SINER-GI Strengthening International Research on Geographical Indications: from research foundation to consistent policy. Instrument: specific targeted research or innovation project. Thematic priority: priority 8.1. Policy-oriented research (SSP). D9 - Synthesis and scenarios. Analysis built on case study reports

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SINER-GI
Strengthening International Research on Geographical Indications: from research foundation to consistent policy

Instrument: SPECIFIC TARGETED RESEARCH OR INNOVATION PROJECT
Thematic Priority: PRIORITY 8.1. POLICY-ORIENTED RESEARCH (SSP)

TASK 3 – Synthesis and policy implications

WP 6 – Synthesis and scenarios

D9 - Synthesis and scenarios
Analysis built on Case Study reports

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RE	Restricted to a group specified by the consortium (including the Commission Services)	
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D9 - Synthesis and scenarios
Analysis built on Case Study reports

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Contents

INTRODUCTION

The main activity in the WP6 Sinergi project was to develop a comparative analysis based on all the studied cases by SINERGI partners (WP5, see WP5 reports, D8).
The work was accomplished in several steps:
- in July 2007 a note on the hypothesis to build baseline scenarios was diffused by the WP6 coordinator partner (**Gilles Allaire and Bertil Sylvander**),
- the synthesis exercise started after the reception of the cases reports (in draft version), with the Lausanne workshop (10-13 October 2007): **Allaire Gilles, Barjolle Dominique, Paus Marguerite, Sylvander Bertil, Thévenod-Mottet Erik, Tisenkopfs Talis, Wallet Frederic,**
- it resumed by the Budapest plenary meeting (24-25/10/2007) and the two regional meetings in Budapest (26/10/2007) and Santiago de Chile (10-11/12/2007), in which participated the different case studies authors (see the proceedings of these meetings on the Sinergi website).

Results from WP6 were presented and discussed in the Edinburgh workshop (10-11/01/2008) and the Sinergi & FAO joint meeting in Rome (31/01-01/02/2008).

List of previous deliverables:

Deliverable No	*Deliverable title*
D1	Report on legal and institutional issues
D2	Report on social and economic issues
D3	Report on conceptual synthesis
D4	Proceedings of the meeting on GIs development
D5	GI World wide database on-line
D6	Report on case study methodology
D7	Critical check-list for impacts assessment
D8	Case study reports
D9	**Report on synthesis and scenarios**

A/ General SINERGI work organisation

According to the technical annexe: In reaching the scientific objectives of the project, the following steps will be followed:

1. *to develop a **theoretical model** for monitoring and measuring the impact of GIs and evaluating their conditions of success (WP3, drawing from WP1 & WP2) (See: D1, D2, D3);*

2. *to develop a new knowledge **corpus** from an **in-depth fieldwork**:*
   - build a common reference methodology for analysing case-studies using an integrated approach to assess the multifunctional character of different types of GIs; (WP4)
   - perform in-depth analysis of relevant case studies in selected extra-EU countries (with special emphasis on Developing Countries) and comparison to EU case-studies; (WP5) (See the template (guide) for the case study reports);

3. *Elaborate synthesis and scenarios to devise **strategies and policy recommendations**:*

- **compare international case-studies and define a typology of GIs protection effects crossed to different legal and institutional systems**; (WP6)
- identify likely consequences (in terms of competition, trade, economic growth and income distribution, rural development, environment and culture) of the pursuit of current GI protection arrangements in different EU and non-EU countries, and elaborate recommendations for future improvement of GI institutional and policy frameworks, in EU and non-EU countries, in order to enhance opportunities and benefits, whilst decreasing threats (WP7);

4. Communicate the results and disseminate the information (WP8).

B/ Specific WP6 objectives and report outlines

Objectives:
• International comparison (using case-studies reports) to define a typology of GIs protection effects crossed to different legal and institutional systems
• Identification of "invariant" effects among all GI Cases studied in Task 2
• Definition of long-term scenarios without policies changes for each relevant situation, highlighted by the case studies

GI systems are considered according to the system of protection and "legal and institutional systems", meaning both support policies at national (or other) level and international trade policies. To develop the WP6 comparative analysis, those variables have to be used in designing relevant "types" of GIs protection schemes and GIs systems economies (see D1, D2, D3, D6, WP5 template).
See Chapter I- Typology of geopolitical contexts in the comparative GIs cases analysis.

Identification of "invariant effects" rests on an analysis of the factors of impact of the various GI systems in the three dimensions of sustainable development. Models of impact were identified through the literature and verified by case studies implementation. The values of the impacts, positive or negative, are dependant variables according to GI types in various geopolitical contexts (national and regional). This methodology is developed in D6 (Report on case study methodology) and D7 (WP4), and activated in the WP5 reports common template. At the stage of the synthesis and general level of analysis, invariant effects are identified in general terms, in accordance with the methodology.
See Chapter II- Identification of GIs impacts on sustainable development, tentative assessment

While, in the WP6 framework, the policies and even the politics are not changing (for example in Europe the UE 512 reg. will be developed, the TRIPS agreement will stay in operation with its ambiguities, etc.), markets institutions and stakeholders ideas about GI and the role of the GI quality schemes in the market differentiation process could change. Considering this general framework, the forms of competition in the actual trade regime are the main variable taken into account. The opinion of the marketers on the advantages and the disadvantages to use such or such marketing tool evolves according to several types of factors and is not just a reflect of prices. The effective level of protection on one side and the effective level of recognition by consumers on the other are at stake. Competition regime is the main variable taking in account for forecast exercises based on case studies.
See Chapter III- International trade regime, positions of GIs based quality schemes and hypothesis to establish scenarios.

To be able to compare the case studies, a methodology was build using the DPSR model. Two dimensions are considered: protection schemes and GI systems. For each a few number of Driving Forces, Pressures, present state and Responses are identified and allow analysing the diversity and the factors of evolution of GI systems and markets.
See Chapter IV- Methodology for case studies comparison.

Not only protection schemes for GIs are diverse but also their evolution in the actual period. The cases studies because they focus on new initiatives in the South show that these dynamics are also diverse and offer arguments for the three hypothesis related to the position of GI differentiation in the global market.
See Chapter V- Diversity of the institutional and legal frameworks for GI: national/local dynamics.

According to "type" (geopolitical contexts) and to the *specific trajectory* of each GI system (each case), the tendencies characterising the three general hypothesis regarding the international trade regime we made will be different. According to the cases, each of the three scenarios corresponds to different evolutions of the configuration of the system of actors and of the power of each type of actors. To describe the trajectory of the system in each case we use the *DPSR model*. Based on the analysis of each type of trajectory, the forecast exercise consists in identifying three scenarios corresponding to the three general baseline hypotheses.
See Chapter VI- System trajectories and baseline scenarios.

The importance and the specific nature of the economic social, and environmental, impacts are likely to be different for each scenario in each type of GI and geopolitical context. The particular role of the system of protection has to be considered when assessing each scenario.
See Chapter VII- GI System trajectories and impacts on sustainable development.

Chapter I- Qualification, typologies of GI systems and of geopolitical contexts

The definition for Geographical Indications (GIs) provided by the TRIPS Agreement is broad enough to cover the name of any kind of products when some distinctive quality is linked with their geographical origin, and the diverse modes of identification of those products. While according to the TRIPS agreement, Geographical Indications are by essence intellectual property rights, in many case, beyond protected and designated GIs, these rights are not constituted. The use of a geographical indication to identify an origin quality product implies a clarification of the authorized use of it and it is a result of a community initiative. It is generally a first step to get value from specific local resources. There are several degrees and levels of recognition of a geographical indication value and right: consumers' demand, marketing rules within a supply chain, protection laws and supporting public policies.

The levels of analysis in this report are both "GI systems" and "protection schemes". WP1 (D1) proposed a definition and an analysis of protection schemes. WP2 (D2) showed the collective action aspect of GI systems dynamics, from the literature. The objectives of WP3 and WP4 were to set up analytical grids for the case study analysis in terms of "GI system". Chapter 1 deals with both the typologies of GI systems and of geopolitical contexts and related protection schemes (A) and the methodology to descriptive systems and protection schemes (B).
The methodology to distinguish GI systems types draws from the previous work packages preparing case studies. Data analysis result from the WP6 Lausanne workshop (September 2007).

We know that *the products, markets and policy features concerning the GIs are fairly diverse worldwide*. This diversity can be described at many levels:

- types of qualification of products bearing a GI as identifier (origin, local, organic, faire trade, standard products, etc);
- diversity of initiators / stakeholders and their motives (to recover the use of usurped names, improve the access to markets, preserve the biodiversity and fight against biopiracy, protect the traditional know how, support collective development initiatives and enhance the rural development, better regulate market fluctuations, better develop and implement the overall market rules, support the individual firms' strategies);
- market structures (monopolies, oligopolies, fringes);
- supply chain structures (long/short, coexistence of large/small firms, etc.);
- governance structures (clubs, channel captains, inter-professional bodies),
- consumers' behaviour (familiarity, local and remote consumers, generic or connoisseurs, etc.);
- generic systems (firms selling both GIs and trademarks) /specific systems (specialized on GIs);
- age (novel systems / mature systems), related to learning capacities and flexible organisation;

- policy schemes, legal instruments, enforcement devices, public or private certification modes; types of justifications of the public action, and interpretations of the rules are also quite different.

According to the main objectives of the project and to the WP1 and WP2 results, we shall keep in mind the following points:

- **Assessment of the effects** has to be based both on the systems' internal goals and on the ability of the systems to achieve objectives linked with sustainable development. Those objectives shall be considered with regards to overall public stakes concerning GIs development; effects cannot be measured in general, but with regards to concrete and specific situation.
- We shall not deal with "success" or "failure", as those concepts are too static. Furthermore, they don't address sufficiently the GI systems' trajectories. One system can be threaten, pass through crisis and find resources for a new trade success. On the other hand, a well doing system can fail, if hidden weaknesses emerge or if the context becomes very negative. Therefore, we prefer to deal with **"development potential" and "state of development"**, taking in account influential factors and driving forces**.**
- Protection schemes can be **permissive or prescriptive** (D1). However, we shall be pragmatic and consider the actual diversity of the protection schemes and of the driving forces. A public legal protection as in Europe can be considered as prescriptive (with possible permissive implementation in some countries / some sectors / some historical periods). Trademark or certification trademark (CTM) systems can be considered as permissive, although some CTM are designed and implemented on a prescriptive way. Not only legal provisions have to be considered, but also modes of governance.
- We shall consider the notion of **"protection"** widely, as the protection juridical scheme in itself is not sufficient to explain the dynamics of GI systems (D2). We have to include in the picture the overall public support, which can play a key role in the development of GI systems. In effect, **public support** is not restricted to the intervention of the State. Other public bodies (as NGO or research / consultancy agencies for example), enhancing public goods and supported by diverse policy networks and epistemic communities can play a crucial role in public policies. Those supports can concern technical assistance, education, monitoring, funding, etc. We distinguish weak or strong support as descriptive elements of GI systems (see D3 table 10, p. 39).

A/ Origin quality products qualification and GI systems

Let us recall what is a **GI system**: ***"The GI system is 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" (WP5 template).*** Taking another point of view we can see a "GI system" as the dynamic institutional framework by which origin quality product get qualification, in which market standards and the regulation of intellectual property right play a key role (Allaire, Daviron, 2007). There are several dimensions of GI systems, which are complex institutional combinations: the market structure, the supply chain organisation, local resources management system, the stakeholders' configuration and policies types of support, the regulation and control management system and the mode of governance, the technology and its generic vs. specific aspects, and product qualification procedures… We argue that a GI system cannot be assimilated to a supply chain because it

also incorporates horizontal (cluster) and land-based coordination mechanisms, due to the specific nature of geographical indication as Intellectual Property right as defined in the TRIPs 1994 agreement. The value chain incorporates common intellectual resources. Informal vs. formal rules are regulating common pools of resources (see Olstrom, Schlager, 1992).

Sinergi Cases studies (WP5) have collected knowledge considering the various dimensions of GI systems. The position of influent actors of the market chain and of the territorial actors' vis-à-vis the GI system mode of governance (inside or outside) is not predefined, but it depends from case to case. For example, a large enterprise might be an outsider in one case, and a local authority insider in another case, or the reverse.

According to the literature identified in D2, the main feature distinguishing the GI systems is tied to the way the players deals with markets standards. While a GI recognition relates to some specific characteristic, that does position in an unambiguous manner the products bearing this GI in the complex market world of the qualities. In their sorts, some GI can be market leaders and in this case can be distinguished by other features (artisan/industrial, terroirs inside the appellation area, the name of the producer or other types of mark…). Thus the distinction from a market point of view between *generic systems* versus *specific systems* concerns the GI world itself[1]. This criterion distinguishes dominant strategies within GI systems and even within market channels inside a large GI system (Table 1). The specificity of origin is to be found in the specificity of local and human resources and in local knowledge heritages. But, while GI specificity relates somehow to distinctive specific resources, the quality attributes of a product bearing a GI are not limited to that specificity (which accounts in the value according to marketing and consumers' expectations). A GI product has generally to comply with various mandatory or market quality standards, and thus the capacity of absorption of these standards inside the GI qualification and marketing procedures is another criterion of distinction (Table 1). To follow one or the other direction is a strategic choice, depending of the form of the actors' alliance. It is a path dependant process of designing marketing common strategy or strategies, in the framework of a GI system. Thus, phases of conflict between alternative strategies and period of crisis resulting by a strategic change (issue of up-grading and up-scaling) break up GI system trajectories (see chapter IV). In the process of market enlargement, the names of some products can become a general designation for a type of product; and the link between the product and the origin name can be lost.

Table 1 Generic versus specific systems according to types of resources and of market

	Distinctive Resources	Types of markets and strategic marketing tools
Generic system	Generic knowledge to define quality standards	General market, supermarkets, exports and long distance sales
Specific system	Cultural diversity, tradition, consumer knowledge and familiarity, loyalty and interpersonal links	Specialized market (ethnic, fair trade, organic) Direct sales, "radical marketing", and community supported agriculture (box schemes)…

But products qualification issues can not be reduced to the economics or the sociology or the law related to the issues of the signalling of *one* type of attribute, while these approaches are well developed in the academic literature. Qualification results of mechanisms of institutional

[1] See Allaire, Sylvander, 1997.

hybridity mixing in concrete market standards quality innovation paradigms (see Allaire, Wolf, 2004). Products identified by their origin or bearing a geographical name are first recognized as particular, specific or typical (as they present themselves, as it could be say). But that typicality is to be seen according to a given universe of qualification. All types of sign, brand names as collective standards are investments to get a distinctive recognition by the market opinion and are supports for potential return value by distinctive reputation. While communication rationale is to claim some higher utility comparatively to anonymous product, while indeed have to respect mandatory threshold norms, in ordinary consumption behaviours product are not anonymous. While market analysis rest on codified typologies of products according to recognized standards, social and finally market qualification of the products is not a simple combination of attributes (as supposed in the Lancaster dominant economic framework) (see Allaire, 2004). For example, the consumer perception of an "origin" attribute will not be the same in a farmers' market scene or in a supermarket, on this attribute will not be identified by the same says in regional versus international market. Qualification procedure will differ, and thus the role of diverse legal tools, in different historical market regimes, for example in the 50's before the supermarket revolution versus in the 90's in a media market universe (Allaire, Daviron, 2007). All along the trade history and in the contemporary global world, origin quality products exist as market facts and institutional facts. Market reputation encompasses intimately a typical quality and credibility in the GI sign and in the rules of quality control.

The typical quality of a GI product changes along time with technology and acculturation processes, and it varies within professional communities of producers or processors. We see these changes possibly enhancing the market position of these communities in GI systems trajectories of successful market extension, but also in the contrary jeopardising the GI reputation, when the system looses quality coherence (Barjolle, Sylvander, 2002). What is jeopardising collective reputation is a complex issue because collective reputation is a balance between individual interest to develop individual reputation and to safeguard collective reputation banking the individual reputation. First of all, origin typicality linked with some specific resource (included vegetal varieties or animal breeds) is not only a horizontal quality differentiation within a sort of products. Yes the claim for typicality is addressing a particular type of consumers, more or less connoisseurs. But what is expected is that these consumers are willing to pay to found available those typical products. Indeed, to consider economic analysis, the origin distinctive identifier is linking the horizontal or *qualitative* notion of origin or place with some more or less perceived or implicit quantitative (ordinal) attribute[2]. Classically, well known GI products, prestigious wines as Champaign or Chianti, and spirits as Cognac, Scotch whisky or Tequila, or spices as Paprika or cheeses as Parmesan and Roquefort, but also carpets from Turkey were considered as aristocratic or deluxe products and market niches. Thus the implicit quantitative attribute valuing the GI reputation is linked with hedonic or aesthetic utility. In fact, the hedonic attribute has several (no additive) components depending from cultural and social capital and politics involved in qualification processes. But finally a certain level of collective reputation is provided for GI product. Different types of players, differentiating themselves by diverse signs (local terroirs, "maisons", "chateaux" or brands names) or being anonymous raw material providers are both investing and benefiting of the multilevel reputation system. When the quality of the products referring to a GI is to much heterogeneous according to the implicit level of collective reputation, the premium advantage is threatened (quality crisis).
When we refer to a GI "product" as a collective name ("Champagne", "Basmati", "Rooibos tea", we use a notion referring to a collective standard (codified, but never completely) and to

[2] See Loureiro, McCluskey,, 2000.

a level of reputation which is a collective output and a collective resource of the players. The real products found in the marketplaces are challenged by consumer perceived standard (meaning reputation). In a GI systems trajectory, market up-scaling challenges the origin quality product standard and attached significations in various quality universes. In each situation or market universe (domestic versus international, local vs. supermarket…), a GI identifier is covering a certain position in the implicit reputation order concerning the relevant sort of competitor products (standards). All the "mature" GI systems we was referring to upper have in common to be the "top" of their sorts of product by investing in reputation and by their capacity to adapt along the time to relevant changing quality differentiation attributes, through codes of practices revisions and interprofessionnal regulation bodies (adaptation, but not without possible quality crisis…). Generally, in these cases, large companies are promoting the product on large internationalized markets directed to the developing "leisure class" (Veblen). But, collective investment is of necessity beyond private investment of the main beneficiaries of the collective reputation premium to maintain it. Professional and interprofessionnal bodies ensure the alliance within players and stakeholders and the implementation of collective rules, and some sort of regulation of the volume of labelled products. Thus codification of practices, and in general any change in the set of formal and informal rules qualifying in different situations the product (as standard) are collective and competitive challenges. Different forms of social organisation of production and market chain (co-operative rules) and different legal systems (public rules) more or less permissive and protective, support origin products diffusion through the market and maintain the value of using geographical indications as market sign within others.

In the past, while GI markets was developing in (let say) aristocratic markets (protected and codified GIs), as pictured upper, origin naming or labelling was also used in trading practices a within local markets. The geography and the economy of GIs are affected by various trends in our actual world, new market configurations and regimes being developing since the 80' (see chapter III). While public action was limited in the past to the legal protection of GI as IPR (according to international agreement and competition principle preventing consumers' misinformation), new rural development policies and collective initiatives, both in the North and in the South. New justifications for GI support policies have developed with the recognition of positive impact of GI on territorial public goods, including biodiversity (see Sylvander and al., 2006).

GI products generally combine identifiers. Cheeses, coffees or wines bearing a GI identity can be identified in addition as organic, faire-trade, or by any type of public good friendliness. These systems of identifiers can be analyzed according to quality qualification in distinguishing the rationale and the stake to identify not only the origin attribute but more globally a product in its complex signification, and the tools (rules) allowing that identification. Three principal rationales are in play to identify quality of GI products:

- the *heritage*: reference to tradition, ethnic values and cultures, and to traditional knowledge,
- to *prevent quality heterogeneity* jeopardizing collective reputation and the GI identifier system including the GI sign and the market chain governance mode,
- to *reach new consumers' concerns* related to modes of production (public issues in human health, animal welfare sustainable development…).

Table 2: Quality attributes and public/private standards

Rationale	Identification stake	Instrument
Common heritage	Specific "origin" quality	Code of practice (basis)
Prevent quality heterogeneity jeopardizing reputation	Intrinsic relevant quality attributes	Additional rules in the code of practice
New consumers' concerns	Process and other extrinsic quality attributes	Additional rules (not in the code of practice) and skills (in complementary setting

Hughes (2006) proposes "*that geographical words in product names (that is, labeling and advertising) have three basic purposes. These are (1) to communicate geographic source, (2) to communicate (non-geographic) product qualities, and (3) to create evocative value.*" What is called "product characteristics other than geographic origin" in this quotation does not cover specific quality which is linked with the territory specific resource, but quality attribute sourced in the primary origin product, but which can be imitated. Thus, the author stresses that "*this second use often leads to the geographic words becoming "generic." The word loses its geographic meaning and acquires another meaning based on non-geographic qualities of the product, as when people go into a restaurant chinois off the Champs-Elysées or, nine time zones away, Californians order French fries with their hamburger.*" While the name by itself identifies a source, if it is protected, all the quality of the product cannot be detached from that source. Again, the legal protection of names is not sufficient to protect with the name a type of product, a type of knowledge, which is the purpose of classification system associated with the form of protection (see upper analysis in terms of institutional protection scheme).
The third use of geographical words distinguished by Hughes concerns "evocative and aesthetic purposes". In this sense, Allaire & Wolf (2004) see in origin name global quality identifier linking credence attribute regarding the specific virtues of the source and evocative value. While in that holistic quality paradigm the origin quality cannot be split up in identified attributes, it does mean that a real link does not exist between product and local resources, moreover that quality is depending of the mode of collective management of common pool of local resources (Ostrom). However the evocative value of names and the holistic perception allow linking that value with social distinctive attitudes. Cognac is made with local skills and material, while to drink Cognac is not sharing that knowledge, but showing off certain social status.

Hughes (2006) stresses that "*the classical justification for geographical indications is that they serve a special combination of #1 and #2: to communicate a product's geographical source AND non-geographic qualities of the product that are related to its geographic origin. This is the idea of terroir: that the particular geography produces particular product characteristics that cannot be imitated by other regions.*" But there are debates around that notion (see infra, point C/) and other classical justifications for geographical Indication (see Sylvander, and al, 2006).

B/ Descriptive variables of the case studies and typologies of GI systems

To establish types of GI systems, the Lausanne working group set up (according to previous works) a list of 16 variables which was filled in from the case reports executive summaries. These criteria are used to build typologies of GI systems and protection schemes and to analyse GI systems trajectories for comparative analysis (see chapters V and VI).

1 Name of the product
2 Country
3 Type of product
(*Cheese, Spice, Cream, Herbal Tea, Fruit, Fruit, Vegetable, Ham, Spirit, Meat, Coffee, Cheese, and Pork Pie*)
4 Full process in the area (production of raw material and processing)
(*Yes, no*)
A distinction can be made between the GI product (for GI recognized product) and the whole supply chain.
5 Why is the case interesting for SINERGI? Main features regarding SINERGI main objectives (WP6 / general objectives of the project)
6 Classification of the present stage in the trajectory
(*New GI / Mature / Emergent / Evolving / In crisis*)
7 Market of reference
(*National / regional / international*; *Long or short supply chain*)
In many cases, there are two markets differently qualified: Domestic-quality & Export-industrial-generic; National (fresh) / International (frozen); High quality for export & Cheap mix for national market…
8 Supply Chain structure (numbers and types of actors/players) (see infra)
9 Motivations of the actors (who initiate the procedure? why do the actors apply to a GI / objectives of the registration?)
10 Type of collective organisation and of members of the organisation
(No collective organisation, Initiated by local authorities, Inter-professional body (producers and processors), Producers organisations, Processors organisations, Local authorities, Local NGO, Administrative agency)
11 Diversity of business models and coherence of the supply chain differentiation
(*Several Business Model (BM) but not conflicting, Several BM and conflicting, One BM but conflicting, One market leader no conflicting*)
12 Conflicts inside the Supply Chain among the actors (conflicts of interest)
(*Yes, no*)
13 Main current challenges for the supply chain (not related to GI protection) (see infra)
14 GI Legal framework (protection status of the GI / year of protection)
15 Regime of protection at country level (Level of protection, see D1)
16 Public support (types of actors involved and policies).

These variables allow distinguishing several types of GI systems according to the supply chain structure, stakeholders' relations, and forms of coordination, and their local/ national contexts. Some will intervene in a first synthetic typology focusing on contexts (*see hereafter*). The others will help to analyze the trajectories of the systems and to formulate scenarios features in each case (see chapters V and VI).

Supply chain structures

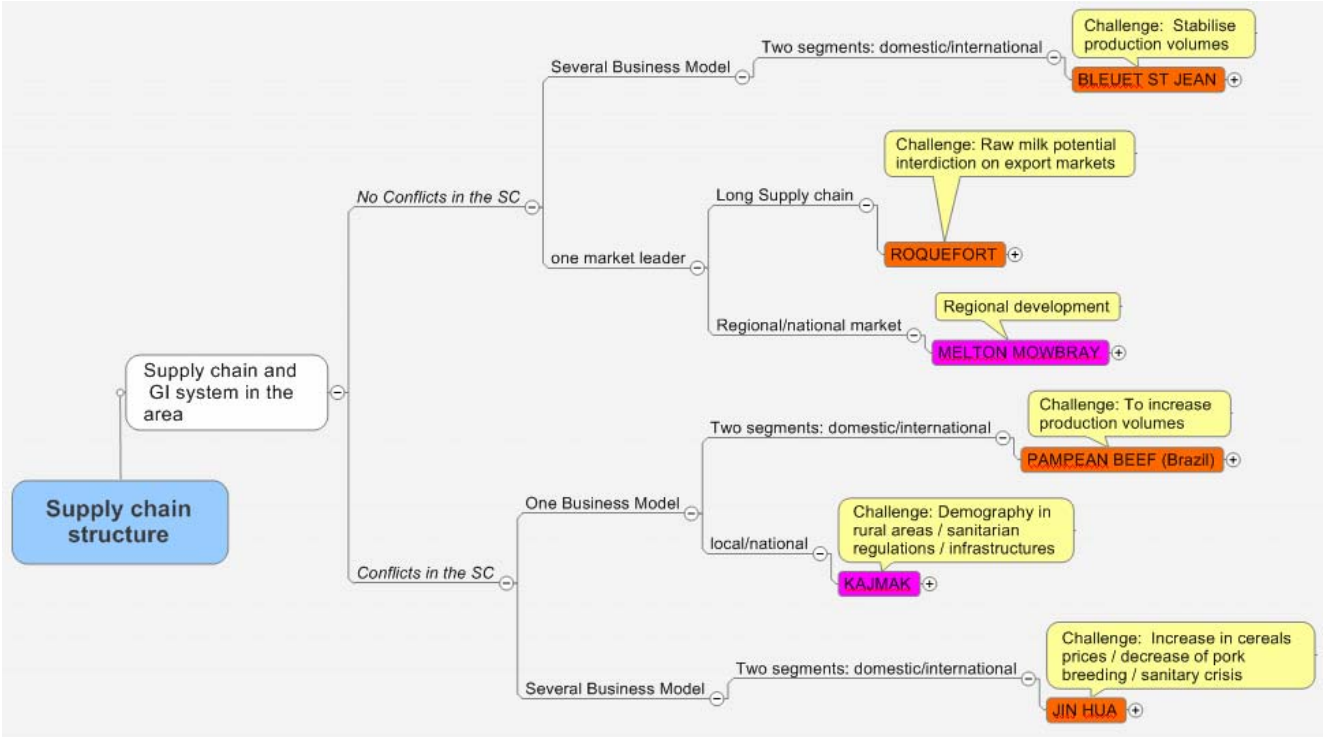
Several variables relate to the supply chain structures and situation (4, 7, 8, 10-13). They are reported on Figure 1.
According to those variables the two main types appear as follows:
Generics GI systems: *Bleuets du lac St Jean, Basmati, Florida Oranges, Roquefort, Paprika, Rooïbos, Tequila, Jinhua*
Specific GI systems*: the others.*

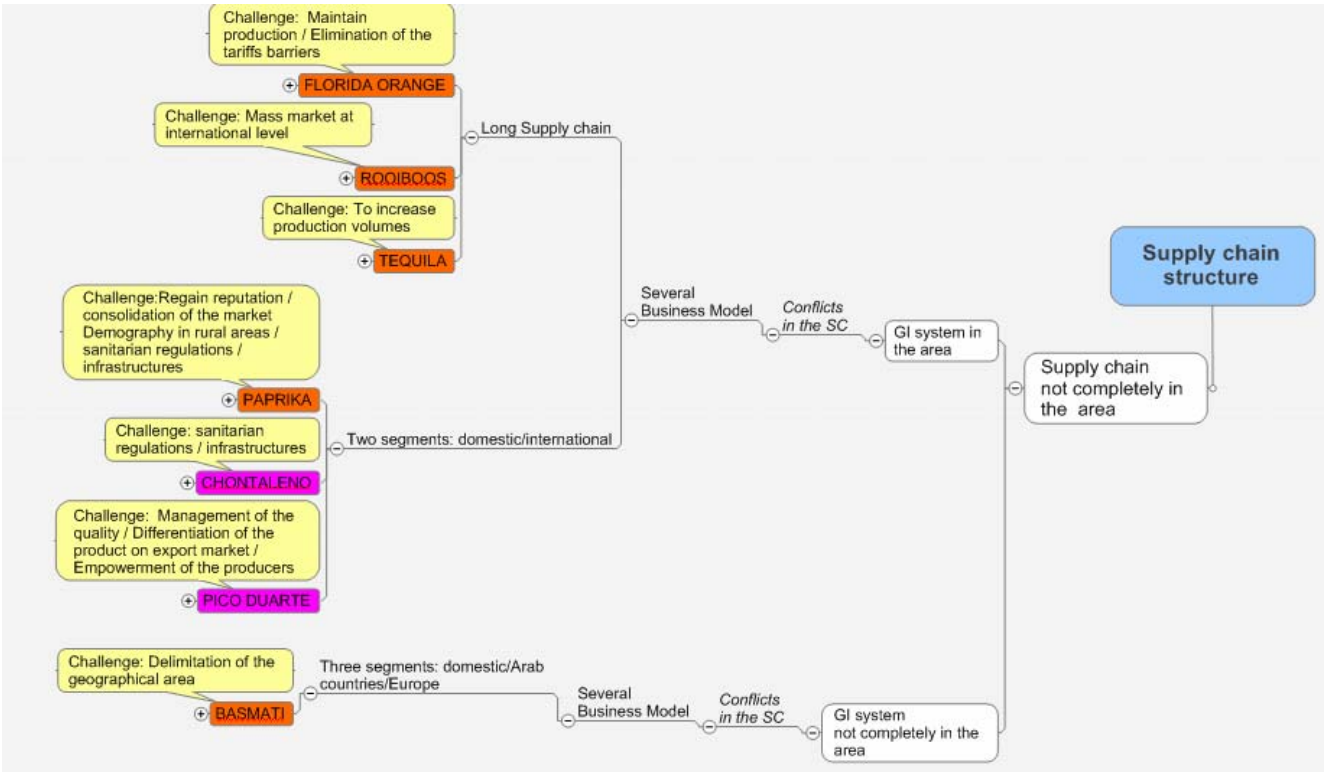
Main challenges for the Supply Chain (not related to GI protection))

(variable 13)
Roquefort: Raw milk potential interdiction on export markets
Paprika: Regain reputation / consolidation of the market
Kajmak: Demography in rural areas / sanitarian regulations / infrastructures
Rooïbos: Mass market at international level
Bleuets du lac St Jean: To stabilise production volumes
Florida Oranges: Maintain production. To resist to pressures (elimination of the tariff barrier)
Basmati: Delimitation of the geographical area
Jinhua: Increase in cereals prices / decrease of pork breeding / sanitary crisis
Tequila: To increase production volumes
Pampean Beef (Brazil): To increase production
Pico Duarte Coffee: Management of the quality / Differentiation of the product on export market / Empowerment of the producers
Chontaleno: Demography in rural areas / sanitarian regulations / infrastructures / empowerment of the producers
Melton Mowbray pork Pies: Regional development

These challenges have to be analyzed in the regard of the driving forces shaping international trade regime and national/regional economies and polities (see DPSR model hereafter).

