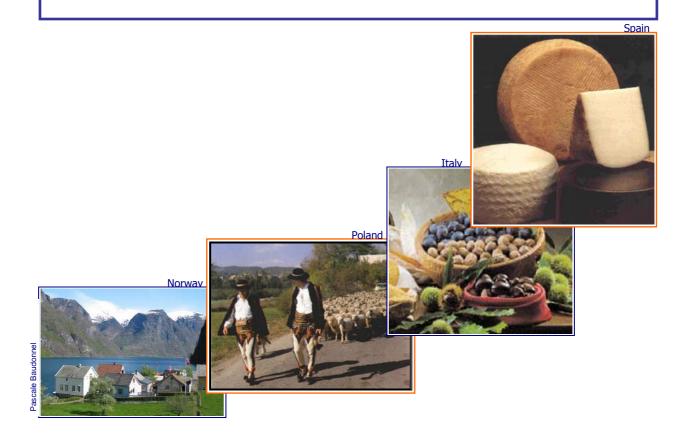




# MOUNTAIN FOOD PRODUCTS IN EUROPE: CASE STUDIES DESCRIBING 18 INITIATIVES

WITHIN THE FRAMEWORK OF THE EUROPEAN PROJECT\*





\* « Strategic information for the development of agricultural quality products in European mountain areas»

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**EUROMONTANA** is the European multisectoral association for co-operation and development of mountain territories. It embraces regional and national mountain organisations throughout greater Europe, including regional development agencies, local authorities, agriculture organisations, environmental agencies, forestry organisations and research institutes.

Euromontana's mission is to promote living mountains, integrated and sustainable development and quality of life in mountain areas.

In order to achieve this, Euromontana facilitates the exchange of information and experience among these areas by organising seminars and major conferences, by conducting and collaborating in studies, by developing, managing and participating in European projects and by working with the European institutions on mountain issues.

#### INTRODUCTION

This case study compendium is the first publication generated by Euromontana's study of European mountain food products financed by DG research under the 5<sup>th</sup> RTD framework programme. 10 territorial relays from 8 countries participated in the field data collection.

The field study was carried out in 2 steps.

In the first wave of enquiries, about 120 mountain food products were studied and their selection was based on the expertise of the local territorial organisations, according to the following criteria: the chosen products must either be specific of the mountain territory because of their tradition, culture, image to consumers, or/and the products must have a real impact on the local economy and development. Various aspects regarding production, processing, communication, regulation etc, were studied.

As a second step, out of these first 120 mountain food products, 18 have been chosen for more detailed examination. This second wave of enquiries focused on identifying the conditions that make mountain food products economically sustainable. Therefore, the products selected for the initial case studies were the ones that could provide lessons on that particular issue, and which illustrated as far as possible the various cases identified through the first questionnaire in regard to specific criteria.

This document presents each of the 18 products through 8 chapters:

- i) emergence of the initiative;
- ii) basic production;
- iii) processing and transformation;
- iv) delivery chain;
- v) global supply chain;
- vi) labelling;
- vii) success, failure and needs;
- viii) and when appropriates production aspects and link with the territory.

Each chapter includes sub-chapters on organisation, know-how and quality, public policy, quality control, strategy and impact of mountain area location.

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#### **NOTES FOR READERS:**

In most of the cases, the texts were written in English by non English authors.

This publication comes from one of the enquiries within the framework of Euromontana's project, and each case study draft is based on a single structured guideline. Each partner was free to fill in the appropriate or relevant chapters depending of the case. This explains why sometimes the chapters' numbers are out of sequence or some chapters are developed together.

P.D.O.: Protected Designation of Origin P.G.I.: Protected Geographical Indication

Project: in the document, this word has to be understood as the "the project and the initiative accompanying the development of the product"

### APPLES AND PEARS OF SAVOIE (P.G.I.)

Area: Savoie Alps (Northern Alps France)

<u>Author</u>: Emmanuel Mingasson (SUACI Alpes du Nord)

#### CHAPTER I - BASIC DATA ABOUT THE EMERGENCE OF THE PROJECT

#### 1 - Natural, Geographical, Historical and Economic environment

The production zone consists of the entire area of the departments of Savoie and Haute-Savoie, a large part of which is in the mountain zone, with valley forming a small part, classified as plain, or piedmont.

#### 4 - Impact of mountain area location on the launching of the project

In Savoie and Haute-Savoie, the production of apples and pears is traditional, with unprotected orchards. The natural conditions of production (sunshine, altitude, day/night temperature difference) are good for the production of fruit with superior taste. In addition to these natural conditions there is the long-established orientation of the Savoyard fruit-growers towards:

- integral fruit production respectful of the environment
- paying particular attention to the health of the consumer (no residue from spraying or other treatment at the time of sale).

#### 3 - Human Dynamic and/or Categories of Actors that provided the impetus

The Savoyard fruit-production is on a relatively very small scale: Savoie production forms hardly 1% of total French production. Fruit-farms are small:

	Average orchard area in hectares		
	Apples	Pears	
Savoie / Haute-Savoie	3.2	1.3	
France	6.1	2.3	

Under these conditions, efficient marketing and high price of the fruit are absolutely essential for the producers. They have long been specialised in the production of high-quality fruit. Since 1979, the public authorities have recognised (through the *Label Régional Savoie*, set-up by the producers, official sign of quality recognised by the French Ministry of Agriculture) the apples and pears of Savoie as high-quality products; fruit sold with the mention *Label Régional Savoie* are controlled for quality by **Certisavoi**e, independent certifying body.

#### CHAPTER II - BASIC PRODUCTION (THE RAW MATERIAL)

#### 1 - Organisational Aspects

In Haute-Savoie, the number of fruit-growers has decreased by more than 40% in the 10 years between 1989 and 2000. The Departmental Federation of Fruit Producers of Haute-Savoie today has 78 members, as opposed to 130 in 1989.

The number of members of the Departmental Federation of Fruit-growers of Savoie is around 110 to 115 in 2000, as opposed to about 180 about thirty years ago.

The Departmental Federations of Fruit Producers are specific to each department; each employs a technician (with the support of the Chambers of Agriculture) responsible for experimentation and technical advice on the farms.

#### 2 - Know-how and Quality Aspects

#### Production of apples and pears with the Savoie Regional Label

The label has been in existence since the early 80's, but it only reached 800 tons of production per year in 1995. For 15 years, production of fruit with the label did not reach 4% of the total Savoyard fruit production. It was at its lowest in 1992/1993, with only192 tons.

The Savoie Regional Label (L.R.S.) has been in constant progression for just a few years.

		Change relative to the preceding year	
Year	Tons L.R.S.		
92/93	192	- 70%	
93/94	489	+ 154%	
94/95	1006	+ 105%	
95/96	1639	+ 63%	
96/97	2639	+ 61%	
97/98	1803	-32%	
98/99	2084	+ 16%	
99/00	2590	+ 24%	
00/01	3535	+ 36%	

Source CERTISAVOIE

#### **Apples**

- Three varieties (Golden Delicious, Reinette Grise and Idared) grown by more than 2/3 of operators producing apples under the Savoie Regional Label, that is, nearly 80% of total tonnage under the label.
- Golden Delicious itself accounts for more than half (52%) of Savoie Regional Label apple tonnage.
- Eight apple varieties are represented in the remaining 20% of production.

#### **Pears**

- Three varieties (Conference, Passe Crassane and Doyenne du Comice) are grown by at least 5 of the 12 operators producing pears under the Savoie Regional Label, accounting for nearly 86% of Savoie Regional Label pear tonnage.

For both apples and pears, there is no local variety specific to Savoie. The varieties accepted for the Savoie Regional Label have sometimes changed: subject to consumer demand (or that of the hyper- and supermarkets), some have been removed and others have been added.

#### Fruit of Savoie or Mountain fruit?

There are orchards both on the plain and in the mountains; the greater the altitude, the shorter the growing-season. The first consequence is a reduction in production: there is either a large number of low-calibre fruit or a lower number of larger fruit. The second consequence is an improvement in the taste of the fruit, linked to a greater day/night temperature range.

#### Maintaining the quality

#### Anti-hail nets:

An estimated 12% of the two departments' orchards are covered with anti-hail nets (1999). Extension of this cover is generally planned with renewal of the orchards (covering young trees).

#### **Irrigation**:

42% of the orchards' area is irrigated; it should be increased to 48%.

#### Frost-protection Equipment:

About 15% of orchards are estimated to be protected against frost; most are on sites with little risk of frost.

#### Experimentation

It is undertaken as part of the trials performed by the Rhône Alpes Fruit Experimentation Station in the orchards of an agricultural college and of certain producers. Experimentation undertaken is not specific either to Savoie or to the mountains. It allows local validation of cultivation and anti-pest techniques to be used in Integrated Fruit Production.

Small-scale action is being undertaken with a Regional Natural Park for the conservation of traditional varieties of Savoyard apples and pears.

#### CHAPTER III - PROCESSING AND TRANSFORMATION

#### 1 - Organisational Aspects

A large number (36), of storage and packaging sites, in the 2 Savoies, often dealing with small volumes.

#### 5 - Quality Aspects

#### Maintaining Quality

Storage conditions after harvesting are an essential element for maintaining the quality of the fruit. Coldstorage is essential for quality, with equipment that really retards maturity: Controlled Atmosphere or Ultra Low Oxygen.

# Equipping the sector, with Ordinary Cold, Controlled Atmosphere (C.A.) and Ultra Low Oxygen (U.L.O.) storage.

☑ "Individual" equipment : on-site, and storing the production of only one producer:

Total storage capacity estimated at 4,500 tons. Ordinary cold: 2/3 of the equipment (3000 tons); C. A.: 1000 tons; U.L.O.: 500 tonnes.

**Investment planned:** 

400 tonnes: 130 in ordinary cold and 270 tons in C.A.

☑ Collective Equipment for storage:

3750 tons storage capacity; C.A.: 2150 tonnes

<u>Investment planned:</u>

500 tons in C.A.

#### ☑ Equipment at the packing-houses

Total storage capacity estimated at 3800 tons, covering 2/3 of needs. Ordinary cold: 47%; C.A.: 53%. Projected Investment:

1570 tons in C.A.

#### 6 - Strategy Aspects

The objective of the union is to develop investment in the storage stations in order to improve the quality of fruit arriving on the market. The fruits are being sold from the harvest in September / October to the end of spring (April / may). Ideally, the entire storage capacity, in C.A. or U.L.O. should be sufficient to conserve all fruit sold after Christmas in this way.

#### **CHAPTER IV - DELIVERY CHAIN**

#### 1 - Organisational Aspects

#### The economic operators in the sector:

#### The "Fence - Orchard producers":

Fruit-farmers who deliver most of their production to a storage and packaging station. A small part of the harvest is sometimes kept at the farm for direct sale.

Certisavoie lists 29 "Orchard producers" with the Label.

#### Producer-storers:

Fruit-farmers with a means of storing most of their production. Grading, transport and marketing are undertaken at a station though a part of the harvest is sometimes sold directly.

Certisavoie lists 13 « storage » operators using the Label.

#### « Storage and transport » producers

Fruit-farmers with a means of storing most of their production and undertaking themselves part of the packaging (grading), transport and marketing of their fruit.

Certisavoie lists 17 "storer - transporter" operators using the Label.

#### Collective storage structures

Structures permitting the storage of the production of several farmers. They are often cooperatives (3 structures in Savoie and Haute-Savoie), but some private stations also provide storage facilities.

#### **Dispatch stations**

They undertake storage, product-grouping, grading and packaging, marketing and transport. These stations are either collectives (Cooperative, CUMA (cooperative for equipment-sharing), GIE (group of economic interest) or private (companies, limited companies).

Certisavoie lists 9 dispatch stations (collective and private).

#### 7 - Marketing Strategy Aspects

#### The Apples of Savoie market

- The Apples and Pears produced in Savoie are mainly (70%) sold in the Savoie Region. 30% of fruit produced in Savoie is sold in other regions.
- The Apples and Pears produced in Savoie represent at about 50% of the total consumption of apples and pears in the Savoie Region. One of two apples consumed in Savoie is produced in Savoie.
- The Apples and Pears of Savoie (P.G.I.) certified "Savoie Regional Label" represent only between 5% and 6% of total consumption of apples and pears in the Savoy Region.

#### The distribution of Apples of Savoie :

- According to our surveys, apples produced in Savoie are present in nearly 80% of Hypermarkets and 65% of Supermarkets in Savoie and Haute-Savoie. Apples produced in Savoie represent about 43% of the total volume of apples distributed by the Hypermarkets and Supermarkets in the northern French Alps.
- The Apples of Savoie with the Savoie Regional Label are present in nearly 50% of Hypermarkets and 43% of Supermarkets in Savoie and Haute-Savoie. Due to the size of the production, it is impossible to know their distribution level in other regions.

