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RAW SHEEP MILK CHEESE OF PISTOIA MOUNTAINS

Case study report

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1. INTRODUCTION

Pastoral family farming systems are among the most endangered by modernisation of the farming process. Besides a traditional tendency to social exclusion as a group, in the last year shepherds have suffered from an increasing pressure to increase flock size and to integrate their farms into food chains increasingly dominated by big processing firms and retailers. The high rate of abandonment of sheep farming has caused both social and cultural erosion in several rural areas.

In recent years signals of change have appeared, coming from the consumers' side. If looked from consumers' eyes, the crisis of shepherds' farming systems brings to an erosion of food quality and diversity. As a response to an increasing dissatisfaction by consumers with the modern food system, the issue of quality had already become central to food discourse and policy in the '80s, but only recently the meaning of quality has been associated to the origin of the product and of its raw material, to craftsmanship and to natural processes rather than to technology, industrial organisation and public controls (Goodman, 2002). For the shepherd farming systems there are now concrete opportunities of revitalisation, provided that they succeed in creating appropriate marketing strategies to link up to consumers.

To this purpose, it is important to explore the potentialities of 'alternative food networks' (AFNs) (Murdoch *et al.*, 2000; Renting *et al.*, 2003), new organisational patterns around food production and distribution, whose common characteristic is to propose alternatives to standardised and environmentally-unfriendly conventional food. The substitution of the metaphor of the network to the one of 'chain' is related to the fact that these organisational patterns involve a large variety of actors, including public institutions, NGOs, consumers, whose interaction activate intense communication flows around themes which go beyond the pure commercial aspects (Murdoch, 2000; Brunori *et al.*, 2003; Brunori *et al.*, 2004).

Among the most important conditions of the emergence of AFNs there is the consolidation of new entrepreneurial models in agriculture (Ploeg *et al.*, 2000) inspired to the principles of sustainability and multifunctionality and relying mainly on so called 'endogenous resources'¹.

The paper originates from a case study analysis presented within an European research on the assessment of the potential contribution of new FSCs in sustainable rural development. The leading idea of our research is to assess the role AFNs can play in rising sustainability in both production systems and rural development; specific attention is given to factors related to the organisational structures and interactions among different levels.

It is contended that to understand the role of supply chains in the enhancement of rural development, we need to explore which sustainable meanings or promises are incorporated with AFNs, to examine how these are built and shaped and what is their impact on society. To this purpose, the case study aims to assess the effectiveness in creating cohesion and successful collective action between different actors in the chain. In order to analyse the socio-economic dynamics of the alternative FSCs, we have developed a set of indicators able to assess the sustainability performance and to identify bottlenecks that constrain the improvement of the collective performance towards sustainability.

The paper starts by examining some of the features and the trends of the agro-food system, putting in evidence some of the problems associated with the conventional food chains. After having described the specific context of the area where the initiative takes place, the case study develops a narrative explaining how a specific sustainability concept is progressively embodied into the initiative and how this initiative changes the existing networks. In the discussion section, we attempt to assess, through a discussion of the indicators, the sustainability performance and the potential contribution of the initiative to wider aspects of rural development.

¹ Recent theories of development of rural areas play particular attention to "endogenous resources" (Ploeg and Long, 1994; Ploeg and Dijk, 1995; Ray, 1999; Bryden, 1998; Iacoponi *et al.*, 1995), those specific resources which characterise a territory and are at the basis of its competitive advantage. Among them endogenous development theories include other factors in addition to physical and financial capital, traditionally considered by more conventional development theories (Ray, 2002; Brunori, 2003): *human capital* (individual knowledge and competencies); *social capital* (social relationships and conventions in which economic activities are embedded) (Putnam, 1993); *natural capital* (source of production factors as well as of fundamental goods for the quality of life of communities) (Costanza and Daly, 1997), *cultural capital* (knowledge, skills, values and techniques embodied in the territorial organisation over time) (Bourdieu, 1986; Throsby, 1999).

These resources are generated from within and individually or in an integrated way, as well as through the integration with the external resources, they can give rise to specific development processes.

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2. THE CONTEXT

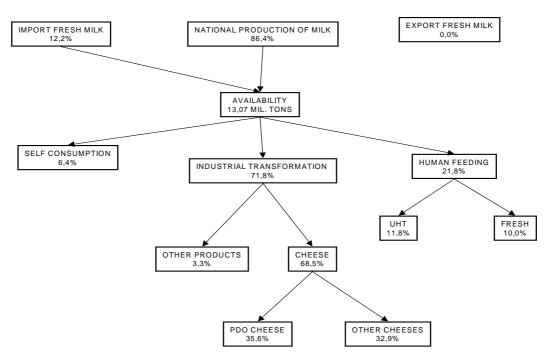
2.1 The conventional Sheep Milk Cheese sector in Italy

2.1.1 Primary production

The dairy sector is of the great sector within the Italian agri-food system. An overview of the Italian milk supply chain is represented in figure 1. This shows that the great majority of the milk is processed into cheese (71,8%), with a strong relevance of PDO cheese production.

Fig. 1 Dairy chain. Diagram of milk utilization by sector

(Ismea, 2000)



With respect to the sheep milk production, over the last ten years it has remained substantially stable and the sheep cheese production follows the same constant trend (sources ISMEA; ISTAT).

Tab. 1 Sheep milk and cheese production (source: ISMEA and ISTAT data bases)

1000 tons	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Sheep milk	660	802	759	867	844	742	788	820	626	646
production										
Sheep	107,4	99,0	102,7	106,3	116,0	111,4	119,0	119,6		
cheese										
production										

On the contrary, the number of holdings has strongly dropped from 1990 up to 2000 (-40%), especially those without own lands (-69,8%), and the average herd size has increased. Sheep cheese production is traditionally concentrated in Sardegna and Lazio and among the Centre-northern regions Toscana has the leading position (source, ISTAT).

Regions	Milk holdings	Sheep milk holdings
Piemonte	42.521	2.214
Valle d'Aosta	2.822	169
Lombardia	35.589	2.857
Trentino-Alto Adige	17.789	2.515
Bolzano - Bozen	12.812	2.136
Trento	4.977	379
Veneto	84.555	1.054
Friuli-Venezia Giulia	14.679	231
Liguria	11.636	1.331
Emilia-Romagna	49.012	1.871
Toscana	49.805	4.635
Umbria	25.526	3.815
Marche	39.479	3.853
Lazio	68.721	13.037
Abruzzo	37.559	9.646
Molise	14.374	3.884
Campania	70.278	8.560
Puglia	7.946	2.462
Basilicata	20.306	8.119
Calabria	37.229	5.726
Sicilia	18.443	6.482
Sardegna	27.566	14.478
Total	675.835	96.939

2.1.2 Processing industry

Dairy is the most important Italian agri-food sector. Its total turnover is some 25,000 billions Euros, representing approximately the 15% of the whole agri-food industry; during the last years, the tendency shows a reduction in fresh milk production, accompanied by an increase in valued added produces, especially cheese.

The structure of the dairy industry is characterized by the presence of a small group of big size enterprises, and on the other side, by a large number of medium-small scale dairy firms. The high level of vertical integration within the chain is demonstrated by the fact that the leading role is played by some multinational companies, such as *Parmalat*, followed by *Granlatte*, and its controlled *Granarolo* (ISMEA, 1999). On the other hand, co-operatives play a key role within the dairy sector, (e.g. *Abit* and *Latteria Soresina*), by taking over milk processing and product marketing activities. The Parmigiano Reggiano is one of the most visible expression of the strong horizontal integration within the food chain, as the great majority of cheese-makers are involved in co-operatives (88%). (Source, ISMEA).

An important characteristic of the Italian dairy industry is the high level of diversification of the produce obtained; the most important destinations of milk for cheese production are: Grana Padano (2 million tons), mozzarella (19,9 million tons), Parmigiano Reggiano (1.64 million tons), Crescenza (0.44 million tons), Gorgonzola (0.38 million tons), Provolone Valpadana (0.23 million tons). In the 2000 the export of cheese was 168,925 tons and the main destinations were, in order of importance: Germany, France, United States, United Kingdom and Switzerland.

Italy is one of the most important producers in Europe of PDO and PGI cheeses, with further margins of development on the foreign markets. A recent ISMEA inventory identified 113 officially recognised PGI and PDO products in Italy (with 150 others in the process of recognition). The total

value of the already recognised products is –at farm level- some 3,5 billion Euro, whilst after transformation this equals some 8 billion Euro. The PDO cheese makers are mainly concentrated in the northern regions, whereas in the southern regions only 10-15% of dairy farms have obtained the geographical certification (source, ISMEA 2000).

With respect to the sheep dairy sector, in terms of volume of milk processed, "Pecorino romano" is the most important Italian sheep cheese (30.000 tons/year), representing the most viable market outlet for all the milk produced in Sardegna and Lazio. Its marketing channels are consolidated mainly towards exportation to US and Canada, which are the traditional customers. However, over the last years prices are collapsing to very low levels (4-4,4 EUR/Kg at wholesale level); furthermore in the future the level of subsidies to livestock producers in the Less Favoured Area cannot be assured (source, ISMEA).

2.1.3 Distribution system

Starting from the 90's the distribution system has shifted from the traditional, nonspecialised shop to the large distribution system and to high specialised marketing channels; *mozzarella*, *grana padano* and *pecorino* (sheep cheese) are the most common cheese retailed within the large distribution system; the continuous growth of produces diversification provides to the large distribution companies to gain the leadership in the cheese marketing sector, overtaking in importance the traditional small shops, which remain relevant only for the "personalised" relationships they guarantee to consumers (Ismea, 2003).

Besides these two ways of marketing, during the last years specialised shops increased their importance in the high quality segment, whose marketing within the .large retailer system is still not enough developed as the strictly hygienic standards imposed prevent small producers to market local cheeses within the large retailer system.

2.2 Main issues and dynamics

The following paragraphs refer not only to the sheep milk cheese but to the whole dairy sector, sector, because of the sharing of the characteristics, problems and tendencies covered.

2.2 1 Quality production

As said above, an important share of the dairy production in Italy is processed into PDO and PGI products, which are affected by restrictive standards. These products together with organic, traditional and "cottage products" are very important, because they are based on small-scale farms, have a softer impact on the environment, valorise hilly and mountain areas, and activate synergies with tourism. As their demand increases, it is likely that a rebalancing of the "alternative" chain visà-vis conventional chain will be re-established. Indeed, many of the rural regional development plans approved in Italy under 1257/99 regulation support on-farm processing facilities. Moreover, a big effort of promotion of typical products has been made by the local institutional authorities.