Figure 1 Types of supply chains and GI systems





Classification of GI systems according to the age of the GI recognition

The variable termed "classification" (v6, supra) comes from a usual distinction on "mature" and "new" GIs which is related to the age of the name of the product and of its protection first scheme. Generally "mature" GI systems have accumulated social capital. But a mature GI can be in crisis as it is for the Paprika in the present situation. In emergent situation, when is developing new initiative to set up a GI market and/or scheme of protection, the existence (or the deficit) of support resources are part of the main factors of success (or failures).

The Sinergi case studies generally concern localised systems of production and products bearing some reputation linked with their name and origin, but not necessary identified or protected as GI. In some cases (Florida oranges for example), only a part of the production corresponds with a product able to claim for GI recognition and protection, or only a group of actors is motivated by that perspective and is involved in developing niche markets.
If we consider the reputation issue, all studied products (except Pico Duarte coffee) could be considered as mature GI. But if we consider the issue of the existence of a GI scheme of protection, the majority of the cases correspond with new or emergent GI. For example, in considering national reputation Kajmak is a "mature" product, but the Kajmak GI system is "emergent". Due to the variety of geopolitical contexts, a simple classification related to the system age offers trouble when mature supply chains (as Florida Orange or Bleuets) are localised and benefit from some kind of protection of their name, but the stakeholders are not interested (except minority) to develop a GI identification.

GI system economic performance dimensions

Four factors (dimensions) for the “originality” of a product described by Van der Meulen (1999; 2007, see D6) can be used to characterise a GI system type of economic performance

(as we find it in a given moment, but that large part of this potential is the result of management efforts in the past). In this sense, the product “originality” or specificity is the degree to which it is linked to a specific geographic area (cf. variable 4, 5, 6, 11).

Territoriality = the physical bond to the area; a food product that is grown, processed, aged, and consumed within a given geographic area, is highly rooted in the place.

Typicality = the specific characteristics of the production process and of the final product, both comprising intrinsic as well as extrinsic aspects, which sets a food product apart from the generic version, and in a way that relates to the area of origin; landscape is considered to be a extrinsic quality aspect of the production process.

Traditionality = origin products are not only part of the heritage of an industry or a community of producers but the heritage of a group mixing consumers –connoisseurs- and producers (or processors). Tradition does not oppose with innovation but it reflects the cultural dimension of knowledge and, in this sense, traditional products are part of national heritages and even of the world heritage. GI producers are generally aware of this patrimonial feature of their activity, but GI systems are submitted to two contradictory logics. One is the maintaining of the traditional design as the true basis of the collective reputation, while the other is in contrary the need of innovation to maintain high collective reputation when market conditions are changing. In both direction, to maintain tradition and to manage innovation, co-operative rules are of necessity and finally the social organisation of producers and of the market chain management give to these products their characteristics.

Collectiveness = the degree of vertical and horizontal coordination of players and stakeholders participation to resources management.

Policies support

The variable "Public support" (var. 16) not only includes national policies (or European policies) but also NGOs implementing public programmes in the South (corresponding with development aid policies from the North or international programmes). Because NGOs are generally working through development programmes funded by Northern countries or the World Bank, a possibility to classify this support is to contrast NGOs work by their orientation more or less in favour of GI procedure. It seems that we can contrast two "philosophies": one under US influence (clustering and branding), another under Europe influence (INAO, AGRIDEA, Italian NGOs…) which considerer the role of GI procedure of registration and the possibility offered by the UE 510 reg. for abroad registering.

For example, as it is noticed by Marguerite Paus, there are some arguments to put in close types the Serbian Kajmak case and the Pico Duarte coffee from Dominican Republic. There are several US influence vectors in this Serbian case. The Serbian law on GIs is a compromise between the European and US systems of protection, and local support and clustering methodology is brought in by USaid. The advantage of the clusters building is to develop pluri-disciplinary or pluri-professionnal capacities. In general, GI products are final product involving in the process of specification several categories of metiers (veterinaries, local authorities, producers, processors, NGOs, etc). The philosophy of the World Bank and Us aid stresses "branding" issue, supporting individual or collective trade marks setting up, while European experts support Geographical Indication strategy (PDO/PGI model, code of practice setting up), in revealing a common territorial good by resources identification and appropriation. The local initiative to introduce GI label for the "kajmak of Kraljevo" comes from the cluster (more precisely from a veterinary public agent, a woman). The project was afterwards developed by a local ONG (and funded by the Serbian Ministry of Agriculture)

when the World Bank programme stopped due to the end of the financing (see Kajmak case report).
As a result, the confusion is often made between the concepts of branding, trademarks, Geographical Indications, PDO/PGI…, which comes from the fact that the cluster/US Aid or World Bank initiatives are often promoting the "branding» concept to better valorise the production, through a collective, when not individual trademark. Often, those initiatives are part of short term project and do not have immediate results. GI building on its side is part of long term initiatives. So, it appears in several cases that the two influences combine.

C/Typology of GI geopolitical contexts

Geopolitical context relate the geo structuring of markets (part of the GI for export being an important indicator, see v4 and v8, upper) and to legal protection schemes and doctrines, which differ at national and world regions levels.

Protection schemes

Report D1 enlightens the diverse interpretations of the GI regulation in the world. Following Stern (2000), the D1 report states polarity between two opposite attitudes towards protection, from a permissive to a prescriptive one, taking into account the following criteria:

- Prevention and repression of misleading or unfair use, with an enforcement on private initiative vs / definition of right holders and public enforcement
- From TradeMark to protected and registered GIs, through Certification Trademarks and weak GIs
- From freedom of packaging and labelling to requirements on those items
- From wines and spirits to all kinds of products
- From juridical decisions to administrative ones

Table 3 Classification of GI protection schemes
Historical trends in recognising, codifying and protecting GIs

<table>
<tr><td colspan="7">Permissive system → Prescriptive system</td></tr>
<tr><td colspan="3">Prevention and repression of misleading or unfair use
Enforcement mainly on private initiative</td><td colspan="4">Definition of right holders and public enforcement</td></tr>
<tr><td>Individual trademarks</td><td>Collective / certification marks</td><td>Definition of GIs when conflict occurs</td><td>Definition of GIs by regulations</td><td>Registered GIs (weak requirements on quality)</td><td>Registered GIs with general requirements on quality</td><td>Registered GIs with special requirements (tradition, terroir…)</td></tr>
<tr><td colspan="5">Freedom in labelling and packaging out of the registered graphical or verbal trademarks</td><td>Requirements on labelling</td><td>Requirements on packaging</td></tr>
<tr><td colspan="3">Court decisions</td><td colspan="2">Administrative rules</td><td colspan="2">Collective rules in relation with public control</td></tr>
</table>

Source: D1, Thevenod-Mottet (2006)

On this basis D1 distinguishes four types of legal/institutional contexts (see Table 4). Another dimension to be taken in account is the degree of participation of the local producers in the definition of the code of practice and the regulative authorities.

Table 4 Types of legal and institutional contexts regarding GIs

	Type A	Type B	Type C	Type D
Specific legal means of protection	**No specific legal means of protection, but general rules on unfair competition or misleading of the consumers**	**Provisions related to GIs in the trademark law**	**Specific legal means of protection only for GIs related to wines and spirits**	**Specific legal means of protection for all agricultural and processed agricultural products, or for all products**
Public policy	No specific public policy related to GIs	GIs matters are entirely left to the private sector	Limited public policy related to some GIs, sometimes in relation with tax and/or custom policies (wines and spirits)	Integration of GIs in several public policies related to public goods, rural development, etc.
Recognition of GIs	No specific recognition of GIs	Recognition of GIs through collective or certification marks	Administrative or judicial recognition of GIs or registration on producers' initiative	Registration of GIs as PDOs or PGIs on producers' initiative through a public and opposable process
Requirements on GI products	No requirements	Only requirements on the area of processing	Only requirements on the area of production and processing No or a few requirements on quality	Heavy requirements on origin and quality, generally based on a prescriptive approach in public policy
Registration authority	No registration authority	Intellectual property office	Specific authority for the registration of GIs, but in some cases without specific competencies	Specific authority, often an office of the ministry of agriculture, assisted by a commission of experts
Control	No control	Control is left to the owner of the trademark, in accordance with the provisions in the law on trademarks	Administrative control, sometimes mainly based on tax or custom concerns	Administrative control and/or certification concerning all the characteristics of the GI products, including organoleptic ones

From D1 report, Thevenod-Mottet and al. (2006), see Table 7: Types of legal and institutional contexts regarding GIs (extract)

Quality conventions and GI protection doctrines

Many authors stress the diversity of the GI protection schemes with a lasting divergence in the conception of the GI property right; the TRIPs agreement being a compromise between European and USA point of view, which include involvement for further negotiation. As noted by Josling (2006) a core point underlying the international debate is the form and substance of intellectual protection known by the term 'geographical indication'. This issue has been the subject of transatlantic talks for at least 20 years, and is an outstanding matter clouding WTO negotiations. The setting-up of an international register and the extension of Article 23 to all products would be, the EU argues, an important step towards recognizing GIs as a specific type of intellectual property and would encourage the extension of the *sui generis* legal system of protection already existing in Europe and India for example. Their proponents expect a convergence on the definition of GIs can be achieved in this way. One aspect of that debate is the extent of the protection scheme beyond the protection of the name of a GI product toward quality control.

Considering the protection of the name, certification trademark system and the American common law can be considered as a strong system. Hughes (2006) argues that: "Like other trademarks, certification marks can develop as a matter of common law without USPTO registration. Presumably, the same is true for collective marks. In a seminal case concerning COGNAC as an unregistered certification mark, the Trademark Trial and Appeal Board (T.T.A.B.) concluded that the critical issue is whether control is being exercised over the use of the word. The certification mark exists at common law "if the use of a geographical indication is controlled and limited in such a manner that it reliably indicates to purchasers that the foods bearing the designation come exclusively from a particular region." Thus, if an appellation or *denominazione* is controlled locally in France or Italy, the producers market in the United States, and no one else in the United States is using the GI for the same product, there are probably common law trademark rights under U.S. trademark doctrine. This means that a European producer can gain common law protection of its geographical indication in the United States without regard to whether the GI is protected under an EU member state's trademark law, geographical indications law, or both. The ability of certification mark rights to arise without any ex ante government role further distinguishes the American approach from a real AOC system."
But the issue is more in the provision the legal system offers for producers and stakeholders organisation and thus the capacities of control the producer will have on the system, regarding production and marketing rules; this level of control being the true condition for collective return (rent). This dimension is behind the distinction within permissive and prescriptive systems (see **Table 3**). Behind the so-called "prescriptive system", there is more or less legal room for producers' control. In comparative analysis, we will have to consider the actors system capacities to take over the supply chain as part of the analysis of real protection scheme.

In interpreting the difference between the US and European doctrines for GI protection, American authors have recently adopted in English the word *terroir*—which in French is related to the substantial link between a community of producers and territory-specific resources—to denote the European philosophy (Barham, 2003; Josling (2006) and Hughes (2006). The so called "terroir doctrine" refers to the recognition or the identification of geographic properties translating in the product (see chapter 1), but while this doctrine refers to quality identification and regulation it is not in itself a protection scheme. The first foundation for protection is usurpation (free riding) and consumers' misleading (e.g. French 1905 law). But, as perceived by the quoted authors, the notion of terroir as quality reference system is a kind of protection doctrine. In 1906, the 1905 law against fraud just being issued, Joseph Capus[3], the inventor of the "terroir", was yet claiming that under that law it was possible to obtain "des vins d'une authenticité absolue mais capables de disqualifier la region"[4]. The reference to terroir quality is a way to restraint the number of protected products and to achieve a collective/community quality control within the production area. The objective is to position on the top market theses product, by controlling high quality production objectives within the producers' community. Thus the scheme is in itself acquiring reputation value by denoting high quality products, as "appellations d'origine" (France, 1935) or "denomination of origin" (Lisbonne, 1958). Collective rules (codes of practices, coordination and control) are the necessary complementary face of the GI protection scheme to differentiate product on the market (from generic product and inside the GI world and inside the GI system itself). The reference to terroir quality constitute an institutional framework, a qualification paradigm or quality convention. Terroir refers to a cognitive

[3] French agronomist engineer, Joseph Capus (1867-1947), was Minister of Agriculture in 1924, instigator of the AOC system and chairman of the National AOC Committee (INAO), from its foundation (1935), until his death.
[4] Quoted in INAO (2005), p. 36.

paradigm. It is in this sense an institution or a "formula of transaction", in the Commons (1931) words, that include legal provision for names protection and for producers' organisation, but is not limited to legal provision and include some vision of quality.

The terroir qualification philosophy was dominant in the European wine market, maintaining traditional practices but allowing innovation (negotiated innovation) and also on the fine wines international market dominated by European vineyards. This logic is challenged by the Californian or Australian models and new market trends, but the first explanation is not in term of protection scheme, but in term of reputation signals (on that point see chapter 3, divergence scenario). But, while in that market the weakening of the terroir logic leads to a more flexible link of the appellations to the territory (but as a generalized form of standard, see for example the Chilean system of wine denomination), the logic of the foundation of the origin quality by substantial links with the local territory of production is still an important concern and rationale for develop and market origin quality product. Traditional knowledge or biodiversity protection concerns are new driving forces for origin quality conception and institutional protection. Here Europe is concerned in recognising abroad GIs (Thevenod-Mottet E., Marie-Vivien D., 2005).

The "terroir doctrine" and other justifications for GI policies

Hughes (2006) stresses that "*the classical justification for geographical indications is that they serve (…) to communicate a product's geographical source AND non-geographic qualities of the product that are related to its geographic origin. This is the idea of terroir: that the particular geography produces particular product characteristics that cannot be imitated by other regions.*" The authors attribute to "*the idea of "terroir""* several outputs:

- "*it undergirds the European Union claim for stronger protection of Geographical Indications (GIs)*", but even the European system is dualistic. Thus certain distinction could be made within the GI world, for example: between GI products linked with local resources, these resources (varieties as well traditional knowledge) being identified for protection, and GI with more flexible linkage with territorial specific resources (due to general modernisation), but the reputation. Even if only evocative value is at stake, it is an issue of protection of community and collective heritage and it is a dimension of the international cultural relations.
- it "*helps justify the European Union's demand, since 2004, for the "return" of over 40 words that have become generic names for foodstuffs in other countries (e.g., Parmesan cheese, Champagne, Chablis, Gorgonzola cheese, Parma ham, etc.).* Yes the European Union's public rhetoric can be related with the goal: "*control of geographic words for their evocative value in the marketplace. The monopoly rents available from exclusive control of this evocative value drive the EU position in the debates over geographical indications.*" But it is important to notice the argument, what is in play is not the terroir quality convention in its classification dimension, but the notion of heritage.

Beyond the initial terroir argumentation for wine classification system and the INAO doctrine to maintain the signal "AOC" on top premium, the search for origin quality get new rationale with the emergence of international public concern on biodiversity and world heritage preservation.

D/ Synthetic typology of the case studies

To undertake comparative analysis, the legal and institutional contexts regarding GIs protection have to be taken in account. The GI systems types have to be defined according to the "legal and institutional framework" (see upper).
The first dimension taken in account by the typology we propose is the types and levels of protection (variables 14&15) (types: *A, B, C, D*, according to D1, see Table 4), associated with the types of policy support (*public or NGO support for Rural Development* or *sectoral support*) (see variable 16).
The second dimension of the typology is a tentative essay to abstract the product market trajectory in distinguishing restructuring or enlargement trends. These trajectories will be refined in the following steps of the analysis (see Chapter VI).

Table 5 Typology of GI systems (case studies)

Protection Policy	**Rural Development Policy**	**Market Strategic stake**	
		Restructuring	**Enlargement**
P1 : C/D effective(*) implementation	public or NGO support for Rural Dev	Melton Mowbray pork Pie	
	more sectoral support	Tequila	Roquefort
P2: C/D non effective or no implementation	public or NGO support for Rural Dev	Pico Duarte Coffee Kajmak	
	more sectoral support	Paprika	Jinhua Pampean Beef Bleuet du lac St Jean
P3: A/B effective	sectoral support		Florida
P4: A/B non effective	sectoral support	Chontaleno cheese	Basmati, Rooibos

Pink: emergent GI
Brown: Mature GI
Brown: Mature GI (in crisis)
(*) **Effective**: having an intended or expected effect.

Chapter II- Identification of GI impacts on sustainable development

As it is stressed by Tregear (2007), the literature on local food systems has expanded rapidly in recent years, particularly in the fields of rural sociology, agricultural economics and rural geography, "linking local foods to a variety of socio-economic benefits such as increased farmers' incomes in marginal areas which may, through synergies, be multiplied across whole local economic networks (Brunori and Rossi, 2000; Pecqueur, 2001); enhanced skilled employment (Ventura and Milone, 2000); enhanced social vibrancy (Ray, 1998); improved environmental sustainability and animal welfare (Sage, 2003), and safer, healthier food for the consumer (Nygård and Storstad, 1998). At the same time, critical contributions have begun to emerge about the extent to which local foods do, in practice, achieve these benefits, and the extent to which such systems can indeed be regarded as alternative to mainstream food supply chains (e.g. Hinrichs, 2000; Tregear, 2003; Winter, 2003; Sonnino and Marsden, 2006)." Part of that literature is more specifically considering origin quality food products.

One specific task of the Sinergi WP6 is the "*identification of "invariant" effects among all GI Cases studied in Task 2*" (see upper). Here effects are not measures of impacts which are case variables but invariant effect refer to the types of impacts which are in relation with the general institutional nature of GIs. Those effects are in relation with the local and collective dimension of the GI system productive resources, including knowledge, and the (necessary) ruling of the common resources pools, and with quality premium existence and the rent distribution along the supply chain. Identification of invariant effects (causing variable impacts according to context and GI system characteristics) consist in the identification of the pressure factors and the models of impacting, while impacts assessment refers to the building of indicators measuring the effectiveness of the factors of impact or measuring impact results. In the Sinergi framework, impacts are observed effects of the implementation of Geographical Indication schemes and functioning of GI systems, considering the three main dimensions of the sustainable development: economic, social and environmental (including impact on human health). "Invariant" effects are those effects which are linked with the GI quality scheme intrinsic properties but variable with the type of GI system.

The diversity of the systems of production and marketing of products (or ingredients) qualified by their origin is part of the global evolution of the economy and geography of food pointed out by many authors. It is explained by territorial or industry parameters of the governance and not primarily by the form of the legal system of protection. Qualification processes may stimulate new networks and community actions, but they may also be incompatible with strategies of extended territorial development. Comparative analysis of European case studies, under EEC Regulation 2081/92, shows that the consequences for rural development can vary, according to the way the different experiences evolve under the same protection scheme, depending from the involvement and behaviour of actors (Tregear and al., 2007).

GIs systems remain different in their market share according to industries, and in the ways they relate to *terroir,* ethnic, fair trade or other attributes of specificity, and in the way and the extent they participate to rural sustainable development. *An important point is the degree of the specificity and the part of the resources linked with origin in the product material and symbolic elaboration.*

GI protection schemes have be general and generic to be adaptable to the large varieties of GIs. Food policies should aim at giving the producers the power of setting their own standards. Thus, it is not given for granted that national or regional public policies supporting GI producers will necessary contribute to sustainable development. There are diverse powerful policies related to the future of GIs including media, education, etc.

A/ Methodological framework

Most of the Sinergi case studies relates to GI systems in progress. In that situation, it is impossible to assess effective impacts, it is only possible to identify factors (or potential factors) of impact. These potential / expected impacts are congruent with the main motivations of the initiators or the supporters of a GI system / protection scheme. For established GI systems or protection schemes, effective impacts can be considered to be assessed; but the factors which 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. Furthermore, it is difficult to distinguish what is caused by the legal protection versus the GI system rules. Nevertheless, different studies were carried out for the assessment of the rural impacts of GI initiatives, especially in Europe (Paus, 2003; Réviron, Paus, 2008).

Assessment methodologies of GIs impact on sustainable developpement are based on two different points of views or approaches: one is based on the identification and the quantification of a set of *pressure and result indicators* (the main sources being statistical data, accounting data, enquiries and field observations: such as volumes, prices, number of employees, VAT, yield…), the other is based on *impact indicators* assessed through expert opinions. Depending to the assessment objectives and context, various methods exist to collect the opinion of external or internal actors/experts. We use here the terminology used by the EU framework for the assessment of Rural Development Reglement. By “pressure”: we mean a factor coming with the specificity of the GI system or protection scheme and from the market (e.g. the market demand and its trend) and by “result”: an effect of this factor which has territorial impact in terms of sustainable rural development (e.g. % of the land devoted to GI production, % of farmers being GI producers, premium level…). By “impact”: we mean a level of impact (measure or ordinal ranking). The first type of indicators can be used in synchronic or diachronic comparisons and they can be related to production units, regions or supply chains. It is generally difficult to obtain direct measures of global impacts in terms of sustainability (even by modelling). While diverse sets of indicators for biodiversity or for socioeconomic sustainability defined at territorial levels was proposed, for now quantitative studies comparing GI system and no GI system governed territories are not developed[5]. “Indirect methods” (as termed by Réviron and Paus, 2008) are based on ranking indicators among a set of initiatives, considering positive or negative impacts of those initiatives, asking (directly) experts and stakeholders to express preferences and to rank products. In the Sinergi framework, the assessment of the impacts for the GI system considered by the case studies was made in a final step of the work by the researchers responsible for the case study, acting

[5] Coutre-Picard L. (1999), De Roest K., Menghi A. (2002), Dupont F. (2003), Hauser S. (1997), Hauwuy A. et al. (2006), Hirczak M. et al. (2005), Hirczak M., Mollard A. (2004), Lehmann et al. (2000).

in that way as experts and taking in a account stakeholders collected opinions and debates in the Sinergi regional meetings (for a presentation of the impacts see chapter 7).

While the measure of the impacts in diverse specific cases has to be supported by some quantitative indicators, the conceptual or normative identification of those effects is a first step. Identification of the invariant effects should refer to general terms and reasonable objectives in accordance with general goals as the Millennium Development Goals (MDGs)[6]. "General terms" mean for example:

- increase of incomes (better repartition)
- mitigation of poverty
- empowerment of local actors
- development (clarification) of professional and industrial relations
- accountability
- in favour or not of biodiversity
- etc.

B/ Effective effects identified in the case studies

The effective results/impacts (effects) identified in the case studies are the following:

Economic impacts

- Maintain or create employment in the area
- Maintain or create value added in the area
- Price premium for Small Scale Farming and enterprises
- Increase in volumes
- Increase in market share
- Price premium for large firms

Social impacts

- Empowerment of local actors

Other impacts

- Homogeneisation of quality level / quality control

The following kinds of impacts are expected when GI systems are confronted to the 3 baseline scenarios.

Economic impacts

- Market stabilisation
- Price premium compared to other regions

[6] The MDGs represent a global partnership that has grown from the commitments and targets established at the world summits of the 1990s. Responding to the world's main development challenges and to the calls of civil society, the MDGs promote poverty reduction, education, maternal health, gender equality, and aim at combating child mortality, AIDS and other diseases. Set for the year 2015, the MDGs are an agreed set of goals that can be achieved if all actors work together and do their part. Poor countries have pledged to govern better, and invest in their people through health care and education. Rich countries have pledged to support them, through aid, debt relief, and fairer trade. **"The MDGs are still achievable if we act now. This will require inclusive sound governance, increased public investment, economic growth, enhanced productive capacity, and the creation of decent work."** United Nations Secretary General Ban-Ki Moon. http://www.undp.org/mdg/

Social impacts

- Employment - Stabilisation of the rural population
- Gender issue (role of womens)
- Rural development - creation of value added in the region
- Empowerment of local actors
- Cultural value of keeping the production in the region
- Tax income for the State

Environnemental impacts

- Keeping of local breeds
- Extensive way of agricultural production
- Favourable to prevent water supply diminution and erosion

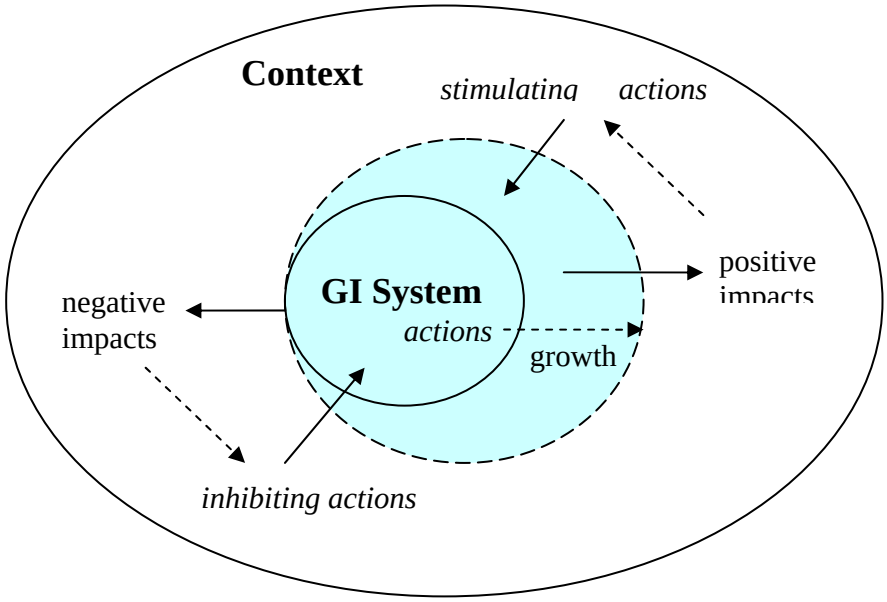
Health impact

- Alphatoxin
- Sanitory / hiegenic rules

C/ Origin quality virtuous (or not) circle

In considering the impacts of GI systems on sustainable development, one considers necessary the development of the GI systems themselves. Then the positive contribution of a given GI system to sustainable development can be considered as a virtuous circle (Marescotti et al., 2008).

Figure 2 Interaction between GI System development and impacts: the virtuous circle



Source D6

In general, observed or expected impacts of geographical indication systems are mainly linked with economic or economic-related issues. The review of the case studies shows that, if the economic concerns are the only motive in the implementation of the GI protection scheme, there are some chances for limited or negative impacts in the others dimensions of sustainable development. For example, well illustrated by the case of the Chontaleño cheese in Nicaragua, a registered geographical indication could lead to more monopoly power in favour of the most powerful actor in the GI system, and have negative consequences for the small scale growers. The delimitation of the geographical area, technical constraints determined by codification, and certification costs, could also have negative effects by unfair exclusion of certain actors. For established geographical indication systems, the quality rent can be captured by out-of-area actors. All these situations demonstrate a conception of the GI IPR strictly in term of economic asset, and not knowledge or cultural asset. They show also the importance of specific rural development policies to support virtuous rural development.

Chapter III- Hypothesis on international trade regime evolution to establish baseline scenarios (competition regimes)

The economics of GIs cannot be considered independently of agrofood economy as a whole and of the international trade rules as a whole. In the contemporary globalisation of the economy, food markets are undergoing a shift towards services and products differentiation among quality attributes (e.g. Allaire 2004, Daviron and Ponte 2005; Wilkinson J., 2002). In this change, all types of media circulating knowledge and opinions in the public spaces play a role in the market functioning (see Allaire, Daviron, 2007), in an internationalized and sophisticated agrifood economy. GIs are standards among standards (Busch *et al.* 2005). They are open standards based on collective rules enforced within different legal systems surmounted by the WTO's TRIPS Agreement. This Agreement requires member states to have a minimal system of protection for GIs. However, the debates turn on the importance of state intervention in the implementation of the system of protection and the role of collective action in the setting up of code of practice and in the economic coordination within the supply chains.

