

# **Institutions and knowledge diffusion in a territory: the case of geographical indications**

Ana Carenina Albuquerque Ximenes

Ligia Inhan de Matos

Renata Lèbre La Rovere

Programa de Políticas Públicas, Estratégias e Desenvolvimento, Instituto de Economia,  
Universidade Federal do Rio de Janeiro

**Abstract:** There is no consensus on the concept of knowledge as authors use sectoral, functional and relational approaches to explain how knowledge is produced and diffused. However all authors, including those who use an institutional approach to analyze knowledge, consider the role of spatial elements in the conformation of the conditions of learning and in the interactions between agents. Institutions, such as geographical indications, that are devised to facilitate the diffusion of knowledge in a territory, not always achieve this goal. This is because knowledge production and innovation depend on how agents perceive the benefits related to new knowledge provided by institutions. This paper will explore this issue based on a work in progress that studies the application of a geographical indication in Minas Gerais, Brazil. The discussion of the case presents the importance of an understanding of tacit knowledge by organizations and institutions in the setting of a geographical indication.

Key words: knowledge economy, regional development, geographical indications.

## **1. Introduction**

Since 1980 many studies on the knowledge economy and its ideal conditions have emerged in a global scale. However there is no consensus on the definition of knowledge economy as this concept has been based on several different approaches (sectoral, functional and relational). These different approaches in turn influence the design of different policies. Nevertheless these approaches, be they empirical or theoretical, share a common trait that is to consider the centrality of spatial elements in the creation and diffusion of knowledge. The challenge that authors face rests on how to go beyond the incorporation of the analysis of learning, knowledge creation and innovation to propose industrial and technological policies that promote the development of a region. The main question that emerges is how to implement policies, public or private, taking into consideration all aspects of knowledge.

This paper has as main goal to discuss the role of spatial elements in the knowledge production of a region, centering on a specific element: tacit knowledge. We will show that understanding this knowledge is essential for the implementation of regional development policies such as geographical indications. To do this, after this introduction we will briefly describe the current concept of the knowledge economy and discuss the importance of tacit knowledge, exploring the link between knowledge production and territory. The third section will present the case study on the geographical indication of Serra da Canastra, Brazil. The fourth section will discuss the case and the final section will present a summary and conclusions of the paper.

## 2. Knowledge Economy, Tacit Knowledge and Territory

### 2.1 Different approaches of the knowledge economy

During the 1990s the first phase of globalization was conducted by multinational companies that looked for areas of low-cost labor to locate their productive activities and then distribute and sell products in their home markets, especially in the U.S. and in the European Union (EU). Their strategies were focused on lowering labor costs and raising productivity. As global value chains emerged, multinationals became more selective to locate elements of those chains and regional knowledge started to be taken into consideration in their management and operational strategies. During this period multinationals started to explore industrial clusters that were already formed in developing countries and established links between them on a global basis (CARDOSO, 2005).

By the end of the 1990s, authors that studied knowledge diffusion observed that as new technological competencies emerged, companies became to outsource and to look for technological capabilities in developing countries, using at the same time foreign engineers and scientists in developed countries. Cooke et al. (2007), give the example of software companies:

Numerous studies (..) had begun to show how in the years leading to the boom, Silicon Valley's workforce was 25 per cent foreign born and that in 1990 one-third of higher qualified workers (engineers and scientists) were born overseas. Of these, two-thirds were Chinese (including Taiwanese) and Indian. (...) Moreover, these entrepreneurs represented a new kind of so called "to-and-fro migration" rather than a simple "brain drain". That is, they frequently returned home and, in India especially, created new software businesses as well as venture capital funds that gave rise to dynamic cluster growth in such places as Bangalore and Hyderabad. (COOKE et.al., 2007, pp.76-77)

Cooke et al., op.cit., remark that this search for technological capabilities is characteristic of the second phase of globalization where multinationals seek pools of global talent and knowledge that are asymmetrically distributed. The emphasis on varieties of knowledge and asymmetries of distribution of knowledge suggests that understanding how regional knowledge is produced and diffused is essential to devise policies to promote development. As Mazzucato (2014) suggests, development policies must consider interactions present in systems of innovation.