The level of transparency of the dairy industry is quite high, if compared to other sectors. As far as hygiene is concerned, milk and dairy production are controlled by health authorities, while all PDO and PGI products, which represent the biggest share of national output are submitted to additional quality controls which require traceability systems. Besides several schemes, both private and public, have been put into place to improve traceability along the chain.

A recent national regulation (National Law 289/2002, Financial law 2003) provides the possibility to use "mountain produces" brand name for upland livestock producers. The establishment of some producers' associations, such as the *Associazione produttori formaggi d'alpeggio* and the *Associazione pastori vaganti dell'Arco Alpino italiano,* plays an important role in the promotion of these mountain productions.

2.2.2 Regulatory system

During the '90's European and Italian regulations imposed structural changes and controls on hygienic conditions at farm level, creating difficulties for the survival of small production of the mountainous and hilly areas. In order to control the adaptation of the sector to the new regulatory system, in 1993 the Italian Ministry created the U.V.A.C., *Veterinary Offices for the fulfilment of EU requirements*, and unified the hygienic control competences within the A.S.L., the *Local Health Authority*. As a consequence there was a strengthening of controls for the adaptation of farm structures in the respect of previous and new laws (D.P.R. 327/1980), which reinforced the risk of closing down for the small breeders farms.

In 1997 the Italian Decree n. 54 (D.P.R. 54/1997), introducing in Italy the EU Directives 46/92 and 47/92 about production and marketing of dairy products, and the Italian Decree n. 155 (D. Lgs. 155/1997, implementing the EU Directives 43/1993 and 3/19969) about hygienic standards for food produce, imposed strict conditions for the production of some traditional dairy products, and particularly for the raw milk cheeses:

- the adaptation of farm buildings in the different production phases;
- the recognition of the raw milk cheese production, under a fixed bacteria threshold;
- the requirement of a continuous monitoring on the production process.

The implementation of the new regulations generated a new awareness of the necessity of supporting the breeders in their facing with the changes required by the laws, particularly those related to the respect of hygienic rules, together with the importance of maintaining the quality of the traditional product against standardisation.

2.2.3 Consumer's attitude

In the context of significant changes in consumers' attitude ,towards a higher attention to hygienic standards and to quality local products, it has been observed the increasing importance on the market of traditional cheese, such as *parmigiano reggiano* but also other PDO cheese: in 2002 they interested around 27% of cheese consumption (Ismea, 2003).

A significant impulse to the "rediscovery" of traditional high quality cheeses has been given by diverse initiatives of promotions undertaken by public bodies or private organisations. In all the Italian regions, there are several "cheese routes", aimed at promoting local specialities; moreover, cheese takes a place of honour in very important events centred on food culture, such as the *International hall of taste* (a food fair organised by Slow Food every two years in Turin that attracts more than 100,000 visitors), or cheese became the exclusive object of promotional initiatives as *Cheese* (another thematic initiative organised by Slow Food).

To sum up, we can say that in Italy, cheese represents in the consumers' eyes one of the most important symbols of high quality food (strongly linked to territory), probably the second after wine. Among all the kinds of cheeses, sheep milk cheese takes an important place, thanks to its strong link to territory (because of the characteristics of the breeding) and to local traditions. Many of the promoted and certified cheeses, (e.g. through PDO labels or Slow Food Presidia) are sheep milk cheese.

3. OBJECTIVES AND STATE OF THE ART OF THE INITIATIVE

3.1 Objectives of the initiative

3.1.1 The aspects the initiative aims to address

The case is about the experience of a cheese producers' association which started a project aiming at making raw sheep milk cheese complying with hygienic rules but, at the same time, defending the traditional characteristics of the production process. In this initiative the collaboration with Slow Food, committed to saving food products in danger of extinction, has played a significant role in the creation of new commercial relationships and in the development of communication strategies with consumers.

The main problems addressed by the initiative are:

- saving a typical product in danger of extinction
- raising awareness and stimulating changes in the involved actors
- giving producers a chance to survive in the long term

opening new markets for local products

3.1.2 The sustainability problems emerging from it

- Socio-territorial: reinforcement and communication of the link between production and its territory
- ➡ Quality-health: raw milk cheese production in compliance with the hygienic requirements but at the same time, by saving the traditional product quality
- ➡ Economic: improvement farmers' livelihoods, creating new development opportunities in that marginal rural area

3.2 State of the art

In Italy the recent development of the food industry is based on the need to offer products with a medium quality and low price, which respect the strict hygienic rules imposed by the national and EU regulations. In order to achieve these purposes, the common way to process the cheese is based on the milk pasteurisation (heating at 72° for 20 seconds). As a consequence, the production of cheese is quite homogenized, because the pasteurisation destroys the original microflora and therefore the milk has to be afterwards "*re-generated*" through the addition of milk enzymes from the laboratory culture.

On the contrary, the production of cheese without pasteurisation, namely with "raw milk" is based on the fermentation through the bacterial flora which is already in the milk and survives when the milk is heated at temperature lower than 40°. Traditionally in Italy and in other European countries many kind of cheese are produced with raw milk, and among them the very famous *Parmigiano Reggiano* (Italy), *Grana Padano* (Italy), *Roquefort* (France), *Emmentaler* (Svizzera).

Due to the new regulations introduced by the EU during the '90s (see 2.2.2) and to the standards imposed by the needs of the market, the production and consumption of cheese in Italy has become more and more homogenized, and besides the raw milk cheeses have become more difficult to produce and to find on the market. In order to contrast that tendency in 2001 the *European Alliance for Artisan and Traditional Raw Milk Products of Bruxelles*, together with Slow Food (see 4.2) and the Italian ANFOSC (*Associazione Nazionale Formaggi Sotto il Cielo*) have launched a campaign for saving the dairy products made with raw milk. As a result of that initiative, in Italy Slow Food started to support with its Presidia (see 4.2) the small traditional productions of raw milk cheeses, which are very spread on the Italian territory, particularly in certain regions (in the Piemonte Region, for example, there are almost 10 Slow Food Presidia on raw milk cheeses of mountainous and hilly areas).

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4. STORY OF PRINCIPAL CASE

4.1 Background

4.1.1 The territory

The study area is the mountainous region of Pistoia Province in the North of Tuscany, an area which has been facing considerable development constraints, due to its marginal position. The economic activity has traditionally been rather weak and has brought to de-population phenomena and to unfavourable demographic features. On the other hand, agriculture is still very important in the area, and in particular breeding activities which are characterised by the presence of small-scale, traditional and family owned farms; the traditional breeding vocation of the area is a favourable factor for the local development. Moreover, the whole area is characterised by a great potential in tourism development, which is favoured by the presence of rich environmental, cultural and gastronomic resources.

During the post-war period, Cutigliano (the village where the initiative started) knew, like the other villages of Tuscany and more in general of whole Italy, a constant series of flows of population. With the beginning of the '50s a complex process of modification of the demographic structure started, involving deep changes in the distribution in the territory and migratory movements. In fact, in those years people began to left the land in the mountainous areas, where the living conditions were very hard, and started to move to the cities in the valley bottom.

Therefore there was a process of concentration, emigration and modification of the composition of the population that progressively generates the abandonment of the territory and of the farms. In the meantime, people who mostly had been before employed in agriculture found employment in the industry and in the services sector.

The follows grid shows this trend:

year	n. resident people
1951	2692
1961	2317
1971	2035
1981	1916
1991	1827
2001	1802
2001	1823

Tab. 3 Demographic trend of Cutigliano (source: census data)

4.1.2 The local production system

In large parts of Tuscany, especially in the marginal rural areas, extensive sheep breeding is a traditional and still common activity. The majority of the farms are specialised for milk production, with selected animals (*Sarda breed*) which produce an average of 200 l of milk per year; and the milk, which is their main product, is usually sold to the cheese-making factories.

In the North of Tuscany, by contrast, the survival of the livestock activities is linked to different farmers' strategies. First of all, they still use a local sheep breed (*Massese sheep*) which has a dual attitude, milk and meat, and is particularly suitable for extensive breeding. In fact, the breeding techniques are based on high-altitude grazing during spring and summer; that allows to reduce the overall costs of feeding and differentiates the milk through the diversity of vegetable species in the pastures.

The sheep in the area of Pistoia province are almost 4,000. The farming system is characterised by the following fundamental features:

- small scale livestock farming (100-200 heads per farm)
- little land assets
- exclusive family labour
- long lasting tradition of on farm processing and direct selling to local consumers or to citizens coming in the area during their holidays.

The local processing method maintains the basic principles of the traditional technique: the use of raw milk, that is processed without heating over 40°C, and curdling with natural rennet. The production of about 3 quintals per year includes three different kinds of cheese: the soft one (7-20 days of ripening), the "abbucciato" (at least 35 days of ripening) and the "asserbo" (from 2-3 months up to 1 year of ripening). All the kinds of cheese have white paste and the colour of the rind changes from yellow to dark brown according to the length of the ripening period. Each cheese is

characterised by particular features that distinguish it from all the rest. This peculiarity is a consequence of the use of raw milk that allows to maintain the natural composition of yeast and micro-organisms, responsible of specific fermentative processes.

Compared with the other sheep breeding systems, the main difference in farmers' strategy is to be found in the cheese making and marketing at farm level. Such strategies have allowed to reposition the product in high quality circuits of marketing, in which consumers can perceive and appreciate its particular value.

Over the last years, the shepherds have had to face the increasing constraints posed by the health authorities, in order to comply with the European hygienic rules (farms were too small, or their structure were inadequate to modern standards and techniques). At the same time, in Italy the attention on food quality and its connection with locality and artisan processes of production has been increased, as the success of Slow Food movement shows.

These factors have been at the basis of the necessity of an initiative of legitimation and market valorisation of the raw sheep milk cheese, which has been carried out mainly by the local rural community, thanks to a strong support offered by the local institutions. Through it, as the case-study shows, a traditional product in danger of extinction for effect of modernization has been a key resource around which a social network has been reinforced and developed. Within that process, the local identity and the image of the specific product and of the other resources of the area has consolidated and communicated to the outside world.