WTO members are engaged in renewed negotiations over the TRIPS Agreement that began in the Doha Round in 2001 and have not made much progress because of antagonism among the projects in contention. One group of countries (including the EU) is seeking to bolster regulation internationally, extending the *ex officio* protection of Article 23 to all products and setting up an international register of protected names (like the Lisbon register); other countries (including the Cairns Group) object to this proposal. Such opposition may be found among political networks within the same country. For example some free-trading developing countries set up systems for protecting their cultural and natural heritage. In Argentina for example, while the state is not interested by specific GI regulation, some provinces are thinking to provide support policy. The stalled trade talks allow considerable disparity to remain among conceptions of GIs as IPRs and among the legal and supporting systems. Could this disparity be reduced or is it rather an aspect of the new competition regime?

A/ GIs and the new regime of innovation

Since the 1980s, many authors have emphasized a 'quality turn' corresponding to the increasing variety of food services. The differentiation of food qualities concerns the whole system of food production and provision. The diversification of food services (prepared food, lunch services, various information services, etc.) and of food items in the marketplace rests on an increasingly complex circulation and mixing of ingredients, including different types of standards (Allaire and Wolf 2004). The industrialization of food chains has been renewed by biotechnological innovations and at the same time consumption patterns have undergone substantial transformations with the development of services at the end of the food chains. While generic food is regulated by mandatory national (or Europe) norms, quality-differentiated markets require private standards and global regulations. This has led to a form of institutional gap. While in the previous industrialist period state administrations and industries had concentrated standardization capacities, the development of new models of production and of new services mobilizes local resources and at the same time is based on

global norms. The new standards emerging in food provision put in relation mode of production codification with emergent global norms related to sustainability inspired programmes, promoted both by states, and social movements and NGOs. This new standardization (or innovation) regime is characterized by international agreements following the creation of the WTO, but which remain incomplete; multi-actor initiatives to set up global norms by products (e.g. sustainable forest norms) tending to constitute entry conditions for certain markets; and the renewal of marketing strategies at the various stages of agrofood chains (Reardon T., Codron J.M., Bush L, Bingen J., and Harris C., 2001).

As stated by G. Brunori (Budapest meeting minutes): "Currently, the general rules of competition are shifting to a new level of competition, from fixed rules on the markets, to moving rules (degree of maturation of the markets). The first level of competition (at the global or national level) - the current level - is quality, hygiene, prices, etc. Those competition elements are all performed inside a same set of rules (fixed rules). The second level of competition - the new level towards which competition is shifting - is about setting the rules. Setting the rules becomes part of the game. Consumers don't take it for granted anymore. For example, setting high hygienic rules has a strong impact on the trajectories of local products and potential GIs." Related to that, the retail firms play a key role, because they are aware of the consumers' needs and participate in the writing of the standards. Their market power has to be considered as a main driver of the current evolution. The third level of competition is about setting meta-rules, i.e. "frame rules", in which rules can be defined at national, regional and local levels (Brunori, id.).

Although quality standards concern the large industrial food systems, a new regime of innovation is developing through the extension of 'alternative foods'. Organic or ethnic products may be mentioned in this category. Whether they bear a geographical indication or not, origin products also account for this evolution. Such goods play a role in popular representations of food that extend far beyond their markets (Allaire 2004). "From an evolutionary perspective, there is the question of how GI systems can sustain technology transitions. GIs can support innovation from below. Innovation can break given paradigms, start a new knowledge, and create niches. Many successful niche initiatives put together could lead to a shift in the regime (set of rules) and modify the landscape. Niches are laboratories for innovation; not only in terms of content, but also regarding the forms of the collective action" (Brunori, id.). This resulting macro dynamics will not be directly addressed in the present work. But all the case studies have to be informed by the national/regional context, in terms of market trends and innovation regime.

B/ Quality fora, qualification, certification and competition

Food quality standards and environmental standards and norms are perfect examples of the double dynamics of decentralization (private and voluntary standards) and globalization (WTO and other international agreements) of market regulation and market institutions change. Fulponi (2006) claims this movement is mainly induced by big retailers at the world level. Alongside public health standards, private standards emerge in coalitions of firms (e.g. GFSI: Global Food Safety Initiative). This phenomenon, she argues, does not stem from consumer demand, as consumers are not informed of B2B norms, nor from any intention to pre-empt state regulation, but from a new way of competing: excluding some firms from the market, improving competencies, specifying production conditions, establishing new management systems, making transaction cost savings by not multiplying separate certifications for each coalition member. Henson and Reardon (2005) show that the

development of private standardization associated with public standardization may have potentially varied and contradictory effects: positive effects (complementarities with public policies, assistance in bringing firms up to standard, head-starts for some leading businesses) and negative effects (capturing of public good by private interests, lobbying effect dragging quality down). This prompts debate about the linkages between the different aspects of qualification of agricultural goods and food: safety, environment, fair trade, etc., including GIs.
In a complex universe of qualification, due to market networks enlargement and food acculturation, private standard-setting organizations are developing as an institutionalized solution to global problems when international conventions are absent in the relevant domain (as it is the case for standards pertaining to sustainability). They can be also a way around WTO rules limiting states' ability to enforce production requirements over the products they import and in this case can be supported by bilateral agreements.

Marketing of quality referred products and services on large market scale, due to the concentration in the retail chains and the worldwide diffusion of the supermarket model for food provision is a characteristic of mature economies, which are often referred to as knowledge or services societies and pointed out by the notion of 'economy of quality (or qualities)' (Allaire and Boyer 1995; Callon, Meadel and Rabeharisoa, 2001). This phrase aims to characterize a change in the form of market competition. The new innovation regime focuses on conception and design product characteristics and standards discriminate within the modes of production with regard to public values, in relation both with health and ethics. In general, conception costs, which entail knowledge building and transfer, exceed production costs when product differentiation strategies predominate. Private standards and especially agricultural standards related to origin and mode of production are kinds of collective design models. Models of conception and design and various types of standards themselves become market goods and acquire strategic value in the organization of industries, trade exchanges and retail activities. But collective initiatives are always in play as it is shown by the Sinergi case studies. Moreover, in the case of collective standards (legitimated by some public good dimension) it is not easy to discriminate in the quality sources what came from personal skills, the collective standard (not binding norms and tour de main or written code of practices), and the system of qualification itself in its convention of quality and legal aspects.

The change in the governance of markets and in competition among actors in food chains, known as the quality turn, institutes several types of fora where product specifications and mode of production standards are debated and negotiated among various types of actors, private or governmental, scientific experts and NGO representatives, whether specialized or not. A quality forum is a network, a cognitive framework for quality controversies (including heath and environmental impacts), and a legal framework allowing standards to be set and implemented. Generally a quality forum is based on the activity of what we call a standard-setting organization (SSO). Quality fora include SSOs, influential media and social movements (e.g. slow food). This new type of competition regime may be called a media regime (Allaire 2005), in which movements of opinion play a key role (Wilkinson 2006). Producers, processors and retail firms, have strategic resources in play within quality fora, and engage in strategic behaviour known as forum shopping[7]. Economists have formalized forum shopping as a trade-off between the cost of participation in a particular quality forum and the benefit (collective quality reputation) it provides (Lerner and Tirole, 2006).

[7] Forum shopping derives from the practice adopted by some plaintiffs to have their lawsuit heard in the court thought most likely to provide a favourable judgment. The notion becomes relevant in international trade owing to the diversity of international agreements and the difference between national regulations and jurisdictions. The notion is extended here to strategic choice of certification schemes and quality qualification signals in general.

In the context of the global competition, a strategic challenge for individual firms and value chains collectively is to position them in the relevant quality forum or fora to relate with the media universe of quality attributes. This position setting rests on a selection of design(s) among standards and certifications schemes (forum shopping), according to business model orientation. In another words, to position a firm or a product in the quality universe is to participate in quality forum(s) and to relate to standard-setting-organisation(s) (SSO), at different level of participation or membership. We distinguish at least two types of SSO, public (national or international) and private or co-operative standard setting bodies. Two phenomena conjugate in the dissemination of standards: a process of adoption by proximity (in value chains segments or territories) and at the macro level a process of competition among the areas of standardization formed by the various fora.
A system and a doctrine of legal protection, specific but various supporting policies (education, biodiversity, social development, regional development…), and particular visions and rationales of origin specific quality (a set of conventions of quality), constitute a type of "quality forum" for GI recognition. The situation resulting from the TRIPs agreement offers potentiality for a multiplication of national or regional GI recognition and protection systems, contributing to the differentiation of quality fora.

C/ Base line scenarios

Methodology

To contrast the not necessary in coherence different aspects of the new international trade and competition regime we present three alternative economic scenarios (or hypotheses). We propose them to frame the exercise of forecasting GI's systems trends following the conclusions of the case studies. Both market competition in broad sense and political issues (meaning: who are the final owners of the intellectual right corresponding with GI) are at play. These three hypotheses concern the position of origin (IG) as marketing tool for differentiate final products in a complex market universe in which IPR in general, social norms and opinions play a major role in the dynamics of markets:

- CONVERGENCE
- DIVERGENCE
- PLURALITY

Markets structures, supply chain (SC) organisation and governance, consumers' demand spoke-bodies, policies (local, national, regional levels), economic development tools, and cultural and political ambiances, nature of the initiative groups, are the mains criterions to define "*situations*" (national or regional configurations) in which are situated case studies (see upper and WP3 and WP4 reports). According to the choices made for the case studies selection (and in the organisation of "regional meetings"), the following regional configurations can be considered: North America, Latin America, , Asia and South Africa, new members of EU and accessing countries.

For each regional configuration (geopolitical context), case studies have addressed the following issues:

- (1) How the developments we can observe thank to the case studies are sustaining one or one other of the three hypotheses?

What are the corresponding changes in the organisation of the industry and in the role of the various stakeholders?

- (2) In relation with those developments, what will be the evolution (trajectory) of the concerned GI system?
- (3) What are the impacts of that evolution on sustainable development objectives (economic, social environmental)?

One aspect of the comparative analysis of the case studies is to identify the nature of the supportive policies in each national/local context and especially the institutional arrangements which give or not capacities to the producers. According to the WP6 methodology, the scenarios do not consider major institutional or political changes in the present state of the world. But that do not signify that the economy will not change. **We propose a general framework to understand the general evolution of the agro-food economy and geography in distinguishing three hypotheses regarding the forms of market competition**: one is the medial trajectory (3) of the global market where are competing several strategies and the two others (1, 2) are two extreme deviations of this medial trajectory. Methodologically speaking, they are not exactly scenarios. It is ideal-types resulting from a holistic approach of the international trade regime including its institutional dimensions. The hypothesis numbered (3) ("plurality") is closed to the present situation in which we observe diversity of GI products qualification processes on the global market and several contrasting GI based strategies; to define a type (the third economic scenario) the hypothesis is related to the consistency of that situation as equilibrium, while in the reality the situation fuels no negligible tensions. We confront this hypothesis with: (1) the hypothesis of unification of the GI concept (vision of the true meaning of GI IP right) in stakeholder's representations and strategies, needing some convergence in the competition laws, trademarks systems and GI protection doctrine; and (2) the hypothesis where consumers change their preferences and do not recognize significant value to GI's. The driving forces (see hereafter) which influence the probability of occurrence of each of the three scenarios are not limited to the market tendencies but are notably depending on the forms of collective regulation by private or public initiatives, regarding sustainable development issues.

The first scenario is based on the idea that the process of acquiring value for origin is related to a particular convention of quality, which can translate as a whole in different contexts; it is why we call it "convergence". In this vision, as in the terroir logic of qualification, the protected IGs are supposed to get premiums in covering specific geographical quality and in some dimensions to absorb the other high quality specifications. Diffusion of this quality paradigm is generally thought by its proponents in favour of the emergence and the development of GI new markets, if they are able to benefit from the global demand and the products access large markets. From a certain point of view, Trips recognizes GI as a specific Intellectual Property Right. Nevertheless the TRIPs agreement does not decide on what is the substance of GIs. It requires members to include reference to GIs in a general IPRs framework or to provide specific protection for GIs. National legal systems remain diverse (WP1, see D1). There is still national divergence within the interpretations of the nature or the essence of GI intellectual property. Such divergence is still a pending debate between Europe and USA, as noted by Josling (2006).
The WTO panel concerning the opposition made by USA and others against the 1992 European regulation has confirmed both the status of GI and the two possibilities of protection, by special reference in the general IPR legal system or by a sui generis system devoted to GIs certification and protection. One important point to be noticed is that the panel has obliged the EU to provide the same protection for foreigners (see the new 510 reg.). In the scope of the EU influence (versus the US influence) on markets and on rural development

policies, as far as GIs economy is developing (scenarios 1 or 3), the implementation of UE 512 reg. can enhance both the market power and the jurisdictional influence of the UE in the domain of GIs markets and regulation (*this hypothesis is to be evaluated in the present context, see later*).
As it is noted by certain observers (and confirmed by our case studies), the actual trend in the setting up of GIs laws following TRIPs seems to reinforce the option of sui generis systems. But the issue is the effectiveness of such systems in the global economy and in national protection schemes. In the real present economy, in any case, the strategies of the actors operating at the international level, and the local origin products systems confronted with scaling up issue have to complain with the two types of legal/institutional systems. In addition, the individual competition inside one GI system leads to combine GI certification and others marks in individual and collective compatible marketing strategies. Thus the efficiency of sui generis system is still a matter of economic competition and marketing strategies, including cultural dimensions of those.

CONVERGENCE

The **first economic scenario (hypothesis)** corresponds to a growing role of the specific GI certification ("origin") benefiting from sui generis protection and from policies promoting its use in the organisation of global markets. It could be termed "convergence" in the measure of it is supposing not only a global regulation which is still in debate but also a convergence of the consumers' representations of the value attached with origin and of the policymakers visions. A complete convergence of all the actors (stakeholders) on the substance of origin products is not a likely future. It is an integrative innovative[8] logic we can express as a scenario.
The discourses of the "convergence" proponents in the WTO debates shed some light on this logic; however the negotiation on the extension of the trips agreement is not really progressing. Those who expect extension of protection systems and convergence of GI protection on the "wine status" argue that actual divergence is a threat for the GI substance. It is denounced as weakening the *terroir* model of GIs and, according to radical discourses, will ensure the victory of the liberal trade philosophy and lead to the disappearance of *terroir* heritages. Thus they argue for a convergence of the systems of protection and for a certain level of public regulation as an ex officio protection for registered GIs. The opponents to the proposition of the friends of GIs WTO members denounce the bureaucratic and protectionist characters of such regulation. In this issue there are two debates, one in terms of law and public policies (specificity or not of the status of GIs as IPRs according to development policies), and one in terms of markets regulation, meaning both in term of reputation value of origin signs and of markets concrete structuring and in term of policy tools.

We are not considering a "negotiation" scenario; we do not consider here convergence as an hypothetic result of ongoing TRIPs negotiation, but as a competition scenario. The development and success of GI systems is not only (and perhaps not mainly) linked with the formal type of protection system but also (and perhaps primarily) with supporting development policies (rural and food policies) and regulation[9].

Diverging aspects of the developments of this scenario, according to national or regional situations regard:

- the stakes related to rural development,

[8] See innovation paradigm in Allaire, Wolf (2005).
[9] It is a Dolphin result recalled in WP3 (see Barjolle, Sylvander, 2002).

- to domestic market organisation,
- to international trade from or to the area,
- to the structures of food industries and of value chains,
- etc.
-

Diverging aspects of the situations (national or regional configuration) regard also the supporting policies related to those domains. (*These points, in my sense, have to be developed as starting points to set up political scenarios in WP7*). National states (or EU) are in these scenario important players. However, this first scenario is supposing the origin qualification acquiring an affective power of market differentiation in global markets. A major open question is the scope in which this scenario can get public legitimacy and coherent market recognition. While market will resume differentiating on qualitative attributes, this scenario signifies not only convergence on GI image, but yet the convergence of quality policies and institutions. That would correspond with the capacity of GI stakeholders' organisations to influence or predominate on others quality schemes. That would signify that those organisations are able to go beyond a corporatist point of view and that the origin attribute is able to encompass a wide range of credence attributes.

DIVERGENCE

The **second economic scenario**, at the reverse, corresponds to a weakening of the GI recognition in the concrete organisation of large markets and of the influence of the European model of prescriptive protection (see chapter 1). In this situation, diverse types of GI products specifications and marketing tools can develop to preserve reputation of the GI classification/qualification system; but the hypothesis developed in that scenario is that the a too flexible system leads to muddled standards. This hypothesis (which can be related with the classic Akerlof's conjecture[10]) will lead likely to a global weakening of the origin signs significance an attached reputation value, in front of the others specific quality identifiers as "organic", "fair trade", "biodiversity friendly" etc. The power relation between those identifiers is depending of the global support deserved by policies and Medias and of the capacities (organisation and control) of origin quality product local and non local communities.

In this scenario, due to the weakening of the prescriptive systems if they are unable to guaranty a coherent (readable) system of quality differentiation, specific GIs protection laws are not expected to play a key role, in contrary to the general property right and trademarks laws and the existence or not of specific rural development policies. Considering the functioning of GI systems, this scenario leading to private assurance quality schemes development is not incompatible with collective governance, including collective deliberation of the producers to define the specificity of the product by code of practice (collective marks) and even a public control when certification marks belong to state agency (Idaho). *As ideal-type*, this scenario supposes the guaranty to open entry for producers reaching the conditions and the provision of an effective public examination before agreement. Such provision is not limited to centralized prescriptive systems[11], diverse IPR protection tools can be mobilized including collective or certification trademarks owned by public bodies. But, in any case, the collective aspects of the quality regulation can suffer from the scaling up of those specific products, markets and value chains. Thus private standards and competition laws in this

[10] Akerlof (1970). See: Allaire, 2004.
[11] See the "C" and "D" legal/institutional contexts identified in D1 report and recalled chapter 1 (Table 4).

scenario are factors dominating the market organisation. In such situation, private standards (certain certification marks) can be related with origin. This scenario should not be in favour of emerging local GIs systems.

Quality regulation (beyond mandatory norms) based on the trademarks system and the basic competition law relies on the assumption of a perfect capacity of the consumers to clearly identify marks and the sharing of a coherent quality attributes nomenclature. On the market place an origin product appears is perceived in regard of several imbricate institutional levels of the qualification mechanism and reputation building, which are several level of collective investment in reputation and of the regulation. We can consider three institutional levels where market quality failures can develop (according to Akerlof's conjecture) and where rules have to be set up:
- the individual reputation level, when the personal name of the producer or a mark she owns is put on the forefront by market strategy; a minimum set of codified practice an any kind of efficient control including peers control should prevent internal free riding;
- the GI sort of product reputation, or GI system level; here the reputation is that one of the GI product within the variety of the GI products of the same sort (other wines or other cheeses, for example). It is in fact a balance between a common positioning in a quality scale, which need to "collectively" invest in reputation, and an agreed classification system to allow individual positioning. Investments in the collective reputation can be made by alliances (consortium and inter-professional bodies); by dominant firms as it is the case for Champagne, Cognac or tequila; or funded by public money, for example to support emerging GI systems, in regard of industry or rural development public objectives linked with origin quality production systems; collective reputation in not only an issue of communication investment, some "solidarity" (as generally termed by the producers) or at least some kind of adhesion to the collective ruling system have to exist to result in a virtuous quality regime, which is threatened by disorganisation and free riding; in addition a system of grading and differentiating the products qualities within an IG area have to be made clear, for not mislead the consumers and safeguard the collective reputation mechanisms;
- the GI mode of qualification level (institutional protection/qualification scheme). At this level is at play the confidence in certification and control systems. It could be attached to a sign, as the French word "AOC". This level of confidence and reputation is linked with the quality of convention that allows the transactions (see Sylvander, various works). What was called "mediatic market regime" (Allaire, Daviron, 2007) includes driving forces which split up pre-existing classification systems which was in fact specific to industries (wines, spirits, coffee…). Thus new conventions are at stake and the capacity to GI qualification schemes to reorganize is in question.

The weakening of the terroir logic in the wine sector is first linked with the transformation of classification systems and to the shift from niches use of GI labels to mass market differentiation (change in the demand). While defending the terroir logic of quality definition; the French wine community (including professional winemakers, trade operators, including the great "maisons" or "chateaux" and INAO) has progressively developed a classification system operating on large differentiated markets (wine of ordinary quality are covering not more than 20% of the market share), thus introducing a differentiation of the protection scheme ("generic AOC" or "umbrella AOC", "vins de pays"). Similar complex system is in play in Spain[12]. At the European level the PGI version of GI escape the terroir logic, in terms of the identification of specific origin quality attribute (but, in France, until 2006, this quality

[12] In Spain there are only 3 PDO (Rioja, Peneres and a new small one) and more than 80 origin denominations according to the Spanish national labelling system, which distinguish 5 types of origin denominations, from quasi generic ones to terroirs.

sign was integrated with the quality system called ‘label rouge’, placed under state control). In order to adapt to marketing strategies, prescriptive systems tend to diversify the significance of the GI signs as it is the case in the dualistic European system (PDO/PGI). That can contribute to the divergence of GI conceptions and to the weakening of the terroir model. The multiplication of competing quality standards supported by the trademarks complex system can contribute to blurry the substance of GI intellectual property while it is recognize in principle by the TRIP agreement.
Others signs having some link with the consumers' representation of the notion of origin can challenge the PDO system, at least on national markets, for example "typical products" in Italy or farm made product and farmers markets anywhere. For that reason, the management of the signs of origin in the wine sector is particularly complex, along with the PDO mark exists diverse national systems even in Europe, which are more or less effective in international trade. This complexity is finally reduced by the large firms operating on international basis.
In the same way of confusing the standard, can contributes to weaken GI sign the collective initiatives revalorising places of production and the link between consumption and places and seasons, coming from outside GIs communities but from others, as for example the initiatives of the organic agriculture communities in the US, even in Europe the action of Slowfood (*presidio*). So, there are several rationales to support the logic of this second scenario. Finally registered GIs, in this scenario, would stay confined to niche connoisseurs markets, and more or less developed according to level of national standards of life. Even in South-North market alternatives, food trade, organic or fair trade certification standards or general quality standards (as EUREGAP) will supplant or integrate the origin indication (as indication of source). In this scenario, the use in Europe (or elsewhere according to the 512 reg.) of the quasi generic PGI system (in combination with others quality signals) would not attract a large premium and is not likely to be largely supported by industries strategies[13].
Consumers' confusion can result of private firm strategies contributing to blur origin imagery (e.g. retail firms marks referring to "terroir" images).

The second scenario refers to some aspects of the present economic competition regime. While in some way it expresses the "free market" logic, in this scenario as in the others, the market functions within an institutional setting. Marketing capacities sustained by institutions are notably quality market grades and standards or international trade existing agreements, first of all the WTO. The second economic scenario we present can be termed "divergence" in several senses: persistent divergence in the TRIPs actual negotiation, divergence of actors conceptions of GI significance (including consumers, policy makers and media), divergence within quality qualification and certification/control systems; all of this weakening the origin as specific quality identifier.

Diverging aspects of the developments of this scenario according to national or regional situations are similarly of those regarding the first scenario developments. They are related to the stakes concerning rural development and supporting policies; to the mode of insertion of the region in the international trade trends; to the structures of the food industries and retail; and to competition regulation functioning, including its cultural and collective dimensions.

One needs to be careful in interpreting at the political and policies levels the "divergence" scenario. That will not be the result of a definitive battle between doctrines, a US type position winning over Europe type of position… TRIPS agreement is a compromise. And,

[13] It can be noted that PGI strategies in Europe are generally supported by regional territorial policies. This second scenario supposes that the region will reorient there food quality policies (to organic and local markets for example).

while the negotiation is still going on, it will result in a new compromise. But, indeed, in analysing concrete situations, we can find a mix of the instruments referring to those different positions, as it is stressed for example by Josling (2006). Firms adapt to marketing provisions in various contexts[14]. The regional differentiation of quality standards (fragmentation in contrasted quality fora) can result in a global weakening of the GI systems position. But in the reverse in the third scenario such a conjecture will be considered more favourable for GI.

PLURALITY

The **third economic scenario** is built considering how the diversity of the GI systems is presently developing and corresponds to the permanence of the diversity of GIs fora (see D3). It is not a mix of the two former scenarios, it considers an hybridization of the two types of logics of protection (permissive and prescriptive) and a market capacity to take over the complexification of the quality universe. The capacity to promote origin quality products is distinct from the issue of the names protection, even if that security is a condition of development of small emergent GI system. In fact the European system has introduced flexibility (in regard to the Lisbon "denomination of origin") and GI regulation is pluralistic, because GI systems are diverse.

Contrary to the first and second scenarios, here the diversity of the GIs products and signs is not an obstacle for the market recognition (at different premium levels) because that diversity is integrated in a diversified but functioning signalling *pluralistic* system. The third scenario is based on the hypothesis of the establishment by public/private initiative at different levels of functioning pluralistic system of market quality identifiers. Contrary to the second scenario based on the domination of private standards, the third one includes a role of orientation to the collective initiatives. It supposes that "the market" (helped by the media…) is able to make distinctions within a proliferation of quality labelling signs, thus supporting a large variety of business models. What is clearing the market is the media system, including all forms of diffusion of the consumers' experiences. Relevant forums are "hybrids" (Callon), they includes diverse forms of knowledge.

This scenario correspond with what seems to be for certain authors (Allaire, Daviron ; Fulponi…) a "new market competition regime", and it expresses what is termed the "neo-liberal" governance logic by some political scientists[15]: "open method of coordination " to favour policies setting up around large global objectives as the European Lisbon objectives and the Millennium UN objectives related to poverty reduction, education or biodiversity, and diffusion of good governance practices. The method of open coordination was clearly adopted by the EU (Lisbon strategy) and is the method reaffirmed in 2005 for developing the CAP second pillar (RDR 2). It is also the framework for coordination at the international level. By diverse aspects, global objectives are concerned by the issue of the GI intellectual property, e.g. fair trade (rural communities' poverty reduction), biodiversity and traditional knowledge protection, rural development, food security, etc. Global environmental objectives are also at stake along with the global trade objectives founding the WTO (as consumers' health protection, regulation of marks and IPRs as part of services liberalisation, etc…). All of those issues are controversial and conflicting, but for this scenario we assume some effectiveness of open coordination in international regulation and some success in the diffusion of "good governance" practices.

[14] Examples of registered certification marks in the UNITED STATES include PARMIGIANO-REGGIANO, ROQUEFORT, STILTON, PARMA for ham, DARJEELING for tea (source: Hughes, 2007)
[15] Borras; Jacobsson (2004), Schäfer (2006), Zeitlin (2002)

Part of the political scientists are supporting this scenario in challenging the claim made by globalization critics, especially those from the environmental community, that economic liberalization leads to a lowering of regulatory standards. In "*Trading Up: Consumer and Environmental Regulation in a Global Economy*", Vogel and Kagan (2002) argue that, on the contrary, "*under certain circumstances [*stressed by us*], global economic integration can actually lead to the strengthening of consumer and environmental standards. The result is thus more akin to a "race to the top" than to a "race to the bottom."*". But the direction of the race is depending on how are articulated collective, private, and public standard setting capacities (which is an issue of power relations) and on regulation policies[16].

The third scenario considers that motivations for the political recognition of GI intellectual property and for supporting policies are diverse. They differ according to periods of time and economic conjunctures and they can be different according to national configurations and what we call quality fora.

The diversity of the legal systems and related quality fora can be strategically exploited by firms. A clear opportunity of forum shopping would be for example, if winemakers in Napa Valley register their products in Europe and from this quality sign benefit of premium on the American market. In the measure of a location attract some value the producers are motivated to protect this collective value and to individually benefit from it in escaping transaction costs. It is the same if we consider the value of a sign which is attached to a certification body, a standard setting organisation or any media supporting this sign. The premium value for a sign (or a combination of signs) is depending of the reputation of the forum from which it takes its significance (it is not exactly a collective reputation, forum being large networks and not groups). Thus, the choices made to attract value from differentiated fora are strategic. It is the proper logic of market differentiation and monopolistic competition à la Chamberlin. It leads to a permanent stake for the producers to maintain the multifaceted product image and thus to invest in various fora where products and services are differentiated and qualified.

Diverging aspects of the developments of this scenario according to national or regional situations are similarly of those regarding previous scenarios developments and have to be developed by the mean of the comparative analysis.

The diversity of GI systems corresponds to the irreducible diversity of marketing strategies to which the legal system have to adapt. Contrary to the first scenario the third one is not supposing a convergence of GI fora, but it suppose a workable diversity of GI visions which are distributed on a value scale resulting from the diversity of fora reputation and credibility.
Contrary to the second scenario, the third assumes that the GI, in the broad sense of the TRIPs agreement, keeps for its ability to structure markets.

