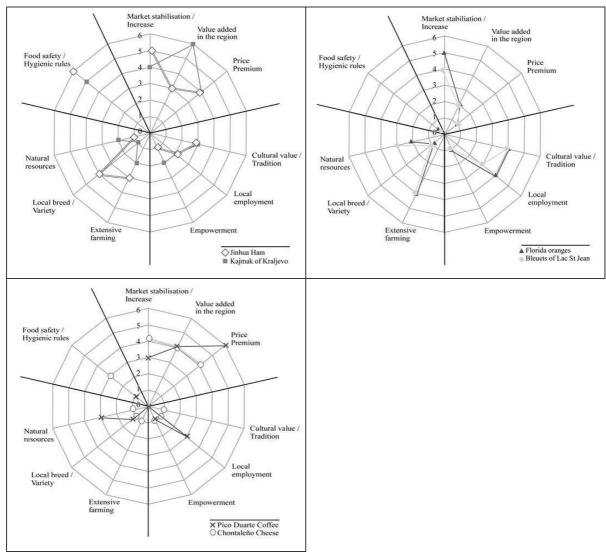


Figure 4: Expected impacts for geographical indications in progress, "Undecided"

Source: authors

For the studied products, there are clearly more expectations in terms of economic effects of GIs. The other dimensions are nevertheless also important but in diverse ways, depending on special concerns in the local context. For the local actors or the external initiators of the GI initiatives, the consensus about the potential impacts is a good starting point as it leads to common objectives. The role of an external facilitator can be precisely to shed some light on the conflicts of interests or the common perceptions of the stakes, in order to facilitate the compromise about the delimitation of a geographical area or the definition of the conditions of production.

5.4 Discussion and conclusion

We can conclude that in general, observed or expected impacts of GI systems are mainly linked with economic or economic-related issues. However, the review of the 14 case studies also shows that in the cases where the economic concerns are the only motives in the implementation of the GI protection schemes, there are some crucial risks. For instance, the case of Chontaleño cheese in Nicaragua shows that a registered GI can lead to more monopolistic power in favour of the most powerful actors in the GI system, and have disastrous consequences for small scale farmers and dairies that might lose their access to the market. The delimitation of the geographical area and the technical constraints can also have the negative effects of unfair exclusion of certain actors. Additional costs linked to certification could also exclude small scale farmers from the benefits of the protection or even exclude them totally, as it could be the case for kajmak in Serbia. For the established GI system Tequila, it is obvious that the benefits in terms of premium prices are captured by out-of-area actors.

Therefore, it is a must in our view to seriously consider sustainable agriculture and rural development concerns when defining the roles of the institutions to be involved and the procedures of the GIs implementation schemes. First, not only the intellectual property rights have to be taken into account. Other related policies are crucial. The agricultural policy, the rural development policy, the food safety regulations and the anti-trust policies play important roles in the optimisation of the positive effects on sustainability. From the beginning of the registration procedure, measures like the publication of the code of practice and the opening of an opposition procedure are important. They legitimate the definition of the product negotiated by the actors themselves (delimitation of the area of origin and definition of conditions of production). Otherwise, given that after the registration, the code of practice becomes mandatory for all the users of the name, there is a risk of serious loss of efficiency of other related policies. For example, when the definition of an area of origin is too large or the conditions of production too vague, the internal competition and stimulation between small scale farmers or processors can be lost very rapidly. Indeed, new producers, which compete on costs with completely different production methods, can easily capture the image of the product. As a consequence, the benefits of other policy measures in favour of protecting natural resources or traditional knowledge can be lost.

Our results have clear limits in terms of broadness. In fact, based on only 12 case studies and 2 control cases, the representativeness is not reached. There is a clear need for further research on impact assessment for a quantitative representative sample of GI systems. We could for example conduct such an assessment for all the 50 products described in the data base available as a result from the SINER-GI project, as well as for case studies investigated in the framework of the FAO programme "products with quality linked to tradition and origin". To do this, we should assess beforehand quality and quantity of available data and define which cases could be analysed with the set of identified methods. For ex-post assessment, synchronic methods are more feasible. However, in the case of future projects or new GI initiatives, it is recommended to plan and implement a baseline study from the beginning.

There is also a need to elaborate best practices to introduce and achieve a GI scheme at an institutional level. In developing countries especially, the weaknesses of public support and institutions are very high. In some cases, there is even a risk to have more negative than positive effects due to wrong decisions at the moment of the registration procedure.

It is obvious that institutional GI legal frames are neither sustainable agricultural policies nor rural development policies. They are policies related to intellectual property rights, as a special case apart from trademark registration, for products which have specific attributes linked to their geographical origin. Nevertheless, in some cases, our results show that the territorial level defined by the GI is sufficiently coherent to host valuable Sustainable Agriculture and Rural Development (SARD) programmes.

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SINER-GI Case study reports

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Perret A., Thévenod-Mottet E. (2007), Florida Oranges, WP5 Case study Report, SINER-GI project.

6 Synthesis and concluding remarks

6.1 General conclusions and discussion

In various countries and at different periods of time, a range of justifications has been developed to define and protect GIs at national and international levels (Sylvander *et al.*, 2006). The contribution of GIs in terms of rural development and conservation of natural and human heritages is the most recent argument developed.

Hence, promoting GIs and encouraging their protection as means of promoting a sustainable rural development imply to identify what are the favourable factors both intrinsic and exogenous to the GI, and to identify what are the territorial effects.