Fig. 2 Massese sheep

4.2 The starters

The initiative of valorisation of raw sheep milk cheese (RSMC) in Pistoia Mountains was started mainly by the Director of Pistoia A.P.A. (*Associazione Provinciale Allevatori*) and by the local Slow Food representative, whose backgrounds are hereby briefly described.

- A.I.A. (Breeders Italian Association) and the A.P.A.s (the provincial sections of the national organisation) were created in 1947, with the support of the Ministry of Agriculture, for the preservation and the support of breeding. The association currently groups most of the breeders of the Italian territory, providing them through the provincial associations technical assistance for animal productivity, breeding and milking techniques. Because of these technical duties A.P.A.s represent a favourable connection between producers and institutions. In the particular case of A.P.A. of Pistoia province, a significant role is played by the director, who is a key actor for his continuous contact with breeders, his technical knowledge and his networking activity.
- Slow Food was created in 1986 as a cultural organisation aiming at the spread of quality-food awareness through the re-discovering of local quality produce. In 1989 Slow Food becomes an international organisation, but its international and national level remains connected with local

networks through local units (called *Condotte* in Italy, *Convivia* abroad). Through the *Ark of Taste* project, set up in 1996, the association formally starts an activity aimed at saving typical and traditional products, which are bound to disappear. The units implementing the project at local level are the *Presidia*, through which the association gives technical and communicative support to the initiatives aimed at saving specific products.

Box 1: Slow Food and the Presidia

Slow Food organisation and the Presidia

Slow Food was founded in 1986 in the Langhe district in the province of Cuneo. It was established by a group of food writers and chefs gathered around the need to give a response to the diffusion of industrialised food, with the aim to defend the local, traditional and specific food in front of the global food and to re-create a quality food culture (Petrini, 2001; Miele and Murdoch, 2002).

At the beginning, the Slow Food's activities were mainly directed to consumers: the promises of sustainability given to them were aimed at the rediscovery and promotion of traditional quality food and wines, and of food eating as an element of the quality of life. The symbol of the association is a snail because they wanted to underline the importance of slowness as opposite to fastness in modern eating and life style.

In the first decade of its life, *Slow Food* disseminated information about typical and traditional products through the organisation of events, the publication of guides and magazines and the establishment of a network of restaurants whose owners endorsed the Slow Food philosophy. But following this purpose they also indirect started to help producers in order to increase self-consciousness about their quality products and market opportunities by creating new links to connect to consumers.

In order to keep the connections with the local context as strong as possible, from the beginning Slow Food is organised in a network of local units - called "condotte" (in Italy) or "convivia" (worldwide) -, co-ordinated by a national, regional and local headquarters. The head of the *condotta* or *convivium* is the fiduciary or convivium leader, who, through the members and the central office, organises food and wine events and taste workshops aimed at promoting consumers' awareness of local typical produce. The *convivia* were first established in Italy, but soon they began to spread to other countries, Local rootedness and decentralization (plus the ensuing conservation of typicality), and without forgetting the voluntary nature of its representatives contribution, are the most authentic characteristics of the movement.

In the mid '90s the movement started to be concerned with the problem of food "diversity" in opposition to modernization of food eating and standardization of food (Petrini, 2001). The new projects are aimed at rescuing some traditional products (and their connected skills) from extinction. In 1996 the *Ark of Taste* was the first official step in this direction. The objective of this project is to identify and catalogue products, dishes and animals that are in danger of disappearing because of industrial standardization, environmental degradation and hyper hygienist regulations (Miele and Murdoch, 2002). The headquarters of the project are the *Slow Food Presidia*, through which the association provides a media back up to groups and individuals pledged to saving an *Ark* product. The *Presidia* project was launched in 2000 at the *Salone del Gusto* ("The Hall of Taste") in Turin, the important food fair organized by Slow Food every two years in Turin.

Through the development of the Ark of Taste project, the Slow Food movement has broadened its goals: it not only spreads information to consumers about traditional food and wines, and on food culture, but it is also acting directly with the producers towards the promotion of products in danger of extinction (Brunori *et al.*, 2004).

4.3 Valorising the Raw Sheep Milk Cheese of Pistoia Mountains

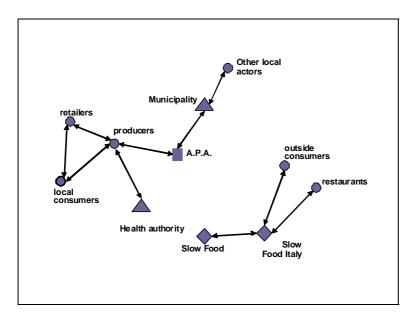
4.3.1 Problematisation

The genesis of the problem can be situated in the '90s, when European and Italian regulations impose structural changes and controls on hygienic conditions at farm level, so that the concern for the survival of traditional produce arises (par.2.2.2). In particular, in 1997 the National Decree n. 54 imposes strict conditions for the production of raw milk cheese, namely the adaptation of farm buildings in the different production phases, the respect of a fixed bacteria threshold, and a continuous monitoring of the production process.

As a result of the forced adaptation to the new regulations, a new awareness arise about the necessity of supporting the breeders: the small farms of mountainous areas need support in facing the changes required, and at the same time maintaining the quality of traditional produce against standardisation.

In the context described, both the Director of A.P.A. of Pistoia, and the Slow Food at national level, following a parallel process, recognize the need of supporting small breeders. When, in 2000, the two starters meet, they can share an agreed definition of the problem, that is the endorsement of the need of adapting to hygienic rules, but maintaining the basic principles of traditional production process.

Fig. 3 Map of the initial network



As it appears clear from the map of the initial network, before the starters of the initiative meet there are two distinct networks: on the one hand, the A.P.A. of Pistoia, and particularly its Director, related at the local level with local authorities and the breeders of Pistoia Mountains, who in turns are connected with local retailers and consumers; on the other hand, Slow Food at local level is connected with the same organisation at national level, which provides alternative and no-local commercial circuits, which grip outside consumers.

Milestone: agreed definition of the problem

Endorsement of the need of adapting to hygienic rules, but maintaining the basic principles of the traditional production process.



Fig. 4 The traditional ripening local of the RMSC

4.3.2 Interessement

Once recognized the need of keeping together the respect of hygienic rules and the traditional processing of raw sheep milk cheese (hereafter RSMC), the Director of A.P.A. starts working on his personal network in order to get involved local stakeholders in building the project he foresees. Specifically he interacts with Local Health Authorities, Tuscany Region and the University of Florence in order to find the technical arrangements that can fit to the specific conditions of the breeders in the Pistoia mountainous area. In the meantime he works with local shepherds in order

to sensitise them about the issue of complying with the new rules, so that to intensify the controls on milk quality and healthiness with their understanding.

Slow Food, besides, explores the existence of local productions in danger of extinction, for effect of the new hygienic rules and of the growing produce standardisation. Within this mission the representative of Slow Food in Tuscany identifies the RSMC as a relevant traditional product undergoing a critical change, and therefore the Slow Food *Fiduciary* on Pistoia Mountains takes contact with the local shepherds sharing the idea of a Slow Food Presidium.

In 2000 the Director of A.P.A. and the Slow Food Fiduciary meet during their activity on the territory of Pistoia Mountains, and share the approach to the problem that they built so far (see *Problematisation*). In fact, the A.P.A. Director for his technical competence, and the Slow Fiduciary for his cultural concern, have become more and more involved by the problem of the shepherds to comply with the new regulations, and both interpret the problem of survival in terms of enhancing a traditional production process. Through their meeting, the two starters unified their goal, which becomes the valorisation of the RSMC, in the frame of the regulations but without giving up with the traditional techniques.

After this meeting the previously separated projects integrate for the achievement of the valorisation of RSMC of Pistoia Mountains. This fundamental step can be considered an *obligatory passage point* (Foster and Kirwan, 2004; Callon, 1986), that makes it possible to align the initiators and the other stakeholders involved in the growing network all around the same objectives:

- adapting traditional production techniques while maintaining their basic principles;
- linking up with consumers by enlarging the shepherds' commercial circuit;
- linking product valorisation to local development.

The new objectives around which the actors align become the lines along which they deploy their action in the follow up of the initiative.

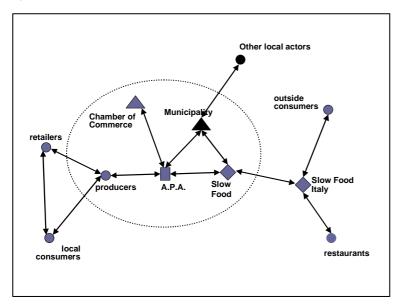


Fig. 5 Construction of the network

Figure 3 illustrates how the meeting of the two starters of the initiative brings about new connections among networks, so that all the stakeholders become entangled in the same web of relations. The alignment of those actors around the same objectives is the core part of the interessement phase, because other actors than the starters become interested in the project of valorisation, and thus make it possible to construct new networks of relationships.

Milestone: objectives around which actors align

Valorisation of Raw Sheep Milk Cheese of Pistoia Mountains through:

- adapting traditional production techniques while maintaining their basic principles;
- linking up with consumers by enlarging shepherds' commercial circuit
- linking product valorisation to local development;

4.3.3 Enrolment

In 2001 the Director of A.P.A. succeeds in defining technical arrangements allowing the shepherds to use raw milk, by drawing up a *Code of Practices* regulating the production of RSMC in Pistoia mountains. This step is fundamental for the legitimation of the traditional production technique to the outside world, and for strengthening of the cohesion among the shepherds.

The existence of the Code of Practices easies the creation of the *Slow Food Presidium n.1*. Various institutions engage for its financial support, thanks to the previous networking activity of the two starters. Among the institutions involved, the local Chamber of Commerce is the one that gives the most important support, and at the same time pushes for the creation of institutional forms for the consolidation of the Presidium action.

Following that suggestion, the Director of A.P.A. promotes the creation of the "Consortium of Pistoia Mountains and Valleys", through the involvement of other institutions, such as the Municipality of Cutigliano, the Pistoia Mountains Association (Comunità Montana) and the Province of Pistoia, which grant economic support for the creation of the Consortium and for the development of its activities. The enrolment of local breeders and of all the institutions just mentioned in the new project makes clear that this step is the obligatory passage point of the enrolment phase: heterogeneous stakeholders constitute a new network of relations and interests and thus generate a new actor, which in this case is the Consortium of Pistoia Mountains and Valleys.