What is as stake comparing the first and the second scenarios is who paid and who benefit for quality certification? The institutional issue being that of transaction cost distribution, both business interests and the states capacity and public willingness to implement regulation are in the play. Josling (2006) see the controversy between Europe and the US on the substance of GI right "*as a part of the continuing tension between regulations that are based on 'product standards' and those that regulate 'production and processing methods', as exemplified in the [other] controversy over genetically modified foods*". In this view, the phrase "product standards" relates to corporate (private) market governance, while

[16] See "National Regulations in a Global Economy", edited by David Vogel and Robert A. Kagan (University of California International and Area Studies Digital Collection)

'production methods" (modes of production or codes of practice) regulation relates to some public implementation and control instruments.
The protection of GI in the US by the trademark regulation makes the intellectual right a collective property (collective mark or certification mark) entailing private costs, while the European system makes it a public right protecting a community heritage no limited in the time, regulated and protected by sui generis law and freely registered (but with private certification costs). One of the key rules of the European regulation is the presentation of the agreement demand by a group of proponents representing the territorial stakeholders' communities and its implementation is supported by rural development policies (more or less efficient, it is an other issue). Nevertheless TRIPs provide minimal GI standard definition and protection. The first scenario supposes some kind of convergence on the heritage value of GIs and the need for long term protection. But, rural development in an Anglo-Saxon perspective includes also clustering and horizontal coordination, generally involving local government policy provision and university or private types of knowledge and organisational services provision. So, the access to such local public provision and such service resources are the main criterions to appreciate the likeliness and the consequences of this scenario.

D/ Contrasting the scenarios

Table 6: Three scenarios related to the positioning of origin quality in a global competition regime

	Convergence	**Divergence**	**Plurality**
Market vision	Diffusion of the GI concept under common understanding of origin specific quality	Regionalization of the policies and dominance of private/collective standards	Globalization with regional workable segmentations (regional forums)
Rules at international level	Establishment of public common rules for quality and origin	Some basic commons rules but weak, multiplication of private quality schemes	Basic rules but open for regional adaptations and through collective initiatives and private quality schemes
Institutions at national and local level	Able to implement international standards and rules in a convergent way (diffusion of collective management methods). Global coherent quality classification system.	Not able to converge in understanding and implementation of protection provision for GIs Failures in quality classification system	Able to integrate and support different quality schemes in a coherent way toward different segments of consumers. Global coherent quality classification system.

The organisation of the diverse value chains according to the three scenarios is depending on the negotiation power distribution within actors. To build up forecasts from the case studies, it is necessary to consider **regional configuration** (geopolitical context) to hypothesize which one of the three scenarios the developments we can observe thank to the case studies are sustaining.
A collective work on that issue for Latina America was done during the SinerGi Santiago de Chile regional meeting (19-11 December 2007).

Regional context analysis: development of the three scenarios in Latina America

1/ How the LA cases feed the scenarios?

CONVERGENCE	DIVERGENCE	PLURALITY
• Many GI experiences are in process. People are learning. Existing convergence (TRIPs) for wines and spirit sectors (Tequila)	• It is the current scenario. Multiplicity of quality schemes and of GI approaches. Importance of private qualification schemes. • ·No clear vision of what a GI is. The entry point for GIs is quality and marketing There is a strong culture of trademark. Recent laws for GIs although there are currently no used. Use of geographical names as trade marks • ISO). Divergence between national institutions.	• GIs are perceived as a marketing tool and for quality. There are some interactions with sanitarian issues. ·Mainly certification mark but recent development of GIs·Reservation of geographical names. The most probable scenario is plurality because of the tension between the US and UE framework.

2a/ Main drivers Political aspects

CONVERGENCE	DIVERGENCE	PLURALITY
• The condition for a convergent scenario in Latin America is the change of the position of USA and CAIRNS group in the WTO. • For Mexico, the convergence scenario is the best one. Necessity of an international norm to escape to US approach.		• Regional (LA) cooperation to promote rural development

2b/ Main drivers of GI system development

CONVERGENCE	DIVERGENCE	PLURALITY
• Power close to processors… But large and even multinational firms: wine and spirit sectors, coffee) • Weak interest for domestic markets due to cost of certification and control	• Power close to trader and large retail firms	• Part of the power for organized small scale producers? Citizen (NGOs)? Consumers? • Many GI initiatives are based on factors such as biodiversity, local culture and knowledge, and receive for that reason some support for the local, national, international institutions? Independently from GI protection!

3/ Opportunity / Threats For emergent and potential GI

CONVERGENCE	DIVERGENCE	PLURALITY
General "convergence" will be more favourable for established and large market GI systems (in LA)	• Favourable for export oriented sectors (private certification schemes)	• Favourable for niche markets (domestic and international markets)

4/ Opportunity / Threats For collective market initiatives

CONVERGENCE	DIVERGENCE	PLURALITY
• In order to maintain low certification, laws no include the requirement of third-party certification. Auto-control needs collective action. Lack of control is a threat for GI development • What about the product that yet not have a reputation? The law is not sufficient. A policy is also necessary to develop fame.	• Dominant role of private standards and "hybrid" forums (firms, NGOs, governments), opportunities for local development is depending on the social capacities of local producers	• What about the product that yet not have a reputation? The law is not sufficient. A policy is also necessary to develop fame.

5/ Opportunity / Threats For local development

CONVERGENCE	DIVERGENCE	PLURALITY
• Some types of rural development programmes could be a first step for a collectivity towards GI building initiatives • What public policies to solve problems of exclusion and of the high price of GI-certified products? • What will be done for producers that can not comply with the norms?	• What will be done for producers that can not comply with the norms?	• There must be a diversity of the tools to promote rural development. Their relevance depends on the targeted market (internal, USA, EU…). • Room for support actions brought on by local associations (citizens, consumers, environmental, etc.), universities and other research institutes, chambers of commerce, etc. • What public policies to solve problems of exclusion and of the high price of GI-certified products? What will be done for producers that can not comply with the norms?

Chapter IV- Methodology for comparative analysis

The DPSIR (Driving forces, Pressures, State, Impacts and Responses) framework was set up by the European Environmental Agency (EEA) to organize reporting on environmental indicators. "*According to this systems analysis view, social and economic developments exert Pressure on the environment and, as a consequence, the State of the environment changes, such as the provision of adequate conditions for health, resources availability and biodiversity. Finally, this leads to Impacts on human health, ecosystems and materials that may elicit a societal Response that feeds back on the Driving forces or on the state or impacts directly, through adaptation or curative action. Obviously, the real world is far more complex than can be expressed in simple causal relations in systems analysis. There is arbitrariness in the distinction between the environmental system and the human system. And, moreover, many of the relationships between the human system and the environmental system are not sufficiently understood or are difficult to capture in a simple framework. Nevertheless, from the policy point of view, there is a need for clear and specific information on:*
(i) Driving forces and
(ii) the resulting environmental Pressures, on
(iii) the State of the Environment and
(iv) Impacts resulting from changes in environmental quality and on
(v) the societal Response to these changes in the environment."[17]

A logical chain links the 5 indicators from the Driving Forces to Responses. The DPSIR framework specificity is to integrate socio-economic and ecological factors in meta analysis.

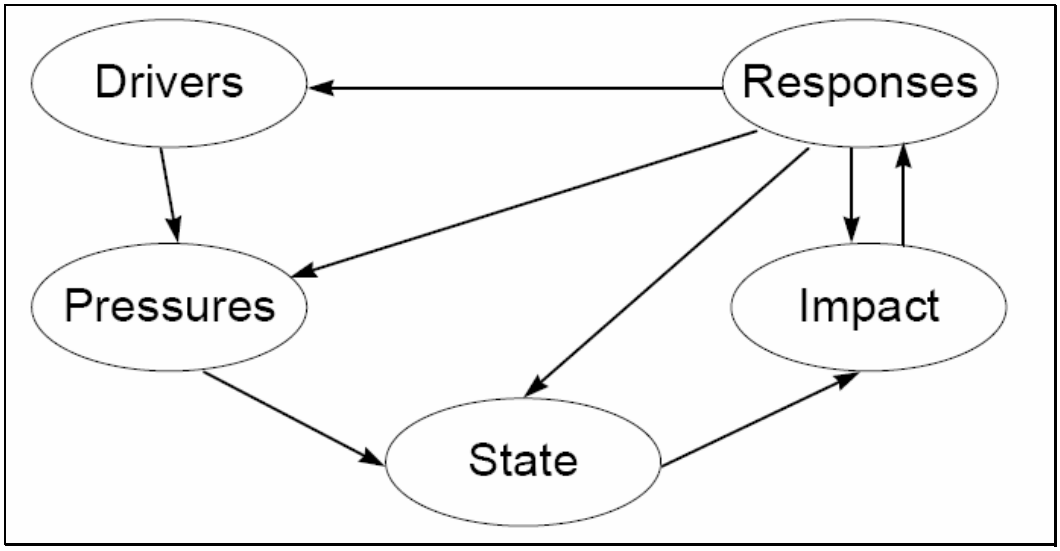


Figure 3: DPSIR Framework

[17] Environmental indicators: Typology and overview (report Prepared by: Edith Smeets and Rob Weterings,, TNO Centre for Strategy, Technology and Policy, The Netherlands): European Environment Agency, Copenhagen, 1999. This referring model comes from the PSR (**Pressures, State and Reponses**), initially developed by the OECD for reports on the state of the environment.

The **original proposition** for WP6 comparative analysis is to use this framework to compare collective/market trajectories of specific GI systems[18], in considering the four categories DPSR (on the five). In this use the distinction within driving forces pressures and state of the situation refers essentially to spatio-temporal analytical scales and to the power (capacities) distribution within the stakeholders. As it stated upper in the case of socio-ecological systems, *the real world is far more complex than can be expressed in simple causal relations in systems analysis*; it is the same for markets or institutional systems. The purpose of the model is not to represent the economic process intervening in markets structuring or collective action which develops at meso-economic level, which would be a no realistic (and stupid) ambition. It is a support for comparative analysis.

In each case study, it was asked to develop quantitative evidences from original or referenced field works, but these collected data are not in comparable formats and moreover there is no obvious theoretical framework to make quantitative comparison between the cases at the level of their impacts on sustainable development (see WP4 report, WP5 guide, and the additional WP6 report). The purpose is to offer an analytical model (and not a functional model). In a back and forth interactive process the model is developed by deductive and inductive ways to result in a general expression of the four analytical categories.
Comparative analysis of GI systems (see upper definition) is developed in this report at two different levels: the institutional/legal (chapter V) and the market (chapter VI) ones.

A/ Driving forces, pressures and resulting dynamic configurations

Driving forces relates to external but also internal forces. The general drivers are constituted by the international trade structures, institutions and dynamics, which are synthesized according to geopolitical contexts. Considering the institutional/legal level (chapter V), the WTO related international relations and IPR national or geopolitical context visions are at stake. Considering the second level of analysis, the GI markets, value chains and power/knowledge distributions within stakeholders (chapter VI), the competition regime including quality conventions determines the external driving forces. But internal forces and essentially governance structure crisis for the first level or technological ones for the second can be considered. ***Pressures*** relate to a different level of analysis and represent more directly causal determinants of the system evolution. Pressures occur for definite periods and scales, and impacts the ***State*** of the system, at given periods and scales. By state, we mean the identification of the major dynamic elements in the present situation. What matters for systemic comparative analysis is to establish (by inductive analysis of the corpus) common formulations of the three series of indicators, distinguished at different levels and scales. In the reverse, identified configurations help to systematize the description of cases.

Driving forces are situated at the level of the economy at large, considering relevant markets (including consumption) in relevant geopolitical contexts. Indicators for driving forces describe economic, demographic, social, and resources at large, developments in the analyzed system and their corresponding changes such as increase of production or consumption and standards diffusion... Such changes affect markets and finally the producers and stakeholders at large earnings and capacities. They also influence technological choices, collective capacities distribution and the allocation of land.

[18] According to a brief look on internet using Google scholar tools this analytical proposition was not developed before as it is proposed here.

Pressures result from driving forces in a definite place and period of time, and will quantitatively and qualitatively affect the local economy and communities capacities. They may also act on lifestyle and society. Pressures indicators describe the development in the use of resources, the market chain structure forces, the markets trends, institutional constraints...

B/ Responses and trajectories

The fourth considered type of determinants is the **Responses**, depending on the situation: responses from the initiative group; and/or the industry; and/or from policymakers. These ***Responses*** are reactions directed on driving forces or directly on pressures or their impacts on the actual state of the situation. The latter is remedy, while the first are more proactive responses. Those responses address the situation with different temporal perspectives and they are path-dependent, because they are limited and oriented by existing collective capacities. They can be of three types: policy measure, collective initiative or normative (moral) behavior. DPS-R configurations shape systems trajectories.

Responses indicators relate to capacities of initiative from groups, individuals or governments to improve, compensate, prevent or adapt to the present dynamic state of the system and economic flux. Those public/private actions orientate the GI system organisation and related markets.

While DPR-S trajectories will be analyzed as types, the "impacts" will be examined in each case and according to scenarios. For each scenario (or hypothesis) the orientation and the consequences (efficiency) of the responses can be distinguished. Thus; for each scenario it will be possible to examine the impacts of the considered GI system regarding sustainable development norms.

Chapter V Diversity of the institutional and legal frameworks for GI: national/local dynamics

DPSR model (see chapter IV) is used to identify GI protection scheme dynamics. **Driving forces**, **Pressures**, **State** (the present situation major dynamic elements) and the **Responses** (depending on the state: responses from the initiative group; and/or the industry; and/or from policymakers) are from the case studies comparison (sources: executive summaries and synthetic presentations prepared for the Regional meetings). After a back and forth exchange between global/local analysis, the five analytical categories (Df, P, S, R) was expressed in general terms. The analysis is then specified by case, context or trajectory type.

A/ Driving forces and Pressures

The driving forces are of several natures: juridical/legal provisions especially regarding the conformity of national regulations to the TRIPs agreement or regional or bilateral agreements (D1), the compliance of market channels with usual sanitary standards (D2); conflicts regarding names protection and GI certification or control (D3); changes in the trade regime (D4, D6), including Agricultural policies Reform (D5) and non trade policies especially the Convention for the Biodiversity (D7).

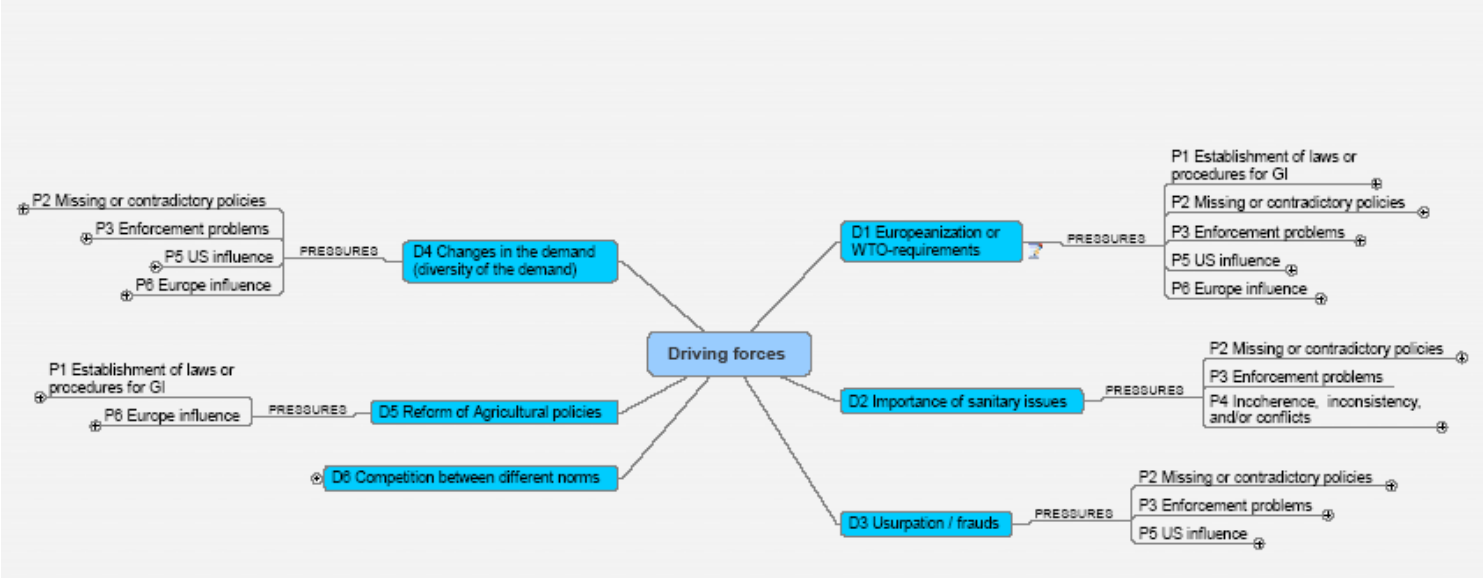
Table 7 Driving forces (GI qualification/protection Scheme)

D1	Europeanization or WTO-requirements	Roquefort, Paprika, Kajmak, Jinhua
D2	Importance of sanitary issues	Paprika, Kajmak, Chontaleno
D3	Usurpation (external) / frauds into the SC	Paprika, Rooïbos, Basmati, Tequila
D4	Changes in the demand (diversity of the global or national demand)	Florida Oranges, Jinhua, Pampean Beef (Brazil), Pico Duarte Coffee
D5	Agricultural policies Reform	Roquefort, Paprika, Kajmak, Rooïbos, Bleuets, Jinhua, Chontaleno, Melton Mowbray Pies
D6	Competition between different norms	Bleuets, Melton Mowbray Pies
D7	Local knowledge or biodiversity conservation	Rooibos

Table 8 Pressures (GI qualification/protection scheme)

P1	Establishment (or modification) of laws or procedures for GI (at national or local level)	Roquefort, Kajmak, Melton Mowbray Pies
P2	Missing or contradictory policies	Paprika, Rooïbos, Basmati?, Jinhua, Pico Duarte Coffee, Chontaleno
P3	Enforcement problems	Rooïbos, Basmati?, Jinhua, Tequila, Pampean Beef (Brazil) Chontaleno
P4	Incoherence and/or inconsistency and/or conflicts in the frame of the GI scheme	Chontaleno?,
P5	US influence (and support) on actors strategies	Kajmak, Bleuets, Florida Oranges, Tequila, Pampean Beef (Brazil), Pico Duarte Coffee, Chontaleno
P6	Europe influence (and support) on actors strategies	Paprika, Kajmak, Pico Duarte Coffee, Melton Mowbray Pies

Figure 4 Identified Driving forces and pressures within the case studies



Driving forces and resulting trajectories according to the comparative analysis

Considering for each case the dominant Driving Forces and Pressures, 12 types appear over 13 case studies. They are described hereafter.

D1: WTO-requirements or Europeanization

A general driving force is linked with the TRIPs agreement. Countries where specific GI protection did not exist had to set up such provision; countries joining WTO (as China) have also to complain with TRIPs. But when these provisions are very recent, recognized GI can not exist. European influence (especially French or Spanish cooperation policies) or USA influence (US aid or IIAA in Latin America) participate differently and generally (but not always) on complementary ways in the development of GI framework.

A same type of driving force is the "Europeanization", meaning that new member states (as Hungary) or countries willing to access Europe (as Serbia) have to complain with the EU regulation.
The change of the European regulation after the WTO panel asked for by USA and others can also be related with the same general DF.

1. *P1 Establishment of laws or procedures for GI*
   R1 By actors' mobilisation (coordination): KAJMAK
   R2 New law (or change in law) on GI: ROQUEFORT
2. *P2 Missing or contradictory policies*
   R2 By law modification (or enforcement); JINHUA

D3: Usurpation / frauds

3. *P2 Missing or contradictory policies*
   R1 By actors' mobilisation (coordination): ROIBOSS, PAPRIKA
4. *P3 Enforcement problems*
   R3 By market initiatives (diversification): TEQUILA
5. *P6 Europe influence*
   R1 By actors' mobilisation (coordination): BASMATI

D4: Changes in the demand (diversity of the demand)

6. *P2 Missing or contradictory policies*
   R2 By law modification (or enforcement): PICO DUARTE
7. *P3 Enforcement problems*
   R1 By actors' mobilisation (coordination): PAMPEAN BEEF
8. *P5 US influence*
   R1 By actors' mobilisation (coordination): FLORIDA ORANGES

D5: Reform of Agricultural policies

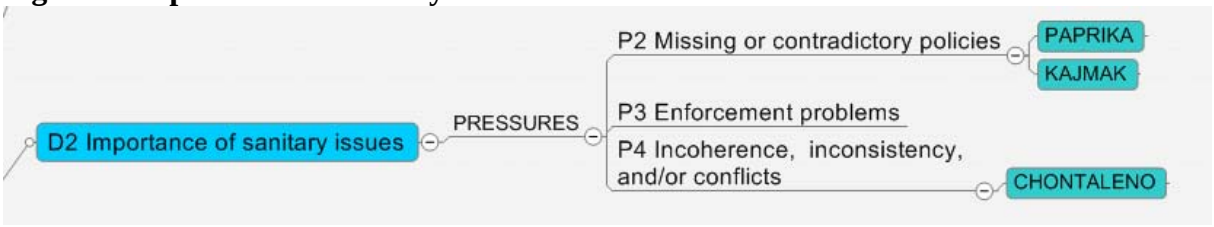
9. *P1 Establishment of laws or procedures for GI*
   R1 By actors' mobilisation (coordination): MELTON MOWBRAY

D6: Competition between different norms

10. *P5 US influence*
    R4 By external expertise and funds: BLEUETS
11. *P3 Enforcement problems*
    R4 By external expertise and funds: CHONTALENO

Sanitary issues as driving force (D2) play an important role in several cases but are never the first driving force to be considered.

Figure 5. importance of sanitary issues



The same observation can be made for the last **driving force (D7: Local knowledge or biodiversity conservation),** added in consideration of the South Africa case (Rooibos).

State indicators (dynamic elements of the present situation)

The state indicators characterize difficulties needing some answer (except S9) (problems to solve). But in all the cases, there are some positive dynamics, which explain why they were selected as case study (WP4).

Table 9: States of current systems (GI scheme qualification/protection)

S1	Lack of coordination between Intellectual property office and Ministry of agriculture (weakness of institutional coordination) or competition between administrations	Kajmak, Jinhua, Pampean Beef (Florida oranges) Paprika?, Rooïbos,
S2	Commonplace GI product (*how to differentiate*?)	Tequila
S3	Heterogeneity of specific quality identifiers	Tequila, Basmati?
S4	Consumer interest in terroir products (*how to reach new type of demand*?)	Florida oranges, Bleuets
S5	Difficult appropriation of the GI concept at different levels	Rooïbos, Bleuets, Florida Oranges, Pico Duarte Coffee, Chontaleno
S6	Failure of initiative groups	Paprika, Chontaleno
S7	Conflicts between branding and GI initiatives	Pico Duarte, Jinhua, Pampean Beef (Brazil)?
S8	Lack of service resource (no national certification body for example) or lack of enforcement	Pampean Beef, Pico Duarte, Kajmak
S9	Functioning implementation of GI scheme (efficiency of controls and producers involvement)	Roquefort, Melton Mowbray Pies

Responses

From the case studies reports, 7 kinds of response were identified. The responses range from local actors coordination and empowerment (R2), eventually by the formation of (new) initiative groups (R1), local network capacities empowerment by social innovation and/or external expertise and funds; to regulation or enforcement devices setting (code of practice and control issues); and to marketing initiatives. Three types of leading actors appear in the case studies. In the majority of the cases it is a public body as it is normal considering that juridical issues have to be clarify. But producer's collective initiative in numerous cases is devising the response (R1). Consumer’s movements also can be a source of initiative.

Table 10 Responses (GI qualification/protection scheme)

R1	Formation of (new) initiative group (s)
R2	Empowerment of the GI network
R3	Collective trade mark implementation
R4	New law on GI (or implementation of new legal provision)
R5	Protection of reserved geographical names
R6	Code of practices improvement
R7	Certification improvement (third party)

Responses induced by the different situations (states) in different contexts have impacts at different levels (spatio-temporal scales). The relation DF/Pressures/State and Responses design **trajectories** (see next point for trajectories analysis).

B/ Protection schemes stakes and institutional trajectories

The presentation in the following figures of the cases studies trajectories will develop their descriptive analysis.

Legend (for all the figures):

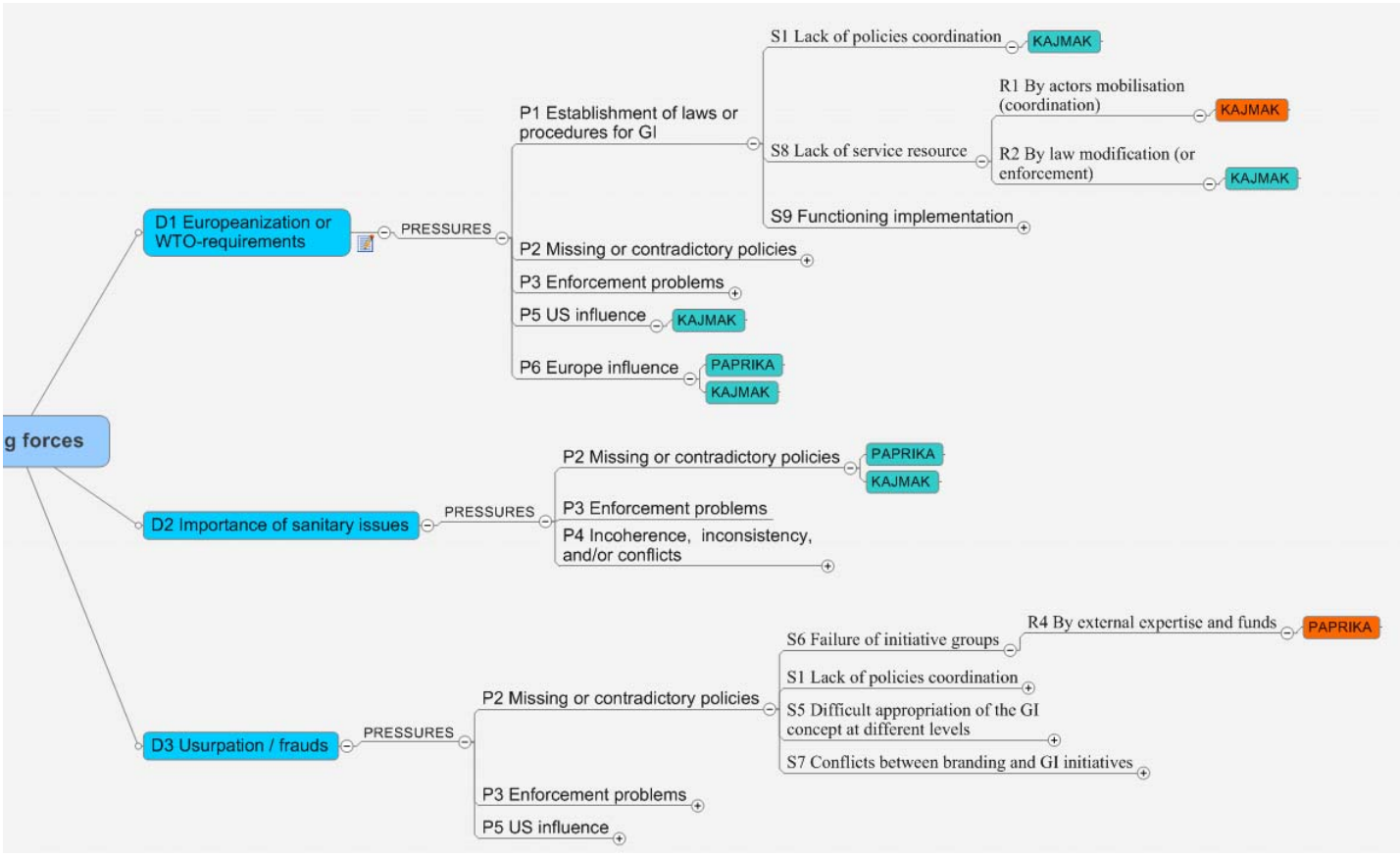
When the "subject" is in red colour it is meaning that the considered chain *DF/Pressures/state/response is considered by the analyst as the more determinant.*

When the "subject" is in blue colour it is meaning that the considered chain *DF/Pressures/state/response is considered by the analyst as secondary determinant of the GI system trajectory.*

Kajmak and Paprika (D1, D2, D3): risk of failure

Kajmak and Paprika are concerned specifically by the combination on the three first mentioned driving forces: conformation to European regulation, sanitary crisis and issue if usurpation threats. The processes of the building (kajmak) or the rebuilding (paprika) of the GI codes and of collective strategies are facing risks of failure.

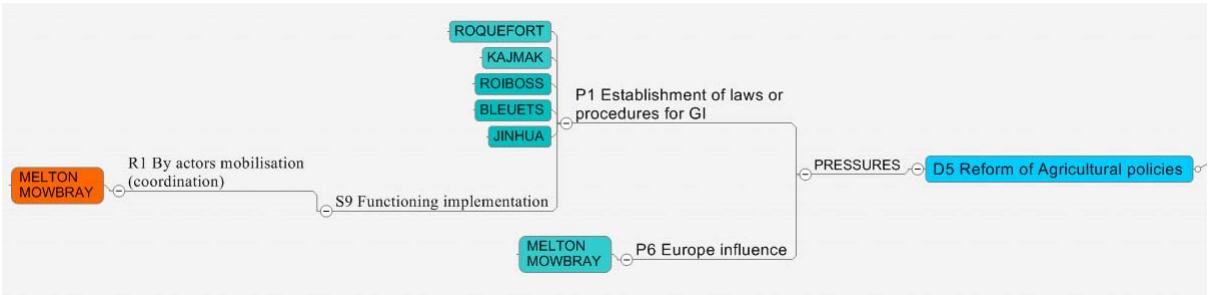
Figure 3



Melton Mowbray and other cases under "D5: Reform of agricultural policies"

This trajectory build on the opportunities offered by rural development policies reform (as in Europe with the creation of the second pillar) and regional food market development. It is presently a successful trajectory in Europe.