#### Sale price of Apples produced in Savoie and of Savoie Regional Label (S.R.L.) apples.

There is an average difference of about 10% between the selling price of Apples from Savoie and the price of apples of the same variety from elsewhere.

For fruit labelled S.R.L., the difference is between + 15% to + 25%.

The high prices practised in the distribution of fruit from and marketed in Savoie is due to:

- ⇒ the proximity and therefore the customised service provided by the local marketing companies: variable daily supplies as required by the main buyers in the large-scale distribution system,
- ⇒ the proximity and so the positive image brought to a supermarket's fruit and vegetable shelves by locally-produced fruit,
- ⇒ the quality, especially as regards taste, which is higher for fruit with the P.G.I. specification "*Pomme de Savoie*" or "*Poire de Savoie*."

#### Communication

The market position chosen for the *Fruits de Savoie* is: the apples and pears of Savoie are particularly good, healthy, chemical residue-free fruit thanks to strict growing specifications which preserve the natural environment and allow the fruit to be eaten with their skins. The *Fruits des Savoie Union* uses the picture of an orchard against a high-mountain background in its communication without saying that it is "mountain fruit". And in view of the zone of production, this would not really be possible. The image is that of Savoie, and that itself is very evocative of the mountains.

#### CHAPTER V - GLOBAL SUPPLY CHAIN ASPECTS

#### 1 - Organisational Aspects

Producers form part of the *Fruits des Savoie* union. The objective of this union is to defend and promote the Regional Label for Fruit of Savoie (Protected Geographical Indication, or P.G.I. - the quality management group charged with the management of the Label).

The Fruits des Savoie Union has 66 members (514 hectares):

- 22 from Savoie with 200.57 ha; an average of 9,12 ha per farm
- 44 from Haute-Savoie with 315.31 ha; 7.16 ha per farm.

The Fruits des Savoie Union unites rather less than a third of fruit-farmers in the two departments, and 55% of the orchards surface area.

The other 164 fruit-farmers in the two departments have between them 426 ha, an average of 2,6 ha per operation.

#### 3 - Relations with Public Authorities, and 4 - Public Policy Aspects

#### The O.P. (Organisation of Producers)

The O.P. has existed since 1997; 43 producers are members. The O.P. has no commercial activity; the ownership of the fruit is not transferred. The O.P. has the status of union; it has, however, signed an agreement with 5 commercial companies (cooperative or private) which market the production of the 43 members.

It works as follows:

The O.P. establishes the sales invoices of its members to the commercial companies.

The companies pay the O.P. which transmit the payment to the producers.

The O.P. centralises information from the companies on their outlets.

The Value of the Marketed Production was 6,200,000 euros for the period  $1^{ST}$  July 2002 to 30 June 2003 (last season).

All the members of the O.P. must also belong to the Savoie Fruit Union, but there is no necessary reciprocity: a producer can belong to the union without joining the O.P.

The O.P. undertakes an annual Operational Programme; 500,000 euros for the year 2004 of which 50% comes from the E.U. and 50% from the O.P.'s own funds.

The programme's collective operations absorb 15% of the funds, while 85% goes to individual operations.

The collective operations include:

- technical actions (advice or experimentation) to improve cultivation techniques and practices allowing a better respect of the environment and of the standards of the *Production Fruitière Intégrée* (Integrated Fruit Production).
- action to improve the quality of the fruit, in particular as regards taste and the absence of residue
- collective communication action. The O.P. can undertake promotional action because it concerns products with a quality sign + P.G.I. (Protected Geographical Indication).

The individual operations are essentially in two domains:

- the manual thinning-out of trees
- "delayed marketing": aid for cold or controlled atmosphere storage contracted over a period of 2 months at 64€/ton for apples and 85€/ton for pears.

#### 6 - Strategy Aspects

The Fruits des Savoie Union has committed itself, for the period 1<sup>st</sup> September 2002 to 31<sup>st</sup> August 2006, to an Apples and Pears of Savoie development programme at a total cost of about 4,300,000 euros of which 2,300,000 euros is investment for the modernisation of storage, packaging and dispatch stations. For this, it received about 750,000 euros from the French state, the E.C., the Rhône-Alpes region and the departments of Savoie and Haute-Savoie. The material investment is subsidised up to 15%. The other actions listed below are subsidised at a rate of 25 to 40% (exceptionally 50%).

#### The entire programme will allow:

- 1. to develop quality fruit production (with the label and the P.G.I.) with assistance:
  - to finance the certifying organisation's costs
  - to develop biological means of pest control in the orchards.
- 2. to help the growers to adapt their practice to specification requirements by assistance:
  - in financing the producers' technical advisor
  - to set up a treatment timetable, to circulate warnings and, for the farmers' use, a quality manual and a means of checking traceability.
- 3. to help marketing by:
  - communication
  - a permanent marketing analysis, and advice on communication
  - assistance for marketing companies in their promotions in hyper- and supermarkets
- 4. to help animation in the sector
  - assistance in financing the position of animator
  - producing an internal information bulletin

#### CHAPTER VI - LABELLING

#### 1 - The Type of Label

The legal protection established by the Fruits des Savoie Union is one of the official quality mark recognised by the French Ministry of Agriculture. This official quality mark is only available to products which respect the specifications guaranteeing the quality of the fruit.

The specification criteria concern:

- The conditions of production: grassed orchards, limitation on quantities produced, environmentally-friendly amounts of fertiliser and treatment etc.
- Traceability: checking by batches at different stages (in the field, with the grower, in storage, grading, packaging and marketing).
- The characteristics of the product: refractory index (sugar-level), Thiault index (relation between sugar-level and acidity) for Golden Delicious, size and categories.
- Identification of the fruit: a certification sticker on each fruit.
- These criteria are under the permanent control of the certifying body (EN 45011), Certisavoie.

#### 2 - The reasons behind the choice of labelling / non-labelling.

Created in 1979, the Savoie Regional Label has benefited from the European legal protection "P.G.I." since June 1996. Until 1996, use of the Savoie Regional Label had no official force. Any operator could sell his products under the name of "Fruits de Savoie" independently of the label. Since the arrival of the P.G.I., only fruit meeting the specification criteria can use the description "de Savoie".

The French state having chosen to link the demand for:

- making the demand for registration of a product in the register of the P.G.I. dependent on the previous establishment in France of an official national quality mark
- allowing the use of a geographical name for a product under an official sign of quality on condition that it is entered in the register of P.G.I.

It was necessary for the fruit-growers of Savoie and Haute-Savoie, (who, collectively, wished to both use the name Savoie and certify the quality of their product) to commit themselves to the P.G.I. process.

#### 3 - The Organisational Aspects

Controls are carried out by an independent certifying organisation respecting the standard EN45011.

#### 7 - The Labelling Strategy

It is certainly encouraged and supported by the Fruits des Savoie Union, but the strategy for development marketing of fruit under the official sign of quality / P.G.I. is the responsibility of the enterprises undertaking the marketing.

#### CHAPTER VII - SUCCESS/FAILURE/NEEDS

#### 1 - To what extent and in what way the product may be considered a success or failure?

The production of apples and pears in Savoie bears high costs. The total volume is low and the farms are small. In spite of these difficulties, the producers have managed to obtain a good image and a good value of their fruit, superior to the standard product.

- The producers market their fruit as much as possible in short distribution chains (via commercial companies cooperative or private which they have set up themselves) in the local distribution system.
- They benefit from the positive image (nature, purity) of Savoie and their mode of production is coherent with this image.

The present organisation has negative consequences for the economic results of the sector

- High transport costs (orchard => storage site => packaging and dispatch site => distributor).
- Disparate cooling equipment in the storage stations.
- No concerted management of the opening of cool rooms.
- Storage and package management is only moderately professional, leading to losses of product quality and of the product itself.
- Time spent by the sales team in managing problems of quality in the domain of storage and packaging, reducing the time available for positive marketing.

The *Fruits des Savoie* Union has begun a development programme, for the period 2002 to 2006, for the Apples and Pears of Savoie sold with a certificate of quality, and has prepared investment to permit the improvement of the weak areas of the sector. The problems of marketing organisation and of grouping the offer are more difficult to resolve.

#### TOME OF BAUGES CHEESE (P.D.O.)

Area: Savoie Alps (Northern Alps France)

<u>Author</u>: Emmanuel Mingasson (SUACI Alpes du Nord)

#### CHAPTER I - BASIC DATA ON THE ORIGINS OF THE PROJECT

#### 1 - The natural, geographical, historical and economical environment

The Bauges mountains straddle the departments of Savoie and Haute-Savoie, and form the central part of the northern Pre-Alps. Surrounded by the valleys of the Rhône and the Isère rivers and of Annecy and Chambéry, the Bauges mountains are an enclosed limestone massif. The massif consists of :

- A high plateau of between 600 and 1000 metres altitude, surrounded by summits reaching about 2200 metres.
- Steep spurs on the edge of this high plateau.

The Bauges massif, situated on the edge of the Alps, receives a high annual precipitation of over 1400 mm.

The altitude is relatively moderate, but the winters are nevertheless harsh. Snow covers the massif for four or five months in the year. The winter temperatures in the valleys often fall to minus 15°C.

In the Bauges agriculture is an important activity, and for centuries metallurgy was also important thanks to the abundant supply of energy in the form of wood.

The 14 communes in the heart of the massif, which have today a population of less than 5.000 inhabitants, had up to 23.000 inhabitants at the end of the 18<sup>th</sup> century. The demographic and economic decline began from 1850.

Because of their mountainous terrain, and because they are more often bypassed than crossed, the Bauges have long remained outside the development of the nearby, densely populated Savoy valleys. This has led to the conservation of the customs and landscapes, a very special heritage. Today, agriculture, tourism and forestry industries are the principal economic resources of the massif.

#### 2 - Conditions (opportunities / threats) that caused the local players to take action

In 1970, the producers, the ripeners and the traditional buyers were already aware that the *Tome des Bauges* was a characteristic product, different from the Tomme de Savoie. A group of farmer-producers of Tome des Bauges registered the trade name "*Tome des Bauges*" at the National Institute for Industrial Property (*Institut National de la Propriété Industrielle*). *Tome des Bauges* has, thus been theoretically been protected since 1972 but this did not bring the results expected, in terms of image and defence of a quality cheese, and that for three reasons :

- 1. Legally the brand was not valid. *Tome des Bauges*, the specification of the product and its origin, could not be reserved by a company or a group of producers.
- 2. No system to control the specifications defined by the producers had been established.
- 3. The producers, farmers and small-scale dairies lacked the means for maturing and they often sold their Tome unripened to retailers who did not always respect the brand *Tome des Bauges*.

This situation lasted until the middle of the 1980's.

#### 3 - Human Dynamic and/or Categories of Actors that provided the impetus

In 1986, a group of young producers decided to react. Together they created the Interprofessional Union (*Syndicat Interprofessionnel*) of Tome des Bauges. The union involved the farmer-producers of Tome des Bauges, the cooperatives who collect the milk in the Bauges and the dairies which transform the milk within the Massif des Bauges.

The union set up several procedures aimed at improving the quality and image of Tome des Bauges:

- Research to precisely define the traditional characteristics of Tome des Bauges
- Technical advice on cheese-production for the producers
- The production of the first publicity for Tome des Bauges
- Consideration of better legal protection for the name "Tome des Bauges."

This work was carried out between 1987 and 1990.

In 1987, three dairies and seven farmer-producers belonged to the Interprofessional Union, for a total volume of 150 tons.

At the end of the 1990's, the same union comprised 4 dairies and the 25 farmhouse-producers, with a production approaching 450 tons.

Between 1990 and 1993, the collective work programme of the union was less intense. During this period, the cooperatives, which had numbered 15 with 7 production sites in the early 80's, regrouped and restructured to modernise the 4 production sites which remained at the end of the 1990's.

#### 4 - The Impact of mountain area location on the launching of the project

In 1994 four factors set off a strong new mobilisation of the producers and makers of Tome des Bauges:

- 1. A French law of the 2 January 1994, called the "quality law," forced the interprofessional union to consider a new legal protection of the name *Tome des Bauges*.
  - Explanations: From 1985 to 1994, the use of geographical references specific to mountain areas such as Bauges (name of a mountain massif) in the name of agricultural or food products should previously ask for an administrative authorization which Tome des Bauges had. The quality law had added as further requirement that only the products for which a demand for registration on the AOP/IGP list was transferred to Brussels could continue to use specific references to mountain areas. This forced the Interprofessional Union of the Tome des Bauges to commit itself in the settlement of a French quality designation, the only way in France to reach PDO or PGI.
- 2. The preparation for the establishment of a Regional Natural Park, an instrument for developing and land-use planning, encouraged the producers to define their strategy of agricultural development in the Bauges.
- 3. An agricultural association was founded in the Bauges; it created a post of advisor and animator of agricultural projects which had been absent for ten years.
- 4. The Bauges were classified as a fragile rural zone, giving access to considerable European Union funds.