With the constitution of the Consortium the previous informal network evolves towards a formal organisation. This process of institutionalisation has important outcomes. It establishes a filter among the producers who "stay in" and "stay out", in this way defending its members sharing the same codified quality. At the same time, by means of its collective brand, it provides the product and the production system with a symbolic representation, so contributing to reinforce the internal identity and to create and communicate the external image. Besides, also some un-formalised outcomes are created, because the shepherds are actively involved in building marketing strategies, and through the time the co-operation with local health authorities is consolidated.

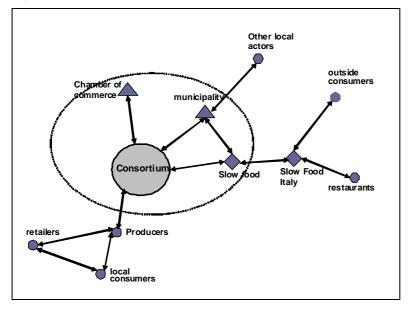


Fig. 6 Evolution of the network

Mapping the network at this stage shows that after the birth of the Consortium it is this new actor that deals with consumers and retailers, while at the same time keeps together an heterogeneous variety of other actors.

Milestone: formalised outcomes

Creation of the Consortium of Pistoia Mountains and Valleys:

⇒ institutionalisation of the previous informal network;

- ⇒ establishment of a filter (code of practices) among the producers who "stay in" and "stay out"
- ⇒ creation of a collective brand certifying safety and quality to consumers
- \Rightarrow active involvement of the shepherds in building marketing strategies
- ⇒ trust and co-operation with local health authorities

4.3.4 Mobilisation

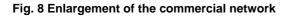
The Consortium, since its creation, plays mainly the role of facilitator, supporting them for the adaptation to the hygienic rules. In fact the new actor facilitates the exchange of knowledge among the breeders members and the relationship between the inside (the members) and the outside world: it keeps the relationship with the institutions for bureaucratic fulfilments, such as the A.P.A. and the health authorities, but also the relationship with the consumers. With regard to the representation of itself to the outside world, the Consortium not only can draw on the notoriety based on the specific territorial identity (the "traditional product"), but can also make use of Slow Food symbolic capital, so that to differentiate the product against other sheep milk cheeses.

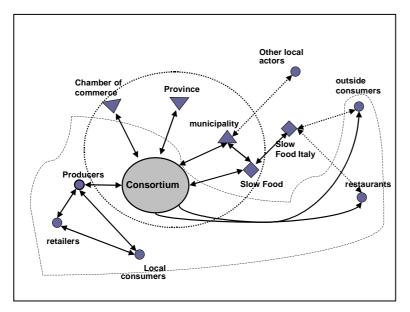
The shepherds who entered the Consortium are also supported in marketing activities, because through it they can take part collectively and so more effectively in local fairs, such as the *Show of Pistoia shepherds products* and the *Shepherds Fai*r, both held in Cutigliano village, as well as in Slow Food events, such as the *International Hall of Taste* and *Cheese*, so enhancing the notoriety of the local product and enlarging their commercial circuits.



Fig. 7 Raw milk sheep cheese of Pistoia Mountains at the Salone del Gusto (Torino, 2004)

As a consequence, the Consortium strengthens consumers involvement, so that it is possible on the one hand to give continuity to the traditional direct selling at the farm, and on the other hand to distribute the RSMC in restaurants and agri-tourisms, and connect local, national and international commercial circuits. The enlargement of the commercial network can well be visualised in Figure 5.





Through mobilisation phase the previously established networks operates to implement the initiative started with the construction of the Consortium, so that some of the objectives are attained, new objectives arise, but also unforeseen obstacles emerge. In this case it is possible to observe a growing distance between the producers members and the ones not members of the Consortium, the difficulty in the management of the organisation in the long term, and an emerging competition among diverse local networks for the control of the initiative.

Milestone: outcomes of the actions taken

- ⇒ Codification of the production process
- ⇒ Increase of communicative ability
- ⇒ Higher market visibility
- ⇒ Increase of prices to producers
- ⇒ Shepherds' self esteem
- ⇒ Concrete possibilities of emplyment
- \Rightarrow Higher notoriety of the area

4.4 Towards a new management of the organisation

4.4.1 Problematisation

In the first translation cycle put in place by this initiative it was possible to observe scaling up depending on commercial performance and appropriate public support, based on:

- improved visibility of the product
- significant increase of sales and access to new and diversified marketing circuits
- crucial role of public support for the consolidation of the organisational structure.
- At the same time unforeseen obstacles emerged.

The first difficulty is related to a growing distance between the producers members and the ones not members of the Consortium. As matter of fact, the setting up of the Consortium increased the separation between the producers of the mountain and the producers of the plain, and more generally between producers involved and those not involved in the Consortium and in the Presidium. The Consortium is nowadays an established organisation, with consolidated relationships among its members and significant advantages in commercial and visibility terms, therefore the current members are quite reluctant to integrate new members. That is bringing about an underlying conflict between the two groups.

The second order of problems is related to an emerging competition among diverse local networks for the control of the initiative. In fact, the more the initiative of the Consortium and Slow Food consolidated and scaled-up, the more the visibility of Raw Sheep Milk Cheese of Pistoia Mountains became related to the entire territory, giving chances to other kind of actors of taking

advantage from it. If on the one hand this achievement represents an important opportunity for rural development processes, giving the possibility to promote the other local products together with cheese and increasing the notoriety of the area for tourist activities, on the other hand it raised a competition among local actors to get involved or even control the events linked to the RSMC. As a matter of fact the local association Pro Loco, the Municipality and local retailers (who usually don't sell the RSMC), have started to get more and more involved in the organisation of local fairs, where only the Consortium and Slow Food were responsible before. That in turn is causing a growing tension between the original starters of the initiative and the new emerging actors, who were in the beginning only enrolled by the starters, while now are willing to become "starters" on their own.

. A visible outcome of that is the decrease in participation and the tensions related to some events in Cutigliano village, as it is attested by the interviews conducted.

Another weakness in the Consortium organisation that has to be taken in consideration is that shepherds are still very dependent on the Director of the Consortium in the management of the initiative.

Milestone: agreed definition of the problem

Enlarging the network related to sheep milk cheese of Pistoia Mountains in order to a better management of the organisation

4.4.2 Interessement

In order to face new problems, and not loosing the credibility among consumers, one of the original starters, the Director of the Consortium, under pressure of the Chamber of Commerce of Pistoia, which played an important role in building the Consortium in the past, proposed a new initiative. The idea is to introduce a PDO label for the Sheep Milk Cheese of Pistoia Appennines, which would imply:

- ⇒ enlargement of the territorial area of production
- ⇒ lowering of production standard imposed to producers members, as the geographical limit of the area defined with the PDO covers the whole province, and so, it is foreseeable an extension of participation to new members (potentially including also cheese-maker firms).

Suschain WP5 - Case study report Raw sheep milk cheese of Pistoia mountains

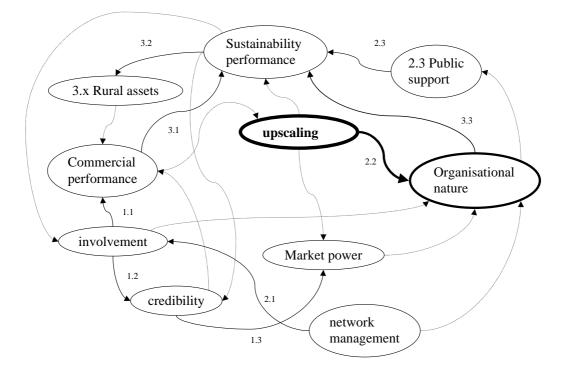
5. DISCUSSION

5.1 Sustainability performance indicators: overview

As stated above, in this section we assess the impact of the initiative by analysing the collected information through a set of sustainability performance indicators.

Fig. 9 Interrelation among the issues based on the sustainability performance indicators

(From SUS-CHAIN Case Study Methodology)



The following table (Tab. 2) synthetically shows the results of the analysis which we discuss hereafter.

Aspects to assess	Indicators	Results
the occurring of scaling up	- rate of growth	The impact of the initiative has been more the consolidation of an existing food-chain under risk of extinction and the connection of the chain to broader commercial circuits, rather than the growth of production in quantitative terms.
the commercial performance and marketing success	 rate of growth prices differential profits brand loyalty market share and competitiveness 	The volume of sales increased of 14%: Price differential since the Consortium was constituted is not significant in direct selling, while in the shops outside the area or in fairs can reach 36%. There is a strong fidelity of clients through the time.
the role of public support	- type of public support granted	Informal support prevailed in the Interessement phase, while formal support (financial and not) occurred in the Enrolment and Mobilisation phase.
governance	 mapping of networks at different stages narrative of network creation list of problems ranked by importance by stakeholders 	

	 summative evaluation changes in participation, rate of compliance 	
Rural development	 prices at all levels of the chain list of resources ranked by importance by stakeholders 	

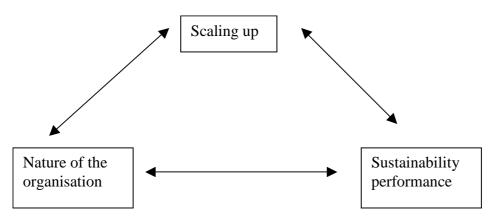
5.2 Scaling up: the growth of connections and visibility of the local production system

Box 2: Central hypothesis

Scaling up an initiative in the field of new food supply chains changes the nature of the (chain) organisation (network structure, rules, values etc) and its sustainability performance.

Fig. 10 Framework related to the central hypothesis

(From SUS-CHAIN Case Study Methodology)



The assessment of scaling up of this initiative entails considering its particular meaning. Scaling up in quantitative terms hasn't been always significant: since the Consortium was created (2000) there has been an increase of the cattle heads of about 10%, the number of farms hasn't increased, while there has been a reduction of the number of workers in sheep-breeding in the area. With regard to the prices, the price differentials are not so important within the area of Pistoia Mountains, particularly in direct selling, while the trend in the shops of Pistoia or in the fairs (promoted by Slow Food and others) can get up to 36%. Nevertheless, producers, consumers and retailers observed an increase in sale volume and, above all, a growth of visibility and notoriety of the product on the market and a strong fidelity by consumers.

So we can say that the impact of the initiative has been more the consolidation of an existing (but under risk of extinction) food-chain as well as the establishment of connections at extra-local level and the development of the ability for their management than the growth of production just in quantitative terms.