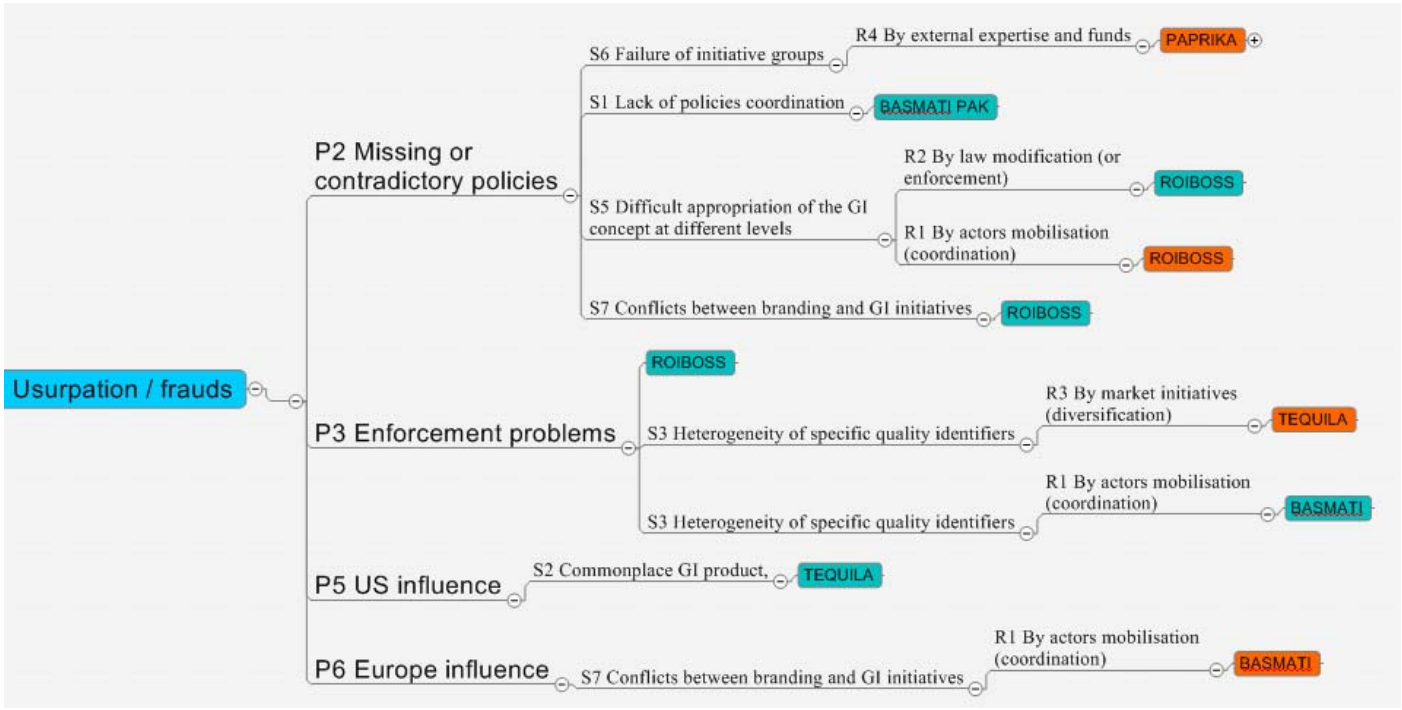
Figure 4 Agricultural policy reform (D5)



Basmati, Tequila, Rooibos and other cases under D3: "reaction to usurpation")

In diverse contexts, here are examples of reaction by the legal way of reacting to usurpation threats (driving force D3), Figure 5.

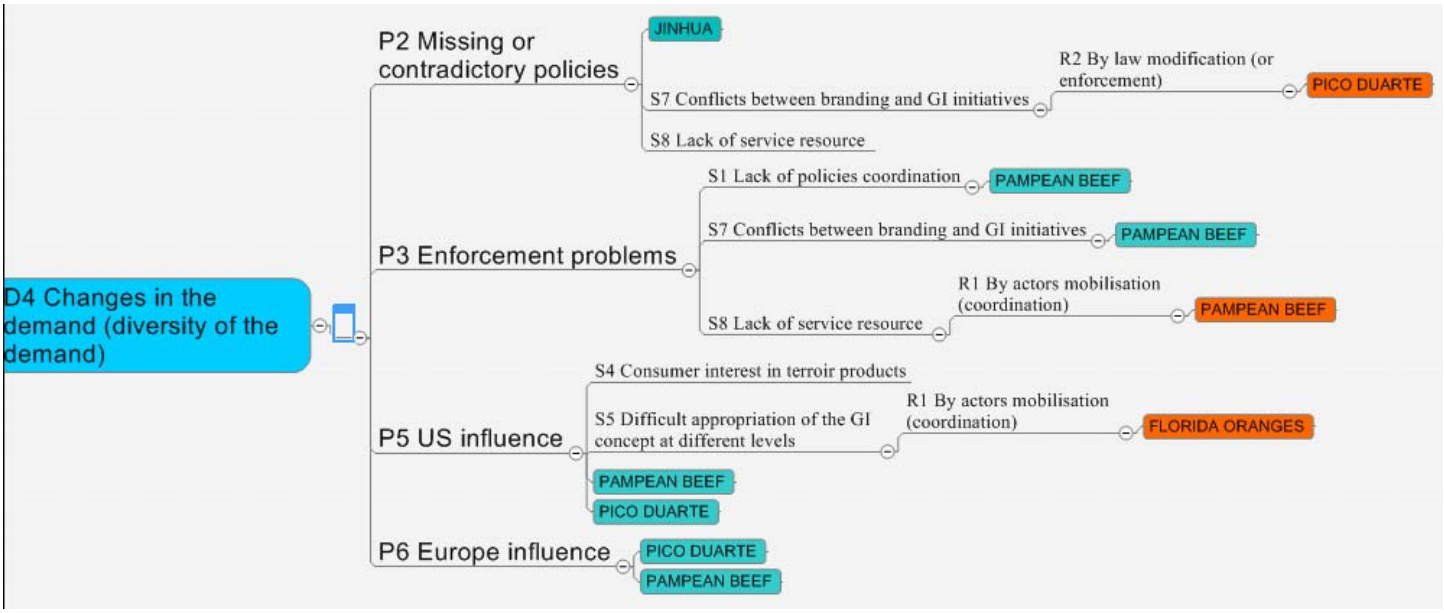
Figure 5: reacting to usurpation threats



“Demand change” driving force (D4)

Diverse strategies aim to get opportunities from new markets, but not without difficulty to set up good governance or efficient coordination to consolidate such trajectories.

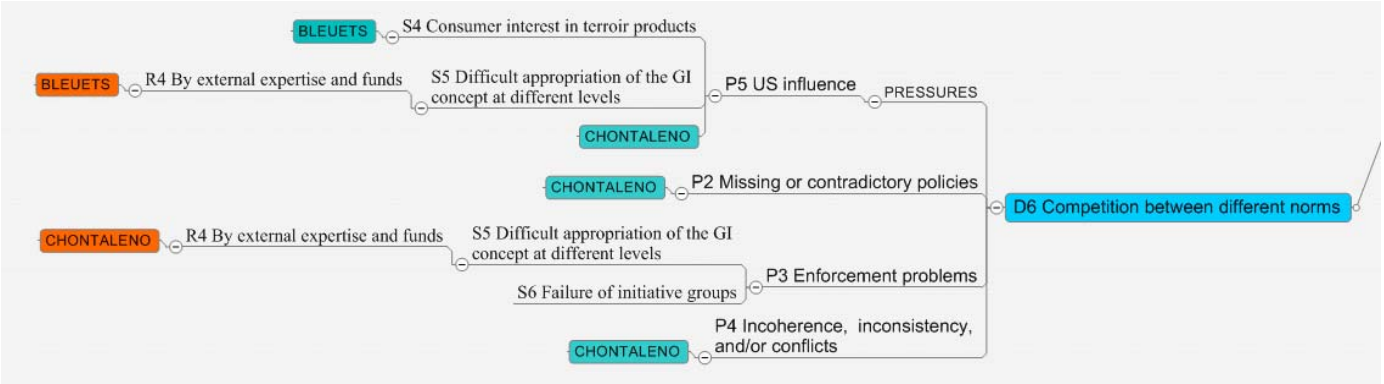
Figure 6



Driving force D6: "competition between different norms”

Two cases relate with undetermined trajectories (Figure 7).

Figure 7: Competition between norms



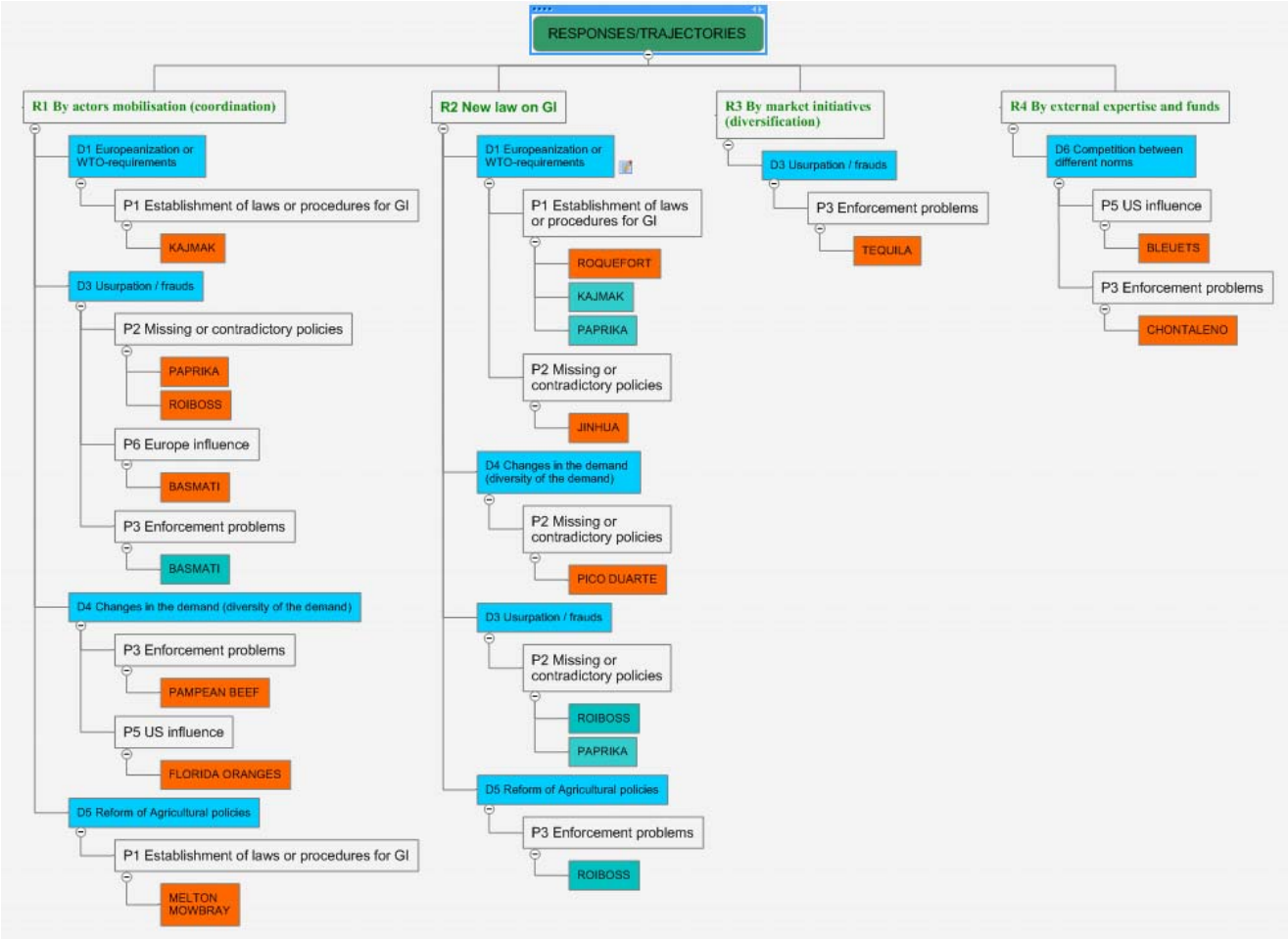
Institutional trajectories

Identified responses (see Table 10) can be gathered in **four main types** of responses according to the types of collective action and of the support network shaping it (Table 11. The first type of responses is developed by actors' coordination improvement within the chains or the territories concerned. A second type of responses developed by politicians and legal actors is independent or accompanying the first type. Considering the relation between responses and the institutional pressures and driving forces, two trajectories appear as particular. In certain case, the leading responsive actors are important and even international private firms for which legal issues are intricately bonded with marketing management issues, this third type is solely represented by the Tequila case, with reactive leading firms. The fourth type of response correspond to many situations where external actors, from private firm to NGO's and external social movements, and governmental aid funds from European countries or the USA. In this situation, a stable solution can be difficult to establish. It is in this type of situations we have considered the response IV and D6 (competition between norms) dominant.

Table 11 Responses types (GI qualification/protection scheme)

RI	By actors mobilisation (coordination) : Empowerment of the GI network or formation of (new) initiative group (s)	Paprika, Kajmak, Florida oranges, Pampean beef, Rooïbos, Basmati, Melton Mowbray Pies, Roquefort?
RII	By law modification (or enforcement) (code of practice and control issues)	Roquefort, Bleuets, Jinhua, (Pico Duarte, Kajmak) Paprika? Rooïbos
RIII	By market initiatives (diversification support tools)	Tequila, Bleuets?
RIV	By external expertise and funds	Kajmak, Pico Duarte, Chontaleno?

Figure 8: Institutional trajectories



One aspect of the analysis is to assess the system coherence. Description of the trajectories shows successful institutional strategies (adaptability to pressures) versus failures. Failures take two main forms: (i) no coherence between actions taking by various bodies and policies (no coherence solution to P2: missing or contradictory policies), it includes situations of real competition between administrations (China), generally these situations result from a conflict or miss-cooperation between “trademark” versus “GI” protection doctrines, the first generally bonded with trade policies and national Intellectual Property offices and the second with Miniseries of agriculture competences regarding rural development (but more complex institutional configurations exist); ii) weakness of enforcement tolls and administrative or collective capacities missing, notably relatively to certification and control. Florida Orange is a special case with a governmental opposition to IG type of recognition (see on this point: Perret and Thevenod-Mottet, 2007).
Figure 7 shows that the response by actors’ mobilisation and or by changing legal provisions combines with the different driving forces we have identified.

Chapter VI- System trajectories and baseline scenarios

DPSR model (see chapter IV) is used to identify GI systems dynamics according to market trends and both chain and territorial drivers (system governance and market organisation). **Driving forces**, **Pressures**, **State** (in the present situation major dynamic elements) and the **Responses** (depending on the state: responses from the initiative group; and/or the industry; and/or from policymakers) are derivate from the case studies comparison (sources: executive summaries and synthetic presentations prepared for the Regional meetings). After a back and forth exchange between global/local analysis, the five analytical categories (Df, P, S, R) was expressed in general terms. The analysis of socio-economic driving forces completes the analysis of institutional pressures and responses proposed in the previous chapter. It is then specified by case, context or system trajectory type as a point of departure to develop scenarios in each particular case.

In trajectories analysis, DPSR model allows to differentiate scales and levels of analysis. Driving forces related to the large scale of world-sized markets (globalisation issues), being either niches or mainstream differentiated markets, are designing quality fora and regional economies. They relate to the three baseline scenarios proposed in Chapter III (and specified upper in the Latin America context as example).

A/ GI systems DPSR analysis

GI systems trajectories driving forces

Driving forces are identified in relation with the competition regime in globalizing markets. These forces (D1) can be identified for all the GI systems confronted with scaling up issues. Access to marketing capacities (knowledge and credit) which is at stake in developing countries for small scale and poor producers includes access to strategic normalisation forums. It is a prerequisite to benefit from market opportunities opened by trade liberalisation. The opening up of opportunities for local products to be marketed on larger markets and especially developing strategies related to specialty and origin quality products generally results in confronting local production systems with scaling up issues.
When developing, most of the GI producers have to comply with the generic market standards (sanitary standards, labelling, traceability, generic quality grading, more environmentally friendly production modes -e.g. organic, etc.). Those standards are often requested by the supermarkets chains and European or US importers. The larger processing firms (not necessarily specialized in GIs) are generally more able to meet those requirements than the smaller ones (often specialized). Anyway, the strategic turn is quite obvious for many of the specialized firms. Sometimes the smaller specialized supply chains can manage very well the standard requirements, but sometimes, it represents a serious threat and the scaling up must be carefully designed. In the process of scaling up, local actors confront the export market concentration. An important issue is thus the level of locally captured value added of exported products (see Rooibos case in the second part). To capture value added is it generally of necessity to further develop the processing in the local.

Most of the alternative supply chains for origin products face the same kind of strategic turn[19]. On this way, the GI actors don't compete only with firms of different size within the same market, but also with other alternative origin products as organic products, farmhouse products, fair trade, etc. Therefore NGO's role and the kind of supporting capacities are determinant factors (cf. D5).

Periods of change in the political regime (D2), in Western Europe or in China and thus WTO membership are contexts which generally confront national systems with global competition (D1) and liberalisation (D4). Liberalisation of tariff (D4) is one of new competition regime forces. It concerns large GI systems in North America or in Europe.

Table 12 GI systems trajectories driving forces

D1	Global competition
D2	Structural political change
D3	Rise of living standard
D4	Liberalisation
D5	Decentralisation
D6	Biodiversity preservation
D7	International migration

While poverty is still a general pending issue (see the "millennium objectives"), the "Rise of living standard" in the "North" and in emergent countries as Brazil, India or China is a driving force of the global market. This general driving force (D3) is considered as related to all the cases (global pressure) and is not developed in the mapping. Evidently the force of this global pressure is depending from factors related with open questions regarding the position of the different regions and industries in the global competition. One aspect of that issue is the role of international migrations (D7), which contribute to the revenue in the South and in rural area; this force was identified in the Latina America context.

Decentralisation, central state weakening and reinforcement of local government and change in public management methods are driving forces (D5) concerning the governance of GI systems (see chapter 1). Rural development policies in Europe (RDR) and the Leader+ programme introduce territorial forms of coordination, which is a facilitator for collective initiatives and contribute to "local food" initiatives. The same can be noted in the US and in Latina America, in various degrees.

Biodiversity preservation (D6) which is a Millennium objective can be a driving force orienting GI system evolution (Rooibos).

[19] See Sylvander et al. (2006) and Sylvander & Kristenssen (2004)

Pressures

The driving forces identified which express the global competition regime and the restructuring of international market and economy result in pressure in terms of cost (P1) or in term of quality differentiation (P4). These pressures can result in crisis on the demand side (P2) or the supply side (P3).

Scaling up trajectories face sanitary standards issue (P4), which is related both to B2B norms (ISO) and international agreements (WTO).

Pressures on GI system trajectories result also from the juridical context (see chapter 5). The change in the legal framework is identified as a pressure (P6) which concern a large number of cases, due to the fact that following the TRIPS agreement, number of adaptations of legal provisions for GI protection was made by WTO members, including Europe (reg. 510, 2006).

Table 13 Pressures on GI systems economic trajectories

P1	Rise of the prices of raw materials / productivity issues / **competition costs**	FLORIDA ORANGE, ROQUEFORT, TEQUILA, PAPRIKA, JINHUA,
P2	Crisis in the valorisation of the product (loose in the premium, decrease of production volume) (**crisis at the demand side**	PAPRIKA
P3	Increasing demand (**crisis on the supply side**)	TEQUILA, BASMATI, BLEUETS, ROIBOSS, KAJMAK, JINHUA
P4	**Demand Diversification** / market Europeanization	MILTON MOWBRAY, PAMPEAN BEEF, PICO DUARTE, ROIBOSS, BASMATI, KAJMAK, PICO DUARTE
P5	Importance of the **sanitary norms**	CHONTALENO, JINHUA, PAPRIKA, KAJMAK
P6	New juridical framework	PAPRIKA, KAJMAK, JINHUA, Latin America...

Diversification of products and of marketing contexts linked with the change in the consumers' attitudes (P4) is one of the principal pressures leading to change in GI systems business models.

State (dynamic elements of the present situation)

State indicators concern the main dynamics in the present situation, or the main issue identified by the system of actors analysis.

Table 14 Indicators of the state of GI systems

S1	Diversification of Business Model along time
S2	Emergence of the supply chain (local to national or international), scaling-up process
S3	Intensification at the level of raw-material production and/or process modernisation
S4	Muddled norms (rules failure in the product quality characteristics definition)
S5	Quality heterogeneity (rules failure in regulation)

Responses

We consider here as response of the GI system, change in orientation resulting from innovation process. Innovation concerns: the products specifications, marketing tools and channels (R1), technology (R2), and institutional dimensions (ruling). Institutional changes are identified in three dimensions: the system of classification and codification of practices, knowledge building (R3), horizontal coordination for collective resource management and knowledge diffusion (R4), vertical coordination in the value and market chain (R5).

Table 15 Actors responses and levels of action

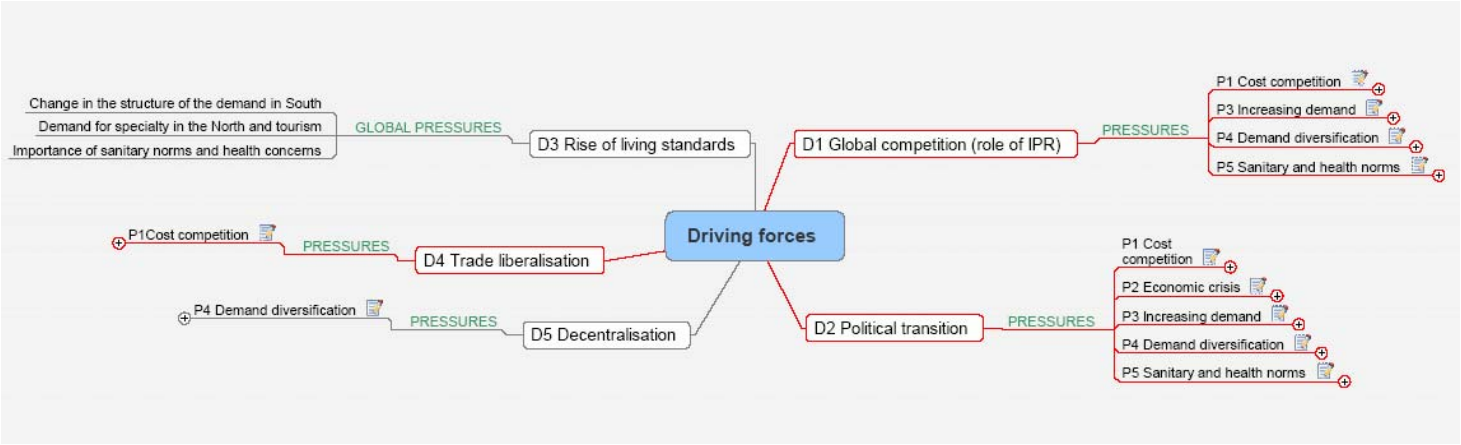
R1	Innovation in terms in new products / new markets
R2	Innovation by intensification / modernisation
R3	Institutional innovation (quality norms)
R4	Institutional innovation in terms of horizontal coordination
R5	Institutional innovation in terms of sectoral coordination

B/ GI systems trajectories

Driving forces and pressures: Competition models

Driving forces and resulting pressures are factors which differentiate *models of competition.* The combination driving forces and pressures defines trajectories determinant factors.

Figure 9: Models of competition and determinant trajectories



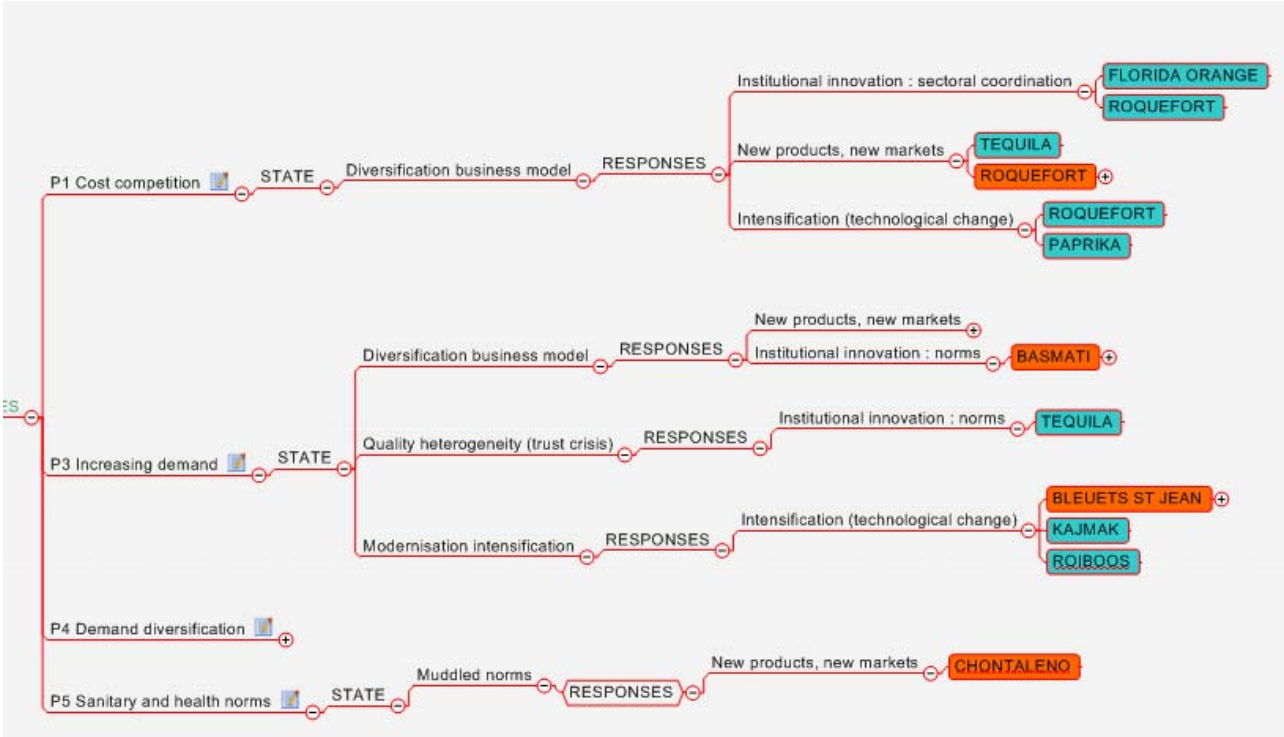
Considering the global competition regime (D1), different types of pressures determine four types of models of competition

Table 16 Models of competition

	Competition models	**Cases**	**Types of systems and markets**
D1/P1	*Costs competition*	FLORIDA ORANGE, ROQUEFORT, TEQUILA, PAPRIKA	Long and market chain, international market
D1/P3	*Increasing demand (Supply side crisis)*	TEQUILA, BASMATI, BLEUETS, ROIBOSS, KAJMAK	Rapid market enlargement, non stabilized chains
D1/P4	*Diversification*	MILTON MOWBRAY, PAMPEAN BEEF, PICO DUARTE, ROIBOSS	Micro project to respond to demand of diversified food (regional or specialized markets)
D1/P5	*Standard implementation failure*	CHONTALENO, PICO DUARTE	No clarified micro project (Local/regional)

(NB when the name is in colour parme it is the main determinant).

Figure 10: Trajectories according to competition models

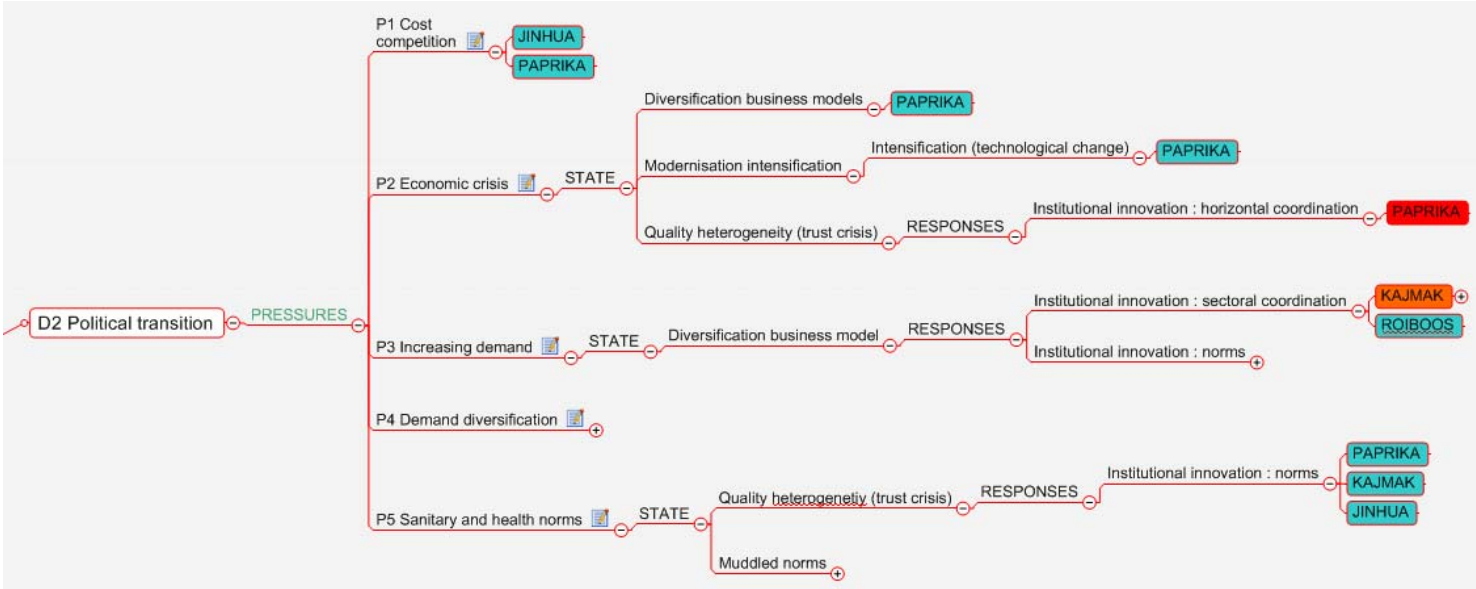


Legend:
When the "subject" is in red colour it is meaning that the considered chain *DF/Pressures/state/response is considered by the analyst as the more determinant.*
When the "subject" is in blue colour it is meaning that the considered chain *DF/Pressures/state/response is considered by the analyst as secondary determinant of the GI system trajectory.*

Political transition effect (D2)

All the pressure type can be identified in political transition contexts (Western Europe, China, South Africa). Thus the different cases are concerned by the four identified competition models. But in that context, these systems are not stable and confronted with rapid transformations (e.g. Rooibos) or in certain case the combination of the pressures leads to a "quality crisis" (crisis on the demand side), as for Paprika.