#### 5 - Other Aspects

The Bauges are situated in the region of Savoie, where agricultural policy is clearly directed towards the development of products officially designated as "quality" products. Three cheeses are already recognised as *Appellation d'Origine Contrôlée*: Beaufort, Reblochon and Abondance, strongly encouraging producers in the Massif des Bauges to follow the example.

# CHAPTER II & III: BASIC PRODUCTION (RAW MATERIAL) - PROCESSING AND TRANSFORMATION

#### 1 - The Organisational Aspects

In the case of the Tome des Bauges project, as in that of many other mountain cheeses of the Savoie region, it is very difficult, if not impossible, to distinguish the actions taken for the production of the raw materials from those undertaken for transformation.

From the start of the project, under the impulsion of the producers, all the actions undertaken for quality control, for communication and for legal protection were studied and defined by associating all the partners in a joint programme: milk producers, cheese-makers, retailers and ripeners.

#### 6. / 7. – The Impact of mountain area location on the various Aspects and the Strategy Aspects

The Alps have long remained apart from the great restructuring of the food industries. Bearing this in mind, among the characteristics of mountain farming, we can retain the following points:

- 1. Procedures have often remained traditional crafts;
- 2. For a single product, there is considerable diversity, linked to the different seasons, practices and dairies:
- 3. The sectors are often splintered and each has a large number of operators;
- 4. Each operator produces small volumes in a small operation, and this has two consequences:
  - technically, individual variations are pronounced (for the 25 farmhouse producers and the 4 cheese-dairies which make Tome des Bauges, we have noted 5 main types of fabrication procedure),
  - economically, financial resources are limited.

# In the mountain environment, the objective of quality is more complex than it is in the more standard "agribusiness" approach.

In industrial transformation, where quality means regularity, one seeks to reduce variation and diversity by treating the raw material. In the mountain environment, on the other hand, different studies show that variation and diversity are essential factors in the richness of taste expected by the customer and are characteristic of mountain products.

#### Further, bearing in mind:

- ✓ in the mountains, the small size and the limited financial resources of each enterprise,
- $\checkmark$  the numerous interactions and interdependence between enterprises which share traditional skills, according to our observations, one can add that, in the face of all kinds of obstacle (whether in the area of quality, commercialisation, communication and product image or of legal protection and the defence of the operators' interests), the best solutions will be found even more so than in other areas in a collective strategy, based on grouping, rather than on an individual approach.

#### 2 - The Know-how and Quality Aspects

In order to characterise and precisely identify Tome des Bauges, production by the farmhouse producers and milk-collectors involved in Tome des Bauges was monitored over two years and at three periods each year: summer, autumn and winter. Studies were achieved for each producer, resulting in a series of bacteriological and sensorial physico-chemical analyses on the products.

The second area of the Union's work was the establishment of what it calls the "territorial juries," composed of cheese-makers or previous cheese-makers, traditional buyers of Tome des Bauges, dairymen and ripeners of Savoie. This allowed the completion of the first approach, very precisely defining the traditional characteristics of the product.

This has led to the establishment of a permanent cheese advisory service offered to all makers of Tome des Bauges. The advantage of this approach was to permit the elaboration of advice which took into account the

specific characteristics of the product. This technical support was provided by a cheese technician, at first employed by an organisation for agricultural development, and then directly by the Tome des Bauges Union.

The work involved in the characterisation of Tome des Bauges with the advice and the supervision of the Scientific Interest Group of the Northern Alps (Groupement d'Intérêt Scientifique -G.I.S.- des Alpes du Nord). The G.I.S., since 1985, has brought together the INRA (The National Institute for Agronomic Research), the CEMAGREF (the National Centre for Agricultural Mechanisation, Rural Engineering, Water and Forests), the Technical Institute for French Cheeses, the Chambers of Agriculture of Savoie, Haute-Savoie and Isère, as well as their mountain service (SUACI). The object of this Scientific Interest Group is to assist the agricultural changes in the Northern Alps by undertaking research and development on both the problems and the advantages of the Alpine mountains and their agriculture.

The work undertaken on milk-production and its transformation into cheese has permitted the definition of the essential rules to respect in order to preserve the traditional skills of the producers of the Bauges massif. In particular:

- 1. The use of unpasteurised milk
- 2. No mechanical skimming
- 3. Maintaining techniques of milk-maturation by different procedures aiming to mature the milk and develop natural lactic flora for a period varying from several hours to several days.
- 4. Regulation of the use of commercial lyophilised ferments.
- 5. Respect of certain practices and materials (copper, cheese-cloth, wood) involved in the fabrication, pressing and turning of the product.
- 6. Obligation of a minimum maturing period of five weeks.

In summary, the three important factors to retain in this procedure are :

- 1. Working with the research and development support
  - Research to understand the fundamentals of the traditional fabrication of Tome des Bauges
  - Development : providing the means of support and technical advice on fabrication, for all producers
- 2. Definition of the essential rules to respect in order to maintain traditional methods.
- 3. Work undertaken entirely under the technical and financial responsibility of the producers in their union.

#### Technical advice to the farmhouse producers and the cheese-dairies

The cheese technician working for the Tome des Bauges Union visits all producers at least twice a year for systematic checks on fabrication. This system has been in place for the last five years. It will be adapted so as to increase the cheese-makers' motivation. Technical advice (which was paid for by the union) will be payable, at least for analyses, and they will in future only be carried out on demand from the producers.

A new cheese-dairy is being set up for making Tome des Bauges. In the same way, the union proposes advice for setting-up as a paying service.

#### **CHAPTER IV: DELIVERY CHAIN**

There are two types of enterprises making Tome des Bauges, and each of them are taking care of the selling of their products :

- the farmhouse producers: 25 140 tons
- the cheese-dairies (private or cooperative): 4 310 tons
- > Situation of the cheese-dairies

In the Bauges, there are two modes of management for cooperative dairies:

1. in the first mode (2 dairies), the producers form a cooperative, and sell their milk, under a contract valid for several years but at a price / kg which is negotiated each year, to an industrial dairy which undertakes the fabrication and sale.

2. in the second mode (2 dairies), the operation is managed by the producers right to the finalisation of the commercial process. The milk delivered by the producers is paid according to the financial results. The results of these two cooperative dairies are detailed below.

The 4 dairies have their own maturing cellars and market a finished product.

#### Cooperative 1 (of mode 2)

440,000 € of investment in 1999 to set up a shop for direct sales, a visitor's circuit and a discovery area (interpretation centre) for the agricultural activity of the Bauges

Products: Tome des Bauges and a range of dairy products on sale at the shop (other cheeses, butter, cream, Gruyere)

Products sold at the shop: a wide range of food from the Bauges (wine, goats' cheese, bread etc.)

#### Cooperative 2 (of mode 2)

 $1,200,000 \in$  of investment since 1986 for the modernisation, the adaptation of the dairy to the regulations, the construction of cellars, of a car-park for visitors and a sales point.

Products: Tome des Bauges and Gruyere

Products sold at the shop: a wide range of dairy products made by the dairy or by other, associated producers (cow or goats' cheese)

	Cooperative 1	Cooperative 2
Number of producers	6	16
Quantity of milk transformed	650,000 kg	2,500,000 kg
Direct sales at the shop	63% of total turnover	25% in volume
		1/3 of total turnover
Price of milk paid to the producer in 2002	0.45 €	0.44 €

Commercially, these two examples illustrate clearly the importance, for small units, of direct sales in a zone which is both touristic (summer and winter) and also close to large towns (more than 200,000 inhabitants on the edges of the massif). In the case of cooperative 2, other sales form ¾ of the total volume. They go to super- and hypermarkets, hotels and restaurants, the strategy being to reduce risks by limiting the relative weight of each buyer.

We do not have the results of the two other dairies (of mode 1) managed by private companies. They manage several cheese-dairies in Savoie and Haute-Savoie and Tome des Bauges is one of the products in their range which is marketed in super- and hypermarkets country-wide. Nevertheless, due to its low total tonnage, Tome des Bauges is essentially present at a regional level.

#### > Situation of the farmhouse producers

The situations of the farmer-producers are very diverse. Ten years ago, the majority of them did not have cellars equipped with temperature and humidity regulation systems for the proper maturation of Tomes des Bauges. The commercialisation of farmhouse Tome des Bauges was mainly undertaken by several traditional ripeners in the nearby towns. Through lack of good organisation of the offer, the image of farmhouse cheeses was, contrary to the situation for most other cheeses, not as good as that of cheese made in dairies. Recently, some of the farmhouse producers have got organised to invest in a collective ripening-room. This will allow the proper maturation of the cheese, but the farmhouse producers, involved in this project, have not yet established a sufficient commercial organisation.

#### CHAPTER V: GLOBAL SUPPLY CHAIN ASPECTS

#### 1 - The Organisational Aspects

The interprofessional union consists of three groups:

- 1. the farmer-producers,
- 2. the collecting cooperatives,
- 3. the dairies and the ripeners.

Each group has an equal number of votes shared between its members.

It is important to note:

- the interprofessional union unites all those concerned in the development of the product;
- the statutes permit the expression and the representation of all;
- no distributor of the product nor any other structure (professional organisation or local community) belongs to the union;
- it is intentional that the producers (of milk, through their cooperatives or farmer-cheese-makers) have a voting majority in the union.

To ensure sufficient resources, all the operators contribute, since the beginning of the project, to the Interprofessional Union according to either the quantity of milk delivered to a dairy producing Tome des Bauges (the case of the cooperative groups) or to the quantity of Tome des Bauges made (groups 1 and 3).

The establishment of the collective project benefited, between 1986 and 1998, from the considerable support of departmental organisations concerned with agricultural development and in particular the partial funding of the cost of the animation of the union. During this period the Union remained in complete charge of its actions; being both decision-maker and financially responsible it sought of course to maximise the public funds available to achieve its aims. The fact that the union and its members were responsible and personally committed to a significant extent in the financing of the project is a key factor (whose importance we have measured on several occasions) in the success of a difficult collective project, in both the medium and the long term.

#### 3 / 4 - Relations with Public Authorities and the Public Policy Aspects

In the mid- 90's, several essential factors enormously favoured the project of the Interprofessionnal Union of Tome des Bauges:

- 1. The classification of the Bauges massif as a Regional Natural Park.
- 2. Evolution of the regulations on the use of trade names.
- 3. The classification of the Bauges massif in zone 5b: the start of a development programme for the Tome des Bauges in the "Product, Territory, Landscape" programme (Produit Terroir Paysage - P.T.P.) in the larger framework of the Programme of Rural Development in Rhône Alpes.

#### First step of the public financing programmes: 1994 - 1998

(Budget of the Product, Territory, Landscape programme below)

1994 specific expenses incurred under the P.T.P. programme

✓ road-signs indicating the production zone : 27,000 € ✓ legal protection: 7,500 €

✓ communication, publicity: 7,000 € ✓ Total : 41,500 €

Subsidy 5b (national and European funds) 1994: 74%

#### 1995: specific expenses incurred under the P.T.P. programme

✓ characterisation of the product: 10,000 € ✓ market survey: 9,000 €

✓ research into the fabrication process : 39,000 € ✓ animation of activities: 2,000 €

✓ communication, publicity: 7,500 € ✓ Total: 67,500 €

Subsidy 5b (national and European funds): 78%

1997: specific expenses incurred under the P.T.P. program me

✓ quality of the product: 8,500 € ✓ legal protection: 27,000 €

Subsidy 5b (national and European funds): 66%

1998: specific expenses incurred under the P.T.P. programme

✓ hygiene : 16,000 €

Subsidy 5b (national and European funds): 75%

1999 : specific expenses incurred with the help of another 5b fund (agricultural domain, studies, technical assistance, promotion) animation and advice : 30,000 €

√ communication: 23,000 €

Total : 53,000 € **Subsidy 5b : 80%** 

In summary, in the 5 years from 1994 to 1998, the Inter-professional Union for Tome des Bauges was able to totally relaunch it's project thanks to :

- ✓ a high level of mobilisation of the producers: they contribute in the order of 23,000 € to 30,000 € per year to finance their actions; the voluntary subscription for all operators is 5,5 € per 100 kilos of Tome des Bauges produced,
- ✓ the dynamic created by the new Regional Natural Park;
- the considerable financial assistance of Community funds: 215,000 € towards actions undertaken over 6 years with a level of assistance of between 66% and 80%. The producers' own financial contribution in their global budget between 1994 and 1998 varied between 28 and 40% (average 33%) for an annual average budget of 75,000 €.