At national level, the institutional environment - and in particular the legal framework builds a general scheme. However, intrinsic factors of GI initiatives also play a determinant role in the production of positive territorial effects. In the introductive part (paragraph 1.1.1 g)), we reported that the literature identified the type of organisation and its decision making mechanisms on one hand, and the territorial intermediaries (public and private coordination and partnerships) on the other hand, as being crucial factors that determine territorial effects (Allaire and Sylvander, 2000; Marsden *et al.*, 2000; Barjolle and Sylvander, 2002; Belletti and Marescotti, 2002; Frayssignes, 2005; Hirczak *et al.*, 2005; Scheffer, 2005; Jahn *et al.*, 2006).

Indeed, although the choices regarding internal governance (both in terms of organisational pattern and strategy) primarily answer economic efficiency objectives, they have knock-on effects on the territorial performance of the agro-food initiative (see for example Barjolle *et al.*, 2007; Tregear *et al.*, 2007).

The type of organisation developed to pilot a GI is an intrinsic factor of the supply chain. The territorial partnerships can be seen as an outcome of the strategy displayed by the supply chain's operators. These partnerships reflect the level of articulation between the agro-food initiative and the rural governance.

In the following section, we refer to the research questions outlined in paragraph 1.2.2 and expound the findings.

Research question A: Does the internal governance of GIs have the same determinants in transition countries as in the Western Europe and Switzerland?

In chapter 2, we investigated what are the governance structures in Serbian GIs and what are their potential territorial effects.

Serbian GIs are under construction. Currently, there is no formal collective organisation, as observed in the European Union, such as professional or inter-professional associations.

Actually, the governance structure is not characterised by a collective organisation. In Serbian GIs, we observe a trend of processors towards partially vertically integrating the production. Indeed, in this context, concurrent sourcing ensures a plasticity and both vertical integration and (formal and informal) contracts with farmers might cohabitate.

Following the typology proposed by Williamson (1991), followed by Ménard (2004) and Réviron and Chappuis (forthcoming), we can place the GIs in Serbia at the border between hybrid forms (leadership and formal government) and hierarchies (figure 1).

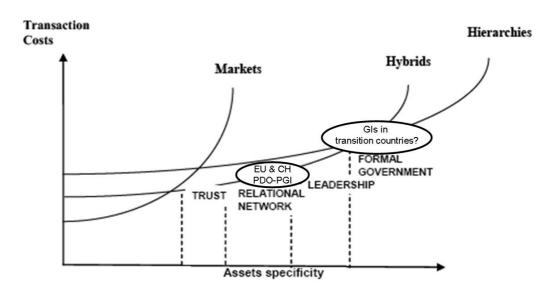


Figure 1: Place of GIs' alliances in Ménard's hybrid forms classification

Source: Following Williamson (1991), Ménard (2004), and Réviron and Chappuis (forthcoming)

The identified determining factors of this individual strategy are the following:

- Institutional factors (e.g., lack of a clear political vision for agriculture and rural development, poor legal enforcement of business relationships, lack of controls);
- Historical factors (low level of trust between operators, reluctance to participate in cooperatives);
- Local economic factors (need to circumvent uncertainties over quantities and qualities of raw materials, entrepreneurial behaviour of actors with investment capacities).

These determining factors, identified in Serbia, might be similar in numerous transition countries, though further research is needed to conclude for transition countries in general.

Some of the determining factors are similar to those identified in western European GIs (e.g., uncertainty over quality), nevertheless, the institutional context, which is stable and enforced in Switzerland and Western Europe, is a crucial factor that induces a shift to vertical integration.

The observed governance structures, the trend towards vertical integration, are linked to individual strategies, and are not part of a global territorial strategy. Therefore, we cannot talk about a "territorial strategy" developed by the operators.

However, chapter 3 demonstrates that facilitators, who attempt to create a collective action, build network and partnership with other territorial actors (e.g., municipality, agricultural school, research institute, veterinary station, chamber of commerce), thereby developing a territorial strategy, regardless of the type of supply chain's governance structure.

Finally, the main determinant of a territorial strategy is the facilitator's capacity to enlarge networks and build partnerships with other actors of the territory.

Research question B- Is there a link between internal governance and the potential territorial effects? Is there a pattern that should be promoted in order to develop a territorial strategy and positive effects in terms of territorial impact?

Relational networks, in the form of formal collective organisations, such as professional and inter-professional associations, were identified in the literature as the most promising factors to observe a territorial strategy linked to positive territorial effects.

In Serbia, territorial strategies, revealed by partnership building with other territorial actors, were observed despite the absence of collective organisations (table 1). Nevertheless, these strategies are exogenous towards the supply chains; and the absence of collective institutional arrangements between operators hinders the development of territorial strategies initiated by facilitators.

	Switzerland	Serbia
Governance structure of the supply chain	Trust, Relational Networks (Réviron and Chappuis, forthcoming)	Markets, Leadership, Formal governments, Hierarchies
Collective organisation	Professional or inter-professional associations (Réviron and Chappuis, forthcoming)	External initiators, no formal organisation
Governance strategy	Territorial, sectoral, corporate or mix (Perrier-Cornet and Sylvander, 2000; Frayssignes, 2005)	No clear collective strategy within the supply chain (individual and corporate strategies), Network and partnership building thanks to the presence of external facilitator(s)
Potential positive territorial effects	Potential benefits highlighted in section 1.1.3. <i>d</i>) : Sustainable use of natural resources, location of economic activities, location of the know- how's handing down and support to the reproduction of local social system, promotion of the global image of the territory, and feed- back effects on the PDO, territory is the space framework which guarantees the product identity	Medium-term potential benefits concern the supply chain (and indirectly the territory) (ch.2): Small- scale processing position the product on new markets and offer new opportunities for small households, growing innovation and investment capacities, managerial and technical innovations swapped between integrated sets of producers and suppliers in a learning process

Table 1: Types of governance observed in Switzerland and Serbia and potential territorial effects

Source: Author

The literature stressed that inter-professional organisations are the most promising pattern to obtain positive territorial effects. However, it is also highlighted that the type of organisation does not guarantee them.