Figure 11: political transition subsequent trajectories



D2/P1	JINHUA, PAPRIKA	Competition by costs in a new economic context (due to political transition)
D2/P2	PAPRIKA	Crisis of the GI system (quality crisis)
D2/P3	KAJMAK, JINHUA, ROIBOSS	Increasing demand and crisis on the supply side
D2/P4	ROIBOSS, KAJMAK	Orientation toward new demand of urban consumers
D2/P5	JINHUA, PAPRIKA, KAJMAK	Issue of implementation of sanitary standards

(NB when the name is in colour parme it is the main determinant).

Trade liberalisation effects (D4)

When trade liberalisation (D4) is the principal or significant driving force the trajectory of the whole system is oriented by cost competition model, which could result in pressure for intensification of production model. But this force is also a fragmentation force and alternative orientations toward a differentiated market can develop inside or along side the GI system. Responses in this direction can be identified in the case of Florida orange juice[20] (and also Bleuet du Lac St Jean, Paprika, Roquefort…).

Figure 12: Reacting trade libéralisation

[20] Florida orange juice is covered by an US registered certification mark (*THE FLORIDA SUNSHINE TREE* and *FRESH FROM THE SUNSHINE TREE* owned by Florida Department of Citrus). Diversification occurs through private initiatives.

Diversification of demand effects

Two orientations were identified in response to new demand and markets differentiation: speciality food and regional food. See following figures.

Figure 13: Speciality vs Regional food

From D1 (global competition driving force)

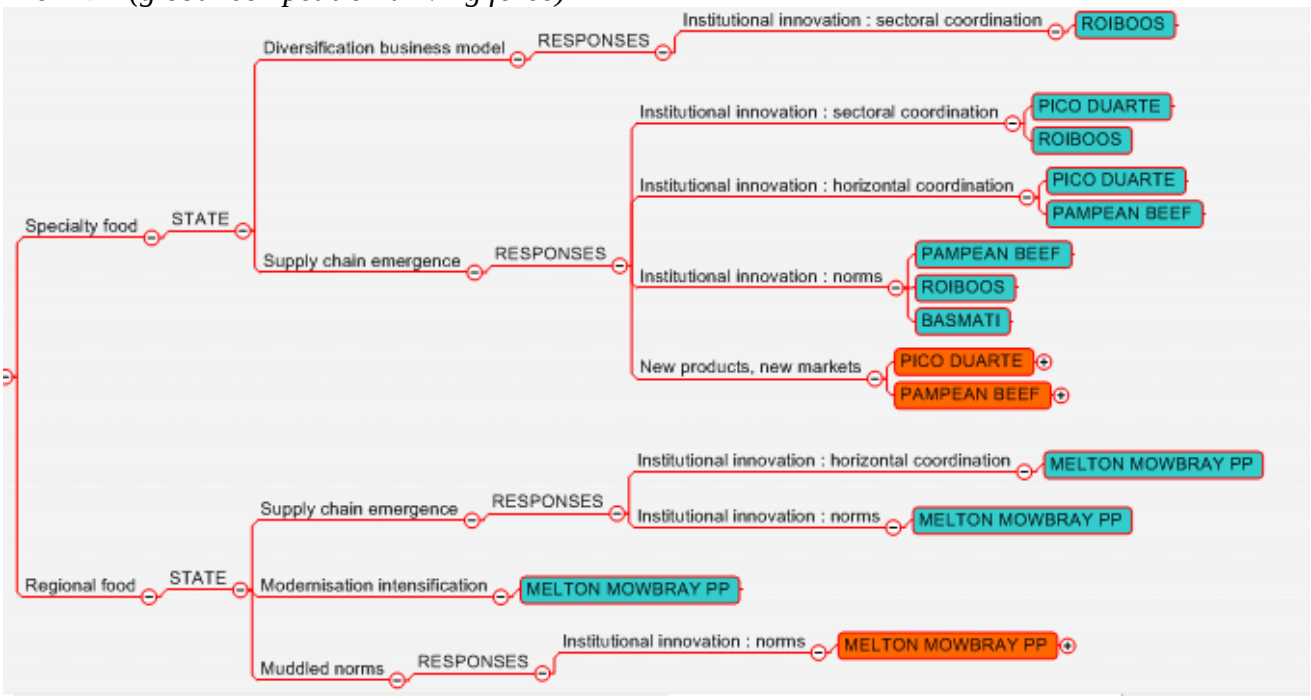
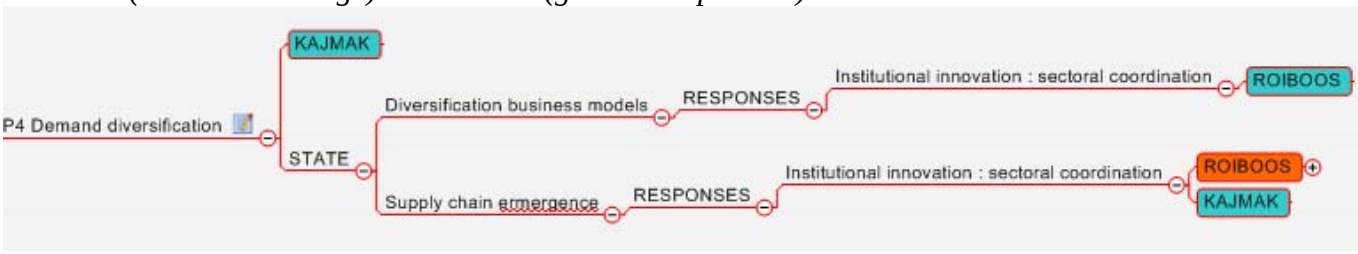


Figure 14: Demand diversification and emerging GIs

From D2 (structural change) but with D1 (global competition) active



Decentralisation and local food issue

Response to diversification in term of regional food is linked with the decentralisation (D5) driving force, which was not identified as exclusive but significant factor.

Figure 15: Decentralisation driving force and demand diversification

Various European cases (included the Melton Mowbray Pork pie) could be included in that category. Angela Tregear (2007) proposes "*a typology from the perspective of the marketplace*". It gives a "*brief overview of the European market for local foods*", which "*highlights two key points. First, it is impossible to speak of local foods as a singular concept and market – there are too many different types and behaviours inherent in the mix of literature presented, which need to be teased out if local food systems are to be analysed and understood satisfactorily. The second point is that across Europe, market and consumption activity is embedded in different traditions and socio-political conventions. These shape the behavioural norms of the actors involved, and also of the researchers who seek to explain the role and value of these systems*." It is the same worldwide. While in certain countries such as France, Italy, Spain and francophone Switzerland, collective origin-labelled products dominate the marketplace for specialty products, elsewhere, it is 'alternative' supply chains, farmers' markets and organic foods that are the preoccupation of consumers. "*These differences are worthy of more recognition in studies of local food systems. Related to this point, it is noteworthy that the key European policy designed to protect and support 'local' foods – EC Regulation 2081/92, which offers Protected Designations of Origin and Protected Geographical Indications - is an example of a law derived from one set of conventions, but is now applied across Europe.*"

A Treagear (2007) typology is based on two specific dimensions. *"First, by **the identity a local food product holds in the marketplace**, specifically, whether it is a commodity or a product with special territorial character. This dimension is important because it distinguishes those foods that are 'local' simply because they are grown and sold within a particular geographic area, from those whose evolution is dominated by debates about authenticity and intellectual property protection. The second dimension is **the nature of producer-consumer relations in the system**, specifically, whether they are proximate or distant. This dimension is important because it distinguishes between exchanges driven by high levels of shared knowledge and understanding amongst buyers and sellers from those where products are exchanged through impersonal, mainstream channels"*. These dimensions give three types of local food system:

- *(T1) direct produce* (commodity identity products with proximate relations),
- *(T2) close typicity* (special character products with proximate relations), and
- *(T3) distant speciality* (special character products with distant relations).

Angela notes that "*the fourth logical system in this scheme – commodity identity products exchanged through distant channels – is not included here because it has less obvious 'local' characteristics. For each type of local food, the key features of actors' behaviour and relationships are outlined, followed by critical discussion of the evolution of the type and its future research needs.*" This analysis has to be extended considering US and international trade market. In this perspective the fourth logical system of the typology could be termed "*ethnic product*" or (T4) "*diasporas product*" as it play a role in communitarian international markets (e.g. Basmati rice).

C/ Scenarios case by case (examples)

BASMATI case: Trajectory, Scenarios, Impacts (G. Giraud, D. Marie-Vivien)

Scenario	**CONVERGENCE**	**DIVERGENCE**	**PLURALITY**
How is it sustaining the scenario	- Congruence between India & Pakistan in GI debate - Basmati forms the benchmark for the development of a sui generis system	- No value in the GI – the sceptics are convinced right - Branding strategies - Other IP tools becoming more important and supported	- Several market segments appear (domestic, trade Muslim, trade EU) - The importance of a quality standard coming to the fore - Range of IP tools being developed and supported
Power	- Power to the cross-breeding seeds institutes and companies - Growers taking the initiative - Traditional market for Diaspora - New market opportunities in EU - A credible GI would also give power to the consumers	- Power close to the markets (trade then domestic) - Power to traders & millers - Proliferation of private quality standards - Enhancement of the quality controls - Exports of blended continue	- Power close to the markets (trade then domestic) - Power to traders & millers - New entrance of GMs for sure - Weakened quality standards (meta-norms).
GI trajectory	- Can lead to a Basmati GI - Flagship for national initiative in both India & Pakistan - Example for other products (Hunza apricot, Darjeeling tea,..)	- Weak or absent GI - Proliferation of trademarks - Proliferation of production - GMs (?) - Consumers confusion	- Domestic registration - Branding strategies for trade - Registration abroad according to the available IP tools
Potential Impact on sustainable development	- Water management becomes more important. - Increased importance of Seed Act - Value adding at local level	- Trademarks IPRs more important - Supply chain management based on ethnic trust - Value adding taking place downstream	- GI as collective trademark: growers - Large companies private & strong brands for export - Rent extraction at Trademark level - Potential for limited value adding for export at local level

JINHUA: Trajectory, Scenarios, Impacts (F. Wallet)

Scenario	**CONVERGENCE**	**DIVERGENCE**	**PLURALITY**
How is it sustaining the scenario	• Flagship case for Chinese involvement in GI debate and Chinese GI schemes (development of a sui generis system)	• No value in the GI – the sceptics are convinced right. • Other IP tools becoming more important and supported	• The importance of a quality standard coming to the fore. • Range of IP tools being developed and supported
Power	• Power to the ham producers • Producers taking the initiative. • New marketing opportunities may develop • Proliferation of producer initiatives. • Opportunity to structure distribution networks • Improvement in efficiency of breeders/producers relations • A credible GI would also give power to the consumer	• Power close to the market. • Power to brand owners • Power in the hands of the owners of the quality standards • Consumers confidence on private brands • Evolution through quasi standard production	• Power close to the market • Leading to the debasement of quality standards. • Individual initiative to promote brand (+GI) • Niche GI markets (low evolution of Jinhua volumes) • Need to manage the establishment of quality standards (meta-norms).
GI trajectory	• Registration abroad (in UE?) • Flagship for national initiative. • Example for other products • Cooperation between SAIC/AQSIQ system (roles sharing?)	• Weakness of GI use • Proliferation of trademarks. • Proliferation of production • Consumer confusion? • Increase of SAIC power (TM system) • AQSIQ only for sanitary controls	• Maintenance of the two registration systems • Competition between SAIC/AQSIQ: lack of coherence of the protection system
Impact on sustainable development	• Eco: market stabilisation (if cereal price too high) and increase of the production volume • Marketing network structured and stabilized, development of export market • Env: preservation of local breed • Health: Mitigation of sanitary crisis • Social: Stabilisation of rural population, creation of local added value (poor mountains) • Eventual impact on tourism	• Eco: evolution through quasi-standard production + niches with weak link to terroir and based on brands • Env: (quasi)failure of preservation of local breed + growth of standard production (more polluting) • Health: slower evolution of sanitary norms • Social: population decrease in mountain areas	• Eco: competition between TM + weak growth of exports (sanitary criteria) + monopoly with fringes (Zhejiang cie + Jinhua small producers) • Env: preservation of the local breed • Health: mitigation of sanitary crisis but lack of norms coherence clarity • Social: Uncertain stabilization of the rural population.

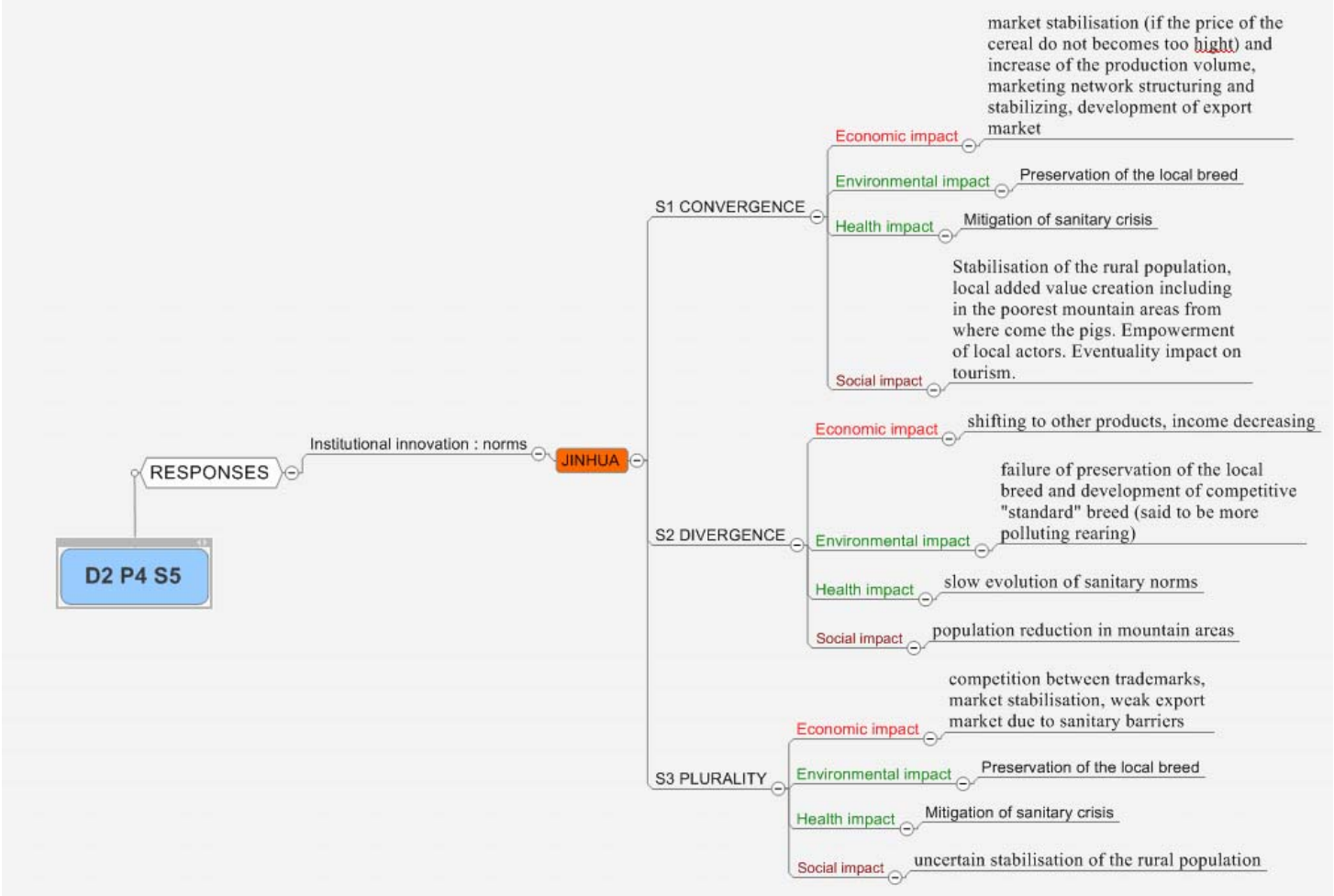
*Scenario1 (***CONVERGENCE)***:*
Economic impact: market stabilisation (if the price of the cereal do not becomes too high) and increase of the production volume, marketing network structuring and stabilizing, development of export market
Social impact: Stabilisation of the rural population, local added value creation including in the poorest mountain areas from where come the pigs; Empowerment of local actors; Eventuality impact on tourism.
Environmental impact: preservation of the local breed.
Health impact: mitigation of sanitary crisis.

*Scenario 2 (***DIVERGENCE)***:*
Economic impact: shifting to other products, income decreasing
Social impact: population reduction in mountain areas.

Environmental impact: failure of preservation of the local breed and development of competitive "standard" breed (said to be more polluting rearing)
Health impact: slow evolution of sanitary norms

*Scenario 3 (***PLURALITY)***:*
Economic impact: competition between trademarks, market stabilisation, weak export market due to sanitary barriers
Social impact: uncertain stabilisation of the rural population
Environmental impact: preservation of the local breed.
Health impact: mitigation of sanitary crisis.

Figure 16: JINHUA DPSR and scenarios



KAJMAK: Trajectory, Scenarios, Impacts (M. Estève and M. Paus)

See Figure 11, and the following.

Figure 17: Trends and perspectives: GI protection schemes (organization and political strategies)

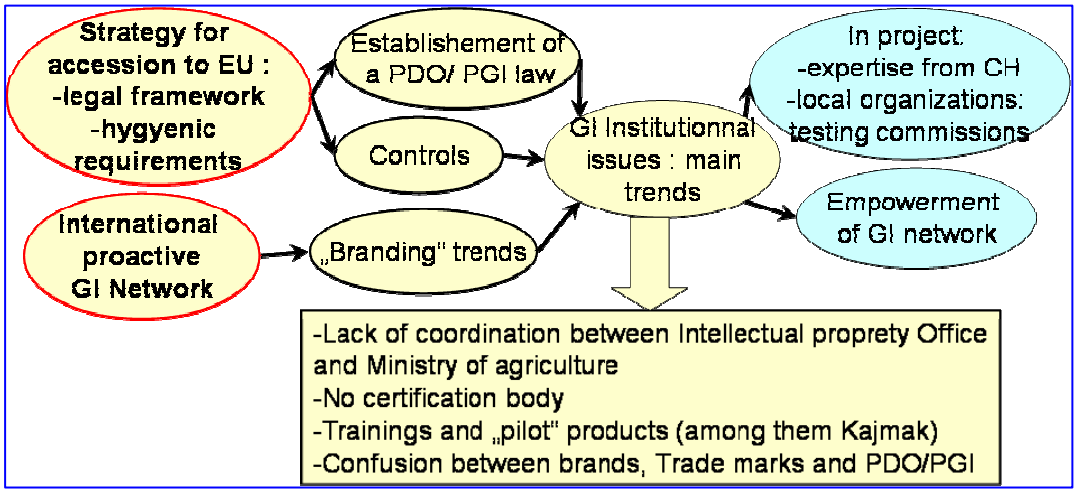
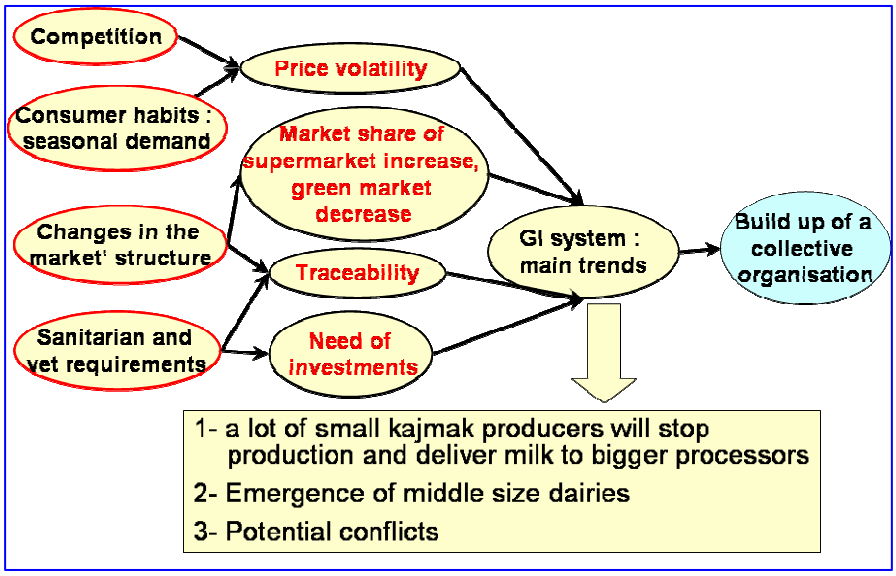


Figure 18: Trends and perspectives: GI system



Scenario	CONVERGENCE	DIVERGENCE	PLURALITY
How is it sustaining the scenario	• Enforcement of the Serbian PDO/PGI law • Kajmak and the 2 other pilot products form the benchmark for the development of a sui generis system • Creation of certification bodies	• No value in the GI • Other IP tools staying more important and supported	• Enforcement of the Serbian PDO/PGI law • Range of IP tools being developed and supported • Creation of certification bodies
Power	• Small producers of kajmak taking the initiative • Local traders vertically integrate the processing step (link with market and small producers) • New marketing opportunities may develop • Entrance of GI into new EU markets (diaspora) • A credible GI would also give power to the consumer (transparency)	• Producers with investment capacities survive • Local trade activity disappears • Power close to the market • Power to owner of dairies and supermarkets • Power in the hands of the owners of the sanitarian standards • Proliferation of quality standards by private actors	• Power close to the market • Possible new entrance of GI into important markets (supermarkets and exports – diaspora). • Power to regions and local actors that take part in GI strategies.
GI trajectory	• Can lead to a "South West Serbia" Kajmak GI or several local kajmak GIs	• Weak or absent GI • Proliferation of trademarks. • High heterogeneity in the product (process of production industrial/ artisan kajmak) and increase of productivity as main strategy • Consumer confusion? • Relocation of the production	• Proliferation of GIs (several regional GIs such as Kraljevacki kajmak) • Can lead to "South-West Serbia" kajmak as umbrella • Registration in the country and abroad according to the available "shopping basket" of IP • Consumer choices enlarged • Emergence of regional labels
Impact on sustainable development	- Economic: value added at regional level and better repartition of the VA - Social: women empowerment, positive image of farmers and rural areas, maintain of a artisan know-how	- Economic and social : investment in industrial dairy sector, investments in dairy production, small producers disappear, value adding taking place at process level, loss of traditional know-how	- Regional identities are reinforced and sustain the competition between territories - Value added stays in the region if the competition between kajmaks is not too high at shops level

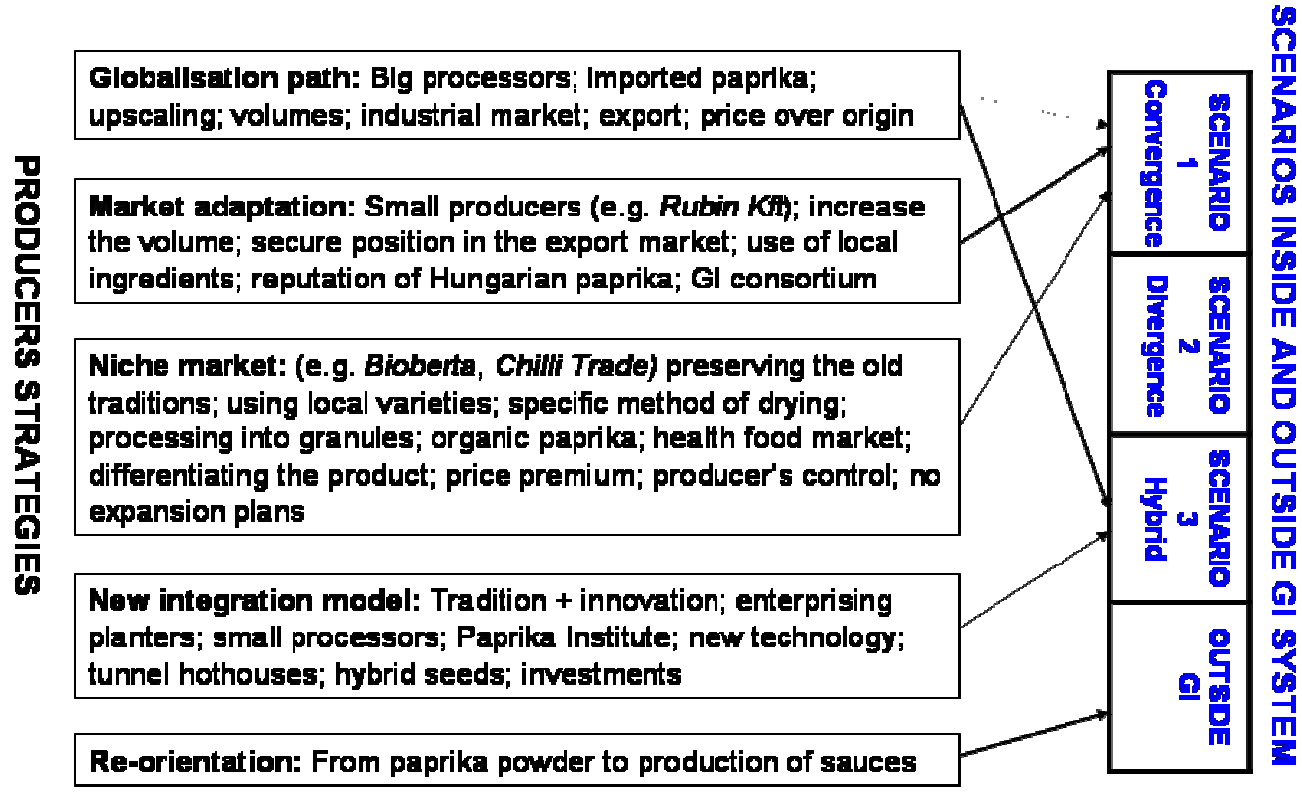
PAPRIKA: Trajectory, Scenarios, Impacts (T. Tisenkofs, B. Kovacs, E. Bienabe, G. Allaire, M. Ansaloni)

Actors motivations

- **Growers**: Small farms, large farms, cooperatives, households; incentives and disincentives for producers
- **Dryers, millers, processors**: Concentration, modernisation, upscaling, oligopoly, innovation
- **Paprika research institutes**: Deregulation, privatisation, research and development, innovation
- **Local authorities**: Decentralisation
- **Paprika Council**: Interprofessional body, safeguarding and promoting Hungarian paprika, proposing redefinition of the standards (Codex Aliment.)

- **GI consortiums**: Two current consortiums and applications to EU in progress; Failed application efforts in the past; Conflictual relations; Disorganised collective action
- **Industrial byuers on export markets**: Not very interested in Hungarian Paprika GI, but they could be by the origin if sanitary norms are respected (due to the fact the problem cames from imported raw material)
- **Consumers in Hungary**: "Endogeneous" reputation and trust regardless GI registration; "mature" reputation, "emergent" GI system
- **Policy institutions** (MoARD, HPO): Legal procedures in place; rather "formal" policy implementation
- **Public support organisations** (e.g. Agricultural Marketing Centre): Support to marketing activities, developing labels, some assistance with application (but limited budget).

Figure 19: Business model diversification process in the Paprika case



Scenario	**CONVERGENCE**	**DIVERGENCE**	**PLURALITY**
How development fits the scenario	• Rebuilding of the local initiative groups (eventually after a rejection of the actual proposal by the EC	• Seems the likely scenario except if the "new integrative model" succeed	• Seemingly, we are not moving towards convergence scenario • Consumers are decisive force – they do not pay tribute to GI as much as to origin related quality • Sanitary norms play important role. The processing firm should want to benefit a premium in localizing the production in the Danube/Tisla area
Impacts on actors power configuration	• Power close to local initiative and supporting actors • GI cover a bulk of producers •	• In "black market" there is a real price – 700 Ft against 300 Ft in supermarkets • Great diversity in terms of regions, markets, valorisation of the product • Fooling the consumers through blending	• Consumer groups may have greater influence; if consumers are inactive, that may lead towards plurality scenario • Leader groups could play the role through their initiatives and definitions to protect origin paprika from blending

GI trajectory	• Szeged consortium is moving towards "clarifying the situation"
	• Two GIs (if local initiative develop in Kalocsa) build different relations with different markets, esp. domestic and export
		• Government institutions may help
		• DUAL ROUTE: You may have dual / two GI registrations in two regions or failure of local project replaced by a global PGI Hungarian paprika
		• On global market it may jeopardise reputation
		• Leader groups may require specification production requirements in Codex Alimentarius
			• Heterogeneity: which choices are made in code of practices:
			  • towards artisan GIs with favour of quality
			  • towards more export oriented (This seems to take over, the power of big processors)
			• Consumer protection office can play increasing role

Impact on sustainable development	• If GI recover paprika reputation this would be in favour of Rural Develoment • Importance of the modernisation way (taken by younger farmers)	• GI registration is a matter of social capital rebuilding – there are some evidences from the two consortiums	• The ageing of rural population might undermine the artisan/ household way of growing paprika – will young people continue this tradition? • Importance of the modernisation way (taken by younger farmers)

COFFEE PICO DUARTE (G. Belletti, A. Marescotti, F. Galtier)

On a whole, the Pico Duarte case (and more generally the coffee case) seems to sustain the Plurality Scenario. Many quality schemes (origin, environment, social norms, etc.) and growing attention paid to territorial origin as leverage to differentiate in a growing segmented market).