#### Second step: 1999 - 2003

The Tome des Bauges Union committed itself, for the period 1st December 1999 to 30th November 2003, to a Tome des Bauges development programme at a total cost of about 575,000 euros. For this, it received about 210,000 euros from the French state, the E.C., the Rhône-Alpes region and the department of Savoie - about 40% of the total.

This has permitted the union to work on the following points:

- Experimental technical work, particularly to develop the use of traditional ferments for making Tome des Bauges
- ⇒ To improve its knowledge and competence in the sensorial and bacteriological analysis of Tome des Bauges
- ⇒ To improve quality control in the final stages of maturing.

Support is also available to cattle-farmers who convert all or part of their milking-herds to the breeds prescribed in the Appellation d'Origine Contrôlée decree : traditional breeds of Savoie and Haute-Savoie. The decree states " From 1January 2012, each herd is to consist of a minimum of 50% of milking cows of the Tarine and Abondance breeds."

Finally, the union has received aid to finance the post of Union animator, to improve the equipment of its office and its minor laboratory equipment and to undertake work with the objective of improving the image of Tome des Bauges through the organisation of farmer-producers, by communication, and by checking on the distribution circuits. All this work will be undertaken by the person recently employed by the Union.

The development programme is in the framework of a procedure, the "Integrated Programme of Agricultural Development" set up in the Rhône-Alpes region and using various credits to support the objectives of a group of producers over a fixed period.

#### The today organisational aspects

The annual subscription for the Tome des Bauges Union is :

- 35 euros for a farmer-producer,
- 100 euros for both cooperative and private dairies.

The entry fee, payable once only, is 100 euros for a farmer-producer, 100 euros per producer delivering milk to a milk-collecting cooperative and 1000 euros for a private dairy.

The proportional subscription based on tonnage of Tome des Bauges is 13 eurocentimes ex tax per cheese of about 1.2 to 1.5 kg on average, that is, from 12 to 15 kilos of milk. This proportional subscription has almost doubled in five years. It was 8 eurocentimes in 1998. This permits self-financing of the Tome des Bauges Union, the means of which are, in terms of human resources: one person, full-time animator and cheese technician.

Very soon, a second employee will be taken on to assist all the operators in their communication and marketing. His role will be to provide support for the commercial action of the cooperatives and producers, starting with a market survey and then supplying marketing tools. The aim is to maintain this second post for three years. It will be financed for the first two years entirely by voluntary contributions from the professionals of all cheeses of both Savoie and Haute-Savoie in a common fund, redistributed to the products according to their needs and projects.

The marketing of the products of each enterprise (farm, collective maturing-cellars set up for the farmers, or dairy, whether cooperative or private) remains the entire responsibility of each enterprise. The Union has no reponsibility for the marketing of the cheese of its members but it can give them collective help or advice.

#### CHAPTER VI: LABELLING

Tome des Bauges is a cheese recognised, by decree published in the *Journal Officiel*, as Appellation d'Origine Contrôlée (A.O.C.) (Controlled Designation of a Product's Origin) since December 2002. The A.O.C. guarantees the close link between the product and its earthly origins, that is, a geographical zone limited and defined by natural factors (its geological, agronomic and climatic characteristics), by human factors and the rules established to take best advantage of nature. This notion of *terroir* indicates that the product coming from it can not be reproduced outside this territory.

The A.O.C. reserve the use of the product's name to the operators, situated within the defined zone, who respect the traditional rules of fabrication and who submit to the procedures of approval mentioned in the decree. The A.O.C. is only accorded on the demand of a collective structure accessible to all participants in the production zone.

It should be noted that beyond the legal protection of the name and of the codification of the traditional rules of fabrication of the product, in defining the conditions which link the product to it's territory, the A.O.C. is indirectly a true and potent tool for economic development and land-use. While recognition by A.O.C. is always an important objective for the producers, it is not an end in itself.

Economically speaking, the results of the enterprises are always linked:

- to the efforts taken to ensure the quality of the milk and it's derivatives,
- to the investment which allows the cheese to be made and matured in good conditions,
- to the investment in marketing the product.

Recognition as A.O.C. is only the icing on the cake. Or rather it is more than that, in that it forms the framework in which economic actors and particularly the producers can organise themselves, with the help of public bodies, to establish the conditions of a durable valorisation of their product. The good image of a product is not, however, guaranteed by the A.O.C.; it depends on the form of economic organisation and the means deployed by the producers and the transformers. The A.O.C. makes it possible to avoid lowering the standard of the product and to restrict the zone in which the tradition is recognised and protected.

#### 7 - The Labelling Aspects

Every enterprise wishing to make Tome des Bauges cheese, or to produce milk for making Tome des Bauges, must sign a declaration of aptitude; this is a personal and moral commitment to respect the terms of the decree.

The enterprises which make and mature Tome des Bauges are themselves responsible for the classification of their product as Appellation d'Origine Contrôlée. So the enterprises themselves have the primary responsibility.

The Interprofessional Union for Tome des Bauges is currently establishing a verification commission, as it is done for other Appellation d'Origine Contrôlée products. Controls are carried out by 2 commissions:

- 1. a conformity commission on production conditions at the farms and dairies
- 2. a control commission on the products themselves.

The first commission goes to the production sites to check that the decree is respected.

The second one undertakes the tasting of product samples taken from the production sites by the National Institute of Appellations d'Origine (INAO). The INAO only takes samples of the product before it reaches the distribution system.

The two commissions are authorised, as necessary, to give warnings and to recommend a temporary withdrawal of the Appellation d'Origine Contrôlée.

The commissions are composed of a majority of professionals, and for the time being do not include the President of the Interprofessional Union (decision of the INAO). Controls may be carried out in the distribution chain on the labelling of products.

Concerning regulations and the respect of production conditions: of the hundred or so farms supplying milk for making Tome des Bauges, there are four cases which pose a problem today, where the producers have not signed the declaration of aptitude.

The dairy which collects the milk from these producers (who have not signed the declaration of aptitude) can not process this milk in the dairy in which it makes Tome des Bauges. The Appellation d'Origine decree stipulates that all the milk processed in a Tome des Bauges dairy must conform to the decree.

#### CHAPTER VII - SUCCESS/FAILURE/NEEDS

- 1 To what extent and how the product may be considered a success or failure
- 2 To what extent and how the success/failure mostly stems from the various chapters
- 3 To what extent and how the success/failure mostly stems from the different aspects

For a long time now in France, the term 'mountain produce,' has evoked in the consumer the idea of a high quality produce. As early as 1985, the Chambers of Agriculture of the Northern Alps region (the departments of Savoie, Haute Savoie and Isère) observed that, apart from two products which were well-defined, organised and protected by an A.O.C. (the Beaufort and Reblochon cheeses), the other mountain products were little known, even within the region, were not organised in groups and were neither precisely defined nor protected. They also noted that in the mountain zones, the areas which favoured the development of traditional and specific mountain cheeses were characterised by a certain dynamism as regards the installations, and a higher level of image-enhancement of dairy-products than in other zones. On the other hand, the mountain areas which concentrated on the production of milk as a raw material collected in the plain and used in products not specifically identified as mountain-produce, faced a depreciation of the product and the disappearance of agricultural operations. With the support of the Rhône Alpes region and the state (funds for regional development), the Savoie and Haute-Savoie Chambers of Agriculture committed themselves from this time to a policy of support for the collective organisation of operators and of the development of traditional mountain products. From 1986, *Tome des Bauges* has formed part of this programme.

#### Today:

the producers of *Tome des Bauges* are organised in an interprofessional union: a framework exists for debating the collective policy for the product, and for determining collective action aiming to improve the

image of the product: research and development, technical advice, campaigns of collective communication etc. Finding strength in union, the actors in the *Tome des Bauges* story have also become a credible group in relation to the public bodies, local communities and tourist operators who discuss together the economic development of the *Massif des Bauges* area.

- the product is defined and protected by an official sign of quality: the name *Tome des Bauges* can no longer be misappropriated, either by cheeses made outside the Bauges, or by cheeses from the Bauges which do not have the recognised traditional qualities; both forms of misappropriation had been highly prejudicial to the image of the product. The benefits are not only felt in terms of image but also in the preservation of a skill which forms part of the heritage of the Bauges.
- the producers of Bauges milk have also restructured their dairies, grouping the milk-collection cooperatives and choosing to invest in just 4 of the 10 cheese creameries that existed in the Bauges in 1985! Without this rationalisation and concentration of investment, all the creameries would have closed.
- the A.O.C. decree states: "The basic feed of the herd consists of pasture grass during the summer, during at least 120 days, and freely available hay in the winter. The use of dry fodder produced outside the geographical area (as defined for the AOC) as a complement to local produce is authorised to a limit of 30% of the annual requirement of the farm for the whole of the herd." As well as the obvious link with the land, this also indicates a consideration of the need to maintain the land and for rural planning in the Bauges.
- by protecting their product and improving its quality, the milk and cheese producers are also favouring its best marketing interests. It is too early to be sure for the Tome des Bauges production zone, but due to the combination of factors encountered in the wider Northern Alps, the dairies have recorded a high milk-price. "According to the RICA, the 3,160 professional milk operators in the Northern Alps have an average milk quota of 167,000 kg for 1.86 agricultural employees and 62 hectares. Highly specialised (milk represents nearly 80% of agricultural production), very extensive (1.09 head of cattle per ha of forage) and only slightly indebted (the total of annuities represent 22% of the gross profit as opposed to 38% for lowlands dairy farms), they benefit from a milk-price paid to the producer estimated at 443 euros per ton (as opposed to 326 in the Massif Central and lowland areas). (...) These operations receive a lower amount of direct aid than their lowland equivalents" (Chatelier et Delattre 2003).

It is difficult to pinpoint the particular origin (which aspect or chapter) of the results observed, as they are rather the result of an ensemble of coherent and complementary actions. What can be noted is that no single factor, not even the legal protection of the A.O.C., can explain the results obtained; it is rather a combination of actions, undertaken in different domains (technical, legal and marketing) and at different levels: at the core of each enterprise, between the operators in the union and in collaboration with other Savoyard cheese unions - all in the pursuit of quality.

#### 4 - What are the needs, what is missing and what could be done (from the various aspects)

One of the weak points of such a project, relying on a volume of production which will necessarily remain limited owing to the dimensions of the production zone is the weakness of its means of financing its own operations. The current annual production of 500 tons corresponds to 45 to 50,000 euros per annum for financing the action of the union, which seems to be a small amount.

One difficulty encountered today is the marketing of farmhouse cheeses, and the union has decided to allocate funds to help its members in this domain. Currently, farmhouse producers work independently, and are not organised to enter either the traditional circuit or the large-scale distribution network, even though the latter is interested in having the whole range of A.O.C. products on its cheese counters.

It is still too early to evaluate the effects and the weak points of the establishment of an A.O.C.

#### FRESH MOUNTAIN PORK MEAT FROM FRANCE

Area: French mountain areas (France)

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(ISARA-Lyon)

#### Chapter I - Basic Data about the emergence of the project

#### 1 - The Natural, Geographical, Historical and Economical environment

The French pork production is regularly in crisis due to national prices which show significant fluctuations ("marché du cadran" in Brittany), and these are occurring on an increasingly frequent basis (to the extent that prices reach levels below the cost of production for farmers in less favoured areas). Various initiatives based on official quality designations (Label Rouge in particular) have been in place for a number of years, especially in the highly productive areas (lowlands), but they have not made any impression in bringing stability to farmers' incomes. Another issue is that numerous salt meat processing units in French mountain areas producing cured meats (eg. ham, dried sausages ...) which they describe as "from mountain areas". However, most of the time they are made from cheap raw materials sourced from intensive farms in lowlands.

#### 2 - The Conditions (Opportunities / Threats) that caused the local players to take action

For a number of years, in the absence of a national association of pork producers (one was only created in 2003), the regional associations concerned with mountain areas formed themselves into a national association - the Mountain Pork Association (APM). The APM's main objective is to achieve an association of organisations within the supply chain for the establishment of French government subsidies for quality pork in mountain areas. This financial aid for supporting quality production in mountain areas is given on the basis of farmer commitment to comply with specifications controlled by an independent body. A process of quality, based on compliance of specifications controlled by a independent body, with the support of public authorities has been in the process of development for a number of years. However, at that time, the pork production qualifying for the above mentioned support was linked neither to structured commercial promotion nor to quality designation.