The knowledge economy is characterized by a raise of the uncertainty level due to dispersion of technological capabilities, fast product and market development and increasing competition. The adaptation, survival and success of enterprises rest on their ability to consistently create new knowledge and incorporate this knowledge in new technologies and products. Learning is essential not only at the firm level but also at the regional level.

Regional learning is identified with cognitive processes that combine information flows, existing and dispersed know-how and market interpretations, thus enabling exchange of experiences and cooperation. These processes involve the capability to manage information with the specific aim to identify and to solve problems. At the economic level,

this capability transforms information and inventions into innovative products and processes, leading to innovation and a raise of productivity. Especially on these contexts characterized by several agents, such as cities and clusters, the evolution of knowledge no longer is understood as resulting from R&D efforts of individual firms, but as the result of the combination of interactive learning processes that involve complementary capabilities in a productive chain (CAPELLO et al., 2013).

Studies that were based on definitions of knowledge economy went into different phases that were summarized by Capello et al. (2013) as shown in Table 1. We may add that although these authors suggest that all the views presented in Table 1 should be taken into consideration in the modern (present) concept of the knowledge economy, today we still can find in the literature narrower concepts that enhance just one type of definition (sectoral, function-based or relational).

	<b>Sector-based definitions (1970-80)</b>	<b>Function-based definitions (1980-90)</b>	<b>Relation-based definitions (1990-2000)</b>
Driving forces of the knowledge economy	Science-based sectors, high-tech sectors	High Education, R&D	Cognitive Capability
Location regions	Advanced Regions	Scientific Regions	Innovative networking regions
Path towards innovation	Invention-innovation short circuit	Spin-offs, spatial spill-overs	Collective learning, local synergies
From innovation to performance	Radical innovation, schumpeterian profits	Technological breakthrough, royalties or patents	Continuing innovation, productivity increases
Spatial context	High-tech clusters	Science parks, large city-regions	Innovative millieux, lрге cities
Role of space	Proximity economies, specialization advantages	Proximity and agglomeration economies	Uncertainty reduction, relational capital

**Table 1 – Approaches to the knowledge economy**

Source: CAPELLO et al., (2013, p.p 18).

Nevertheless we agree with Capello et al. that all approaches listed above consider the central role played by spatial elements in the creation and diffusion of new knowledge. This new knowledge, as suggested by Polanyi (2009), consists of tacit and explicit knowledge.

## 2.2 Tacit Knowledge: “saber-fazer”, know-how and savoir-faire

Although Michael Polanyi has discovered the difference between two types of knowledge (tacit and explicit), he states that it is impossible to separate them. In his work of 1958 entitled *Personal Knowledge* he summarizes what he considered as tacit knowledge when he states “we know more that we can tell” (POLANYI, 2009, p. x).

Polanyi drives attention to the essence of human ability. A practice of a human ability can be described in specific and detailed norms or rules, but these rules cannot determine the practice itself. The description of an art may serve as a guide, but it is useful only when it can be integrated within the practice of the knowledge of the art. Even for mechanical processes, the human ability of how to do is at the same time an intrinsic element of production and totally linked to the individual.

The definition of knowing include several types ranging from the most intellectual to the most practical or (*knowing what*) and (*knowing how*). These two types of knowledge have a similar structure and one is never present without the other: “I will always speak of knowing, thus encompassing the practical and the theoretical knowledge” (POLANYI, 2010, p. 17-18).

Authors that came after Polanyi elaborated on the concept of knowledge and today there are several definitions of knowledge and its types. As some of these definitions are present only in certain countries, we opted to maintain the terms in their original languages (English, French and Portuguese). A comparative table focusing only on one type of knowledge- know-how – and its variations is proposed below. As we will see later in this paper, these different concepts lead to different assessments of the role of tacit knowledge.