Power relations and decision-making mechanisms within the organisation are key factors to negotiate the value added distribution, which is the most expected benefit from building a GI, at the supply chain level as well as at the territorial level.

In the investigated Serbian cases, we highlighted the emergence of both vertical integration and contracted purchasing strategies. In chapter 2, we discussed whether these governance structures may have positive effects in terms of territorial impact, and under what conditions. The results highlighted that the potential territorial effects are balanced. In the absence of both favourable institutional framework and historical background of cooperation, developing hierarchical strategies present potential advantages for smallholders: transfer of technical innovation, access to new markets.

Serbian GIs are at the very beginning of their development. Most of the potential benefits observed in the first development stage concern the stabilisation of the supply chain in a period of important restructuring, the development of new market opportunities and learning process of managerial and technical innovations (table 1).

Unfortunately, the time-frame of the study did not enable us to analyse further the impacts.

Research question C- What is the role of external facilitation in the emergence of a GI?

Although the role of facilitators in building collective agro-food initiatives is stressed in the literature (see section 1.1.4), no study has investigated in depth the role of facilitation in a GI-based initiative. Our research is concentrated on the early stage of GIs' development, as it was not possible to observe the long-term process of scaling up in the given time-frame.

In chapter 3, we proposed an analytical framework to conceptualise the role of GI facilitators. Beyond this, the challenge was to identify the failures and success of facilitation. The case study methodology enabled us to investigate the process in its real-life context.

A need of facilitation activities both at local and national levels was stressed. Institutional facilitators have the mission to coordinate national institutions, raise awareness and build capacity at national level. Our results show that local facilitator cannot both work at local and national levels, due to tight time schedule and a demanding work at local level.

Local facilitators must help structure the group, catalyse the group process and develop formal and informal networks. By bonding producers, bridging producers to local stakeholders and linking them to diverse formal and informal institutions, facilitators promote and develop the social capital of the group of GI producers.

Nevertheless, in absence of clear short-term economic benefits for each farm and enterprise, these activities cannot overcome the reluctance of producers to join a collective action.

Our research suggests that the primary mission of facilitators in the early stages of collective initiatives is to highlight, beyond collective benefits, the potential individual benefits that operators can gain while joining the collective action.

Second, facilitators must help the operators define their common objective. To define a common objective is a first step to establish a concerted management of the product, as well as the territorial resources associated with it. Nevertheless, in the Serbian context, where entrepreneurs develop and invest in individual strategies of partial vertical integration, the difficulties for the facilitator to point out potential common individual profit are higher, as well as to define a common objective that would be the ground of a collective action.

Moreover, in order to achieve his/her missions, the GI facilitator must combine skills and expertise in several domains:

- Micro-marketing (definition of the unique selling proposition and the sell potential);
- Technical (code of practice, definition of norms);
- Legal (knowledge concerning the available protection schemes);
- Managerial and organisational (conflict management, knowledge of diverse organisational patterns);
- Animation (communication and inclusion of less powerful actors).

As Markelova *et al.* (2009) stressed, it is agreed that NGOs with an appropriate skill set may be the best facilitators of collective marketing initiatives. But, the authors also emphasised that they might be tempted to intervene too actively. Indeed, facilitators are not leader in its traditional meaning. Our research also showed that there is a risk for local facilitators to lean towards authoritarian leadership, and lose participative approach that would empower producers.

Our research suggests that co-facilitation (Knight and Scott, 1997; Hogan, 2002 p.85-112), associated with distributed leadership (Gronn, 2002) is recommended in order to both distribute the responsibilities in a complementary and interdependent manner towards the local community and the backers, and to limit the temptation to lean towards a more directive leadership's style.

Finally, related to the research question B, facilitators play a role in enhancing rural development considerations. As seen in the above section, they build partnerships with other territorial actors. Additionally, beyond a conception of rural development based on a territorialisation of action and a construction of networks, local facilitators become ambassadors of rural development concerns. Indeed, they relay the local expectations of both territorial actors and operators with regard to rural development issues.

Therefore, local facilitators must increase awareness and encourage the group's participants to define common objectives in terms of rural development. These priorities might also help the operators to establish a commercial promise linked to their product.

Role of the institutional environment

The role of the institutional environment was not addressed as such in the research questions introduced in section 1.2.2; nevertheless chapters 2 and 3 have highlighted this crucial factor. Operators' decision-makings regarding the choice of organisational pattern and involvement in collective action are influenced by the perception that operators have of their institutional environment. Developing GIs requires a stable institutional environment and trust among local and institutional partners. Public-private reciprocity can be guarantee when mutual trust is observed as well as legitimate representation and trustworthy policies (Wiskerke *et al.*, 2003). A transition context is in favour of vertical integration strategies. Poorly enforced laws regarding intellectual properties, quality controls and quality signals, favour individual strategies.

Moreover, as it was mentioned in the conclusions of the chapter 5, the GI Serbian law might have even negative effects with regard to collective dynamics. The Serbian legal framework was strengthened during the last four years; however it is still not efficiently enforced. In addition, despite an increased awareness among institutional actors, the absence of both incentive towards a collective application and opportunity to oppose the registration are not in favour of inclusion strategies that could have rural development benefits.

Finally, the success of GI collective initiatives not only depends on the efforts of the involved producers but also presupposes a responsive and favourable institutional environment. As Bruns and Bruns (2004) stated, beyond the stages of initial enthusiasm, sustainable changes requires good follow-through from planning to action and a supportive institutional environment.

Research question D- What methods must be developed to measure the territorial impact (economic, environmental and social effects on a territory), as well as the recognised effects on the territory? And how can territorial impact be assessed in emergent GIs?