Since January 1994, the French system of official identification of mountain products ("indication of mountain origin") established by the "Mountain Law" of 1985 has been ineffective. Then in 1997, the European Court of Justice in Luxembourg ruled this operation to be contrary to the Treaty of Rome.

#### 3 – The Human Dynamic and/or Categories of Actors that provided the impetus

In the mid 1990's, APM decided to look into the feasibility of identifying the products that comply with existing specifications within the framework of the quality aid in mountain areas. The association commissioned a study agency (ISARA) to assess trading opportunities for selling pork (fresh meat and salt meat products) identified by a "mountain" origin with controlled specifications, aiming at sharing added-value especially with mountain farmers.

This initiative is primarily led by some pork farmers from the Massif Central.

- The first stage of the study by ISARA, completed in 1998, is important as it assessed the commodity chain dimension number of mountain breeders concerned, number of slaughter houses located in mountain areas, and the expected market interest.
- The second stage of the study by ISARA is crucial, as it has confirmed the existence of a potential market for a differentiated fresh pork meat in supermarkets identification of a psychological price to consumers,

achievement of the packing and communication concept, sales talks to supermarkets, test markets in real size from September 1999 to January 2000 in various supermarket chains in France. The test carried out on a large scale has proved the capacity of the national commodity chain to sell mountain pork meat in the supermarkets with a price about 30% higher in comparison with the standard products.

In parallel with these market tests, an important work is underway by APM to discuss directly with the Ministry of Agriculture the speeding up of the drafting and publication of a new decree to define the use of the term "mountain" for agricultural products and foods, further to the publication of the agricultural guideline policy in July 1999. APM used law experts to make proposals to the Ministry for the drafting of the decree, and followed progress very actively until the publication of the new decree on 17 December 2000 (Decree of the 15/12/2000).

#### 4 - The Impact of mountain area location on the launching of the project

The mountain location is the starting point and the permanent impetus of the initiative. The image linked to mountain areas in consumers' minds (especially inhabitants from non-mountainous areas) is highly positive and justifies the overall project.

#### 5 - Other Aspects

The success of this project is also due to the fact that this product belongs to a supply chain (fresh pork meat) which previously was only slightly commercially differentiated, with quite often a very basic and not really qualitative image of products. The product "fresh mountain pork meat" did not exist in the marketplace until 2000. They focussed on mountain image and the elaboration of solid specifications controlled by an independent body that puts forward the characteristics required by consumers, such as during the BSE crisis – eg. composition of animal feed (no animal proteins or fat at a time when they were still accepted in pork feeds, and no antibiotics in feeds).

#### CHAPTER II - BASIC PRODUCTION (RAW MATERIAL)

#### 1 - The Organisational Aspects

Since the beginning, the objective of this initiative has been to develop the mountain pork supply chain (mainly located in the Central Massif) and, in that way, to enable the 1,700 farmers located in the French definition of mountain areas to achieve a significant premium on the basis of strict specifications controlled by an independent body. This initiative is being developed on a nationwide level (including the Reunion Island), so the diversity of the farms covered is very high. Their common point is being located within the French definition of mountain areas and having signed the specifications of APM.

#### 2 - The Know-how and Quality Aspects

Little by little, a huge work has been undertaken with technicians from the regional pork association and from the Technical Institute of Pork regarding the technical aspects of the specifications. The commercial, marketing and organisational aspects (including legal aspects) have been achieved with regular support from external subcontractors.

The specifications are mainly focused on traditional production in small and family-run farms, with very strict constraints on the traceability of the mountain origin of pork (born, bred and slaughtered in mountain areas), on the feeding ingredients (no animal proteins, animal fat or antibiotics) and on the registration of the businesses involved in the various stages of the supply chain within the framework of the control schedules.

#### 3 - The relations with Public Authorities

The initiative has benefited, and is still benefiting, from a high level of financial support from public authorities, especially from the State (mainly on a national level: OFIVAL). Relations are also established with the Ministry of Agriculture and the Direction of the Concurrence and the Fraud Squad, regarding the development of the Mountain Decree and the establishment of a future Certification of Product Conformity

(CCP) by APM. This initiative is regularly quoted as an example by the Ministry of Agriculture (for instance, in the Senate report on the progress for mountain policies).

#### 4 - The Public Policy Aspects

State aids for quality of mountain pork provided to the farmers. State aids for the development of the mountain pork supply chain, especially at a commercial level (eg. setting up of a national central purchasing agency), as well as for promotion of products identified by the Mountain Pork label, owned by APM.

#### 5 - The Quality Control Aspects

Since the beginning, the commodity chain has been controlled by an independent control body, with State support. The level of controls is being reinforced by the establishment of the CCP (Certification of Product Conformity), one of the five official French designations of quality and origin of the agricultural products.

#### 6 - The Strategy Aspects

The overall production is located in mountain areas, on the basis of strict specifications controlled by an external body.

Marketing of the products is through a unique central purchasing agency, set up by APM, which is also the sole stakeholder. This innovative approach enables the avoidance of competition between traders that is usually the cause of a permanent price fall of pork products. The central purchasing agency is quite light but very operational and implements the strategy decided by APM, especially the selling price to consumers, about 30% higher to equivalent standard products.

#### 7 - The Impact of mountain area location on the various Aspects

It is the most important element of the whole initiative.

#### **CHAPTER III - PROCESSING AND TRANSFORMATION**

#### 1 - The Organisational Aspects

The Mountain Pork Association (APM), unique stakeholder of the SAS (i.e. "Simplified Ltd company") Mountain Pork Development (PMD), has appointed that company to undertake the development, marketing and promotion of the products using the designation and the brand "Mountain Pork".

Thus PMD plays the role of a central purchasing agency - it permits the appropriate connection between farmers, farmers groups, and slaughter houses on one side and its customers, supermarkets and salted meat unit owners on the other side.

#### 2 - The Know-how and Quality Aspects

PMD employs a quality manager, a commercial manager and a trading administration staff.

#### CHAPTER IV - DELIVERY CHAIN

#### 3 – The relations to Private Firms and Organisations

The central purchasing agency keeps permanent relations with its customers from supermarkets.

#### 4 - The relations with Public Authorities

APM keeps permanent relations with the ministry of agriculture and the Auvergne region prefect (where the head office of APM is located) for the development of the CCP and the future national technical regulation for mountain pork.

#### 7 - The Marketing Strategy Aspects

The prior and decisive study has been achieved by ISARA.

Establishment of a common logo for all the products from the mountain pork commodity chain:



In-store promotion is carried out by the farmers themselves.

#### **Chapter V – Global Supply Chain Aspects**

#### 1 - The Organisational Aspects

All the relationships between APM, PMD, producers groups, the slaughter/ processing units, salted meat units and supermarkets are framed by contract.

APM is the central element of the initiative. Within APM, the pork farmers have a decisive role (as they have a voting majority). APM is organised into sub-groups (one for producers, one for producers groups, one for slaughter/ carving units, one for transformation units (especially salted meat units), and one for animal feeding suppliers. Each sub-group has one or more of its representative at the APM board of directors. Globally, pork producers have the majority. The information goes to the farmer either directly by APM or by regional inter-profession groups.

#### 2 - The Know-how Aspects

- Technical know-how drafting of specifications, reference of the CCP and organisation of the control schedule.
- Commercial and marketing know-how development of mountain pork sales in the national multiple retail market with a high selling price.
- Legal know-how organisation and management of the overall system.
- Financial know-how mobilisation of public financial support.
- External services + hiring for PMD.

#### 3 - The Organisation and management of the product quality

PMD hires a quality manager who is in charge of validation of the various tools from the partners of the commodity chain - slaughtering, carving, feed suppliers.

The quality manager is, of course, closely involved in the formulation of the new CCP specifications and its control schedule (external and internal control), together with the official control organisation registered and accredited according to EN 45011 standards.

Specifications of the CCP are based on work achieved over several years in consultation with farmers, feeding suppliers, technicians from the regional inter-professions, within the framework of the APM association. The specifications also benefit from testing with consumers and traders carried out at the beginning of the project.

#### 4 - The relations to Public Authorities

At the time of writing, APM is awaiting local authority approval for the use of the term "mountain" on their products. National technical regulation: the stage of national public consultation is ended since mid-September 2003, in connection with the Ministry of Agriculture (see annexe 2).

#### 5 - The important Public Policy Aspects

Regulation: Agricultural Guidelines Policy of 1999 + Mountain Decree in December 2000.

Support to quality mountain pork of quality - state aids addressed to farmers.

Public subventions for the launching of the initiative (organisation, prior studies, trading development, communication).

#### 6 - The Global strategy of the supply chain

To develop the mountain pork supply chain mainly located in the Central Massif to enable 1700 pork producers located in mountain areas to obtain a significant premium on the basis of strict specifications controlled by an independent body.

To centralize the commercial supply so as to permit as high a premium as possible.

To launch, on the national market, the project of fresh meat in consumer packs identified with the logo "mountain pork";

To set-up an effective communication of the specifications (e.g. approved by the public authorities; animals coming from high altitude farms, selected and regularly monitored; born and bred in our mountain areas; all the values of mountain people on your plate; a map of France with the identification of the various mountain massifs; ...) and in-store promotion in shops by the pork producers themselves.

In development - the market of mountain pork pieces certified for processing units (salt meat in particular), used in the production of mountain dry sausages and hams.

The prime objective of APM's initiative is to link 2 official French designations of Quality and Origin - the term "mountain" (which in French legislation testifies the geographical origin, but does not include qualitative criteria), and the official French quality designation (CCP), in order to connect qualitative values to the origin "mountain" – in other words a mountain product of certified quality.

#### CHAPTER VI - LABELLING

#### 1 - The Type of Label

The use of the term "Mountain" planned in the Agricultural Guideline Policy (national) of July 1999 and the implementation decree of the 15 December 2000.

+

Certification of Product Conformity (CCP) according to the agreement of the National Commission of the Labels and Certification (CNLC) of July 2003.

+

Private brand "mountain pork", owned by APM, registered to the French National Institute of the Industrial Propriety (INPI)

#### 2 - The reasons behind the Choice of Label / non-labelling.

The term "mountain" guarantees the mountain origin of the product (very fulfilling image in the minds of French consumers) and also the location in mountain areas of the different stages of production (See annexe 1).

The CCP guarantees the completion of the specifications certified by a control body which is independent and registered by the public authorities, and which verifies that a certain level of quality has been reached.

#### 3 - The Organisational Aspects

APM is the owner of the brand "Mountain Pork" and is the "quality group" for the CCP.

APM assigns the use of the brand to PMD, which is the only trader using it.

PMD has therefore made a regional requirement (as set out in the Mountain Decree) to be able to use the word "Mountain".

#### CHAPTER VII - SUCCESS/FAILURE/NEEDS

#### 1 - To what extent and how the product may be considered a success or failure

For the moment, the initiative cannot yet be considered as a success as it is still in formative stages. The market is quite receptive, but volumes sold are not yet sufficient to achieve the major and essential goal of the project - bringing added value to pork producers in mountain areas who are committed to the initiative.

At the present time, the Massif Central is the most committed French area but it also represents 80% of the national pork production in mountain areas. Another factor is that, for many years, some supply chains in Alps and Jura have been focusing on differentiation based on "local" approaches to quality.

#### 3 - To what extent and how the success/failure mostly stems from the different aspects

The success will come first from:

- the special way in which the central purchasing agency is organised;
- the human, technical and commercial competencies;
- a marketing strategy based on mountain territories + certified quality + high involvement of the actors at the various stage of the commodity chain;
- the strictness of the application by the public authorities of the Mountain Decree in all the supply chains

#### 4 - What are the needs, what is missing and what could be done (from the various aspects)

Need for a European recognition (and therefore French) by Public Authorities, of the interest and relevancy of a demanding statutory system, that couples mountain origin and quality, not only in a "local" and origin logic, as is already the case in the framework of the PDO and PGI regulations. Those 2 designations are linked to limited territories where links to the location is quite easily demonstrated, through a strong territorial identity. Thus, the European system should be developed in a more transversal logic, that is to say not linked to a local origin but to a large mountain identity, connected to quality controlled criteria.

Such a framework programme would be of benefit to the development of the MQP initiative. It would also overcome the competencies distortion caused by some countries, such as Spain, which do not have a strong national regulation on the use of the term "mountain" and which begins to develop its market in a somewhat disloyal manner.