Concept	Meaning	Authors	Field of Knowledge
<i>Saber fazer</i>	Gives quality to the product and to the region A specific type of practical knowledge	BRASIL-MAPA, 2013	Regional knowledge protection
	Artisanal practices of traditional knowledge	MÜLLER, 2012	Traditional Knowledge
	Gives quality to the product and to the region A specific type of practical knowledge Collectively built	NIERDELE & VITROLLES, 2010	Regional Knowledge
	A type of traditional knowledge Associated to artifacts and utensils A quality of producers	PEREIRA et al, 2014	Traditional Knowledge
	Traditional knowledge that gives quality to the products Is different from the knowledge of the organization Easily transferred and explicit through dynamic routines	SOUZA, 2013	Traditional Knowledge

<i>know-how</i>	A type of specific knowledge Traditional knowledge Local knowledge Production tacit knowledge Collective knowledge	Insight, OriGIN, REDD, 2013	Regional Knowledge
	Ability to produce according to norms and related to routines Collectively constructed Gives value to products	VIANA, 2014	Regional Knowledge
	Knowledge tacit and explicit May be individual or collective Shared by actors inside a region Related to human capital	BAPTISTA, LEITÃO, 2015	Regional Knowledge
	Specific or technical knowledge of a region, tacit and explicit	BUSCH, 2008	Organizational Knowledge
	Technical knowledge inside tacit knowledge	NONAKA, 2012	Organizational Knowledge
<i>knowing how</i>	A practical way to know how to do things	OGUZ &SENGUN, 2011	Organizational Knowledge
	Propositive knowledge	STANLEY, 2010	Philosophy of knowledge
<i>Savoir-faire</i>	Local knowledge that establish the systems of production and/or consumption of the product and enhance its specificities. Habits and practices; collective knowledge linked to culture and tradition, directly linked to human beings.	BRASIL-MAPA, 2013	Regional Knowledge Protection
	Provides quality to the place Inherent to human beings	SEBRAE, 2005	Organizational Knowledge
	May be transmitted across generations	CRUZ, 2012	Regional Knowledge

**Table 2 – Meanings of *saber fazer*, *know-how*, *knowing-how* and *savoir-faire*, in the literature linked to Knowledge Theory**

Source: The Authors.

As Polanyi states that when human knowledge is based on beliefs “the cash element is intrinsic to the tacit component of knowledge” (POLANYI, 2009, p. x), all types of knowledge described in Table 2 may be considered tacit.

Hodgson (2014) observes that although the frontier of tacit and explicit knowledge is in constant movement and that it is possible to learn through codification, tacit knowledge cannot be fully explicit.

To Polanyi, (2009, p. x): “[...] no knowledge can become fully explicit” and explicit knowledge has a meaning based on tacit knowledge. Therefore an important part of general knowledge of individuals can be learned by others, especially through examples. But when individuals express their knowledge in the form of symbols, oral or written, the practice of

knowledge is interrupted or considerably reduced so that explicit knowledge may flow. in their manifestations, one type of knowledge cancels the other (POLANYI, 2009).

Tacit knowledge does not rest confined within the individual and circulates as a result of a social interactive process between individuals of different types and experiences. Therefore, suitable conditions to propagate tacit knowledge are social interactions and collaboration between individual workers and between those workers and firms that are embedded in a specific social and cultural context characteristic of a region (GERTLER, 2003; NONAKA; KONNO, 2005).

### **2.3 Production of knowledge and territorial development**

In a period where competition is intense and economic success depends increasingly on the capacity to produce new or improved products and processes, tacit knowledge is the most important basis for innovation based on value creation. When access to explicit knowledge is fully and quickly disseminated, the creation of exclusive capacities and products depends on production and use of tacit knowledge. As observed by Gertler (2003), tacit knowledge is a key determinant of the geography of innovative activity. This author mentions three elements related to this argument: first, it is difficult to diffuse tacit knowledge in long distances because it is not easily articulated and it is acquired experimentally; second, the specific nature of tacit knowledge makes it spatially adherent and context-related, as the involved actors can only effectively exchange knowledge if they share a locally defined social context; third, socially organized learning processes are increasingly important as the very innovation process is changing.