Chapters 4 and 5 tackle these questions. The review of studies shows that the assessment of the territorial effects of agro-food initiatives has become an important research field.

Nevertheless, there is no well-established method and the assessment remains very contextual.

Despite many empirical studies on GIs and their territorial impact, there was no study aiming at classifying and discussing these previous analyses. This thesis offered a review and a typology of methods in order to discuss both methodological approaches and obtained results.

Many methodological difficulties were highlighted: identification of a reference point, in time and space; selection of indicators. Due to the difficulties to identify a baseline, the causality relation is difficult to be stated and quantified. It is for example difficult to distinguish what is caused by the protection and what is caused by the GI system itself.

A subjective approach was proposed to complete the assessment tool kit. Inspired by the multidimensional measurement of the well-being concept, we developed an original method to assess the territorial impact of established GIs (chapter 4). This method is founded on the perceptions stakeholders have of the supply chain's externalities. A set of items are selected and marked by opinion leaders. These stakeholders are identified according to their power to promote or hamper the development of agro-food initiatives. The results obtained by the studied initiative are then compared with those obtained by the competitors. The main advantage of the method is a more holistic view of rural development.

Following this approach, chapter 5 presents a comparison of emergent GIs with respect to the territorial expectations that GI facilitators and initiators have.

It is very difficult to assess a global performance in terms of territorial impact. Given the advantages and disadvantages of objective and subjective methods (table 2), both approaches must be combined to provide a holistic view of the territorial effects. Additionally, the selected indicators must reflect the objectives of the stakeholders (both operators and territorial actors).

	Objective methods	Subjective methods
What is evaluated and how?	States of the territory (snapshot). Indicators of state	Perceptions of stakeholders with Likert scales
Who does evaluate?	Experts	Opinion leaders, local stakeholders, producers
Advantages of the method	Relative objectivity of the method (indicators selection)	Take into account the set of effects (acknowledgement of the externalities) Potential to take different interests into consideration
Disadvantages of the method	Availability of data (costs of data collection), Difficulty to identify a baseline or reference point, Who has the legitimacy to choose and weigh the territorial impacts? Aggregation of impacts or hierarchy of impacts?	Subjectivity. Selection of the stakeholders who take part of the evaluation? Possible distortions

Table 2: Comparison of objective and subjective methods

Source: developed from the presentation of Belletti, G.; Marescotti, A.; Hauwuy A.; and Paus M. (2005)

Regarding the results, research studies clearly identify the ability of GIs production systems to create positive effects on rural development. Nevertheless, empirical analysis show in certain cases that GIs might also fail to benefit to local population or environment in their production region (Bowen and Valenzuela Zapata, 2009).

Indeed, the protection scheme does not guarantee positive effects, but may rather reinforce them. The registration process should carefully look at the present territorial effects (economic, social, and environmental), since positive effects depend on the strategies that local and non-local actors undertake.

6.2 Identified dilemmas and recommendations

Several potential "fields of friction" were highlighted at different levels. These dilemmas must be overcome to launch and promote the virtuous circle and obtain positive territorial effects.

The identified potential fields of friction are the following:

- Economic benefits versus social and environmental values. As seen in chapter 5, expectations with respect to GIs mainly concern economic benefits. Though economic expectations are largely justified, our research highlighted potential social and environmental risks in the search of short-term economic benefits. Therefore, we recommend that the facilitators clearly identify what are the non-economic values of the GI system and raise awareness of the potential benefits and risks among the different actors of the supply chain.

- Competition versus cooperation, and individual strategies versus collective action. At the supply chain level, the strengthening of individual strategies that results among others from a lack of trust and an unfavourable institutional context, impedes the development of collective action initiated by facilitators. Clear individual benefits have to be identified to reach a shared collective goal.

- Openness versus exclusion and loss of commitment. Facilitators create an atmosphere of openness and inclusion with regard to the participants. However, exclusion happens, linked to the geographical delimitation and the definition of production rules or hygienic rules. In Serbia, administrative delimitations are often followed to avoid political conflict. Moreover, the study showed that the informative phase should not last too long. Committed producers become weary after several meetings without concrete results.

We recommend a brief informative phase, rapidly followed by the building of a working group with the most motivated people. Trying to represent all the interests in the working group is theoretically fair; however overcoming a reluctance to participate can be a timeconsuming activity, as those who are desired do not always see the value of active involvement.

In addition to the above dilemmas, several "fields of friction" were identified in transition and developing countries: - Donors' agenda versus local long-term process. There is a tension between the donors' willingness to rapidly obtain results, and difficulties on the field to undertake an efficient facilitation process in a short time-frame.

The research stressed that it is necessary for the group to have sufficient time to structure. Building a GI organisation is time demanding and there is a need to adapt objectives to time constraints linked to development projects. Additionally, overburdening local facilitators with unreachable objectives might give incentives to facilitators to lean towards authoritarian leadership that would be counterproductive. We recommend undertaking the local facilitation activities when it is possible with a duo of facilitators.

- Willingness to rapidly comply with EU requirements versus current institutional context. Complying with EU regulations in the perspective to enter into the EU requires a quick building or adjustment of institutions (for example certification agency). On the other hand, the distribution of responsibilities might not be clearly defined among national institutions (e.g., MAWMF and intellectual property office) and a certain bureaucracy might remain.

The study highlighted that countries willing to develop GI policies should be aware of the need of facilitation at both national and local levels.

- Simultaneous construction of both national context and local initiatives. If the national institutional environment does not evolve, there is a risk of "vicious circle" in which producers and local actors lose their commitment. In order to avoid such a vicious circle, we recommend building a community of facilitators. Local facilitators are connected to local "communities of place and interest" (Goodwin, 2003) whereas national facilitators connect "community of interest". Bridging the communities of place and the local communities of interest with the national GI community of interest would encourage exchanges of experiences and knowledge sharing at local and national levels.