## Annexes

Annexe 1: extraits Loi d'Orientation agricole du 9 juillet 1999

Annexe 2 : extrait du décret montagne du 15 décembre 2000

Annexe 3 : projet de règlement technique national porc de montagne

#### Annexe 1 : extraits Loi d'Orientation agricole du 9 juillet 1999

J.O n° 158 du 10 juillet 1999 page 10231

Lois

LOI no 99-574 du 9 juillet 1999 d'orientation agricole (1)

NOR: AGRX9800053L

#### **Extraits**

#### Article 76

Il est inséré, avant le chapitre Ier du titre IV du livre VI (nouveau) du code rural, un article L. 640-2 ainsi rédigé :

« Art. L. 640-2. - La qualité et l'origine des produits agricoles ou alimentaires peuvent donner lieu à la délivrance par l'autorité administrative de signes d'identification qui sont l'appellation d'origine contrôlée, le label, la certification de conformité, la certification du mode de production biologique et la dénomination "montagne".

[...]

#### Article 87

Les articles L. 644-2, L. 644-3 et L. 644-4 du code rural sont ainsi rédigés :

- « Art. L. 644-2. Pour les denrées alimentaires autres que les vins et pour les produits agricoles non alimentaires et non transformés, originaires de France, le terme "montagne" ne peut être utilisé que s'il a fait l'objet d'une autorisation administrative préalable.
- « Art. L. 644-3. Un décret en Conseil d'Etat fixe les conditions dans lesquelles est délivrée cette autorisation et précise, en tant que de besoin, les clauses que doivent contenir les cahiers des charges, notamment concernant les techniques de fabrication, le lieu de fabrication et la provenance des matières premières permettant l'utilisation du terme "montagne".
- « La provenance des matières premières ne peut être limitée aux seules zones de montagne françaises.
- « La dénomination "montagne" est accessible aux produits agricoles et agro-alimentaires produits et élaborés dans les zones de montagne telles que définies par le 3 de l'article 3 de la directive 75/268 du Conseil du 28 avril 1975.
- « Art. L. 644-4. Les dispositions des articles L. 644-2 et L. 644-3 ne s'appliquent pas aux produits bénéficiant d'une appellation d'origine contrôlée, d'une indication géographique protégée ou d'une attestation de spécificité et pour lesquels le terme "montagne" figure dans la dénomination enregistrée. »

#### Annexe 2 : extrait du décret montagne du 15 décembre 2000

J.O nº 292 du 17 décembre 2000 page 20108

#### Textes généraux

Ministère de l'agriculture et de la pêche

Décret no 2000-1231 du 15 décembre 2000 relatif à l'utilisation du terme « montagne »

NOR: AGRP0002001D

#### **Extrait**

Art. 1er. - Pour l'application aux produits originaires de France de la procédure d'autorisation prévue à l'article L. 644-2 du code rural et à l'article 4 du présent décret, l'aire géographique de toutes les opérations de production, d'élevage, d'engraissement, d'abattage et de préparation, de fabrication, d'affinage et de conditionnement des denrées alimentaires, autres que les vins, et des produits agricoles non alimentaires et non transformés utilisant le terme montagne, de même que la provenance des matières premières entrant dans l'alimentation des animaux ou dans la fabrication de ces denrées et produits, doit être située dans une zone de montagne en France répondant aux critères définis aux articles 3 et 4 de la loi du 9 janvier 1985 susvisée.

Art. 2. - Il est fait exception aux dispositions de l'article 1er dans les cas suivants :

10 L'obligation de provenance d'une zone de montagne ne s'applique pas aux matières premières qui, pour des raisons naturelles, ne sont pas produites dans une zone de montagne ;

20 Pour les matières premières provenant de zones de montagne, ces zones de montagne peuvent être situées hors de France ;

3o Lorsque les conditions techniques l'imposent et lorsqu'ils ne peuvent être produits en quantité suffisante, l'obligation de provenance d'une zone de montagne ne s'applique pas aux céréales et aux oléoprotéagineux utilisés pour l'alimentation des animaux ;

4o Lorsque les conditions techniques l'imposent, les lieux d'abattage des animaux peuvent ne pas être situés dans une zone de montagne ;

50 Lorsque les conditions techniques l'imposent, les lieux de conditionnement des denrées alimentaires ou des produits agricoles peuvent ne pas être situés dans une zone de montagne.

Art. 3. - Des règlements techniques nationaux peuvent, par produit ou par catégorie de produits, préciser les conditions d'application de l'article 2.

Chaque projet de règlement technique national fait l'objet d'une consultation publique. L'annonce de cette consultation est publiée au Journal officiel de la République française et au Bulletin officiel de la concurrence, de la consommation et de la répression des fraudes. L'avis indique les locaux dans lesquels le dossier peut être consulté. Les observations sont formulées par écrit et adressées au ministre de l'agriculture, dans le délai de deux mois suivant la date de publication de l'avis au Journal officiel.

Le règlement technique national est approuvé par arrêté conjoint du ministre de l'agriculture et du ministre chargé de la consommation.

Dans le délai d'un an à compter de la date de publication de l'arrêté portant approbation d'un règlement technique national, tout titulaire d'une autorisation d'utilisation du terme « montagne » est tenu de se mettre en conformité avec les prescriptions du règlement technique national. A défaut, son autorisation est réputée caduque à l'expiration du délai imparti par la mise en demeure de régulariser adressée par le préfet.

Art. 4. - Tout professionnel, personne physique ou morale, ou tout groupement de professionnels, quelle que soit sa forme juridique, qui participe à la production ou à la transformation des denrées alimentaires, autres que le vin, et à la fabrication des produits agricoles non alimentaires et non transformés, doit, s'il veut

utiliser le terme « montagne » pour ces denrées alimentaires ou produits agricoles originaires de France, en demander au préalable l'autorisation administrative prévue à l'article L. 644-2 du code rural.

L'utilisation du terme « montagne » pour les denrées alimentaires, autres que le vin, et pour les produits agricoles non alimentaires et non transformés, qui sont originaires d'un Etat membre de l'Union européenne, est dispensée de l'autorisation mentionnée au premier alinéa.

- Art. 5. La demande d'autorisation prévue à l'article 4 est adressée au préfet de région du lieu de la dernière transformation pour les denrées alimentaires ou du lieu de production pour les produits agricoles non alimentaires et non transformés.
- Art. 6. La demande d'autorisation est accompagnée d'un dossier comprenant :
- a) Le nom et le domicile du demandeur et, si le demandeur est une personne morale, son statut juridique et l'adresse de son siège social ;
- b) S'il y a lieu, le nom et l'adresse des professionnels intervenant dans les opérations de production, d'élevage, d'engraissement, d'abattage et de préparation, de fabrication, d'affinage et de conditionnement de la denrée alimentaire ou du produit agricole ;
- c) Un cahier des charges précisant :
- 10 La dénomination et la description de la denrée alimentaire ou du produit agricole ;
- 20 Les conditions d'obtention ou les techniques de fabrication de la denrée alimentaire ou du produit agricole ;
- 30 L'aire géographique de production des matières premières ;
- 4o Le lieu de fabrication et de conditionnement de la denrée alimentaire ;
- 5o Les méthodes et moyens de contrôle prévus pour garantir l'origine de montagne du produit ou de la denrée et le respect des règles mentionnées au 2o, ainsi que les enregistrements prévus pour permettre aux services administratifs de vérifier la bonne exécution des contrôles ;
- 60 S'il y a lieu, la référence du règlement technique national applicable.

#### Annexe 3 : projet de règlement technique national porc de montagne

décembre 2003

# Projet de règlement technique national pour les produits de montagne issus de la filière porcine, en application du décret n°2000-1231 du 15 décembre 2000 relatif à l'utilisation du terme « montagne »

#### Art. 1 - Produits concernés

Les présentes dispositions s'appliquent sans dérogation pour tous les produits issus de la filière porcine commercialisés avec le terme « montagne » selon les dispositions de l'article 1 du décret n°2000-1231 du 15 décembre 2000 :

#### Notamment,

- viande de porc,
- charcuteries\* à base de porc et salaisons\* à base de porc,
- plats élaborés\* à base de porc.
- \* Lorsque l'ensemble de la denrée alimentaire est identifié avec le terme « montagne » dans la dénomination de vente de la denrée, les autres matières premières d'origine agricole entrant dans la composition des charcuteries, des salaisons et des plats élaborés respectent les dispositions du décret n°2000-1231 du 15 décembre 2000, lorsque celles-ci sont applicables, et, le cas échéant, leurs règlements techniques nationaux respectifs.

Les dispositions de ce règlement technique national s'appliquent conformément aux dispositions générales précisées aux articles 2 et 3 du décret n° 2000-1231 du 15 décembre 2000.

#### Art. 2 - Zones de production des porcs

Les porcs (males et femelles) entrant dans l'élaboration des produits précisés à l'article 1 sont nés et élevés dans les zones de montagne définies à l'article L. 644-3 du code rural (siège de l'exploitation et site d'élevage).

#### Art. 3 - Alimentation des animaux

L'obligation de provenance d'une zone de montagne définie à l'article L. 644-3 du code rural ne s'applique pas aux céréales, protéagineux, oléagineux, oléoprotéagineux ainsi qu'à leurs dérivés utilisés pour l'alimentation des porcs entrant dans l'élaboration des produits précisés à l'article 1.

#### Art. 4 - Zones d'abattage et de découpe des porcs

Les porcs sont abattus dans un abattoir situé dans une zone de montagne telle que définie à l'article L. 644-3 du code rural.

Les ateliers de découpe primaire et secondaire doivent être situés dans une zone de montagne telle que définie à l'article L. 644-3 du code rural.

Dans le cas où la découpe secondaire est réalisée sur le lieu de commercialisation de détail, cette deuxième découpe peut ne pas être réalisée dans une zone de montagne.

#### Art. 5 - Zones de transformation et de conditionnement

Les lieux de transformation et de conditionnement des produits précisés à l'article 1 sont situés dans une zone de montagne telle que définie à l'article L. 644-3 du code rural.

Dans le cas où le conditionnement est réalisé sur le lieu de commercialisation de détail, celui-ci peut ne pas être situé dans une zone de montagne. Dans ce cas, les carcasses, demi carcasses, quartiers ou abats, transitent directement entre l'abattoir et le lieu de conditionnement.

Dans le cas des boucheries et des rayons traditionnels, une comptabilité matière (entrées-sorties) doit être tenue obligatoirement.

#### Art. 6 - Cas particulier des départements d'outre-mer (DOM)

Les porcs sont abattus dans un abattoir situé dans une zone de montagne telle que définie à l'article L. 644-3 du code rural. A titre exceptionnel, les porcs peuvent être abattus dans un abattoir situé dans une zone de piémont ou de plaine à condition que cet abattoir exerce une activité avérée d'abattage de porcs provenant de zones de montagne à la date de publication du décret n°2000-1231, soit au 17 décembre 2000, et qu'il n'y ait pas la possibilité technique de faire abattre les porcs concernés par la demande d'autorisation d'utilisation du terme « montagne » dans un abattoir situé en zone de montagne.

Les ateliers de découpe primaire et secondaire doivent être situés dans une zone de montagne telle que définie à l'article L. 644-3 du code rural. Dans le cas exceptionnel où l'abattage est réalisé en zone de piémont ou de plaine, la découpe peut être effectuée sur le même site que l'abattage à condition qu'il y ait continuité physique entre abattage et découpe et que l'atelier de découpe fonctionne à la date de publication du décret n°2000-1231, soit au 17 décembre 2000.

Les lieux de conditionnement des produits précisés à l'article 1 sont situés dans les zones de montagne définies à l'article L. 644-3 du code rural. Dans le cas exceptionnel où l'abattage et la découpe sont réalisés en zone de piémont ou de plaine, le conditionnement peut être effectué sur le même site à condition qu'il y ait continuité physique entre abattage, découpe et conditionnement et que l'atelier de conditionnement fonctionne à la date de publication du décret n°2000-1231, soit au 17 décembre 2000.

#### PROSCIUTTO (SAUSAGES FROM EVRITANIA)

<u>Area</u>: the Pindos mountain <u>Author</u>: Dimitris Katzaros

(Centre Méditerranéen de l'Environnement)

#### CHAPTER I - BASIC DATA ABOUT THE EMERGENCE OF THE PROJECT

In the Greek mountain areas, there are not many enterprises that process traditional sausages (and that use the leek as a natural preservative element). In the entire Evritania department (the study area) in fact, this is the only type of enterprise. Most importantly, in the entire Greek mountain area, there is no other enterprise that processes sausages derived from natural pig husbandry.

#### 1 - The Natural, Geographical, Historical and Economical environment

The production and standardization unit we examine is a vertical one; its operations include both the breeding of pigs and the production of smoked or regular sausages of the Evritania region. Prosciutto and salami are also produced in smaller quantities, still on an experimental basis.