According to Gertler (2003) innovation is becoming increasingly based on interactions and on knowledge flows between economic players such as enterprises (clients, suppliers, and competitors), research organizations (universities and other private and public research institutions) and public agencies (technology transfer centers, development agencies). This is also mentioned by Johnson & Lundvall (2001) in their argument that proposes the concept of learning by interaction. The combination of the characteristics of tacit knowledge and innovation cited above enhance the importance of geography for the creation and the diffusion of knowledge.

Therefore, territorial development results from complex forces and the complementarity and interdependence of economic, political and cultural factors allow cities and regional centers to remain on a developmental path that follows a changing hierarchy (JULIEN, 2010).

For Julien (2010), theories about optimal location of firms proposed by regional economists fail due to their limits for generalization. They were created to support studies of location of affiliates of large enterprises with the goal to raise their control over supply sources and franchising activities. These analysis consider only passive and material elements of the territory such as infrastructure, proximity to natural resources and size of the market.

This author emphasizes the importance of the concept of milieu as the context of territorial production measured by *savoir-faire*, knowledge creation, accumulation of a technical culture, learning capacities and proximity forms that stimulate synergies between actors. The territory is, at the same time, a consequence of a development process, the result of organizational strategies by players and the locus of learning and formation of knowledge that impacts in existing enterprises and in the minds of new entrepreneurs.

To consider the territory as a result of a development process implies in considering the role of institutions that establish development conventions and promote the dissemination of production and innovation practices (Colletis-Wahl & Pecqueur, 2001). As observed by Storper (2011):

‘Institutions’ can be considered at two different scales. At the sectoral or activity scale, any agglomeration will have such features as entrepreneurial and labour market networks; business associations; specially-adapted relations with local government; technology and R&D networks; and possibly even local or regional circuits of finance (such as venture capital today). (...)Another scale is that of the region— its formal public-sector institutions, the institutions of economic life that cross-over sectors, and the institutions of civic life that involve actors from many different sectors and interact with the economic and public-sector institutions. (STORPER, 2011, p.343)

However, institutions may fail to consider the role of tacit knowledge that is present in a territory for production. We will discuss this subject based on a case study of the Indication of Origin of Canastra (IO Canastra) in Brazil.

### **3. Case Study: the Indication of Origin of Canastra, Brazil**

As Brazil is a developing country, its policies are normally devised and implemented on a top-down basis. These policies are based on the intervention of public agencies and on the use of new institutional arrangements that are created specifically to support particular products of a region (VITROLLES, 2011).

When products of value were identified in specific territories an intellectual property policy was devised with the aim to protect traditional regional knowledge.

By the middle of the 1990’s, Brazil adhered to the international norms present in the *Agreement on trade-related aspects of intellectual property right* (TRIPs), promoted by the World Trade Organization (WTO) in 1995. This agreement was a significant milestone in the global legislation.

As the agreement let each Member to establish its own definitions concerning guidelines for intellectual property protection, each country adopted the convention best suited to their reality. For instance, in TRIPs the definition of geographical indications is as follows:

[...] indications which 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 geographical origin (article 22.1, TRIPs *apud* FAVERO, 2012, p. 22).

Meanwhile, Brazil has established the following definitions:

Art . 176. **Geographical indication** is the indication of source or an appellation of origin.

Art . 177. It is considered **indication of source (IS )** the geographical name of a country, city, region or locality of its territory, which has become known as a center of extraction, production or manufacture of a product or providing a particular service .

Art . 178. It is considered **appellation of origin (AO)** the geographical name of a country , city, region or locality of its territory , which designates a product or service whose qualities or characteristics are exclusively or essentially related to the geographical environment, including natural factors and human ( BRAZIL , Law No. 9,279 , of May 14, 1996, our translation ) .

A Geographical Indication (GI) is a kind of intellectual property that is considered as a way to protect immaterial and intangible goods and act as distinctive signs, differentiating products and services by their geographical origin (BRONDANI, LOCATELLI, 2008).