5.3 Commercial performance and marketing success

Box 3: Sub-hypothesis 1

Scaling up depends on commercial performances and appropriate public support

Commercial performance has been the key factor for the continuity of the initiative, once the Consortium and the Presidium were created. It can be assessed with reference to a conventional marketing perspective and also by considering its effectiveness in involving and linking up consumers; furthermore, it is also interesting to consider the self-assessment of the actors involved.

From a conventional marketing perspective and considering as indicators the rate of growth, the price differentials, the profits, the brand loyalty and the market share, the initiative seems successful.

5.3.1 Rate of growth

According to all the producers members, since the Consortium was constituted the volume of their sales has increased, and it is possible to state that in the last two years the production of cheese has increased of 14%.

5.3.2 Price differentials

On the contrary, as stated above, the prices of direct selling have not substantially changed: because the Consortium does not impose a common price to its members, most of the producers have kept the price of the cheese between 8/10 euro/kg and 18 euro/kg (from the less to the most mature cheese); however, it is also true that the group of the most enterprising shepherds has risen the prices of around 2 euro/kg. Besides, according to the retailers situated both in the mountainous area and in the closer town (Pistoia), also price differentials between the RSMC of Pistoia Mountains and other kind of labelled sheep cheese are not so high, but this probably depends on the minor notoriety of the product in comparison with other well known typologies of sheep milk cheese. This seems to be confirmed by the success of the product at the fairs specifically aimed at promoting typical and traditional products, frequently niche products (as the International Hall of Taste in Turin), to which the Consortium members participate showing the collective brand: in those occasions the prices of the product are higher (22 euro/kg in 2004 edition of the International Hall of Taste) (Tab.2), so showing a greater differential in comparison with the past and a minor difference with the prices of the other sheep milk cheeses. That is particularly significant considering that for the last years producers have been joining in about 50 fairs every year, reporting an increasing success for their cheese among visitors.

Commercial channels	Price (euros/kg)
Direct sale	9,0
Local retailers	12,4
External retailers	17,5
Fair - Events	20-22,0
25,0 20,0 15,0 0,0 10,0 5,0 0,0 1 1 commercial channels	 □ Direct sale □ Local retailers □ External retailers □ Fair - Events

5.3.3 Profits

The evaluation of profitability in some farms which are representative of the farms of the area has shown that the activity is at the moment profitable. The main positive factor is at this regard represented by the greater valorisation of the capitals used (sheep, labour, structures and machinery) due to the growth of the sales and also to the increased prices of the product. Among the debit items the costs of forage, feed and land rent are the most relevant headings.

The following grids pick out the great differential of net income resulted from the selling of the cheese through the traditional commercial channels (on farm or to the local retailers) (Tab.3), in comparison with the net income resulted when a part of cheese is sold at the fairs, with higher prices (in this case, we simplify the budget, considering 2/3 of the total produced cheese sold at the retailers, while 1/3 sold at the fairs) (Tab.4).

Gross Product Value	euros
Raw milk sheep cheese (10 euro/kg)	54.000
Ricotta cheese	21.600
total gross product value	75.600
Inputs purchasing	23.304
External services	1.700
total intermediate costs	25.004
Added Value	50.596
Depreciation quotas	4.316
Net product value	25.592
Salaries	0
Rents	12.000
Net Income	13.592

Tab. 6 Traditional net income (selling all the cheese on farm and to retailers)

Tab. 7 Net income selling part of the cheese at the fairs

Gross Product Value	Cheese sold on traditional channels (3600 kg/year*10 euros/kg)	Cheese sold at the fairs (1782kg/year *20 euros/kg)	
Raw milk sheep cheese	36.180	35.640	
Ricotta cheese	21.600	21.600	
Total gross product value	57.780	57.240	
Inputs	23.304	23.304	
External services	1.700	1.700	
total intermediate costs	25.004	25.004	
Added Value	32.776	32.236	
Depreciation	4.316	4.316	
Net product value	28.460	27.920	
Salaries	0	0	
Rents	12.000	12.000	
Net Income	16.460	15.920	
Total net Income	net Income 32.380		

5.3.4 Brand loyalty

In the comparison with other sheep cheeses the Pistoia Mountain RSMC shows a weak brand loyalty but a high loyalty towards the producer. More particularly, the results of the research highlight the following aspects:

- local consumers go directly to the producers for buying the RSMC, instead in the shops they prefer buying the cheaper one or other kind of sheep cheeses;
- no-local consumers (tourists) prefer buying the RSMC, both in the farms or in the shops; the main reason is because it's a local product (only few consumers can recognise the difference due to the use of raw milk);
- consumers, both local or tourists, usually remain loyal to the same producer;

- consumers (local and no-local) show greater trust to the producer or to the retailer than to the Consortium brand; in fact, the main part of the consumers is clearly willing to buy the cheese, even it's not from the Consortium.

5.3.5 Market share and competitiveness

The rate of producers belonging to the Consortium and the rate of the quantity of cheese produced by them compared to the rest of the area show the importance of the organisation on the territory. It includes 90% of all the producers of the mountainous area and 50% of all the producers of the Pistoia province; the production represents 50% of the whole cheese production in the Pistoia province.

To better assess the competitive position of the local production system is also possible to use the *McKinsey matrix* (Fig.8), which correlates the two dimensions of the commercial performance: the attractiveness of the market with the competitive position of the initiative². With respect to the first aspect, we have to take into account that the RSMC is sold on the local (provincial) market, but also by means of the connection with the national market realised within the *Slow Food* circuits. As matter of fact, nowadays the RSMC is known and sold in various restaurants and exhibitions at national level and consumers go to the area of production in order to buy this cheese. This relevant market includes the main competitors, which are all the other quality sheep cheeses produced in Tuscany and in other parts of Italy.

About competitiveness, the shepherds' organisation can rely on the specific qualitative attributes of the product (including the link to the territory) and on the communicative support from Slow Food symbolic capital, as well as on the direct and strong relationship with consumers. The following two tables show the relevance of the factors affecting market attractiveness (Tab. 6) and the competitive position of the Consortium's production (Tab. 7).

Indicators		weight	grade on 10
Market size and growth rate	Small size niche in relation with the others Italian sheep cheese productions	5%	2
Market profitability and pricing trends	Comparison of sheep cheese prices at consumer level: high-medium price	20%	6
Competitive intensity / rivalry	A lot of other sheep cheeses, even if few of them are made with raw milk	5%	5
Product image Products quality	Very good (health recommendations and tourism) Very heterogeneous (artisan product)	40%	9
Opportunities to differentiate the product and services	 Very diverse, in relation to: artisan nature of the produce different period of seasoned possibility of making with special ingredients Slow Food label and the future opportunity for PDO label Potentiality for increasing number of agri-tourisms 	10 %	6
Overall risk of return in industry	Low	0 %	0
Distribution structure and negotiation power of the clients	Very short channel (farmer's market, small shops in the area and manifestations) Consumers (above all no-local ones) rarely negotiate prices	20 %	8
Total		100 %	7.35

Tab. 8 Factors affecting market attractiveness

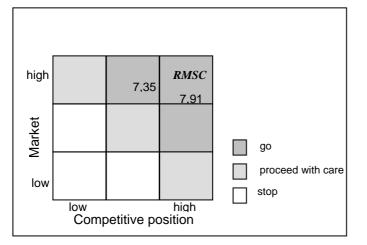
Tab. 9 Factors affecting competitive position

Indicators		weight	grade on 10
Production volume and growth rate Growth potential	Very small production volume (30 q in 2003) but very good growth rate (after years of decline) even if limited to the possibility of the farms to increase the cattle heads.	5%	4

² To build a MacKinsey matrix a system of scores and weights of the relevant parameters of competitiveness is needed. In our case, weights have been set by the research team on the basis of the answers of the people interviewed (for a presentation, see www.valuebasedmanagement.net/methods _ge_mckinsey.html).

		1		
	Low potential in selling out the region: scarce willingness to export or to produce for outside the region (especially to sell in supermarkets).			
Ability of the organisation to co- ordinate the commercial strategy	and communication skills. In fact, Presidium made producers' self esteem grow			
Ability of the organisation to negotiate with retailers	Each produce negotiates alone with his retailer	0%	0	
Product quality	Very good. It is a product with a credible code of practices, and now there is the project to create a PDO label	20%	9	
Image of the Pistoia Mountains	Very good. The image of the area is different from the common Tuscany representation; the area is still a place to be discovered by tourism. The initiative is based on the interaction between product and territory.		6	
Potential of innovation	Very low because it's a traditional produce, and the initiative is aimed at keeping traditional techniques and ways of seasoning	1%	2	
Customer loyalty	High loyalty between producer and his clients	10%	6	
Relative brand strength	Very low: consumers pay more attention to the origin of the product or to the direct contact with the producer than to the presence of the collective brand. Maybe the presence of the PDO label could increase the brand strength.		2	
Ability to promote the product	The initiative benefits from the Slow Food promotion of the products.	25%	9	
Total		100 %	7.91	

Fig. 11 McKinsey matrix



Moving on the effectiveness of the initiative in involving and linking up with consumers, it has already stated that the closer link is between consumers and producers or, indirectly, between consumers and retailers, more than with the whole organisation (the Consortium, represented by its brand). As the results of the research show (Tab.8), the Pistoia Mountain RSMC is mainly bought, among the several possible needs and motivations (price, respect for environment, pleasure/taste, link with the traditions and the territory, health/ genuineness, support to the local economy), for pleasure/taste by the 42,5% of consumers and for the link with the traditions and the territory for the 25% of consumers; support to the local economy and health/ genuineness are the other main factors.

At the same time, the increasing success of the about 50 fairs, which every year involve the producers as Consortium and have a strong impact on the visibility of all members, attests the importance and the effectiveness of the collective action. Fairs - local fairs but also external fairs, in some cases famous, as *The International Hall of Taste* or *Cheese* - are particularly important places to involve consumers and to let them know the product and the places and the ways of its production. The research has shown as the 40% of consumers knew the Pistoia Mountain RSMC by attending the local annual sheep-breeding fair and the 27,5% through other fairs, where was possible to find this cheese.