Generally speaking, power unbalances along the supply-chain (both at local system level and international level) tend to be reproduced and even made harsher when a DO is set-up, unless some counter power is created (maybe it is the role of the Cluster and/or the public sector).
In the coffee market, the situation is worse because producers cannot control the final product (DO is on green coffee), which is in the hands of big players (traders, roasters).

Scenario	CONVERGENCE	DIVERGENCE	PLURALITY
How is it sustaining the scenario	• Sui generis protection. Protection to GI accorded within national law on industrial property • GI concepts included in the National Law (2000) due to the need of respecting TRIPS agreement • Trend within national regulation towards a EU-type form of regulating GI, especially for DO (prevision of Product Specifications, controls, proof of the origin, etc.).	• No much knowledge on GI and GI procedures, but debate is rising between producers and other relevant actors, also at public level • There is not (yet) a Policy for the protection and support to GIs. GI concept has still to be included in the political debate. The absence of very famous Dominican GIs may impede the growth of a real and strong interest in GIs. • A certain influence of US position on GI and trademarks can be evidenced	• In the international coffee market there is a sort of *quality fora shopping*, both for GI and other quality signs • A growing interest towards origin signalling, together with other quality signs (on environment and social norms), can be recorded • Many producing countries are interested to and moving towards the use of territorial origin in Latin America and other parts of the world • In Dominican Republic, there are many ways of using Origin for agro-food products marketing: there are GIs (both Geographical Indications and Denomination of Origin), individual and collective trademarks with territorial reference, Slow Food International presidium. • There are also big international firms asking for origin coffees which comply with their own standards, such as Nespresso (although it is a quite spot initiative, so far) • Some attempts are currently ongoing to insert other quality schemes (Fair Trade, social norms, environmental norms) within the norms of the GIs or with different labels on the same product
Scenario	**CONVERGENCE**	**DIVERGENCE**	**PLURALITY**
Power	• DO may give the opportunities to farmers' organization to catch more added value, but at the same time it may reproduce and worsen the power unbalance along the supply-chain • Effects on power depend on the power distribution along the (local) chain, and on who can get the leadership in the design of the rules of the DO. • Theoretically, a DO may help fixing the added value at a more local level, thus benefiting who owns the power at local level • But, as far as coffee is concerned, DO are for green coffees. Therefore the local system may not be strong enough to negotiate and impose its decision on international traders, roasters, distributors, unless the name owns a strong reputation on markets • Only strong "names" and	• Need of catching other quality schemes to differentiate and escape from the bulk competition • Risk of being captured by big global firms. • Private standards may offset many small producers with no bargaining power, being easily substitutable • But: maybe more room to ethic and social norms (standards), more useful for (small) producers. Much depends on the scheme chosen	• More freedom for local actors to choose the best scheme (or combination of schemes) suitable to their own situation, according also to the different targeted markets. • Changes in the structure of power along the chain and within the sectors of the chain rely on the kind of schemes, on who sets the rules, on the role of the public sector (at local and national level) to supervise and support collective actions

	strong organization (such as Colombia) may be successful • Some market opportunities for local markets (both local consumers and tourists) may arise • Proliferation of producer initiatives and risk of giving confusing signals when initiatives are supported by politicians in view of their visibility in a short-term perspective.		
Scenario	**CONVERGENCE**	**DIVERGENCE**	**PLURALITY**
GI trajectory	• Much depends on the ability to connect with international markets, and to reach a true differentiation on the product • Problems in installing the system, setting-up the controls, certification. • Need of technical and financial assistance, information, education • Reproduction of power unbalance and exclusion of territories, firms, productions • Possibility coming from local consumption (tourism) • Potential increase in the added value captured by the local system.	• Status-quo • Trend to including social and environmental norms in the quality schemes • Private schemes. Need and difficulties to comply with norms for many producers. • GI as internal quality standard for local and international traders and/or roasting firms • Divergence may reproduce a high dependency from both local powerful actors and external actors (international co-operation, big players on international markets)	• Ibridization (social and environmental norms within the Product Specifications) • Coexistence of different schemes • Plurality may allow the local system to adapt to different markets/consumers. Success of the strategy may lead to new configuration of the DO system, especially through an enlargement of the production area (new producers from nearby regions)
Scenario	**CONVERGENCE**	**DIVERGENCE**	**PLURALITY**
Impact on sustainable development	• Economic impact depending on how the DO system will connect to international markets. • Exclusion effects may worsen economic and social conditions of small farmers and some territorial areas • The inclusion of environmental norms in the specifications may help if better specified. Risks of environmental damages in some areas due to exclusion	• The increased role of ethic and social norms may help small producers and even medium-quality producers to improve their living conditions • Question marks on private standards, many of their effects depending on specific rules and controls structure and costs. • The absence of quality signalling may cause severe crisis in the local coffee sector, with negative impacts on economy, society and environment	• Effets on sustainable development depend on the kind of scheme chosen, the effectiveness of the control systems, the price of coffee on international markets, etc.

ROOIBOS: Trajectory, Scenarios, Impacts (Dirk Troskie)

Scenario	**CONVERGENCE**	**DIVERGENCE**	**PLURALITY**
How is it sustaining the scenario	• Flagship case for South Africa's involvement in GI debate • Rooibos forms the benchmark for the development of a sui generis system.	• No value in the GI – the sceptics are convinced right. • Other IP tools becoming more important and supported	• The importance of a quality standard coming to the fore. • Range of IP tools being developed and supported
Power	• Power to the land owners • Producers taking the initiative. • New marketing opportunities may develop • Proliferation of producer initiatives. • Entrance of GI into new EU markets? • A credible GI would also give power to the consumer	• Power close to the market. • Power to specific land owners due to altruistic behaviour of certain actors. • Power in the hands of the owners of the quality standards. • Proliferation of quality standards by private actors. • Leading to the debasement of quality standards. • Bulk exports continue.	• Power close to the market • Power to specific land owners due to altruistic behaviour of certain actors • Possible new entrance of GI into important markets. • Need to manage the establishment of quality standards (meta-norms).
GI trajectory	• Can lead to a Rooibos GI • Flagship for national initiative. • Example for other products • Multi-stakeholder initiatives.	• Weak or absent GI • Proliferation of trademarks. • Proliferation of production • Consumer confusion?	• Domestic registration • Registration abroad according to the available "shopping basket" of IP tools
Impact on sustainable development	• Ownership of Rooibos land becomes important. • Increased importance of Land Reform • Value adding at local level	• Ownership of trademarks more important. • Land not that important, BEE rather in the supply chain. • Value adding taking place abroad.	• Who owns the GI / Trademark? • Rent extraction at GI / Trademark level. • Potential for limited value adding for export at local level.

Chapter VII- GI System trajectories and impacts on sustainable development

Transversal impacts analysis has to be made after the development of the scenarios and impacts assessments[21].

A/ Empirical evidence for European GI systems

Roquefort and Melton Mowbray Pork Pie are two well known geographical indications. Roquefort, recognized as Appellation d'Origine in France in 1932, was the first recognized GI in France. Melton Mowbray Pork Pie is an English GI. Its producer association applied for a PGI protection at the European Commission, which is currently examining the file.

Roquefort (France) (Frayssignes, 2005)

For the Roquefort case study, hard data was available and allowed for a good diachronic assessment as well as for a comparison with competitive products. Following conclusions have been drawn.

Economic effects

- A high average price at consumer level (between 14 and 16 € per kilo) for a high quality cheese with a strong reputation and fame; high costs of production (ewes' milk). However, Frayssignes asks to what extent these facts are real impacts of the geographical indication or rather result from a complex system of rules established by actors negotiations about the milk price which take place every year (quality and market).
- A commercial success leading to increasing competition. For example, a French agro-food group which owns the "Saint-Agur" trademark, produces a cheese made from cow milk, with a current yearly production of 4'000 tons. This copy of Roquefort is sold today to the consumers at almost equivalent price to the one for Roquefort. So, the researcher concludes that the GI protection is not an absolute protection against competition.
- A stabilised market, not very big but guaranteed (18'135 tons in 2000; 18'586 in 2005 (+ 2,5 %)). After a period of market increase, the demand stabilized. The control of the offer is facilitated by a specific concentrated market structure: one well-known trademark – Société – associated with the AOC label, represents 47 % of the market shares. The trademarks owned by large retailers (a counter-power that appeared during the last decades) represented 23 % of the sales of the PDO cheese in 2005. Frayssignes concludes that the fame of private brands is complementary to the protection of the geographical name in the search for a more acute market power.

Social effects

- An important economic weight: 2'330 milk producers and 1'700 industrial jobs (45 % of the total jobs and 50 % of the added value of the South Aveyron region).
- About 10'000 jobs for all the activities linked with the supply chain (8 % of the agro-industrial jobs in the Midi-Pyrénées Region) in a territory characterized by an important demographic decline (18 inhabitants per km² for South Aveyron).
- A specific productive system dedicated to milk/cheese production, contributing to a « pole » of resources and skills based on agricultural and agro-food activities (logistics, relations with local costumers, quality management, research & development).

[21] This chapter was written by Dominique Barjolle, with the contribution of the case studies authors. It is also published in aside document.

- Some links with tourism (200'000 visitors per year for the Roquefort caves).
- But a weakness in terms of local networks (no initiatives like a Road of Cheeses, which exists in other regions like Savoie or Auvergne for example).
- A situation essentially due to the very valuable income generated by the activity (no alternative development project).

Environmental effects

No significant effects have been put into evidence. Yet, landscape amenities in this spectacular plateau area are obviously maintained through the sheep raising activity.

Melton Mowbray Pork Pie (UK) (Ness, Tregear, 2007)

For the Melton Mowbray Pork Pie (MMPP), a diachronic assessment and a comparison with generic products was also done in a synthetic way.

Economic effects

- Generic market valued at £150 millions, MMPP sector value data £50million with 5% growth per annum.
- Price premium 15% over generic product.
- Employment in geographical area: 5'000.
- Sustains local businesses.
- Previous producer of non-authentic product plans to invest £11million in geographical area and join MMPPA.

Social effects

- Area has a strong food culture with for examples MMPP and Stilton cheese, and a rich history.
- Pride in tradition as rural capital of food.
- Annual food and drink festival.
- Initiative linked to 'Gourmet tourism'.

Environmental effects

- Landscape of area linked to fox-hunting tradition.
- MMPP origin in 19th Century as food for fox hunters.
- No detrimental impact on the environment.
- Plans to introduce organic MMPP.
- Conforms with objectives to sustain traditions and culture of area at regional level.

B/ Empirical evidences for Geographical Indication systems in progress

For the GIs in progress, the difficulties appear tangibly across the case studies. They are mainly due to the impossibility to assess effective impacts. The restrictions are so important that it is only possible to identify and assess factors which could potentially be impacted by the GI system and the protection scheme. We note that these potential or expected impacts are often congruent with the main motivations of the initiators or the supporters of a GI system and protection scheme.

Kraljevacki kajmak (Serbia) (Paus, Estève, 2007)[22]

In the case study of kajmak, a famous Balkan dairy product (between cream and cheese) produced in the South-West of Serbia, a diachronic evaluation was made, from an external

[22] See also upper the scenarios analysis.

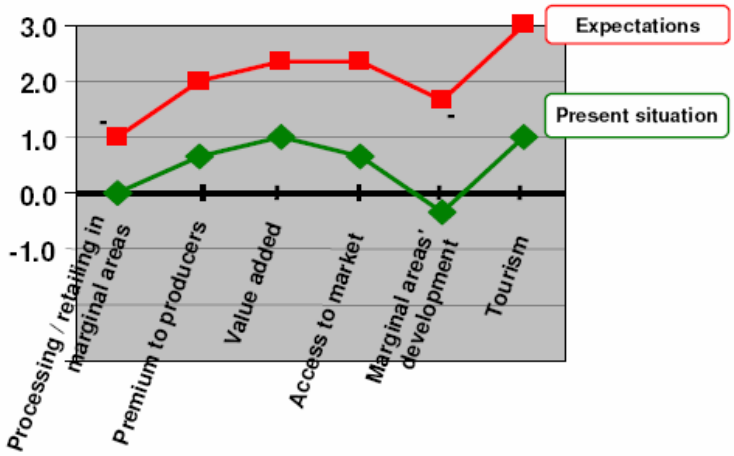
experts' point of view on several crucial topics. Although the number of interviewees was not sufficient and would need to be consolidated, the method and the results are interesting for an exploratory study. Moreover, some adjustments should be made with regards to the items chosen (for instance, the issue of gender should be taken into consideration in the social aspects). The researchers used a Likert scale of 7 points.

Expected economic effects

The effects of the protection of the kraljevacki kajmak are mainly expected in terms of:
- Higher prices to producers,
- Transparency in the margins,
- Stability of the prices and markets.

These expectations from supporters of the registration of kraljevacki kajmak are matching the main motivations of the producers.
Present effects in marginal areas are not convincing. The items "processing/retailing in marginal areas" and "marginal areas' development" are not consensual among interviewed persons (indicated on the figure with the (-) sign). Nevertheless, a protection could sustain a revival of the production in the most remote mountainous areas of the Kraljevo Municipality.

Figure 20: Assessment of expected economic impacts, in comparison with the present situation

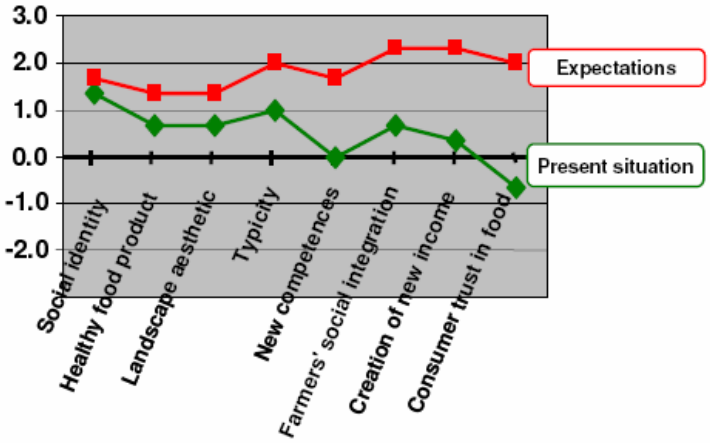


Source: Paus & Estève, 2007.

Expectations on tourism are high but might be more linked to a general expectation about rural tourism development than a specific expectation linked to the registration of the product itself. Kraljevo has a crossroad position and some actors have already understood the potential synergies with traditional food.

Expected social effects

Figure 21: Assessment of expected social impacts, in comparison with the present situation

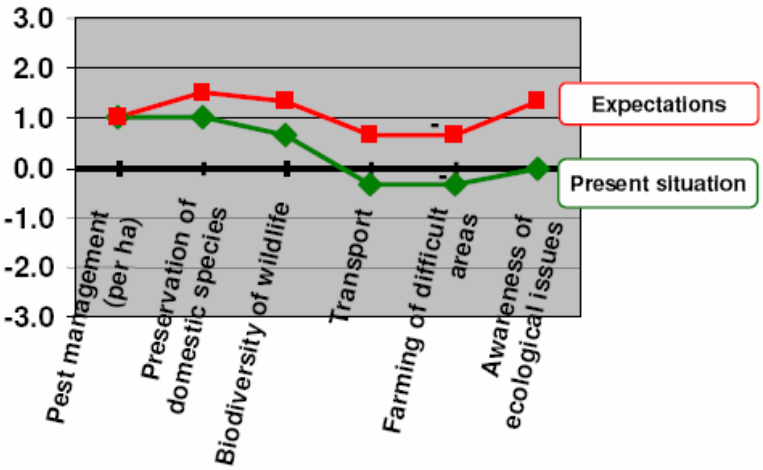


Source: Paus & Estève, 2007.

The social and cultural identity is already very high, as kajmak (in general) is a traditional product associated to a know-how. A protection of the kraljevacki kajmak could increase the self-esteem of producers (public recognition of their knowledge). The researchers noticed that negative social effects could also appear in terms of exclusion risks : "like with other qualification processes, the protection of kraljevacki kajmak might lead to two exclusion issues:
- exclusion due to the geographical delimitation (mountainous areas, villages at the Kraljevo Municipality boarder);
- exclusion due to the definition of a code of practice (limit artisan/ semi industrial practices, definition of the traditional process, composition of the final product etc.)."

Expected environmental effects

Figure 22: Assessment of expected environmental impacts, in comparison with the present situation



Source: Paus & Estève, 2007.

The researchers noticed that environmental issues are not the main stake in the case of the artisan kajmak production. Livestock activities are held in an extensive way: no or few

concentrates in the cows' feeding, Simmental breed and Buša (which is said to be a local type of Simmental breed), and extensive production (no pesticides or other chemicals). Nevertheless, the environmentally friendly type of production might be under pressure due to structural changes (intensification, yield increase, etc). As an example, some producers already shifted to the Holstein breed. For that reason, critical points have to be fixed in the code of practices in order to maintain these positive effects and increase ecological awareness.

Rooibos (South Africa) (Biénabe, Troskie, 2007)[23]

In the case study about Rooibos (or "red bush", a herbal plant from South Africa), the authors chose to develop hypothesis concerning the protection of the GI, while for now specific South African law is not existing (these hypothesis do not directly derivate from the 3 baseline scenarios, but specify national uncertain context) and to discuss their consequences regarding three topics: the reservation of the name, the collective management of the quality of the product and the territorial dynamics. These scenarios can be summarised as follow.

Which GI recognition and protection? 4 hypothesis (scenarios)
1. No local nor international GI recognition: continuation of individual strategies;
2. National GI recognition but no formal international recognition (EU application rejected): collective name reservation, but weak effects;
3. National and international recognition (EU application accepted);
3.1. Low requirements in terms of collective quality strategy;
3.2. High requirements in terms of collective quality strategy (possibility to use GI as a regional umbrella + collective 'terroir' definitions).

In the following tables, the + and the – are put to indicate the intensity of the pertinence of an item according to a defined hypothesis. Comments are explaining the assessment.

Figure 23: Possible economic effects (depending on the 4 hypothesis)

Scenarii	1 → 2 → 3. 1 → 3.2			
Name reservation	-- Risk of delocalisation outside South Africa		++	
Collect. quality management	---	-- Risk of loss of reputation and of decrease of market share		++ Value added creation potential But risk of loss for conventional rooibos
Territorial dynamics	---	--		++ Tourism development potential («Rooibos street »)

Source: Biénabe, Troskie, 2007

[23] See also upper the baseline scenarios analysis.

Figure 24: Possible social effects (depending on the 4 hypothesis)

Scenarii	1 → 2 → 3.1 → 3.2		
Name reservation	-- Risk of decline of South African production : → potentially huge impact on employement → stronger impact on traditionnal product area than expansion area	++	
Collect. quality management		+	+++ Recognition of small scale farmers specific assets
Territorial dynamics			Potential synergies between small scale farmers and large scale farmers

Source: Biénabe, Troskie, 2007

Figure 25: Possible environmental effects (depending on the 4 hypothesis)

Scenarii	1 → 2 → 3.1 → 3.2			
Name reservation	++ Risk of delocalisation : posible impact on biodiversity and environment			
Collect. quality management	- Mainly private standards and initiatives (organic, fair trade, etc.)		+ +++ Expansion controlled Sustainable practices enforced collectively	
Territorial dynamics	--	--		++ «Ecotourism»

Source: Biénabe, Troskie; 2007

C/ Evaluation of the set of case studies

In order to draw some general conclusions, we did a common analysis of the results of 14 case studies of the research programme *SINER-GI*.

The different case studies are the following:

- *Roquefort (cheese, France)*
- *Melton Mowbray Pork Pie (pie, United Kingdom)*
- *Tequila (distilled product, Mexico)*
- *Roiboos 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)*
- *Paprika (spice, Hungary)*
- *Kraljevacki kajmak (dairy product, Serbia)*
- *Bleuets du Lac Saint-Jean (fruits, Canada)*
- *Florida Oranges (fruits, United States of America)*

Due to the lack of common and comparable hard data and to the differences between the assessment methods used in the 14 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 on the basis of the case study reports, in discussion with the person responsible for the case study or its reviewer.

Considering identified "invariant effects" (chapter II), the following items were identified as relevant, comparable and assessable:

On the economic level

- Market stabilisation/enlargement
- Price premium
- Value added in the region

On the social level

- Local Employment
- Empowerment of producers
- Cultural value / Tradition

On the environmental level

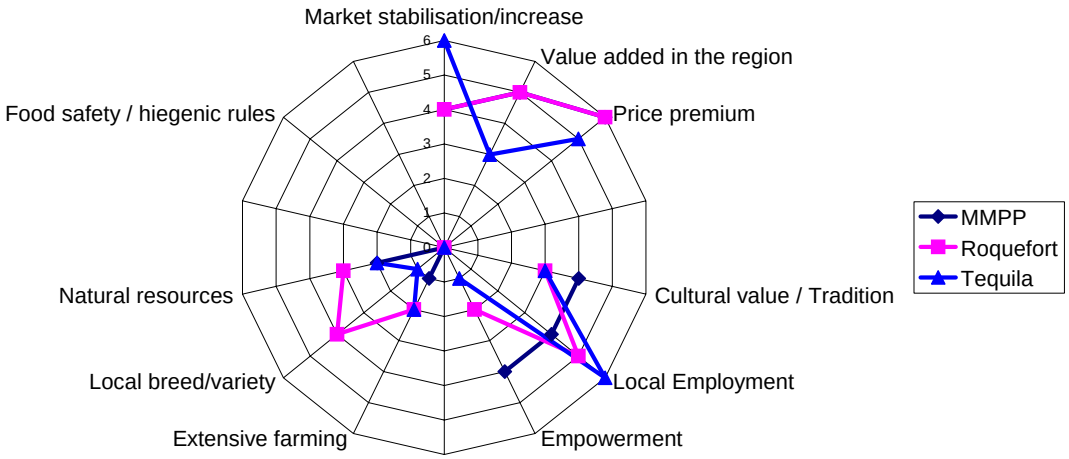
- Local breed/variety (conservation)
- Extensive farming
- Natural resources

The sanitary / hygienic rules also appeared to be an important item, in terms of potential effects of the GI recognition process (see driving forces analysis).

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. So, the researchers in charge of the case studies, or the reviewers, gave a scoring for each item, according to his/her understanding of the expectations for the studied geographical indication system.

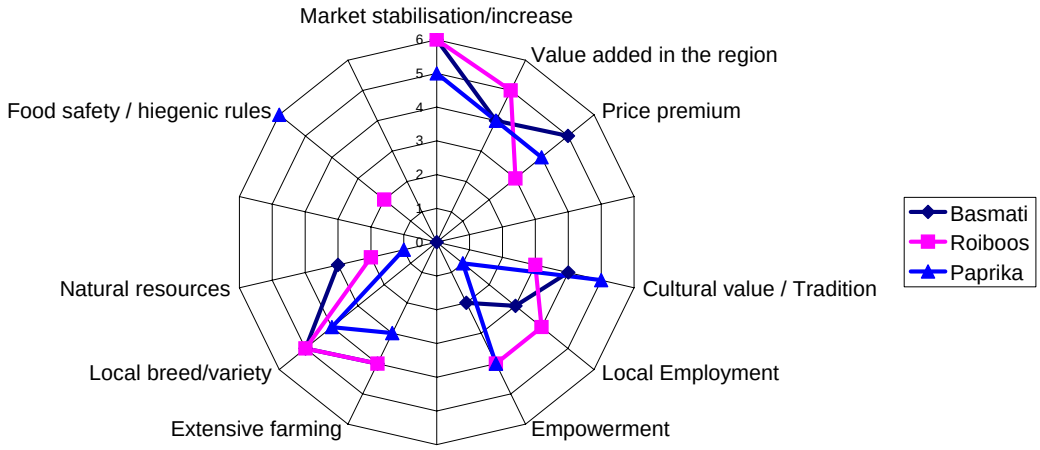
The results are the following. For the established geographical indications, the economic impacts are the most important, and in the social dimension, the local employment is the most relevant for the stakeholders. In fact, the price premium, the value added in the region and the local employment get the highest scores.

Figure 26: Expected impacts for established Geographical Indications



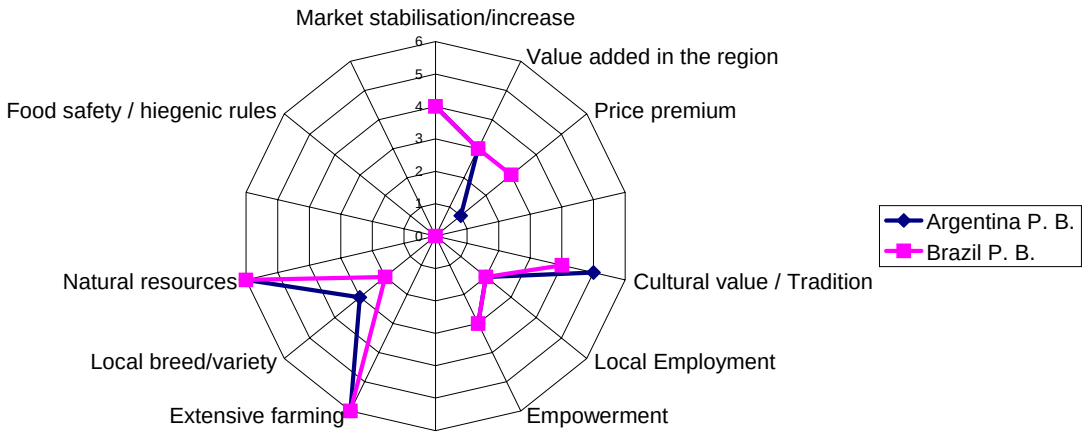
For a first group of geographical indications in progress, which we called “enthusiasts”, the most important expected impacts are the market stabilization or increase, the value added in the region, but also the preservation of local breeds or varieties. All the dimensions received high average scores. For these products, it seems that the motivation of all actors is high, and that the expectations are high for all the dimensions.

Figure 27: Expected impacts for Geographical Indications in progress, “enthusiastic”



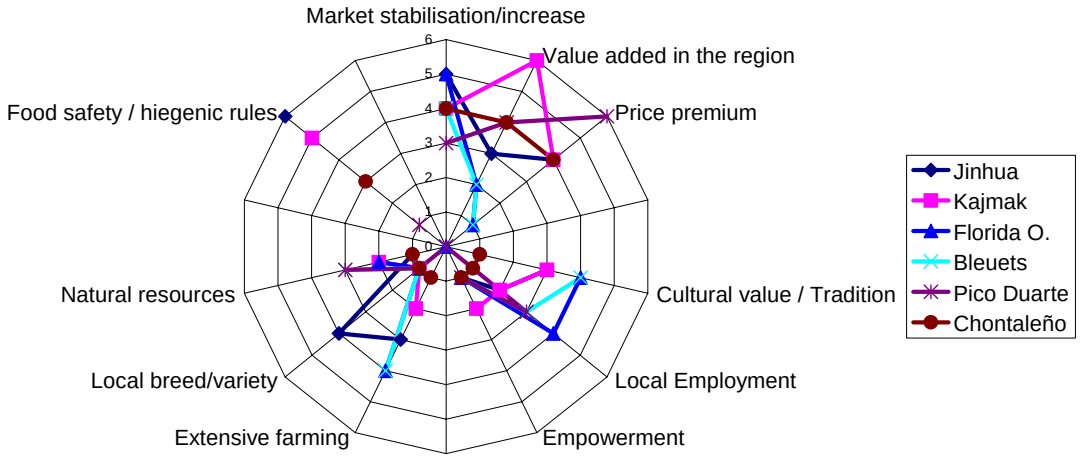
For a second group of geographical indications in progress, that we called “socio-environmentalists”, the expectations on economic issues are less important than the social and the environmental ones. The initiatives stem from mostly one process of recognition of extensive and traditional farming practices well adapted to the area. The two beef meats from the South American Pampa are in this second category.

Figure 28: Expected impacts for Geographical Indications in progress, "socio-environmentalists"



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. Nevertheless, for certain products, the food safety and hygienic rules are also important drivers for key actors. This reflects a pressure from the evolution of general standards on the future of these GI products. In general, issues related to the environment or society are considered as less important for the local stakeholders.

Figure 29: Expected impacts for Geographical Indications in progress, "undecided"



For the studied products, there are clearly more expectations in terms of economical 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 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.

D/ Discussion and conclusion

We can conclude that in general, observed or expected impacts of geographical indication systems are mainly linked with economic or economic-related issues. But 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.
A good example is the Chontaleño cheese in Nicaragua. It shows that a registered geographical indication can lead to more monopoly power in favour of the most powerful actors in the GI system, and have disastrous consequences for the small scale farmers and dairies that might loose 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 exclude small scale farmers from the benefits of the protection or even exclude them totally, as it is the case for Kajmak in Serbia. For the established geographical indication 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 geographical indications implementation schemes. First, not only the intellectual property rights have to be taken into account. Some other correlated 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 public publication of the code of practices 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 practices 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 to get the 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 programme (WP8: GI Data Base), as well as for case studies investigated recently by the FAO in the frame of the programme “products with quality linked to tradition and origin”. To do this we should assess beforehand the quality and quantity of available data and define which cases can be analyzed through direct or indirect methods. For ex-post assessments, the synchronic analysis (comparing similar regions with and without GIs) is more feasible. However, in the case of future projects or new GI initiatives, it is recommendable to plan and implement a baseline study at the beginning, in

order to easily draw a diachronic analysis through a repetition of this study a few years after the implementation.