Evritania is considered to be the most depopulated department of Greece (a population decrease of over 35% from 1970 to 1980, about 25% from 1980 to 1990 and 15% from 1990 to 2000. The area (Proussos village) where the enterprise is located has no more than 70 permanent inhabitants (the majority of whom are elderly and retired). Nowadays, tourism represents the activity of the future for the development of the area, sometimes to the detriment of the primary sector, because the investments of the development programs such as PIM, LEADER etc, and the existing general idea of national and local authorities for the development of mountain regions, favorise the tertiary sector. In the other hand, only a few efforts have been made for the development of the primary sector. The Proussos area, where the enterprise is located, depends almost exclusively on tourism, with about 500,000 visitors each year to the Notre-Dame de Proussos, an icon said to be miraculous.

Over the last 15 years, we have noticed dramatic development in tourism, considered to be the basis of the economic revival of the Evritania area, thanks to community and national initiative programs (PIM, LEADER, etc).

The entire Evritania department such as the Epire region (Pindos mountain) is officially considered by the Greek government to be a highly disadvantaged mountain area and is given priority for the creation of development projects.

#### 2 - The Conditions (Opportunities / Threats) that caused the local players to take action

The first difficulties in the operation of the unit began mainly due to the lack of local raw material allocation (pig meat) for the production of sausages. The main reason behind this was that the primary sector had been facing a crisis since the local agricultural population started to leave the area of Evritania. The result was a significant increase in the price of the final product. The problem was solved later on (1997) with the introduction of a pig farm in the unit.

The unit and the pig farm is founded by a Greek Professor of Industrial Chemistry in the University of Bologna (Italy) and an ex ambassador of Greece to Italy. The professor decided to settle here first of all because he is a native of this region and secondly because he had the opportunity to obtain subsidies from European and national funds. We should also consider that, ideologically, he is strongly in favor of the development of mountain regions, which can also be proved by his involvement in various related actions (e.g. political involvement in the promotion of local development – on 12th October 2003, the development minister came to visit Proussos thanks to him). He also had various reasons other than that of local development, such as the favorable characteristics of the area for that production, and, on a second level,

consumer demand for the product. It has to be noticed that at present, the activity is not profitable and the Professor has to finance it from his own pocket (using a considerable amount of his pension).

#### 3 - The Human dynamics and/or categories of actors that provided the impetus

We should note the sentimental value of the owner for the region chosen<sup>1</sup>. He is a Professor of Industrial Chemistry in the University of Bologna (Italy) and an ex ambassador of Greece to Italy, and his homeland is Proussos-Evritania.

The unit started due to his own initiative and with the assistance of another person who was trained in Italy (with a scholarship) in delicatessen production and standardization in 1997, and who still works in the unit. The creation initiative started in 1989 and was subsidized to a total of 75% by the EAGGF 355 program, leaving 25% to be financed through own funds.

#### 4 - The impact of the mountain location on the launching of the project

This production and breeding unit was founded in the mountain region of Evritania, and more specifically in the Proussos Municipality since that area has all of the necessary distinctive advantages for such an operation: plenty of space for free outdoor grazing of the pigs, plenty of acorns, which are their main dietary source, good climatic conditions, and plenty of tested microbe-free water.

In general, the business created new jobs in the area, and 4 families live from it. The background of the owner and his brother (a mechanic working in Greece) cover the need for scientific specialization in the unit. We would also stress that increased tourist development in recent years has boosted the development of initial production.

#### CHAPTER I I - BASIC PRODUCTION (RAW MATERIEL)

#### 1 - Organisational aspects

The basic operation of the unit consists in 2 major departments: the free-range pig farm and the processing unit. Each case will be examined separately below.

#### 1. The free-range pig farm.

It is situated in an area with an acreage of 3.5ha, close to the processing unit. This area does not belong to the owner, but it was given to him by friends and relatives. A specific breed is used that is suitable for the climatic conditions and outdoor husbandry. It is a crossbreed of HAMPSHIRE< LANDRAS and BIG WHITE. Some 80 pigs were given to the business by the livestock center for agricultural research in Komotini (Northern Greece), a division of the National Agricultural Research Foundation (N.AG.RE.F.). They are freely grazed<sup>2</sup> and the main goal of their introduction was the creation of a quality product (sausage) from freerange animals.

Together with the farm owner, the researchers of the aforementioned center made some genetic improvements to the pigs, in order for the animals to adapt easily to the rough climatic conditions of the area, especially during winter. The minimization of fat content in the meat was another critical issue. The outcome of this research was a breed crossing a Hampshire boar with Landras and Large White. There are hardly any local breeds in the area. The products owe their quality and taste to outdoor husbandry and the fact that in such an area, with such a breed and type of production, there is a much lower fact content, thus facilitating the work on the meat.

The basic feed of the animals is acorn, which is plentiful in the surrounding area, and other trace elements, products of natural feeds.

The relationship of the unit with other private and public agents is very good. There is ongoing collaboration with the National Agricultural Research Foundation and the Komotini center and with the Evritania Forestry Authorities for fencing and sewage management issues. A local veterinarian also works with the farm.

#### 2. The processing unit.

The processing and standardization unit has been set up in a way that ensures environmental protection according to national and European regulations.

There is a specific entrance for the introduction of raw meat, which comes from a slaughter installation 35 kilometers away in stainless steel containers at a temperature of 4-6°Celsius. It is then placed in a refrigeration installation within the unit at a temperature of 2° Celsius.

The meat is processed on PVC tables and ground in stainless steel machinery. It is then placed in special warehouses at a controlled temperature and in humidity chambers where it is dried under an electrical system. All of the processed meat is electronically controlled by a personal computer.

#### 2 - Know-how and quality aspects

Besides meat, the additives used are natural intestine, leek, oregano, and red pepper. Leek is necessary for the production because it provides the sausage with the distinctive smell and taste of mountain products and it also acts as a preservative. Before cutting and grinding the meat, the leeks are carefully cleaned in a special installation inside the unit. The water used comes from natural local sources and is microbe-free, as mentioned above. Oregano and pepper are used in small quantities in order to give a special, spicy taste. Apart from the pepper, all of the natural products come from nearby areas.

The know-how for the sausage production comes from traditional recipes from the Evritania region (adapted for mechanical and electronic processing). Care is taken to ensure that all of the necessary food production meets hygiene rules and regulations.

There is also a product sampling process which takes place before final consumption. The samples are tested (for their compliance with hygiene rules) by the National Agricultural Research Foundation authorities. Those controls are recognized by the public authorities.

#### 3 - Relations with public authorities

As already mentioned, there is a very good relationship between the unit and other local and national agencies. Such relationships encourage efforts towards product development and marketing.

No real development advice is given by the local agencies, which focus more on animal health through the veterinary services. Within the framework of LEADER +, for example, the enterprise asked for funding for the creation of underground tunnels to allow the natural maturation of the products. This investment was under the sole initiative of the owner, who did not receive any technical advice.

#### 4 - Public policy aspects

Not mentioned.

The agricultural activity does not benefit from direct or even indirect aid. Nevertheless, the enterprise benefits indirectly from road improvements from the region of the Capital (Karpenissi) to Proussos (35km) due to increasing tourism.

#### 5 - Quality control aspects

The only controls are carried out on the initiative and through the good will of the owner, who sends his production samples to the NAGREF laboratories within the framework of collaboration between the enterprise and NAGREF<sup>1</sup>. There are no official controls.

#### CHAPTER III – PROCESSING AND TRANSFORMATION

#### 1.- Organisationnel aspects

There are 2 categories of village sausages processed and produced in the unit; the regular and the smoked ones. We will examine each one separately.

- 1. The regular village sausages.
- 2. The smoked village sausages.

The Word "Village" was chosen because in Greece, the consumer usually likes to buy food identified by the word "villager" (e.g. "villager bread, villager cheeses"). This presents the image of high quality, safe products.

#### 2 - Know-how and quality aspects

#### 1. For the regular village sausages

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<sup>&</sup>lt;sup>1</sup> This collaboration began 5 years ago in an effort to create a new and unique enterprise with NAGREF. This effort has failed.

They produced using the method already mentioned: grinding of meat with leek and the addition of salt, oregano, and red pepper. When the mixture is placed inside the intestines, the drying process begins. It is placed in special warehouses and dried in special chambers within the unit, each with a capacity of 400 kilos. The drying process takes 3-4 hours and it is controlled by 3 electronic curtains that ensure speed and uniformity. Each sausage is about 1 meter long and weighs about 1 kilo. Once a tag has been attached, they are ready for sale. The tag contains information on name, place of origin, and ingredients.

#### 2. For the smoked village sausages

Their production method does not differ from the regular one besides the fact that at one stage of the process, they are treated with distilled smoke. Smoking is done in a tank where sawdust is burned. The sawdust is made from 60% olive tree and oak wood, 30% poplin wood, and 10% cedar wood, supplied by local wood processing companies. Once the smoke is created, it is pumped and forced through a pipe. It contains a coil in which water at a temperature of 10-12° is circulating. At that point, the smoke is cooled down, leaving behind any harmful contents. In addition to this, a filter cleans up the tar residue. After this phase, the smoke is applied to the clean, cold sausages, in order to complete the two-day process.

The whole procedure is nothing more than the traditional one, adapted to modern techniques and regulations. Traditionally, sausages were smoked inside rooms with a fireplace. Of course, the procedure was much slower because the smoke circulated more slowly inside the room.

#### 3 - Relations with public authorities

All collaboration between the business and private or national agencies in standardization issues is excellent and has been encouraging for future operations. The enterprise established a good relationship with the local agencies of the Ministry of Agriculture during a visit of veterinary agents to the herds.

#### 5 - Quality control aspects

Products are standardized according to national and European hygiene rules. Sample testing is also carried out by the National Agricultural Research Foundation laboratories. The company has already started the procedure to verify the quality of its product and procedures, which will be completed in the following year.

#### 6 - Strategy aspects

As far as strategic planning in the field of production and standardization for the future is concerned, the firm has signed a draft agreement with Metsovo (another mountain village with a lot of livestock farming and also well known for its cheese) in the prefecture of Ioannina. The deal is for the production and standardization of sausages to use raw material meat and ingredients from Metsovo. The objective of this collaboration is to increase the use of the transformation process of the enterprise (traditional process).

#### 7 - The impact of the mountain area location on the various aspects

We should also note that since there is a farm within the business, all added value remains in the plant. However, it is lowered by the transportation cost of the animals and the increased length of time needed by pigs to reach their slaughter weight, due to their free-range grazing. For example, intensively produced pigs have a daily average weight gain of 600-800 grams, whereas free-range pigs will barely gain 400 grams over the same period.

#### CHAPTER IV - DELIVERY CHAIN

#### 1 - The organizational aspects

Sales of the product have been organized in three levels: direct sales in the plant, local-regional level inside and outside the village and national level.

• Direct sales refer to people coming to the premises of the company in order to buy its products. There has been a significant increase of sales at that level over recent years. Two years ago, these sales represented only10% of the total; they now represent 30%. This is related to the fact that the

company has an agreement with two other companies in the tourism sector (TREKKING HELLAS and COUNTRY CLUB), which offer outdoor activities in Evritania. The agreement includes a visit to the plant for people participating in the outdoor activities. They are welcome to buy any products if they wish.

- Local sales are similar to national ones. They are organized through agreements between the company and local customers such as convenience stores, local supermarkets and restaurants. Every Monday, the company receives its orders from customers by phone. Those orders are delivered in a privately owned refrigerator truck which has a capacity of 1 ton. At this level, there is no signed contract between the two parties, just an oral agreement. The company is also working with the Prousos Monastery for the creation of a sales point there that will sell a variety of local products. The Monastery's attraction is the miracle picture of Panagia Prousiotissa, which brings about 500,000 people each year. The collaboration agreement entails providing the Monastery some acres of nearby land for a 20-year period. The company will pay a rent, and it will build the store at its own expense.
- At national level, the product is sold by a well-known supermarket chain, with delicatessen departments and 30 sales points all over the country. In this case, there is a signed contract between the two parties that states only the selling price, but not the quantity, which varies according to consumption needs. Delivery is on a weekly basis.

#### 2 - Know-how aspects

Generally, the consumption of sausages increases during the September – March period, and there is a decrease afterwards. There is almost no consumption during August due to the excessive heat. The company also owns a wholesale store in central Athens, which is still in a trial/test phase.

#### 3. Relations with private firms and organizations and 4. Relations with public authorities

As already mentioned elsewhere, the company has excellent relations with all of the public and private agencies. However, there are problems with the revenue service because the company is legally registered in Athens, where employees do not fully understand (as the company claims) the problems that the company faces due to its geographical position (mountainous and remote areas). They then do not accept greater flexibility of deadlines for tax payments.