List of needs and motivations	% of consumers interviewed		
pleasure / taste	42,5		
link with the traditions and the territory	25,0		
support to the local economy	15,0		
health / genuineness	12,5		
respect for environment	2,5		
price	2,5		

Tab. 10 Needs and motivations for buying Pistoia Mountain RSMC

5.4 The role and the type of public support

Public support has significantly contributed both to the construction of the initiative and to the spread of its achievements at a larger territorial scale and through the time. The constant networking activity of the starters, combined with the positive attitude of several public institutions, created a crucial synergy in pivotal moments of the development of the initiative.

Public support has been both formal and informal. In the interessement phase informal networking among different institutions has created a favourable background for the further construction of the Slow Food Presidium and the Consortium: negotiations between the Director of A.P.A. and the Local Health Authorities built a significant synergy between the two institutions; the relationships between A.P.A. and the University of Florence contributed to focalise technical innovations for the production process; the involvement of Tuscany Region connected Slow Food to the local institutions.

In the enrolment and mobilisation phases public support became formal, because of the creation of Slow Food Presidium and the RSMC Consortium: when financial support was required several institutions at provincial level intervened, such as Chamber of Commerce of Pistoia, the Province of Pistoia, the Mountain Association of Pistoia Appennines and the Municipality of Cutigliano; later on only the Province of Pistoia kept its financial support, while the other institutions maintained their collaboration without financing.

5.5 The changes of the organisation along the process of scaling up

Box 4: Sub-hypothesis 2

Nature of organisation changes with scaling up as an effect of growth in market power and of the increased pressure of economic constraints and logics

As the different phases of the story of the initiative showed, the changes of the organisation along the process of scaling up are other relevant aspects to take into consideration in order to assess the sustainability of the initiative.

As we saw, the most important points are at this regard represented by:

- the sharing of the dominant problems and so the agreement on the objectives at the basis of the initiative,
- the shaping of the organisation around the initiative,

- the changes introduced with the further development of the network.

From the phase of *problematisation* to the phases of *interessement* and *enrolment*, there has been a consolidation of the agreement on the problem and consequently on the objectives of the collective initiative around which the involved actors align: valorisation of RSMC through adapting the traditional production techniques while maintaining its basic principles, linking up with consumers and enlargement of the shepherds' commercial circuits, linking the product valorisation to local development (by integrating the commercial valorisation with the preservation of the identity).

In that strategy, the main role of the Consortium has been to manage the valorisation of the product and its link with the territory, through the management of the promotion activity (organisation of local fairs and participation in external fairs); to facilitate the adaptation of production techniques to hygienic standards (by supporting single farmers); to favour the exchange

of knowledge among farmers; to provide intermediation in the relationships between producers and institutions for bureaucratic fulfilments; to look for financial support from various institutions. So the Consortium (and particularly, within it, the leading figure of its director) plays a role of facilitator.

The functioning of this organisation is based on the (shared) definition of a set of rules and duties, codified (the Regulation of the Consortium and the Code of practices) and not codified (producers' commitment to give part of their production to the Consortium; producers' freedom to establish the price of the product, both towards consumers and towards the Consortium).

At the beginning of the initiative the Code of practices was the tool to select the members: it delimits the geographical area involved (Pistoia province) and establishes the rules of production that the members must respect. After the creation of the Consortium, the admission of new members was linked to the consensus of all the members, so making that possibility very difficult (the current members of the Consortium generally don't agree about opening the organisation to new members). Consequently, the Consortium consolidated through the time as a "close" organisation.

At this regard, the recent project of PDO registration by entailing the opening of the group of producers (in that case territorially determined) could introduce the necessity to re-discuss the internal rules.

Also the relationships between the Consortium and the other stakeholders of the local network seem to evolve. As a matter of fact, the success of the initiative on both commercial and political terms is making emerge conflicts for the control of the initiative.

Another important aspect is represented by the changes in the market power distribution. With the creation of the Consortium producers members maintain their control on the market of RSMC, because of their freedom to sell directly and to decide the price. At the same time, the enlargement of the commercial circuits and the major visibility of their product acquired prevent them from controlling higher prices eventually imposed to the final consumers.

5.6 The effects on rural development

Box 5: Sub-hypothesis 3

New FSCs have a positive effect on rural sustainable development

The creation of the Consortium and the Slow Food Presidium significantly supported the typical production of RSMC of the area by legitimating the production process and valorising its characteristics on the market. In particular, within the Consortium the initiative strongly supported the process of capacity building of producers, by reinforcing the interrelationship among them, providing them with technical and commercial assistance and stimulating their participation in decision making process.

More generally, the initiative has enabled the connection between local producers and public institutions and highlighted the link between the potentiality offered by the market of typical products and the potentiality to develop the local economy through rural tourism. On the basis of the consciousness of the great importance of the notoriety gained by the local cheese in order to reinforce the visibility of the whole area, a wide range of other initiatives has been in fact activated, so potentially creating synergies in the valorisation of local resources. All that can provide new employment opportunities and so contribute to maintain young people on the territory which is one of the main problems affecting this area as other mountainous areas.

At this regard, the tensions emerging in the control of the promotion initiatives among local authorities and the Consortium can be considered the initial stage of a new (necessary) translation process involving local stakeholders and aimed at managing and promoting the local resources in a wider perspective.

Tab. 11 Rural Development Indicators for RSMC

*Conventional equivalent: sheep cheese which is produced with pasteurised milk

****Existing alternative:** The raw milk sheep cheese of Balze Volterrane (dairy production of raw milk cheese; prevalent long commercial channels – large distribution and exportation; organic farming; PDO registration)

Indicator group	Conventional equivalent*	Existing alternative**	Key factors determining performance (with respect to that variable)	Scaled up alternative	Room for manoeuvre to improve performance (= scope for scaling up)
Economic	0 + +++++	0 + ++		o + ++	
NVA in region	++	+	Through the differentiation of products, the processing on-farm and the activation of short circuits of commercialisation.	+++	The PDO project of registration could be a great opportunity for further increasing the visibility of the product and, as a consequence increasing prices.
				0	On the other hand the consequently enlargement of the network could bring the risk of loosing the link between the value added and the territory
Direct, indirect and induced employment in region	0	+	No relevant	0	By improving activities link with the tourism, such as agri-tourism
Farmer's share in retail £			???		
Transaction costs of establishment	++		The networking has been put in place thanks the presence of facilitators (he get easier the establishment of the network)		
Transaction costs of maintenance	+		The public institutions play an important role of facilitators and orientation, by supporting internally the development of technical and organisational knowledge.		
Dependence on public sector support	÷	÷	Public institutions have given an important contribution to the creation of a favourable context to the interaction among local actors and to the achievement of their goals. Furthermore, the PDO project has risen as consequence of the local institutions pressures	+++	A reduction in dependency should be desirable (by stimulating a broader participation of all shepherds in the organisational management)
Displacement effects within region (which must be clearly specified)	0	0	No displacement effects: the production system is strongly based on local resources (the breed, pastures, processing skills) which give the product a strong specificity and contribute to the creation of its high qualitative attributes.	0	
		Halo effect +		+++	
visibility of the wh	nole area, a wide ra	+++ neese has been u ange of other init	used in order to reinforce the iatives has been in fact orisation of local resources.		

Social					
Self organisation al capacity increased	0	+++	The Consortium has strongly supported the process of building and self organisational capacity of producers, even if producers are still too dependent from the director of the Consortium in the management of the initiative	+	by reinforcing the interrelationship among producers, and stimulating their participation in decision making process
Bridging capital increased	0	++	By allowing the connections with larger and extra-local networks (i.e. Slow Food network).	+++	
Learning & knowledge enhanced	+	++	Both the Consortium and the Slow Food Presidium provided the shepherds with new knowledge about the technical arrangements to produce in compliance with the rules and the possible commercial channels for the product	+++	
Enhanced trust/faith in food system	++	+++	By providing high quality (link with the territory and with the traditions) and "ecologically correct" food.	+++	The PDO project could represent a great opportunity in order to further enhance credibility among consumers
Enhances social inclusion	0	+	By stimulating the participation of producers in decision making process.	++	The PDO project would imply the extension of participation to new members
Yields job satisfaction	+	+++	The notoriety gained by the cheese together with the success of the initiative has provided an increase of self-esteem among shepherds	+++	
Encourages succession	0	+++	The initiative has been able to provide new employment opportunities and so contribute to maintain young people on the territory	+++	
Indicator group	Conventional equivalent	Existing alternative	Key factors determining performance (with respect to that variable)	Scaled up alternative	Room for manoeuvre to improve performance (= scope for scaling up)
Environ- mental					
Increases biodiversity	++	+++	By maintaining the farming ways based on the used of pastures, by breeding an autochthonous breed sheep	+++	
Reduces negative external effects	+	+++	The low impacts production system contributes to the reproduction of the local resources	+++	
Increases positive external effects	+	+++	The low impacts production system contributes to the reproduction of the local resources	+++	
Enriches cultural landscape	+	++	By maintaining the pastures	+++	
Reduces road miles	-		Very short channel (farmer's market, small shops in the area and manifestations)	+++	

6. COMPARATIVE ANALYSIS

Satellites Cases	Raw milk sheep cheese of Balze Volterrane	Lardo di Colonnata
Food-Chain	Cheese	Sausages
Problem addressed	 ⇒ Opening new markets for local products ⇒ Giving producers a chance to survive in the long term 	➡ Respect of hygienic rules required by law but maintaining of the traditional/artisan processing
Sustainability promise	Socio-territorial (food quality and typicity)	Socio-territorial (food quality and typicity)
Aspects to be compared	 Commercial performance: high rate of growth of the volume and of the visibility of the production, increase of the prices Governance: from the initiative of a single producers to the construction of a network (a short chain) around a common project; codification and certification of the specific quality through a PDO label 	 ⇒ Public support: type of support given by local institutions ⇒ Commercial performance: very high increase of the volume of production and of the notoriety of the product; risk of imitation ⇒ Governance: problems arising around the codification of the specific quality and in its certification (PGI label); conflicts and divergences in the networking process

Box 6: Overview of Italian satellite cases

The initiative of Raw Sheep Milk Cheese of Pistoia Mountains is focused on the problem of a traditional production, based on artisanal techniques and small farmers, which became under risk to disappear when, in the 1990's, new regulations and new standard of production were introduced. As explained in paragraph *2.2.2*, the most important laws were linked to the implementation, at national level, of the EU Directives 46/92 and 47/92 on dairy products, and of the EU Directives 43/93 and 3/96 on hygienic standards for food production, which clashed with the artisanal way of production still present in many small production systems in the Italian rural territory.