6.3 Outlook for further research

6.3.1 Link between governance structure, territorial strategy and positive territorial effects

In established GIs

As it is not possible to identify the link between organisational pattern and the undertaken territorial strategies in emergent GIs, we propose to focus on established GIs in Switzerland, where the limited number of PDO and PGI would make it possible to investigate systematically all the GI organisations.

The survey would supply information about the type of organisation and the decisionmaking mechanisms, as well as the type of governance strategy. The governance strategy could be investigated through indicators such as existence and number of partnerships with actors outside the supply chain, actions undertaking with regard to the environment, etc.

In emergent GIs

As far as emergent GIs are concerned, and in the light of recent case studies undertaken in transition and developing countries, it seems that, more than the governance structure itself, it is the location of the most powerful actors that affect the most the potential positive effects.

The cases studies analysed in Serbia and Mongolia show that vertical integration can potentially be linked to positive effects in terms of rural development. Réviron and Tseelei (2008) investigated the case of sea buckthorn juice and oil (registered in 2007) from the Mongolian Uvs province. The main processor, a former state company, produces a large share of sea buckthorn berries on its own plantations (vertical integration). The authors pointed out the role of the leading company in establishing a collective organisation with smaller processors, and stressed the potential positive economic and environmental effects. In both the Serbian and the Mongolian cases, the most powerful actors are located in the geographical area of the GI.

Pointing out the location of actors within a GI supply chain might sound either weird or obvious: GIs are characterised by a territorial anchorage of the products, and therefore of the producers.

Nevertheless, several case studies illustrate a trend: actors outside the GI area enter GIs' supply chains and negotiate or impose new rules.

In some European GIs, large companies entered downstream the GI supply chain. For example, Jeanneaux *et al.* (2009) analysed the consequences of the entry of large industrial cheese companies in the Comté supply chain. Indeed, national companies bought local dairy industries. Nevertheless, the authors reported that the large companies accepted to a certain extend the rules of the game in what Jeanneaux *et al.* called an "industrial compromise". These rules are negotiated among the different actors with regard to a historical depth and fairly involve the producers, organised in cooperatives, in the bargain. Nevertheless, this subtle balance is constantly under pressure, since the bargaining power of the largest actor increases.

Contrary to European GIs, GIs developed in transition and developing countries seldom have a history of collective negotiation along the supply chain.

In some cases, the most profitable economic functions of the supply chain (such as ripening, bottling, blending) are controlled by actors external to the GI area (Neilson, 2007; Bowen and Valenzuela Zapata, 2009). In this configuration, benefits in terms of sustainable rural development can hardly be expected. Economic benefits, which are often positively correlated with the entry of external large players, do not go hand in hand with redistribution of the value added at local level, neither with empowerment of producers.

As Neilson (2007) highlighted, in a paper that examines the case of specialty coffee production in South Sulawesi in Indonesia: "the role of both formal and informal socioeconomic institutions in the regulation of GI is fundamental to its success". Finally, he concluded "many countries are currently unable to maximise the potential benefits of implementing such a system". The author highlighted the need for a complex coordination between producers, regional authorities and central government, extension providers, exporters, and research institutes (Neilson, 2007; Mawardi, 2009). This leads on to the important issue of facilitation.

6.3.2 Role of competition in GIs' development

Given that GI vertical alliances are a subtle mix of cooperation and competition, it would be interesting to evaluate what is the role played by the competition scheme in the emergence and growth of GIs. We hypothesise that a high level of internal competition might hinder the development of collective action and favour the development of individual strategies. On the other hand, the absence of competition might not give incentives to producers to change the current situation and launch a collective action.

Additionally, in an established GI, an increased competition might be a reason for a GI alliance to break up. On the other hand, segmented market outlets might be in favour of internal cohesion.

External competition with substitute products might also play a role in the development of GIs. One may assume that an increased external competition might strengthen the willingness of producers to collectively answer to an external threat.

Therefore, we assume that the role played by internal and external competition should be further investigated with regard to the incentive to join, or on the contrary, to quit the GI alliance.

6.3.3 Impact assessment

Pettigrew (1990) emphasised that the issue of when to conduct the data collection and analysis is closely linked to the problem of when to make judgments about outcome evaluations in a change process. Impact assessments are sensitive to time.

Therefore, we argue that the impact of GIs with regard to rural development should be measured in terms of achieved goals, but also in terms of process goals. Indeed, GIs generate outcomes that are visible, tangible, and measurable. However, the processes themselves are much harder to see, understand, and measure.

Impact assessment might concern a GI system (supply chain and network), the protection scheme (legal framework) or a development programme aiming at implementing GI regulations. Indeed, more and more cooperation programmes are launched in transition and developing countries (Barjolle and Salvadori, 2010). For example, the Swiss Federal Institute of Intellectual Property and the Jamaica Intellectual Property Office have agreed in 2008 to implement a project on GIs. The objective of the GI Project is to assist Jamaica in establishing a functional and effective protection system for GIs.

GI systems, legal framework and cooperation programmes' evaluations require different perspectives and methods.

Given that the building of GIs relies on the objectives of diverse actors (e.g., backers, producers), participatory evaluations could be developed to ensure a measurement of objectives' achievement and evaluate the commitment of local actors. Moreover, participative approaches re-check interpretations with local actors and could ensure a better determination of the causality chain.

A recent study develops a participative approach to measure the territorial performance of two French PDO cheese initiatives (Reboul, 2010). Similarly, a participative approach was developed in the framework of a Swiss-Jamaican partnership to evaluate the technical cooperation programme (Belletti and Marescotti, 2010).