Thus, elements that identify the geographical indication such as quality, reputation or other specific characteristic must be present in the territory. Brazil has many regions with unique characteristics; some of those are in the state of Minas Gerais (MG);

Minas Gerais is a state located in Brazil's Southeast region , bordering seven other federal units : Bahia, north ; Goiás, west ( with a small area of border also with the Federal District)) ; Mato Grosso do Sul , southwest ; São Paulo, south , Rio de Janeiro , southeast ; and Espírito Santo, to the east. The state has an important ore production, and also a very important agricultural production, especially coffee and dairy products. The region of the Canastra is an important coffee producer, but in the hills of this region there is a significant production of cheese, mostly by small farmers ( see Figure 1).



Figure 1 – On the left side, the region of Canastra located in the state of Minas Gerais; on the right side, the state of Minas Gerais in Brazil

Source: EMATER, 2014

Geographical conditions of the regions hinder the access to several farms and have stimulated the development of cheese production as a byproduct of milk for more than 200 years. Data collected in 2004 by the Enterprise of Technical Assistance and Rural Extension of the State of Minas Gerais (EMATER-MG) accounted for 27,000 producers of

artisan cheese in the region, producing about 70,000 tons / year in the state. However, since then the number of producers has fallen considerably. According to Dores and Ferreira ( 2012) there was a 16% drop in the number of producers in the range of just five years, between 2003 and 2008 .

EMATER, in a census of 2004, indicated that there were 2,096 producers that year. 10 years later, a georeferenced research by Perez (2014) recorded only 793 producers. Over 2,000 farmers have left the activity (MAGALHÃES, 2004; PEREZ, 2014).

Remaining producers increased productivity: the IS of Canastra , with seven cities , produces about 17,000 kg / day, totaling nearly 6,000 tons per year (PEREZ, 2014) . Ten years ago more than double the number of producers made about 4,500 tons per year (MAGALHÃES, 2004).

The decline in the number of producers and the increase in productivity seem to be related to the state's initiatives to improve the quality of artisan cheese in Minas Gerais, which happened at the same period.

In 2002, the Program Artisanal Minas Cheese of Minas Gerais state had as main goal to organize producers so that their productive conditions could be improved: “among other things, organize producers, standardizing products, standardizing production processes , packaging, marketing and finally guaranteeing the certification of the origin and quality of its cheeses<sup>1</sup>”.

This program included the recognition of the several producing regions of the state; Canastra was the second region to be protected as Intangible Heritage in the Book of Knowledge by the National Historical and Artistic Heritage Institute (IPHAN). This recognition dates of June 13, 2008 and the Source Indication was registered at the National Institute of Industrial Property on March 13, 2012. The recognition sensitized exogenous institutions to promote the region and develop other producer support programs as well as their professional qualification.

In 2012, an association was founded exclusively for the purpose of recording the IS: the Association of Cheese Producers of Canastra (APROCAN). This association has established a partnership with SEBRAE that is the Brazilian Service to Support Micro and Small Enterprises. The partnership allowed for the development of the IS distinctive sign, the definition of the visual identity and of the website that provides information, contact with producers and sales of cheese. This partnership established as well a program to develop management capabilities among farmers.

As Family farms were interested to register their cheese factories, a conflict between the federal norms included in the Regulation of Industrial and Sanitary Inspection of Animal Products that were established in 1952 and traditional production practices emerged.

All regulation made after 1952 by the Ministry of Agriculture, Livestock and Supply (MAPA) was devised for dairy industries, not to artisanal production. The organization responsible for implementation of this regulation in the state of Minas Gerais is the Minas