The same problem faced in the area of Pistoia by the producers of Raw Sheep Milk Cheese, which brought about the creation of the Consortium of Pistoia Mountains and Valleys and the Slow Food Presidium n.1, was approached by other producers in diverse areas of Italy, similar for historical, economic and environmental conditions. Some of them are hereafter described, underlying the common point of departure and the different solutions proposed in tackling the problem and mobilising resources.

Box 7- 8: Initiatives facing the problem of legitimation of artisanal techniques of production

The Lardo di Colonnata

The *Lardo di Colonnata* is a lard, a traditional production made in some mountainous areas of Italy, and particularly in the Alps, both the Alps in the North of Italy and the Apuan Alps, in northern Tuscany, composed of marble, the quarry of which is one of the main economic activities of the place.

The production of lard concentrates in the small village of Colonnata, in the centre of the marble quarries, and involves around 12 producers. The production technique is part of a millenary culture and *know-how* of farmers-quarrymen. From these quarries, they dig out the materials more suitable for making the tanks, (called *"conche"*) where the lard is put for the seasoning. The lard is put in the tanks in layers with salt and several kind of spices, with a minimum seasoning period of then six months, only during the winter time (from September to May). This technique is so described by a producer:

"The conche (basins) of marble are tanks of different dimensions made with only white marble blocks of Carrara. The most appreciated are those obtained from the extremely compact marble, characterised by a fine grain called from the quarrymen "cristallino", extracted in Colonnata in a particular cave of the area called "dei Canaloni". This marble favours the transformation of saturated fat into in-saturated fat, during a minimum period of seasoning of 6 months".

During the 1990's, with the introduction of the new hygienic regulations on food production (particularly the Italian Decree 155/1997 implementing the EU Directives 43/1993 and 3/1996), the producers of the *Lardo di Colonnata*, were in trouble because their traditional technique clashed with the requirements demanded by law. In fact, according to the mainstream interpretation of hygienic rules, the Lardo di colonnata didn't comply with the new requirements. Because of that in 1996 the health authorities stopped the production for a period, considering the marble a material not suitable on the hygienic point of view for the seasoning. As a consequence producers were not allowed to produce their lard any more, at least with the traditional technique they used so far.

The Raw milk sheep cheese of *Balze Volterrane*: Cannas farm

In the whole Tuscany, as generally in the Centre of Italy, the production of sheep milk is quite spread, as a consequence of a long lasting tradition. In the area of Volterra and Cecina Valley, Giovanni Cannas, the owner of the farm called *II Lischeto*, started in 1963, together with his family, to breed sheep of the race sarda (from the Sardinia region, where this race comes from) for the production of milk sold to industrial dairies of the area, as in the modern tradition of sheep farming of this part of Tuscany.

Through the time Cannas strengthened its already extensive way of breeding, based on pastures, which lately became organic. Furthermore, he reintroduced the processing of the sheep milk into cheese, by adopting the traditional technique based on the use of raw milk, as already done by other producers in the area. He started to sell his products directly in the farm and within local short commercial circuits. In that way this farm started, in 1990's, to combine the traditional techniques and knowledge of breeding and making raw sheep milk cheese with the new approaches to farming given by the organic methods, and the possibility of giving to his products the organic mark.

Therefore his raw milk cheese could offer to consumers both the traditional values of the link with the territory, and the values of the respect of the environment, because of the organic production. Nevertheless, the production of raw sheep milk cheese posed the problem of the respect of the new EU regulations on dairy products and hygienic rules (see above), which as in other cases could clash with the traditional way of production. Finally, also the problem of communication with consumers was at stake, because the efforts of building an extra value embedded in the product could have a recognition only through the understanding of the final consumers.

6.1 Commercial performance

In order to save a production in danger of disappearing, overwhelmed by the requirements of the laws and of the market, a crucial aspect to work on is the marketing performance of the product. In fact, only if a product can find appropriate marketing circuits and a strong visibility, it is possible to give it the possibility to survive in the long term, as well as to the related network of workers and other actors at local level.

6.1.1 Connecting local to wider networks

It has been described above how the creation of the Consortium of Pistoia Mountains and Valleys and the Slow Food Presidium n.1, through their codes of practices and the networking activities at all level, has allowed the producers of Pistoia mountains to keep the right to produce, but also to find the right commercial channels. In this sense it has been underlined that the commercial performance of the initiative has been more the consolidation of an existing food-chain, but under risk of extinction, and the connection of that chain to broader circuits, than the growth of production just in quantitative terms.

In this concern there are other interesting initiatives that show how local existing networks at local level can be connected to larger networks, that give the local production system new opportunities to maintain their specificity and also to improve their commercial performance by interacting within larger commercial circuits. In both cases it is worthy to note how the networking activities of the actors have been at the bases of the construction of new alliances among various actors, so that old ways of marketing the product, as direct selling, could be combined with new marketing outlets.

Box 9 - 10: Initiative of connection between the local market and larger market circuits

The notoriety of Lardo di Colonnata

When the problems related to the respect of new regulations about the safety of food production obliged the small producers of *Lardo di* Colonnata to stop their activity, the producers started to deal with the health authorities, in order to comply with the rules, but at the same time by saving their traditional techniques. As in the case of Raw Sheep Milk Cheese of Pistoia Mountains, the communication with the institutions was a key aspect for putting in place the conditions of maintaining the traditional production process.

With regard to the structural changes the producers had to make for their legitimisation, few of them were very successful and also obtained the EU mark allowing to sell abroad, but many other get into trouble for sustaining such a small production. In this case, as in the case of RSMC, the co-ordination among producers brought about the creation of a Consortium and a Code of Practices, which allowed to guarantee a minimum safety standard to consumers, but at the same time could provide the visibility and the technical support for producers.

In addition, this case attracted the attention of Slow Food too, that established a presidium for the *Lardo di Colonnata*. The joint effort of the Consortium and Slow Food gave the small producers of Colonnata not only the possibility of keeping to produce the lard, but also, through the possibility of using the Slow Food symbolic capital in order to promote their product, the opportunity of enlarging their marketing. They kept direct selling,

the traditional way they used to sell the lard, but in less of ten years they could reach new distribution channels, such as specialised shops, the large distribution and also the e-market. Nowadays the production of lard reaches 1.200 quintals/years, with a visibility that go far beyond the area of production, and through supermarkets and fairs catch the national and also some foreigner market.

The case of Rye Bread of Valais (Switzerland)

The Valais region is a mountainous Swiss region, which is very well-known for its sunny climate, the diversity and the beauty of its landscapes and its quality of life, linked to a basket of typical artisan food products (wines, cheese, dry meat, fruits...). The valley of the Rhône forms the central axis of the region, which is enclosed by mountain ranges at an altitude of more than 4000 metres. Tourism is nowadays the first industry of the region.

For centuries, the valaisan peasants lived in virtual self-sufficiency. Bread was made from rye, the only flour-bearing cereal adapted to the rigours of the alpine climate. The rye bread had the great advantage of being suitable for keeping over long periods. The peasants could take the great loaves with them on their migrations with their cattle from the valley to the mountain pastures.

With the time the market of bakery cereals in Switzerland remained quite self sufficient, but some changes put in danger this system. First of all the reform of the Swiss agricultural policy in the cereals sector gave less guarantees to producers, but above all the change of the market affected the capacity of the small producers of the mountains to survive in the long term: the traditional bakers started to compete with big retailers, and also consumers changed their attitude towards bread.

As a consequence, the necessity of finding new ways for the survival of the production of rye bread emerged, with the need of keeping the work of the small producers and the mills who worked so far.

In 1997 a discussion group gathering the two regional mills, two bakers of the Valais region (delegates of the regional bakers' association), the director of the Chamber of agriculture and a high rank officer of the Ministry of agriculture of the Valais region was established. At this first stage, there were no producers in the discussion group, and all the members of the discussion group knew each other before meeting.

The objectives of the initiators were quite different. The bakers were looking for a differentiation from the big retailers' supermarkets (which have important bakery departments and a high market share in the sector). The mills were trying to improve their competitive position against their main competitors at the national level. The regional institutions were eager to help the regional enterprises to survive and were also worried by the quick decrease of the rye production in the region, with a high risk of decline and disappearing of the traditional production of rye bread. At this time, the region was building its own PDO regulation and intended to develop its typical food products, to the benefit of the region attractiveness (the Valais region is a main touristic destination).

The first step was to formalise the rye bread recipe and to align practices at the mill and baker level. These technical tests paid an important role for interest and emulate the actors. The second step was to find producers and to convince them to enter the organisation. It was then necessary to align practices regarding rye production at the farm level, so to build a vertical alliance among producers, mills and bakers, and to strengthen the initiative in the food chain, with contracts between the operators and the certification organisation.

The first rye deliveries within the alliance occurred as soon than 1997 but developed from 1999. The formal organisation (an interprofessional association) was created in 2001, with the financial support of the State of Valais.

During the same years, the Swiss national PDO regulation was launched. The certification organisation (OIC) was created in 1998 and the association for the promotion of the PDO-PGI products in 1999. The rye bread of Valais was certified according to the code of practices in 2002 and PDO registered in 2004. Nowadays, the organisation faces the following problems:

- to enrol the traditional bakers of the region who are not yet members of the alliance.
- to make a strategic decision concerning the sales to retailers outside the Valais region, to answer to consumers' demand and increase the potential market.
- to secure the regional mills activity.
- to secure the producers' engagement (strategy regarding price fixing)
- to associate some communes that are leading some programs and events. They have discovered the cultural attractiveness of the rye bread baking and the aesthetical qualities of the rye crops, which improve the traditional landscape in the mountain valleys.

6.1.2 The control of the price and the visibility of the product

The producers member of the Consortium have maintained a positive control on the market of RMSC, because of direct selling and their right to decide the price. Nevertheless, it is important to note that the major visibility of their cheese on the market and the connection with the larger marketing circuits often represent an obstacle for the small producers, who are not able to control higher prices eventually imposed to the final consumers by the retailers.

Box 11: The problem of controlling the price and giving visibility to producers

The Raw milk sheep cheese of Balze Volterrane: commercial performance through collective action

The experience of Cannas farm, as described above (Box 9 -10), was based on the production of raw sheep milk cheese, according to extensive breeding, traditional techniques of making cheese, and organic methods. The final product was, therefore, embedded of extra values linked to the tradition, the territory and the environmental sustainability, but at the same time the commercial sustainability could be granted only by finding new markets and by communicating those values to consumers.