Quantitative methods are needed, however qualitative analysis are also necessary to deal with important aspects such as potential conflict(s) within the supply chain, exclusion of actors, and capacity to mobilise effective networks.

Indeed, beyond usual socio-economic and environmental indicators such as farmer's income and use of pesticide, it is worth noting that impacts of GI implementation encompass processes that are difficult to measure. Partnership, participation, ownership, and empowerment are outcomes that are particularly difficult to quantitatively assess. As Leeuw and Vaessen (2009) stressed, these aspects are promoted in policy, and are hardly

reflected in evaluation practices. However, our case studies showed that partnership is a crucial observed outcome in the early stage of a GI-building process.

Therefore, developing new indicators to evaluate practices that are part of a rural development process and that are enforced by a GI development is a lead for further research.

Murdoch (2006) stated that networks appear to lie at the heart of rural development based on the generation of innovation, learning and trust mechanisms. Indeed, innovation and learning mechanisms can be analysed as means to create territorial resources. Additionally, Curtis *et al.* (1999) stressed that networks have greater capacity to attract resources compared with individual groups. For instance, networks enhance group impact on agencies and government.

Therefore there is a need to define criteria to evaluate the performance of networks. Lee *et al.* (2005) defined "good networks" as being "inclusive, facilitating collective learning, allowing sharing of success and generating wider social acceptance".

With a combination of results from several studies (Curtis *et al.*, 1999; Marsden *et al.*, 2000; Murdoch, 2000; Lee *et al.*, 2005), we could evaluate the performance of a network and its building on robust and productive partnerships, with the following criteria:

- 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 down (financial, practical, material or symbolic);

- The capacity to influence decision making at the regional or national level is increased.

These criteria could be evaluated with respect to the perceptions of members and partners involved in the evaluated network in the framework of a participative approach.

Since efficient networks are assumed to be linked to innovation and learning mechanisms, there is a need to discuss these aspects.

Barjolle and Paus (2007) identified that origin-based supply chains potentially innovate in a broad range: from technical innovation regarding the product to organisational innovations regarding the supply chain. The authors linked the innovation processes taking place in GIs to potential effects in terms of rural development. Nevertheless, the authors noted that it remains difficult to precisely quantify the benefits and costs at the different levels and stages of innovations. Further research is needed in this direction.

Collective learning at various levels (institutional, local, supply chain, farmers, and backers) is a process that is rarely measured; however it might reinforce institutional capabilities, encourage discussion among donors, and strengthen stakeholders' relationships. Indeed, collective learning might raise awareness and change behaviours (trade relationships based on duration and honouring, willingness to invest). Though these causalities are hypotheses, it would be worth deepening the evaluation of the establishment of GIs' projects in terms of knowledge and skill acquisition, new ways of thinking, behavioural changes and awareness.

In the implementation of a GI policy, we can observe learning curves at different levels and from different perspectives: national institutions, donors, facilitators (local NGO for example), producers and processors, local partners (municipality for example). Since GI is a multidimensional and relatively new concept, there is a need that the stakeholders involved in the process at national and local levels acquire knowledge.

As Groot and Maarleveld (2000) highlighted, learning emerges from experience and/or human interaction during which people's different goals, values, knowledge, and point of view are made explicit and questioned to accommodate conflicts so that collective action can be taken to tackle a shared problem.

Finally, at the local level, other criteria should be investigated, such as a growing selfesteem of producers, the pride to belong to the prestigious GI club, and the development of a perceived common goal among the group. Additionally, potential negative effects must be considered (linked to the dilemmas exposed in section 6.2): exclusion of actors, arbitrary delimitation, and participation processes that favour advantaged groups and do not lead to more widespread community involvement in the process (Curtis *et al.*, 1999).

Regarding technical cooperation programmes in particular, the development of a favourable institutional context could also be assessed by the building of strong networks between public and private sectors, as well as the level of trust that producers gain towards national organisations. At local level, the outcome of creating a collective intention to promote a product could be seen as equal to or even greater importance than the substantive outcomes targeted by a cooperation programme (e.g. increased export of the products).

6.3.4 Analysis of the scaling-up process

The time-frame of the study did not enable us to analyse the scaling-up process. However, there are several issues to be tackled.

First, there is a need to analyse the interaction between the scaling-up process of the supply chain (measured in terms of volumes, turn-over, new access to market, techniques, etc.), and the scaling-up process of the initiative (building of an organisation, evaluation of the undertaken activities, management of new members entry, internal cohesion, self-awareness of the values of the group).

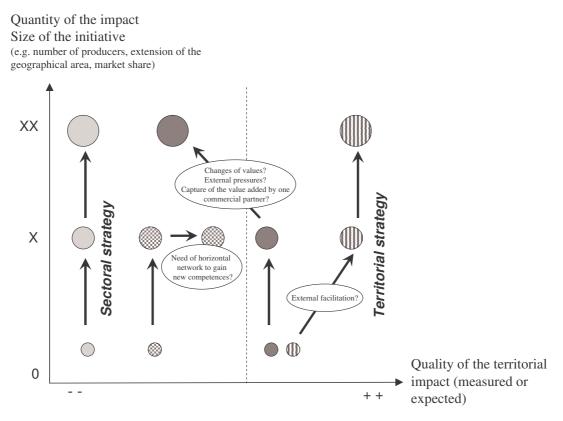
Indeed, there is the question of possible diachronic scaling-up processes. This issue was recently discussed by Tolivia (2008), however further research should be undertaken to precisely determine the path to be followed or avoided.

Second, the governance structure, as well as the territorial impact might evolve during the scaling-up process (figure 2).

Very few studies focussed on governance changes and the determinant factors of the changes. Risoud and Parguel (2002) presented the results of a two-year support in the case of the Epoisses PDO. The facilitation process led to changes in the code of practice.