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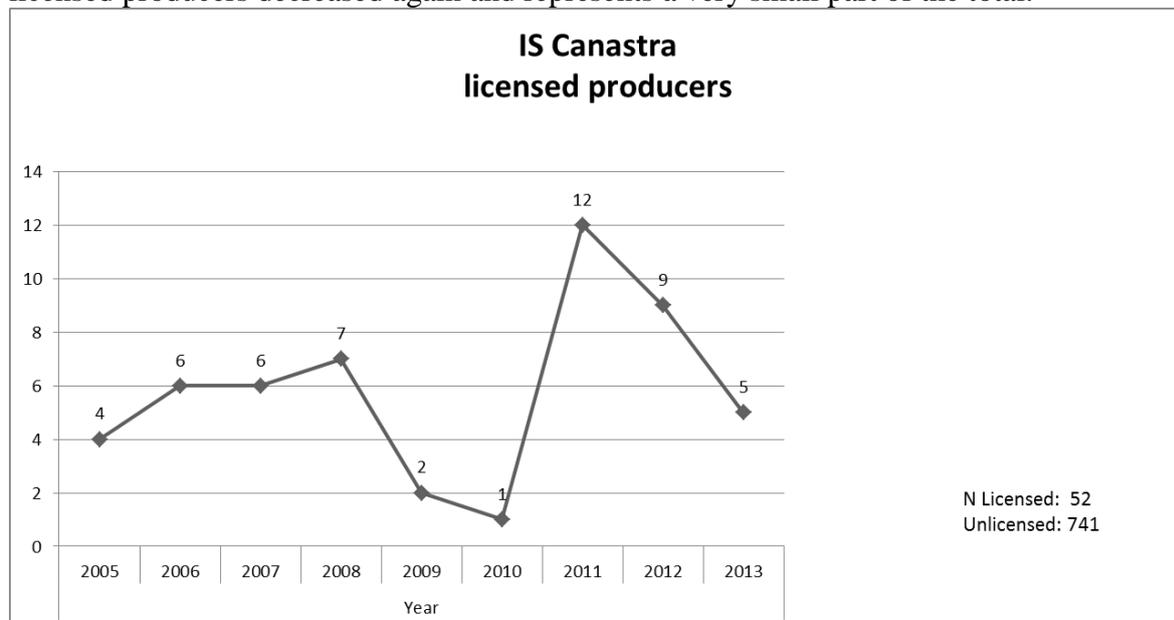
<sup>1</sup> [http://www.emater.mg.gov.br/porta1.cgi?flagweb=site\\_tpl\\_queijo&id=3299](http://www.emater.mg.gov.br/porta1.cgi?flagweb=site_tpl_queijo&id=3299), Access in 05 February 2015

Agricultural Institute (IMA), that has applied to registered cheese factories of family farmers the same guidelines, with the same rigor, that is applied to industries .

The discussion on sanitary and fiscal conditions enhances a immaturity of institutions, because they are not adequate to producers´ needs and the producers cannot adapt to their regulations. The main evidence of this fact is that in 12 years, only 255 producers are legally registered for production and sale, a very small part of the total of 27000 producers in the state.

In addition to the lack of adequacy of federal law and the inability of some inspectors from IMA to deal with rural producers that are already registered and with those that want to register, the government of the state of Minas Gerais decided to end the Program for Artisanal Cheese in 2011. Some few technicians of EMATER that were compromised with producers were taken out of the region and trust relations were lost, provoking an even larger reduction of interest by producers to engage in training courses and to register.

Graph 1 shows the evolution of the quantity of licensed producers of IS Canastra in ten years. After an increase related to the Program for Artisanal Cheese, the number of licensed producers decreased again and represents a very small part of the total.



**Graph 1: Number of producers licensed in IS Canastra, 2005-2015**

Source: The Authors, based on IMA documents <sup>2</sup>.

In the IS Canastra, the only county where trust relations continued was Medeiros, where 65% of producers are licensed. In contrast, the county of São Roque accounts for almost half of the region´s producers but has few licensed producers. As may be seen in Table 1, counties that have many producers not necessarily are those that have many licensed producers.

<sup>2</sup> See: <http://www.ima.mg.gov.br/certificacao/queijo-minas-artesanal-link>

**Table 1 – Number of producers by county in Canastra Region**

County	Number of Producers	%	Number of registers in IMA
São Roque de Minas	377	48,5	17%
Medeiros	150	17,3	65%
Tapiraí	106	13,6	10%
Bambuí	71	9,1	8%
Vargem Bonita	69	8,8	-
Delfinópolis	12	1,5	-
Piumhi	8	1	-

Source: The Authors, based on Perez (2014) and IMA (2015).