There is also clearly a need to elaborate best practices to introduce and achieve a GI scheme, as well as GI protection 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, only caused by wrong decisions at the moment of the registration procedure. There is a need for focused research on the role played by various actors during 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 some 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 programmes.

VIII- Glossary

Alliance
A particular form of collective organization between independent firms cooperating to share certain common objectives, and combining their resources and expertise to realize these objectives in the interest of each participating firm. Alliances are justified by their benefits in reducing transaction costs, seeking synergies in research, and risk reduction. The forms that alliances take can be quite varied: joint ventures, sub-contracting, partial integration, agreements on technology sharing, etc.
In the area of Geographical Indications, a strategic alliance might be established, for example, between producers and processors who form an *inter-professional association* to coordinate production and sales of a local product so that consumers are willing to pay a value-added for the product, feeling confident that it will have the specific level of quality they are seeking. (See Voisin et al., 2000.)

AO - Appellation of Origin
Appellation of Origin was one of the earliest forms of GI recognition and protection (Paris Convention, 1883). Though mentioned in earlier treatises, the 26 Contracting Parties to the Lisbon System first agreed formally to use the term Appellation of Origin as a form of GI by using one single registration procedure, effective among the signatories. Appellation of Origin is the geographical name which serves to designate a product originating therein, the quality and characteristics of which are due exclusively or essentially to the geographical environment, including natural and human factors. The term is most used in France and parts of southern Europe

Certification body
For a product to be certified, a third party must give written assurance that the product, process or service being certified meets specified requirements. Certifications are offered through a certification body, which is usually a business organization but can sometimes be a professional or regulatory body. Potential consumers of a certification wish to understand the nature of the certifying body and the certification process. The well known ISO is a NGO acting as an international standard-setting body composed of representatives from national standard bodies. Several requirements are attached to ISO certification: neutrality, effectiveness, competence, etc. In some cases, certification bodies are officially accredited as in accordance with ISO standards requirements (e.g. Cofrac in France).
In the field of GIs, certification bodies establish codes of practice and assure that producers respect these codes. By providing indications of actors' qualifications, certification bodies recognize distinctions among groups of producers, and thus take part in regulating the market.

Certification mark
A certification mark is any word, name, symbol, or device that protects the certification of a product's quality characteristics, which may include geographic origin. It conforms to specifications laid out by the owner, which can apply to place of origin and/or methods of production. The mark requires some verification by a third party that prescribed attributes have been met or are presented.
Unlike trademarks, certification marks are source-identifying in the sense that they identify the nature and quality of the goods and affirm that these goods have met certain defined

standards. Certification marks differ from trademarks in three important ways. First, a certification mark is not used by its owner. Second, any entity that meets the certifying standards set by the owner is entitled to use the certification mark. Third, it applies only to the product or service for which it is registered; so a Florida citrus certification mark cannot be used as a certification mark on automobiles or radios. However, a single US certification mark can be tied to a variety of products, producers, and processors in a region i.e. 'Pride of New York' for fresh fruits and vegetables.

Code of practice (specifications)
Documented list of precise practices to be implemented, along with standards of production to be met, in making an *origin product*; usually agreed upon by the producers' association / consortium. It refers to standards, minimal standards, product specifications, production mode, and production conditions.
In the EC Reg. 2081/92 (now 510/06), related to the recognition of a PDO or PGI, the code of practice should contain the specification of the characteristics of the raw materials, of the production process and qualitative requirements of the product. Note that qualitative requirements may apply to the raw materials, elements of the processing, and/or the final product. The code of practices should also delimit the area in which the production process must take place (in the case of a PDO), or in which certain phases of the production process must take place (in the case of the less stringent PGI).

Collective good
A collective good, whether produced by the public or private sector, is a good that can be used simultaneously by several actors without any diminution of its attributes. The consumption of a collective good by one additional actor does not reduce the satisfaction of all other actors (the principle of non-competition) and it is not possible to exclude any actor from consuming the good (the principle of non-exclusion).

Collective organization
General economic term to denote a group of actors (producers, but non-producers may also be included) organized to share functions and/or resources, and that is quite generalized in business (i.e., it is not restricted to specific quality products). There are several possible configurations for collective organizations, including *alliances*, *consortia*, and *interprofessional associations* (see definitions).
In the EU, forming a collective organization is a pre-condition for obtaining PDO-PGI recognition. Note that protection, once granted, is not reserved to those partners who initially requested PDO-PGI protection. Entrance is possible for any producer located within the delimited territory if they meet the established code of practice.

Common Law and Civil (or Roman) Law
The system known as Civil (or Roman) law gives precedence to written law and is used in many, though not all, European, African, Asian and Latin American countries whereas Common Law systems that give precedence to prior case-law or precedent are used in a smaller group of nations, the most prominent of which are the UK and the US. These systems also have renerated different approaches to the protection of GIs

Collective mark (USA)
Collective marks are used only by the members of a cooperative, association, or other collective group to identify their goods or services as having a connection to the collective and its standards. The collective may have a geographic identity i.e. the California Raisin

Board and may advertise or promote goods produced by its members i.e. the Sunkist co-op but does not sell its own goods.

Collective (trade)mark (EU)
Collective marks are trademarks used by the members of a collective group to distinguish their offerings from those of non-members. A group that has a registered "protected designation of origin" (PDO) or "protected geographic indication" (PGI) may also apply for a collective trademark for their GI product's name or graphic representation. The PDO/PGI designation provides a protected indication of quality and origin relationship that is separate from other intellectual property rights. Aspects of PDO/PGI can therefore be subsequently trademarked as a collective trademark, conferring additional protection via intellectual property rights. Conversely, a product or graphic representation that has been collectively trademarked cannot be subsequently registered as PDO or PGI because a GI cannot override an existing trademark.

Consortium
Formal type of collective organization including various players (producers and/or processors) implementing common rules (code of practice) and/or common economic functions (financing, promotion, quality grading, etc.), and possibly applying for a protection. (See Arfini and Zanetti, 1997).

CTM - Community Trademark (EU)
The CTM is any trademark registered or pending across the whole of the EU, creating a harmonized trademark system across the membership. The CTM must be applied for, either to the Office of Harmonization of the Internal Market or via a member national government. Essentially, to qualify for Community Trademark registration, a mark only needs to be used in one member state of the EU to meet the CTM application requirements. Any item that can be represented graphically (words, shapes, designs, letters, numerals, the shape of goods or of their packaging) can be registered as a CTM so long as it is unique enough to be distinguishable.

DOC - Controlled Denomination of Origin (EU)
European protection tool for wine and spirit GIs.

DOCG - Controlled Denomination of Origin Guaranteed (EU)
European protection tool for wine and spirit GIs.

DOP - Protected Denomination of Origin (EU)
Commonly used term in Europe synonymous with PDO. Please see Protected Denomination of Origin.

Externality
An externality, or spillover effect, is the consequence of the interdependence among economic agents, such that one economic activity has an effect on the other. The effect can be harmful or beneficial. The pricing of externalities escapes the market mechanism, and therefore must be approached by other means. (See Introduction for a longer discussion of this concept.)

Generic market
A generic market (see the general definition of a market in this glossary) is an economic organization where supply and demand encounter competing goods whose quality is not

specified by a public code of practice or guaranteed by a certification body, although the generic product may bear a trade mark. Generic products are usually of a standard industrial type, produced at lowest cost and competing in the market based on their low price. In addition to their availability, their main distinguishing attribute as perceived by the customers is their price.
Other terms used for "generic market" include: "low cost market," "conventional market," and "main stream market." (Storper and Salais, 1997.)

Generic
A term or sign is considered "generic" when it is so widely used that consumers commonly view it as designating a class name or category of all of the goods/services of the same type, rather than as a geographic origin.

Geographical indication (GI)
In 1994, when negotiations were concluded on the WTO Agreement of Trade-Related Aspects of Intellectual Property Rights (TRIPS), governments of all WTO member countries had agreed to set certain basic standards for the protection of GIs in all member countries. Article 22:1 of TRIPS states that: "Geographical Indications are for the purpose of this agreement, indications which identify a good as originating in a territory of a member, or a region or locality of that territory, where a given quality, reputation or other characteristic of the good is essentially attributable to its geographical origin."
The TRIPS agreement does not provide for any specific legal system of protection for GIs; this is left to member countries. If a member country has established a formal registration process to recognize GIs within their territory, then we can refer to a registered product as a "Protected GI" (PGI), or Protected Denomination of Origin (PDO). However, GIs may exist without protection, or which are seeking protection, and these often become the basis for disputes between nations.

GI – Geographic(al) indications
The TRIPS agreement states: "Geographical indications…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.".
GIs are an umbrella term whose overall purpose is to distinguish the identification of a product's origin and its link with particular characteristics and reputation related to that origin. When GIs are legally registered they take different forms such as AOs, PDOs PGIs, and Marks. As such they become enforceable.

Geographic sign
A graphic symbol indicating a GI

Historicity
Indicates that a product has a long lasting heritage and has a reputation with consumers that has been built-up progressively through time. Production methods have been inherited from previous generations and the reconstruction/revival of the product is the result of a compromise between transmission of a tradition and innovations judged compatible with the tradition by local actors.

IGP - Protected Geographical Indication (EU)
The same as the EU's PGI, this is either the French or Italian abbreviation (IGP) and stands for "Indication Géographique Protégée" or "Indicazione Geografica Protetta".

IGT Typical Geographical Indication (EU)
European protection tool for wine and spirit GIs.

Instrument
Social and technical device which organizes specific relations among actors involved in a collective action according to objectives of the coordination, as well as meanings and representations of the collective action. By its choice and its uses, it helps to materialize, and evaluate the action. It also defines the scope of concerned actors and their role in the collective action.

Indication of source
Any expression or sign used to indicate that a product or a service originates in a country, region or a specific place, without any element of quality or reputation (Madrid Agreement, 1891, Art. 1.1; Paris Convention, 1883).

Intellectual property rights (IPRs)
The term intellectual property reflects the idea that this subject matter is the product of the mind or the intellect, and that IP rights may be protected before the law in the same way as any other form of property. It offers a monopoly protection for creative works such as writing (copyright), inventions (patents), processes (trade secrets) and identifiers (trademarks).
However, the use of the term and the concepts it is said to embody are the subject of some controversy, and intellectual property laws vary from jurisdiction to jurisdiction, such that the acquisition, registration or enforcement of IP rights must be pursued or obtained separately in each territory of interest. However, these laws are becoming increasingly harmonized through the effects of international treaties such as the 1994 WTO TRIPs Agreement. GIs are recognized as IPR in the same way as patents, trademarks or software.

Inspection
Systematic examination of a product, and/or the process of its production, to assure that it meets generic standards (sanitary, labelling, etc.), as well as specific standards required by the established code of practice for that product. Inspection systems can be implemented at three levels: 1) auto control, implemented by the producers themselves; 2) collective control, implemented at the level of the organization producing the product; 3) state control, implemented at the national level. Successful inspection allows the product to be certified so that it may be sold under the protected GI name.

Inter-professional association
An inter-professional association is a private organization, recognized by the state, bringing together upstream and downstream partners from the same product chain with the purpose of better regulating the product's market, assisting with the implementation of agricultural policy, analyzing the implications of different contractual arrangements, guaranteeing equality among members, encouraging performance improvements in the chain, and defending its interests. Although this organizational form originated in France (see French law 2006-11, January 5, 2006, in the French Rural Code), the notion of an interprofessional association is broadly recognized today in texts governing the Common Agricultural Policy. (See Coronel and Liagre, 2006.)

Mark

The term 'mark' is used interchangeably between regular trademarks, collective and certification marks. Depending upon context, 'mark' can refer to a regular trademark, or to GI-related trademarks, collective or certification marks.

Market
Within economics, a market is defined as a social arrangement that allows buyers and sellers to discover information and carry out a voluntary exchange of goods or services. It is one of the two key institutions that organize trade, along with property rights.

Monitoring
Monitoring is used for oversight, control and assistance, and is often carried out by government-funded entities in the EU. In terms of the action being judged, monitoring verifies that interventions are well managed, and it produces a regular analysis of the progress of outputs.
In terms of the criteria of judgment, monitoring passes its judgement according to the operational objectives to be achieved. Monitoring determines indicators to identify apparent success and failures. In terms of the professional skills and know-how required, monitoring officials need to have recognized competence in terms of the organization, management and establishment of tracking systems relevant to the product in question. Monitoring includes a support dimension, as officials observe operators and assist them by providing tools and procedures to help them in their professional practices, as well as by providing critical analyses of the conditions under which they operate.

Multifunctionality
According to the Organization for Economic Cooperation and Development (OECD, 2001), multifunctionality refers to the fact that an economic activity may have multiple outputs and, by virtue of this, may contribute to several societal objectives at once. Multifunctionality is thus an activity oriented concept that refers to specific properties of the production process and its multiple outputs. The concept is intended to recognize that beyond its primary function of supplying food and fibre, agricultural activity can also shape the landscape, provide environmental benefits such as land conservation, the sustainable management of renewable natural resources and the preservation of biodiversity, and contribute to the socio-economic viability of many rural areas (OECD, 1998).
It is sometimes distinguished from the concept of sustainability (see below), with the latter seen as more goal oriented and pointing to corrective action to be taken when current agricultural practices are considered not sustainable, while multifunctionality is seen as more process oriented. OECD (2001) views multifunctionality as a characteristic of the production process that can have implications for achieving multiple societal goals. It emphasizes the joint production and (both positive and negative) externality and public good aspects of the multiple outputs of agriculture, and their implications for policy formation, and thus may have a normative aspect.

Origin product
In this volume, we use the term origin product (OP) for any product whose origin is either 1) *implicitly* known by the consumer due to long historical association of the product with the place in which it originates, or 2) which is *explicitly* identified with that place via a label carrying an identifying geographical indication, whether or not the associated GI is protected. Thus, the term origin product (OP) is used when it is necessary to include all such products whether or not they are designated by a GI or protected.
It is important to note that many origin products are not exchanged on markets with a geographical indication. Producers sometimes are not even aware that their product could be

considered an origin product. When local and/or non-local actors gain this awareness and pursue a geographical indication to recognize the origin tie of a product, it is often the first step towards greater value-added for the product.

Protected designation of origin (PDO)
According to EC Regulation n^{o} 510/2006, "'designation of origin' means the name of a region, a specific place or, in exceptional cases, a country, used to describe an agricultural product or a foodstuff:
— originating in that region, specific place or country,
— the quality or characteristics of which are essentially or exclusively due to a particular geographical environment with its inherent natural and human factors, and
— the production, processing and preparation of which take place in the defined geographical area."
Note that the acronym "DO" was also associated with Spanish and Italian Designations of Origin which existed prior to the passage of EU regulation 2081/92. All are now PDO or PGI (see below) under the EU classification system.

Protected geographical indication (PGI)
Recognized in the EU according to EC Regulation n° 510/2006, a "'geographical indication' means the name of a region, a specific place or, in exceptional cases, a country, used to describe an agricultural product or a foodstuff:
— originating in that region, specific place or country, and
— which possesses a specific quality, reputation or other characteristics attributable to that geographical origin, and
— the production and/or processing and/or preparation of which take place in the defined geographical area. Certain geographical designations shall be treated as designations of origin where the raw materials for the products concerned come from a geographical area larger than, or different from, the processing area, provided that:
(a) the production area of the raw materials is defined;
(b) special conditions for the production of the raw materials exist; and
(c) there are inspection arrangements to ensure that the conditions referred to in point (b) are adhered to.
The designations in question must have been recognised as designations of origin in the country of origin before 1 May 2004.

Public good
Within economics, public goods are considered to be those produced directly by a public agent (the government), or delegated to be produced by them, on behalf of the greater society. These goods are generally considered to be *collective goods.*

Private good
A private good exhibits two main properties: it is 1) excludable – it is reasonably possible to prevent a class of consumer (e.g., those who have not paid for it) from consuming the good, and 2) it is rivalrous – consumption by one consumer prevents simultaneous consumption by other consumers.

Protection
The method(s) by which actors engaged in the production of a good protect it against attempts at usurpation and abuse. Protection is a major element of innovation and commercialization strategies. Methods of protection can take various forms. They are distinguished principally according to their origin — whether they are voluntary or obligatory — and their type. In

terms of type, while most methods of protection are of the legal type, they can also result from court or administrative decision, or from contractual agreements, either verbal or written, among the concerned actors.
Protection methods also differ according to how they are enforced. According to the form they take, they define different types of property: individual property (patents, individual trademarks, collective trade marks), collective property (certification trademarks), or public property (protected denomination of origin, or protected geographical indication).

Producers association
See "collective organization."

Quality convention
In this volume, a quality convention is considered to be a shared understanding that establishes a form of social organization among actors that share it, resulting in a collective exteriorized representation of this common point of view. This exterior representation provides the basis for individual as well as reciprocal expectations concerning behaviors, competencies, and material objects involved in enacting the convention. The convention also defines the final characteristics of the goods and services it governs. In the case of geographical indications, a quality convention represents a specific understanding and expectation concerning the goods to be produced such that 1) producers commit themselves to respect these expectations, 2) consumers are willing to pay for them, and 3) certification organizations are able to guarantee that they are met in order to prevent fraud. Government agencies, at different levels of authority, may also play a role in quality conventions, for example by authorizing certification organizations in their functions. (See Salais and Orléan, 1994; Murdoch, Marsden and Banks, 2000.)

Quality product
As used in this volume, refers to a product produced following a quality convention (see above).

Recognition
Principle by which a product is recognized as distinct from other products of the same type (notably, those produced according to *generic market* standards – see above). Recognition may be informal, for example when it is demonstrated through purchasing habits. However, producers will most often seek a formal means of recognition, because it helps them differentiate their product, which can be particularly important in raising its value in long distance or export markets. The process of product recognition by recognized public authorities includes identification of the specific characteristics of the product that are tied essentially to its place of origin and the specific know-how of the producers there, and at times identification of particular races of animals or varieties of plants used in its production.

Region
Region is a geographic term used to refer to a medium-scale area that is larger than a specific site or location. Regions are conceptual constructs and thus their relative size may vary among cultures and individuals. The term does not imply a political jurisdiction when used in this volume, unless so specified.

Regional planning
The totality of methods used by the public sector to influence the spatial organization of persons and activities at different scales (city, region, state, nation, multi-national region such as the EU). Notably, it includes efficient local use of land, infrastructure and zoning for the

sustainable growth of a region. This approach can address region-wide environmental, social, and economic issues which may necessarily require a regional focus.
In 1983, European Conference of Ministers responsible for Regional Planning (CEMAT) gave one of the earliest definitions: "Regional/spatial planning gives geographical expression to the economic, social, cultural and ecological policies of society. It is at the same time a scientific discipline, an administrative technique and a policy developed as an interdisciplinary and comprehensive approach directed towards a balanced regional development and the physical organization of space according to an overall strategy."

Registered right holder
A registered right holder is the first to register that mark and enjoys exclusivity over any later users of the mark to ensure consumers are not confused by the two uses.

Regulatory body
A regulatory or professional body is an organization, usually non-profit, that exists to further a particular profession while protecting both the public interest and the interests of the professionals in question. On the one hand, professional bodies may act to protect the public by maintaining and enforcing standards of training and ethics in their profession. On the other hand, they may also act like a cartel or a trade union for the members of the profession.
Regulatory body refers to a larger function than *certification body*. In the context of quality products, it is an external organization that has been empowered by legislation to oversee and control the quality process and outputs germane to it.

Rural development
Even though the “rural” and “development” each cover a wide and varied conceptual terrain, in application rural development combines a number of different but interconnected practices, including the conservation of landscapes and natural amenities, promotion of quality of life and diversification of economic activities in rural areas, agritourism, sustainable agriculture, and in particular for our purposes here, fostering production of locally specific products tied to the specificities of their territory of origin.
In the European Union, for example, rural development policy plays a major role in economic, social and territorial cohesion. It is based on the following principles: recognizing the multifunctional role of agriculture, improving competitiveness, ensuring that environmental issues are taken into account, diversifying economic activity, and conserving rural heritage. Rural development has become a major objective of Common Agricultural Policy (Regulation (EC) n° 1257/1999**),** integrated through what is known as the “second pillar” of support to rural communities consisting of packages of aid not directly linked to prices or volumes of agricultural production. (See Fougeyrollas et al., 2003; EU Fact Sheet).

Sectoral (industry) governance
The ensemble of methods of coordination and decision making, and the practices that contribute to the regulation and performance over the long term of a sector of activity. It includes environmental assessment, strategy formulation, strategy implementation and evaluation and control.
In this volume, sectoral governance is distinguished from territorial and corporate governance. It is defined as a level of governance for which priority is given to actors involved in the supply chain, with firms and institutions from the same sector making formal and informal agreements.

Social construction
In sociology, social construction refers to the ongoing process of meaning making that human beings engage in, usually on a micro-level. This understanding rejects the idea that there exists a set, objective reality in favor of the notion that human beings create their reality as they share interpretations of events and social phenomena. The shape of this interpretation in turn determines to a large extent how individuals interact with each other in a given situation. In an institutional context, for example, actors are seen to be constantly negotiating their understandings of situations and material contexts to better evaluate possible actions and to coordinate solutions to problems. (See Berger and Luckmann, 1996.)

Specific quality
A specific quality is a set of characteristics associated with a good or service that are recognized by all involved parties as distinctive aspects of the product or service that therefore can form the basis for its protection. Achieving a specific quality may require particular production conditions, some of which may be linked to unique local attributes (savoir-faire, terroir) that are informal traditional knowledge, which may in turn be defined in a publicly established code of practices (for protected products). These particular production practices may generate additional production and protection costs, which can in turn be recognized by consumers in their willingness to pay a higher price to acquire goods or services with the specific quality they seek.

Standard
Standards are produced by numerous organizations to facilitate coordination of actors and reduce uncertainty concerning the quality of a good or service. Two principal problems may arise regarding them: certain actors may attempt to become free riders by benefiting from the reputation of the standard without respecting the rules associated with it; or several standards that are well established can enter into competition, resulting in confusion for the consumer. Establishing internationally accepted standards is one way to avoid the latter problem.

Sustainability
Refers to an evolution allowing for the preservation, maintenance and improvement of the quality of natural resources, and the maintenance of environmental equilibria, with a view towards managing them for the future. It therefore contributes to sustainable development, which was defined in the Report of the Brundtland Commission (1987) as, "…development that meets the needs of the present without compromising the ability of future generations to meet their own needs." It requires a balance to be struck among the three goals of economic viability, social equity and environmental preservation. (See Godard and Hubert, 2002.)
For OECD (2001), sustainability is a resource-oriented, long-term and global concept. It is resource oriented because we do not know which use future generations will make of the resources and which economic activities they will engage in; it is, by definition, long-term as it involves the interests of future generations; and it is inherently global as long-run sustainable resource use in a sector, country or a region can hardly be achieved if resource use in other sectors, countries or regions is non-sustainable. It is viewed by OECD (2001) as essentially goal-oriented, implying that resources should be used in such a way that the value of the entire stock of capital (including its option value) does not diminish and an indefinite stream of benefits can be obtained.

Terroir
A terroir is (1) a delimited geographic space, (2) where a human community, (3) has constructed over the course of history a collective intellectual or tacit production know-how, (4) based on a system of interactions between a physical and biological milieu, and a set of

human factors, (5) in which the socio-technical trajectories put into play, (6) reveal an originality, (7) confer a typicality, (8) and engender a reputation, (9) for a product that originates in that terroir. (See Barham, 2003; Casabianca et al., 2005.)

Traditional Specialties Guaranteed (TSG)
According to EC Regulation n° 509/2006,
"To ensure compliance with, and the consistency of, the traditional specialities guaranteed, producers organized into groups should themselves define specific characteristics in a product specification… For the purposes of this Regulation:
(a) 'specific character' means the characteristic or set of characteristics which distinguishes an agricultural product or a foodstuff clearly from other similar products or foodstuffs of the same category;
(b) 'traditional' means proven usage on the Community market for a time period showing transmission between generations; this time period should be the one generally ascribed to one human generation, at least 25 years;
(c) 'traditional speciality guaranteed' means a traditional agricultural product or foodstuff recognised by the Community for its specific character through its registration under this Regulation;
(d) 'group' means any association, irrespective of its legal form or composition, of producers or processors working with the same agricultural product or foodstuff."

TSG - Traditional Specialty Guaranteed (EU)
A TSG exists where the product's name is specific in itself or expresses the specific character of the foodstuff. A TSG means that the product must be traditional, or established by custom (at least one generation or 25 years), where distinguishing features of the product may not necessarily be due just to the geographical area the product is produced in, nor entirely based on technical advances in the method of production. Haggis, Mozzarella, Lambic, and *Eiswein* or Icewine are well known examples.

Trademark (USA)
Under U.S. law, it is possible to protect geographical indications as trademarks. Geographic terms or signs are not registerable as trademarks if they are merely geographically descriptive or geographically misdescriptive of the origin of the goods. However, if a geographic sign is used in such a way as to identify the source of the goods/services and, over time, consumers recognize it as identifying a particular company or manufacturer or group of producers, the geographic sign no longer describes only where the goods/services come from, it also describes the somewhat unique "source" of the goods/services. At that point, the sign has "secondary meaning" or "acquired distinctiveness" and can be trademarked.
The EU, of course, also uses trademarks and although they can complement a GI they are not used to protect GIs.

TRIPS
Trade Related Aspects of Intellectual Property Rights (TRIPS) Agreement overseen by the World Trade Organization (WTO). The TRIPS agreement does not determine national legislation, but, to be TRIPS compliant, WTO members' domestic intellectual property law must establish the minimum level of protection for IPRs laid out in TRIPS' 73 articles.

Typicality
(1) The typicality of an agricultural product is the property of belonging to a type that can be recognized by experts (connoisseurs), based on the specific attributes of that type of product. Typicality also expresses the property of being distinguishable from other products in a

similar or comparable category, which forms the basis for the identity of the type. It includes a degree of internal variability within the type, and should not be confused with conforming to a norm. (2) These properties of belonging and distinction are described by a diverse set of characteristics (technical, social, cultural) identified and refined by a human group that serves as reference. These properties are based on know-how distributed among numerous actors including producers of raw materials used, processors, regulators, and connoisseur-consumers. (3) Creative knowledge assures the emergence of typicality, constructs the identity of the type and assures periodic revisions ; production knowledge demonstrates the capacity of the actors to manage a process oriented towards obtaining typical products ; evaluation knowledge is brought to bear through tests devised to assure judge the product's typicality ; and appreciation knowledge assumes a competence on behalf of consumers who share with the human reference group in question familiarity with the typical product. (4) Among the many expressions of typicality, that tied to terroir is a particular construction that concretizes the terroir effect for a given product. (See Casabianca *et al*., 2005.)

USPTO
United States Patent and Trademark Office

Value-added, high value-added product
The difference between the price of purchased raw materials, semifinished and finished parts, and services that are used to make a product and that product's final selling price. In other words, the value added is the increase in prices of these purchased elements created by a firm's production processes. Calculating value added is a far more accurate way of determining an industry's contribution to the overall economy than simply calculating gross sales, since it indicates just how much value has been contributed by the manufacturing process (Ammer and Ammer, 1984)
Products with a high value-added are those for which this difference is superior to that of similar standard products. High value added results from mastery and recognition by the involved actors of:
— the controls on processing methods
— the quality of work necessary to produce the specific quality of the products, and
— methods and circuits for marketing.
Controlling production and sales costs (notably, the costs of transportation and marketing) promotes higher levels of value added. Recognition of the quality of products also enhances product value. On the other hand, while certification procedures can help achieve a higher value added, they do not appear to be a sufficient condition by themselves to its emergence or maintenance.

VQPRD
An acronym used in the European Community meaning Wines of Quality Produced in Demarcated Regions. In Italian (Vini di Qualità Prodotti in Regione Determinata), Portuguese and Spain (Vinho de Qualidade Produzido em Região Demarcada) and French (Vin de Qualité Produit dans une Région Déterminée).

WIPO
World Intellectual Property Organization, a partner with the WTO whose mandate is to facilitate discussion and learning on global intellectual property issues. It administers 24 international treaties including most of those relevant to GIs (i.e. Madrid and Lisbon Agreements) and also keeps the International Register of Appellations of Origin.

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Rooibos Tea from South Africa

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Jin Hua Ham from China

Frederic Wallet (INRA Toulouse), Bertil Sylvander (INRA Toulouse), Guihong Wang (University of Toulouse / INRA), Yafan Sun (Yangzhou University)

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Marcelo Champredonde (INTA Bordenave), François Casabianca (INRA Corte)

Gaúcho Pampa da Campanha Meridional Meat from Brazil

Claire Cerdan (CIRAD, UMR Innovation, Montpellier / UFSC Florianópolis), Delphine Vitrolles (University of Lyon 2 / CIRAD Montpellier), John Wilkinson (UFRRJ -Universidade Rural Federal do Rio de Janeiro, Rio de Janeiro), Luis Otavio Pimentel (UFSC - Universidade Federal de Santa Catarina, Florianópolis)

Kajmak cheese from Serbia

Marguerite Paus (ETH Zurich), Magali Estève (AGRIDEA)

Florida Oranges from United States

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Blueberry Bleuet from Canada

Anna Perret (AGRIDEA), Erik Thévenod-Mottet (AGRIDEA)

Chontaleno cheese from Nicaragua

Filippo Arfini (University of Parma), Sabrina Cernicchiaro (University of Parma), Maria Cecilia Mancini (University of Parma), Stefano Magagnoli (University of Parma), Anna Chiara Matteo (University of Parma), Emilio J. Lopez (University of Juigalpa)

Tequila from Mexico

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