A new coordination process was established between the operators at different levels of the supply chain, with the entry of milk producers in the PDO association, resulting in the building of an inter-professional association.

Figure 2: Trajectories (growth or scaling-up) of initiatives and territorial impact



Source: Author

This is linked to the issue of the role of facilitation during the scaling-up process (see section 6.3.5), but this also sets the question of the determining factors of a shift in the strategy of the initiative.

Some factors were already identified (entry of extra-local actors in the supply chain, facilitation mechanisms, disengagement of initiators and loss of original values). Nevertheless, a comparison based on a set of established GIs could help identify the crucial determining factors in order to prevent a shift in a territorial strategy (territorial to sectoral).

6.3.5 Role of facilitation

The work developed in chapter 3 was an exploratory work and we propose several avenues for further research.

First, there is a need to precise the good practices of facilitation thereby helping collective initiatives to define their strategies. As Podolny and Page (1998) highlighted, important features of organisations' structures are established early in an organisation's history, and these features can be difficult to alter. Therefore, there is a need to identify the successful organisational pattern to be developed in the early stage of a collective initiative. This issue is discussed in a paper untitled "Crystallisation of collective action in the emergence of a geographical indication system" (Paus and Réviron, 2010a).

Second, our research focussed on the role of the facilitator, as a person. Nevertheless, it would be interesting to analyse the role played by the institutions that accommodate the facilitator(s) (e.g., chamber of agriculture, municipality), and identify whether there might be a dilemma between loyalty to their employing agency and loyalty to the group members. Indeed, these institutions might have a political mission and a defined vision with regard to development outcomes. This issue also concerns the role of the institutions that financially support the facilitation process (e.g., ministry of agriculture, foreign aid agencies).

Additionally, in the case studies investigated, facilitators were from the public sphere. However as Markelova *et al.* (2009) suggested, it would be interesting to analyse what could be the role of commercial actors, for example export companies and retailers, which can support producers' initiatives to meet quality and safety standards and to access certification opportunities.

Third, our research identified that the absence of an emergent leader was one of the limiting factors. The literature reported the role of local leader in the success of collective organisation, for example in Danish dairy cooperatives (Svendsen and Svendsen, 2000), in Hungarian cooperatives (Forgacs, 2006), or in PDO alliances (Réviron and Chappuis, forthcoming). In their study, Svendsen and Svendsen (2000) identified that these

entrepreneurs not only facilitated local co-operation at local level, but also facilitated at a regional and national level the exchanges of experiences among cooperatives, and the development of new dairies due to their former engagements which were known to be successful.

There was no emergent leader in the studied Serbian cases, and the following question can be set: What are the conditions for a group leader to emerge?

The question is interesting insofar as we assume that the presence of a charismatic and successful entrepreneur could both promote the collective organisation at local level and the concept of GI at national level. For example, Croatia has a committed "GI ambassador" in the person of a sausages' producer actively involved in the OriGIn network. Therefore, it would be interesting to analyse his influence on the development of GIs in Croatia and whether his action is followed by the spreading out of networks linked to his entrepreneurial commitment.

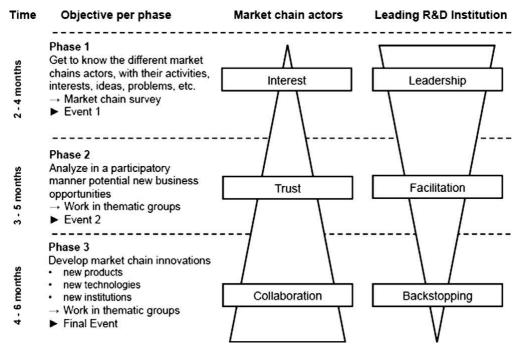
Fourth, there is a need to analyse the role of the facilitator in time. Our research focussed on the early stages of an initiative's development as the processes observed are mediumterm processes (in the European Union, a time-frame of five years between the application and the registration of a PDO or PGI product is common, and this is without considering the time necessary for the producers to establish their application).

Previous research regarding the time evolution of facilitation and its role highlighted:

- The need for operators to take over the collective project and the need of emergence of leader(s) within the group;
- The need for facilitators to adapt their roles with regard to the development of the initiative and to adopt an exit strategy or an interdependent strategy towards local leaders (Schwarz, 1994; Bruns and Bruns, 2004).

Bernet *et al.* (2006) represented the role evolution between the operators and the facilitators (figure 3). This graphic representation seems valid in the case of building a GI collective organisation; however, the time-frame is well under estimated.

Figure 3: Three phases of the participatory market chain approach



Source: Bernet et al. (2006).

Moreover, the emergence of leader(s) among the market chain actors was identified in chapter 3 as being a critical factor for the development of GIs.

Finally we assert that while the organisation develops, there is a need of managerial activities. These activities can be undertaken by an external facilitator in the first stages, however, in the long-term they ideally must be undertaken by a manager paid by the collective organisation.

Indeed, regarding the required skills and the performed roles, there are fundamental differences between facilitators operating at an early stage of the initiative's development and managers operating at a later stage.

The literature offers some promising avenues to further study the evaluation of the facilitator's role in time.

Burt (1992) identified that brokers have different roles at different stages of a network development and Johannisson & Nilsson (1989) noted the missions of the community

entrepreneur change over time during the group process. Loubaresse (2008) highlighted that the development of the collective action is combined with an increase in the mobilisation of external resources (subsidies, public support) and an enlargement of skills and resources of brokers (from generalist competence to a team of specialists). The activities evolve while the initiative develops, and therefore the profile of the facilitator might change according to the needs of the operators. Either another facilitator has to be hired or the facilitator must enlarge the network in order to answer the new need and obtain support of external experts.