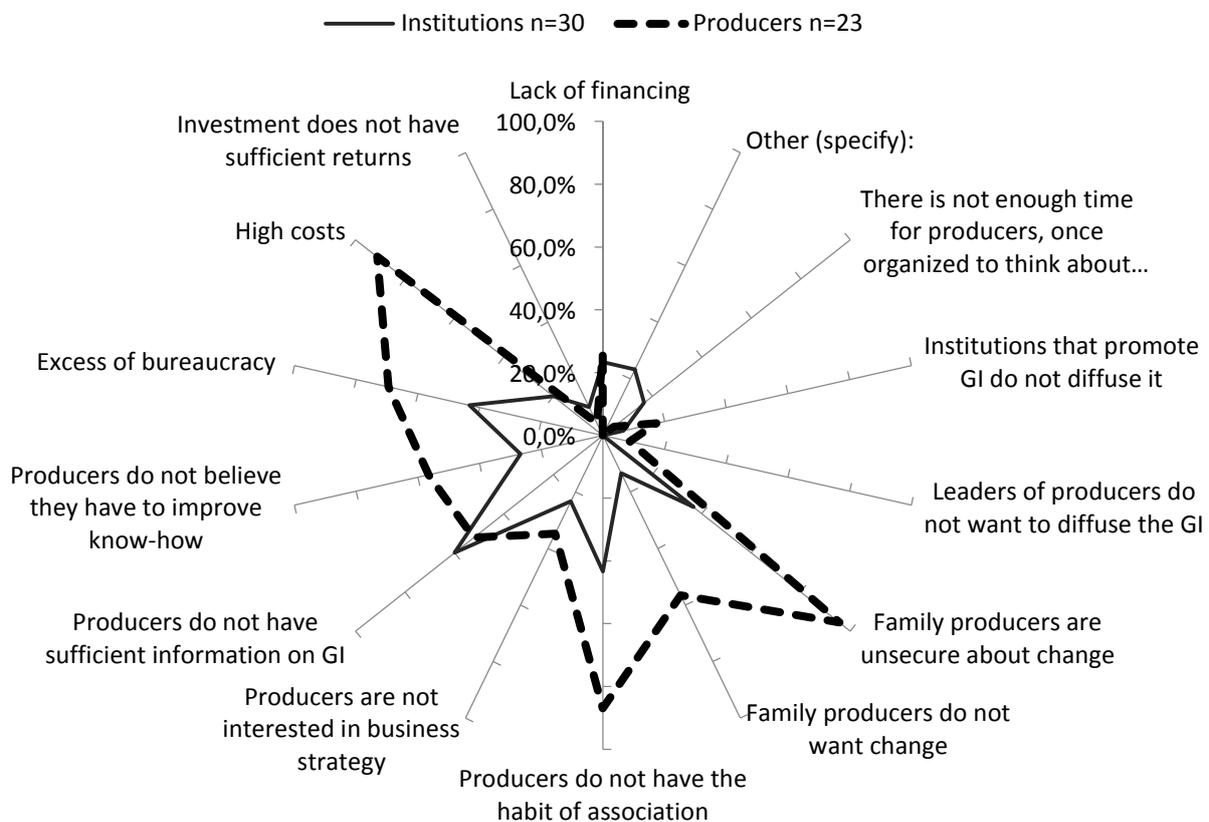
According to producers, Medeiros is different because there is a technician that has given support to them for more than ten years; also, the inspector of IMA responsible for this region is considered a partner of producers that teaches more than punishes.

Thus, the reason for the fall in the number of producers after the establishment of the GI seems to be related a lack of understanding of the institutions about the demands of producers and is directly related to the lack of understanding of tacit knowledge by federal and state institutions. Insecurity caused by this lack of understanding causes many producers to refrain to register, because even if INPI, Brazil's patent office, recognizes that the knowledge of traditional production process must be protected, most of the knowledge used in their specialty is not.

The semi-structured field survey of the institutions involved directly or indirectly with the Canastra IS and producers, from the second half of 2014 until early 2015, has shown strong evidence of the lack of understanding between institutions and producers.