The interessement of other farmers to Cannas's initiative permitted to build a vertical alliance among a certain number of shepherds, whose milk production was suitable for the processing of the raw milk, and a local dairy (see above, about governance), so that the production of raw sheep milk cheese grew in visibility and volume. Through this collective action it was possible to participate to several fairs and gastronomic events, and to differentiate the produce among different kind of cheeses, such as *Ricotta, Pecorino rosso volterrano, pecorino degli sposi, pecorino maschio, cacio, ravaggiolo...*

The strategies adopted by the growing number of farmers aligned around the project of Cannas's farm, allowed the producers of raw sheep milk cheese (called *Raw milk sheep cheese of Balze Volterrane*) to have a good control of the marketing of their product along the food chain. In fact, they were able to reach all together the production of 100 quintals/year, to enlarge the distribution channels, by activating the direct selling and the exportation (towards in Germany, Belgium, USA and Denmark) and to fix a high price of selling (around 20 euro per kilo for direct selling, 40 euro in a prestigious chain in UK).

6.2 Nature of the organisation

It has been stated above that the *Consortium* of *Pistoia Mountains and Valleys* consolidated through the time as a "close" organisation, because of the strict rules for getting new members to join the consortium.

On the other side, the code of practices imposed to the Consortium members and the collective action allowed by the common organisation through the symbolic capital of Slow Food Presidium, brought about a good commercial performance and a relevant visibility of the product. At local level that success determined the problem of the management of the initiatives put in place by the Consortium: when the RSMC of Pistoia Mountains started to be well known also at national level, the local initiatives could attract many people and give a high visibility also at political level, and therefore different local stakeholders started to compete for the control and the organisation of the local events.

Finally, in spite of the recognition acquired by the RSMC of the Consortium among consumers and within Slow Food circuits, some actors linked to the organisation started a new project for a PDO registration, with the aim of collecting a larger number of producers, reaching further consumers and enter new markets.

In relation to both the control of the organisation and the PDO project different interests and opinions raised, so that the changes of the organisation could bring about tensions and difficulties for the maintenance of the collective action. In this concern it is possible to compare this experience with others, where the same changes induced similar problems.

Box 12: Changes in the organisation induced by the search of new markets

All the satellite cases described above introduced, at a certain point of the development of their story, the goal of having the recognition of PDO or PGI mark, implying the necessity of adapting the existing organisation, with diverse reaction of the actors involved.

The initiative of having the PGI recognition for the *Lardo di Colonnata* put in place the problem of defining the area of production. In fact, the lard defined "from the village of Colonnata" is traditionally produced in the whole area of the village. The methods of production are more or less the same, because all them use marble basins for the seasoning of the lard, but each producer could diverge a little from each other, because of the artisanal methods traditionally used. With the creation of the consortium and the establishment of the code of practices, clearly the production process was forces to homogenised a little, in order to comply with the hygienic rules and to conform to the collective standard established. But, beyond the consortium, other producers of the area continued to produce the lard with similar methods, and with the marketing success of the product other producers started (or re-started) to produce the lard.

As a consequence of all those factors, the initiative of requiring the PGI certification, which could further support the visibility of the product, on the other hand creates new conflicts, because the geographical delimitation could exclude some producers from having the certification, even if they produce the same product.

In the case of *Raw milk sheep cheese of Balze Volterrane* the link of the product quality to the territory has been made initially by Cannas, who tried to involve the other shepherds located in the same area: he

sensitised the shepherds to the issue of finding new ways and opportunities in order to valorise their cheese, so that he succeeded in involving about 10 shepherds and one dairy (Pinzani).

Afterwards, the group of farmers involved in the project formalised the raw milk sheep cheese recipe, and aligned the practices at the farm and dairy level, so that it was possible to define a common code of practices. In this case the co-ordination of the producers starts at the beginning to co-operate with the other actors of the food-chain (the processors), with the aim of acquiring the PDO registration. Actually the association of producers and processors, called *Associazione produttori delle Balze Volterrane*, is created in 2004 for the promotion of PDO-PGI cheese, and because of that the project of registration didn't create tensions among producers. The *Raw milk sheep cheese of Balze Volterrane* is awaiting to be registered as PDO according to the code of practices.

6.3 Mobilization of different types of public support

In the description of the RSMC story, it has been underlined as public support has been significant for building the initiative, and also for its further development. In fact, the Chamber of Commerce of Pistoia, the Province of Pistoia, the Mountain Association of Pistoia Appennines and the Municipality of Cutigliano allowed the creation of the *Consortium* of *Pistoia Mountains and Valleys* with their financial support, and other institutions, such as the University of Florence, Local Health Authorities and the A.P.A., supported the creation of the organisation.

With the development of the organisation public support was not financial anymore, and it became more informal, but the interest of public institutions remained at stake, putting in evidence the connection between the marketing success of a food production with the possibilities of local development (see 6.4).

Box 13: Diversity of public support

In the case of *Lardo di Colonnata* public support was quite similar to the case of RSMC. The creation of the *Presidium was* supported by the Massa-Carrara Province and the Tuscany region, while the definition of the Code of Practices is the fruit of the work of a team composed by Slow Food (represented by the regional delegate), all producers of the village, the Municipality of Carrara, the Region, the Arsia, the health authorities, the Camber of Commerce and the University of Florence.

In the case of **Rye Bread of Valais** the State of Valais (regional), The Chamber of Agriculture (regional), the regional bakers' association, the Swiss Federal Ministry of agriculture (PDO registration), the association for the promotion of the PDO-PGI products (national), the communes (local) were involved in the initiative. The State of Valais and the Chamber of Agriculture were leader for starting the initiative and it is obvious that their human and financial contributions were essential for building the initiative. Nowadays, a support is still necessary to manage the organisation, and actually the Chamber of Agriculture pays the salary of the part time (20%) manager.

Public intervention was relevant also for another point of view: the reform of the Swiss agricultural policy in 1992 and its consequences on the conventional cereals market prices incited the cereals producers to find new outlets, and the Swiss PDO regulation was a chance for the Rye Bread of Valais, because it was an important incentive for building the alliance.

6.4 Contribution to sustainable rural development

The initiative of RSMC has contributed also to rural development, but, as underlined in 5.6, the growing tensions for the control of the initiative, and the new dynamics engaged with the PDO project require new inputs and strategies in order to fully realise the potentialities of rural development created so far.

The main attainments of the initiative are:

- the reinforcement of the capacity building of local farmers, thanks to the collective action of the Consortium and the Presidium;
- the connection between local producers and public institutions, through the mobilisation of resources at local and national level ;
- the increase of rural tourism potentialities, which can be further used for creating new local employement.

Box 14: Farm activities connected to the initiative for rural development

Cannas farm, as underlined above, bases its production on organic methods, by connecting the traditional techniques and knowledge to the new trends of production and consumption. Furthermore the farm

represents an example of multifunctional dimension of farming, finding new farms activities: besides organic farming, the production of high quality produce, the direct marketing to consumers operated in the farm, the management of landscape, by keeping the pastures, and the agri-tourism activities.

This is an example of creation of additional activities within the farm, which are carried out besides the collective actions in which Cannas is involved, and can create not only an extra value for the producer, but also extra employement for local people.

7. CONCLUSIONS

The paper has shown that the main outcome of "raw sheep milk" initiative in Cutigliano is to save and maintain the quality and the identity of a traditional system of production against the risk of standardisation. It is this aspect that marks its "alternativeness". In order to save the possibility to produce, that is to maintain a source of livelihood, shepherds succeed in getting the approval from health authorities, find alternative channels to conventional outlets for cheese, mobilise the local community around the product. If we assess the performance indicators against the five research hypotheses listed above, we can conclude that:

- AFNs contribute to increase the added value per unit of production through the differentiation of products, the processing on-farm and the activation of short circuits of commercialisation. Cutigliano shepherds build a specific communication channels with consumers, activating a set of alliance that allow them to avoid to be caught into the conventional chain, where they have limited power. The possibility to communicate directly with consumers increase their added value, improves the image of the product and allow them to start a learning process.
- 2. AFNs positively contribute to the support of the rural economy by defending or creating employment and income, especially when they are constructed on territorial resources. The image of the product becomes a resource of the local community as a whole, as it helps to build a local image and to attract tourists from outside.
- 3. AFNs strengthen local and regional capacity to self organisation and self governance through a broad participation of local population and the development of new organisational forms. The evolution of the local network built around the product brings on one hand to a formalised organisation which keeps the control of the definition of quality and of the marketing strategy within the territory, and on the other hand to an hybrid quasi-organisation which links together local administrations, health authorities, NGOs, producers and allows a more intense communication with consumers.
- 4. AFNs contribute to improve the liveability of the rural area by providing high quality and "ecologically correct" food. The production system is strongly based on local resources (the breed, pastures, processing skills) which give the product a strong specificity and contribute to the creation of its high qualitative attributes; moreover, the production system contribute to the reproduction of the local resources themselves.
- 5. AFNs are at the basis of the effectiveness in building consumer involvement and stimulating participation, and to meet "higher" needs and motivations. RSMC of Cutigliano has become a symbol as an alternative to the way quality is conceived of, showing that safety can be provided by local systems of production as well. Consumers who enter in contact with the shepherds are encouraged to understand quality and food in a different way.

Public institutions have given an important contribution to the creation of a favourable context to the interaction among local actors and to the achievement of their goals, creating the conditions for a wider positive impact of the initiative on the local development.

These aspects can be generalised to all the initiatives of valorisation of products whose characteristics are linked to the territory:

- a first phase of that process is represented by the construction of a local network around a common representation of all the local resources associated the product; as the network building proceeds, a coherence among resource emerges by means of the adhesion to a common set of rules;
- a second phase concerns the interaction with the outside world, the communication with agents of other networks able to perceive the value of the product (consumers, tourists, critics, experts, tour-operators, etc.).

In both these phases the public institutions can play an important role of facilitation and orientation, by supporting internally the development of technical and organisational knowledge, the creation of relationships and forms of collaboration, activities of promotion and communication, and externally the development of adequate information, knowledge, sensitivity and so capacity for appreciating these products by consumers and by all the other relevant actors involved. With regard to the last aspect, where the mobilization of symbolic capital is fundamental, the interaction with other key-actors/institutions (as in the case Slow Food) can give a further significant contribution.

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