Seeking for financial resources and animating the group correspond to a generalist profile, while giving advices to the enterprises and disseminating knowledge correspond to a specialist profile (Loubaresse, 2008). Generally, the tasks evolve from a generalist profile to a specialist profile (animation to network building to commercial development) (Chauvie, 1984; Loubaresse, 2008).

Alsos *et al.* (2007) report that in the first phase, the community entrepreneur invests much personal time and efforts. This is important for the progress of the collective action and might motivate others to join (structure the group). The authors note in the implementation phase, that the facilitator needs administrative skills. The mobilisation of the business community, the government and the voluntary organisations may demand other type of skills, such as skills in convincing and motivating people that has been outside the process. Community entrepreneurs also involve the local government at an early stage, both to legitimise the project and to speed up and facilitate the process with some "hand money" (networking brokerage) (Alsos *et al.*, 2007).

In the studied Serbian cases, durations of varying length were allocated to the informative phase. For the kajmak from Kraljevo, the need for an activation phase was higher than for the prsuta case. This emphasises that facilitation activities evolve during the process, and depend on the structure of the group and the progress of the GI strategy. The activation phase might be reduced for products that have a well-structured supply chain and a high reputation.

Following Belletti and Marescotti (2008), we propose a working grid to analyse the evolving role of facilitator during the different steps of an ideal sustainable development process for the activation of a GI (table 3).

Table 3: Working grid of the missions and tasks of the facilitator during the different phases of a sustainable development process for the activation of a GI

Phases	Missions and tasks of the facilitator
Identification	Structure the group : Raise awareness among producers and potential members of the group (organisation of meetings). Identify the product specificities (specific quality and reputation) that link the producers together.
	Catalyse the group process : Identify the potential for collective action. Help establish the link between the product and the geographical area (natural and human factors).
	Mobilise external resources : The identification of a reputation and the specific resources involved, as well as their link to the specific quality of the product, may require scientific studies and analysis, either on resources (e.g., soil analysis, agronomic studies, history of the product, ethnologic land survey) or on the product and its reputation (tasting, consumer research, etc.). Undertake chemical analysis. Contact researchers. External stakeholders and technicians, who know the expectations of consumers and their requirements, can play an important role. A study of the market might be necessary (is there a specific demand and willingness to pay for the product?). Knowledge about consumers' expectations. Promote local awareness among institutions and potential partners.
Qualification	Structure the group : Improve coherence. Delimitation of the geographic area (eventually carry out interviews and draw maps). Help establish clear criteria (natural, human and administrative criteria). Help producers define their product (name and characteristics) and the process of elaboration. Help producers define what is in the code of practice, look for a common ground. Draw up the code of practice, which defines who is in and who is out of the GI's group. Has to pay particular attention to exclusion issue: exclusion due to production practices and delimitation of the area. Establish new cognitive references by organising a degustation.
	Catalyse the group process: Mobilise the different local actors. Organise meeting, help build the rules collectively. Help design the collective organisation pattern and determine the functioning rules. Organise the local context (visits, meetings), empower disadvantaged actors, manage power relations in the production area, and mediate different visions of operators. Facilitate sharing information and knowledge. Help elaborate technical files and the definition and coordination of necessary additional studies.
	Mobilise external resources : Network and partnership with territory and external supportive actors. Partnerships between the working group and local authorities are needed, as well as discussions between municipalities' elected representatives in order to avoid unfair exclusion. Knowledge brokerage. Facilitate the spread an understanding of methodologies and approaches already applied in other successful GI products.

Remuneration	Structure the group : Help produce visible outputs and tools to encourage producers' identification. Collective marketing, promotion, labelling, choice of the logo or distinctive sign. Implement communication actions and actions for strategic marketing.
	Catalyse the group process : Help design and structure the collective organisation, help set up collective rules. Help establish a legitimate and representative commission. Set the rules for conflict resolution mechanisms
	Mobilise external resources : Find financial support (the market mechanisms might not be able to fully reward certain values), financial support is needed for the collective promotion at the first stage. Contact expert to provide market analysis
Reproduction	Structure the group: Raise awareness of non economic considerations.
	Catalyse the group process : Help set the rules of control and certification. Help establish the control points and sanctions, help organise internal control of the GI value chain and/or participatory guarantee system. Launch information activities and measure of capacity-building to encourage GI product market development
	Mobilise external resources : Establish a partnership with a certification body. Strengthen private and public partnerships to promote non economic values. Organise training courses and education, information and dissemination, technical and financial assistance. Establish a link with rural tourism's actors. Stimulate the debate between local actors on the role of local resources for GI specificity.

Source: Adapted from Belletti and Marescotti (2008)

It seems that from the remuneration phase, the facilitator's missions evolve to missions traditionally attributed to managers.

Finally, the definition of facilitation process proposed by Schwarz (1994) implies that the system – or group - functions autonomously – that is, the group is complete without facilitator. Yet the group depends on a facilitator for help. Consequently, to maintain the group's autonomy and to develop its long-term effectiveness, the facilitator's interventions should decrease the group's dependence on the facilitator. Emergent internal leaders or intrapreneurs, representatives of the group, have progressively to take over some responsibilities and missions.

To conclude, research studies clearly show that GI-building processes hold the potential to promote sustainable rural development. However, activating the "virtuous circle" requires the fulfilment of conditions, at both national and local levels. Indeed, there is a risk that the search for commercial performance and economic benefits leads to an unsustainable use of natural and human resources.

Beyond the justification of the legal protection of GIs, impact assessment methods could be developed to encourage initiatives to identify their strengths and weaknesses regarding territorial effects and to decide on possible adjustments, thereby enabling associated partners to value and justify their involvement.

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