As can be seen in Graph 1, for producers the little adherence to the Artisanal Cheese Program has as most important reason “family producers are unsecure about change” (95.7 %), followed by “high costs” (91.03 %) and “family producers do not have the habit of association” (87%). Institutions believe, however, that “producers do not have sufficient information on GI” (60 %) is the main reason, and the other reasons follow a uniform pattern. It is worth noting that the same causes given by producers as most important had little relevance to institutions: 36.7 % for “family producers are unsecure about change” and 20 % “high cost”.

## What is the main reason for the low involvement of producers of Artisanal Minas Cheese with the GI



**Graph 1 – Main causes pointed by institutions and producers of IS Canastra for the low involvement of producers with the Geographical Indication**

Source: The Authors

### 4. Discussion of the case

As we saw in section two of this paper, studies of the knowledge economy evolved from an approach that considered space as a source of competitive advantage due to physical proximity to an approach that considers space as relevant to the production of knowledge while locus of learning and of accumulation of relational assets. To consider relational assets in the analysis implies to take into account the effects of the actions of institutions that aim to promote productive improvements on the producers of a region.

The attempt on the part of federal institutions to introduce a geographical indication in the Serra da Canastra region can be seen as an effort to establish parameters for production, to promote improvements, to facilitate the achievement of economies of scale by allowing the production sharing and to open new markets. However, field research shows that instead of generating a security for producers by establishing a single standard for productive

practices, the action of the institutions caused insecurity regarding change. What causes this insecurity for change among producers may be the lack of trust in improvement strategies proposed by institutions as producers feel that their tacit knowledge is threatened.

Sanitary and inspecting institutions fail to understand of the difference between tacit and explicit knowledge and have the illusion that by protecting the latter they will ensure tradition. As a result, they do not adapt current norms to producers' practices. Producers, in turn, cannot adjust to these norms and the resulting loss of value in their product induces them to stop production.

Although federal and state institutions try to promote protection and improvement of productive processes, the low interest of producers to build competencies and develop innovation capabilities may be explained by these differences of perception concerning GI.

As observed earlier in this paper, tacit and explicit knowledge trail separate paths that will constitute later a unique body of knowledge. Explicit knowledge is easier to transmit and to process as it is a practical type of knowledge, being normally stored on data bases and computers. Tacit knowledge has a subjective (and sometimes mystified) nature that hinders processing and transmission by systematic and logical ways. The creation of new knowledge in a region depends on economic, political and cultural elements that emerge as a region has particular historical conditions of growth and resilience.

The governance relations so far established between a group of regional cheese producers and promoting institutions pose a concrete risk for tacit knowledge that endangers the sustainability of artisanal cheese production. A conflict between institutional demands that are myopic to cultural context, disregarding savoir-faire, and producers that want to be certified by IS Canastra has emerged. To solve this conflict, policy-makers must review the regional development policy that includes actions to implement the Geographical Indication of artisanal cheese in the Canastra region.

## **5. Summary and Conclusions**

This paper discussed the importance of tacit knowledge for production and territorial development as well as the possible effects that institutions can play in harnessing this knowledge for productive purposes.

The paper did not pretend to make an exhaustive discussion on knowledge and types of creation, application and diffusion in regions. Instead, we opted to focus on a particular type of knowledge that is important for territorial development and show how the lack of understanding of what this knowledge is about hinders the implementation of development policies. The initial sections of the paper demonstrated the importance to understand the territory as a result of a development process related to the accumulation of relational assets and the role tacit knowledge plays in this process. The case presented and discussed in the subsequent section is based on the first findings of a research in progress that is part of one the authors' PhD thesis.

The analysis of the case of the Canastra region suggests that it is not sufficient to have a valuable tacit knowledge in a given region if there is no parity between the exogenous knowledge of the local institutions and the knowledge of local organizations. Although local producers are interested in innovation, the imposition of production standards by federal and state institutions has so far represented a threat to tacit knowledge, causing a level of insecurity that prevents the spread of possible product improvements and processes, thus limiting the possibilities for innovation by producers. An alignment between the perceptions of institutions and producers is therefore crucial for the success of a geographical indication policy.

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