#### 7 - Marketing strategy aspects

Future strategies of the company in the sales area refer to its will for a European and international focus, once quality standards and trademarks are established (the product does not yet meet European quality standards).

At the moment, the promotion of the product is mainly by word of mouth.

#### 8 - The impact of the mountain area location on the various aspects

We should also mention that as a result of the mountainous position of the company, climatic conditions and bad roads are causing delivery problems.

## CHAPTER V- GLOBAL SUPPLY CHAIN ASPECTS

We cannot really undertake a lengthy analysis in this chapter because the product lacks an international standards certificate, which would further assist its promotion abroad.

#### 1 - Organisational aspects

Nevertheless, such validation is in progress and some work has been done for international trade. The owner of the company is a professor in the University of Bologna (Italy) and he has made some efforts towards marketing the product at the Tambourini delicatessen market in Northern Italy.

#### 6 - The global strategy of the supply chain

- 1/ Tradition-based transformation which is linked to extensive farming. If one of those 2 parameters is missing, we cannot have a quality product.
- 2/ Good promotion and a positive image of mountain production and products.
- 3/ With a quality product, new consumers will be reached and this will be a tool against the competition.

#### 7 - The impact of the mountain area location on the various aspects

The "official" slaughterhouses are far from the farm, and this causes difficulties in terms of costs and traffic during the winter when there is snow in the area and it is the high season for sales. That is why the enterprise would like to have slaughterhouses close to the farm.

## CHAPTER VI - LABELLING

## 1 - The type of label

As stated by the company, the trademark and logo shown on its package include:

- A picture of the mountainous area of production.
- A quality description
- A reference to the origin of the raw meat (pigs).

The trademark of the company has been sent to the appropriate agencies along with the operating permission and the original formation agreement, but it has not yet been standardized/registered at national or international level.

#### 2 - The reasons behind the Choice of label/non labeling

The above choice of label was made for two particular reasons:

- Because it recognizes the mountain region which is very important for the promotion of this particular type of product. (traditional know-how in transformation).
- Because it recognizes the product itself as being produced from pure pig meat.

#### 3 - Organisational aspects

The company has also applied to the Ministry of Agriculture for an HACCP certificate. The first evaluation took place after four months, but the certificate was not provided due to the lack of external fencing in the plant. The fence is necessary to avoid the entrance of animals and especially wild animals.<sup>2</sup> The company suggested that the fencing cost be included in the LEADER+ program.

The company is also aiming to introduce electronic registration of all the production and standardization processes. The details will be sent, upon request, to AGROCERT for self-certification purposes during the HACCP analysis.

The company's orientation is towards ISO certification in order for its products to be characterized as organic. This will follow the HACCP procedures.

## 5 - Relations with public authorities

Generally speaking, as far as this chapter is concerned, the relations of the company with public and private product certification agencies are excellent and promising. The only trouble for the company is the fact that all of the authorities are situated in Athens. Such distance between the certification points and the certification authorities typically results in insufficient control over procedures.

<sup>&</sup>lt;sup>2</sup> We remind you that the plant is situated a few kilometers outside the Prousos village, inside the forest and the danger of small wild animals entering the premises is high.

#### 8 - The impact of the mountain area location on the various aspects

The company also feels that its mountain-associated trademark has a positive effect on sales, because it combines the idea of a natural environment with the purity of the product produced.

## CHAPTER VII - SUCCESS / FAILURE / NEEDS

#### 1 - To what extent and how can the product may be considered a success or a failure?

As concluded from previous chapters, both the product and the company are a successful example of "quality mountain products". The company is a pioneer in its field and is almost alone in its struggle against the continuous economic and social crisis of a mountain village with only 70 inhabitants. Its contribution to local life , and the dynamics it has developed have made it a "resistance example against the marginalization of mountain areas".

The settlement of this enterprise in such a disadvantaged area creates local employment and develops the primary sector (farming) that is decreasing but also the secondary sector (transformation) that is almost inexistent in the department. Finally, it also promotes tourism (with local sales of traditional products). This activity widely contributes to sustainable development in the area and therefore this enterprise is seen as a "resistant factor against the marginalization of mountain areas".

#### 2 - To what extent and how the success/failure mostly stems from the various chapters?

We can also state that, with its increasing sales and good potential in the delicatessen industry<sup>3</sup>, the company is likely to have a steady financial future much needed by the region<sup>4</sup>. It has also offered and continues to offer new jobs for the local population, resulting in more people remaining in their place of birth.

The good commercial organization, the innovative processing and transformation and the positive relations with the public authorities and private firms which the company keeps will guarantee a positive development in production in the near future.

At this point, we should add that the company has some important competitors. The delicatessen market in Greece is monopolized by 3-4 large industries that control the vast majority of the market. So producing a quality product of mountain origin is the only option that the company has.

#### 3 - To what extent and how the success/failure mostly stems from the various aspects?

Its contribution also lies in the rescue, preservation and fostering of cultural heritage as far as taste is concerned, since the product is inspired by traditional recipes.

The unit is a vertical one, so all of the added value remains on the farm. As a vertical unit, it also stands a good chance of obtaining an organic product certificate, which is one of its main targets.

On the other hand, the company is not yet certified according to HACCP, and if that is not achieved shortly, it will create many problems for product sales.

#### 4. What are the needs, what is missing and what could be done?

The company has also other needs, the fulfillment of which is necessary for future operations. According to the hierarchical needs stated by the company, these are:

The expansion of primary production (outdoor controlled pig farming) with a focus on the production
of organically certified meat as raw material in the first phase, in adequate quantities to supply both
the regional and national market.

<sup>&</sup>lt;sup>2</sup> We should not forget that besides the product already examined (sausage), the company is also producing prosciutto and salami on a trial basis.

<sup>&</sup>lt;sup>3</sup>At that point we should not forget the sentimental factor which plays the most important role in the mountain regions: the remaining residents can not believe that a restart is possible due to the continuous crisis of the past years.

- The acquisition of more company-owned transport and special vehicles for the delivery of the products to the big urban centers (Athens-Thessaloniki). This need is mainly due to the lack of an organized transport system in the region, and due to the special delivery needs of the products.
- The creation of an exhibition and sales network that will contribute to local sales, and provide jobs for the local workforce. This need arises from the fact that there has been a significant increase in winter tourism in the area, a season in which the major product consumption targets are met.
- A more effective advertising campaign, especially in the national media. This need comes from the
  fact that the centers of production are not widely known to the public and the large urban centers.
  At this point, we should note that such an advertisement campaign would not be cost-effective in
  the light of the company's budget.

Finally, the company wishes to express the hope that it will achieve special European certification for mountain products in the future. This can be implemented by EUROMONTANA for the products discussed in the research.

## ORGANIC APPLES AND OLD ORGANIC APPLES

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## Note for readers

Please note the following specific abbreviations used in the text:

GV: Gross Value

OAFQ: Office for Agro-food Quality

OF: Organic Farmers
PO: Producers Organisations
PAT: Autonomous Province of Trento

## CHAPTER I - BASIC DATA ABOUT THE EMERGENCE OF THE PROJECT

#### 1 - The natural, geographical, historical and economical environment

Because of its particular natural conditions, the study area (Provincia di Trento – PAT) is adequate for production of apples. A favourable combination of climate, altitude and soil gives to apples particular flavours (wide range of temperature due to the altitude).

12.000 hectares of agricultural land is used for apple cultivation and mainly by Integrated Farming System. About 450.000 tons/year of apples are produced in PAT; which represent 20% of the total in Italy and 5-6% in EU.

Moreover apples from PAT have obtained in 2003 the protection (at national level) of PDO under the denomination "Mela della Val di Non".

One has to remember also that:

- a) 7 co-operatives of the Consortium MELINDA and a small family farm "Azienda Agricola Bertamini Gianfranco" obtained ISO 9001:2000 certification;
- b) the co-operative "Società Ortofrutticola Rotaliana" member of the Consortium "LA TRENTINA" obtained a product certification under the EUREPGAP Protocol "Fresh Fruits and Vegetables";
- c) the co-operative "COVAL" member of the Consortium "LA TRENTINA" obtained also the ISO 14001 certification.

The individual marks "MELINDA" and "LA TRENTINA" are consortia national leaders in cultivating and trading apples.

#### 2 - The conditions (opportunities/threats) that caused the local players to take action

Personal-ideology usually motivates farmers to stay independent and to take an opportunity to target a particular group of local consumers aiming to eat food responding to moral and environmental requirements.

When organic apples' pioneers started to use EU's rules, the main aim was to give the assurance to consumers/customers of the "true" organic nature of the products thanks to the control by a third party and to compensate for the lack of information (caused by many unclear labels and related specification) with the supply of guarantees trusted by them.

Anyway, it is possible to distinguish three main categories of OA's producers:

a) traditional: with agricultural family run tradition in areas not really adequate which are looking for subsidies that are seen as the only way to survive;

- b) pragmatic: more dynamic and less marginal than those at letter a), they consider OA¹ as an opportunity to re-qualify their activity with healthier products for consumers and for the environment; they perceive the chance to improve their income and are seeking an economic viability of their products; subsidies are important mainly to cover the costs of control/certification;
- c) idealist: they have not usually agricultural familiar tradition and have a high level of education; ethical and life style motivation influence their approach to organic products; social sustainability and "political view" of their role is more important.

In all cases, EU funds and programmes (i.e. Leader, Interreg) have been decisive for their implementation. Nowadays the so called Territorial Pacts in some areas are offering new opportunities.

As to old organic apples, ideological reasons are still valid; there is to add motivation linked to familiar tradition.

## 3 - The human dynamic and/or categories of actors that provided the impetus

In general terms, Organic Farming began in PAT at the beginning of the 80's promoted by the Associazione Terra Vivente (Association of Living Earth) before the Reg. (EEC) 2092/91.

Within the individual farms, the idea to cultivate organic apples was developed within the family that usually owned apple orchards and/or grew apples. Family's friends and personal contacts with the German-speaking communities (South Tyrol, Austria and Germany) contributed.

After the introduction of Reg. (EEC) 2092/91, the Public Administration began to play an important role to promote Organic Farming (see Chapter 2).

It has to be mentioned that the contribution of the local Association of Organic Farmers ATABIO (see Chapter 2) represents more than 80% of organic producers.

Indirectly, there was and there is still a strong support to organic farming and in these last years this support also came from environmental organisations, e.g. WWF, and other non governmental organisations for the old organic apples.

In some areas the contribution of mayors of municipalities was decisive in searching for funds.

#### 4 - The impact of the location in a mountain area on the launching of the product

Some of them have been mentioned in Part. 1

In some cases the favourable logistic location - e.g. good provincial roads network - has been crucial to market directly organic products.

Anyway, it has to be remembered that the massive adhesion to Integrated Farming of apple producers and the high prices of the Golden Delicious (in PAT there is a kind of a monoculture) was an hidden factor for development of Organic Farming and, of course, of organic apples' production.

The recent crisis of the sector and of the Golden Delicious' sector has changed perspectives, so that also the most important consortia – traditionally involved in Integrated Farming - are trying to differentiate their portfolio with organic apples.

# CHAPTER II - BASIC PRODUCTION (RAW MATERIAL)

#### 1 – the organisational aspects

Quite all organic farmers' (producers from AQA, too) are associated to ATABIO (Associazione Trentina per l'Agricoltura Biologica-dinamica/Association of Trentino for Organic and Biodynamic Agriculture; <a href="http://www.atabio.it/">http://www.atabio.it/</a>).

ATABIO:		
1		_

- ✓ promotes the development of organic agriculture in PAT;
- ✓ represents organic farmers at institutional levels (it has contributed to new Provincial Law on organic agriculture n. 4/2003 and particularly to obtain founds for certification of organic producers and give priority to organic agriculture for other incentives);
- √ helps organic farmers to deal with administrative matters;
- ✓ elaborates marketing/business plans.

ATABIO is linked to other regional and national Organic Farmers Associations (OFA). OFA are associated to A.M.A.B. (Associazione Mediterranea Agricoltura Biologica - Mediterranean Association for Organic Farming; http://www.amab.it/regionali.html) which is a member of F.I.A.O. (Federazione Italiana Agricoltura Organica - Italian Federation of Organic and Biodinamic Agriculture); both at their turn are associated to I.F.O.A.M. (International Federation of Organic Agriculture Movements.). ATABIO develops exchanges of information with APOT (Associazione dei Produttori Ortofrutticoli Trentini - Association of Vegetables and Fruits from PAT) that has been in Italy the first Association of Vegetables and Fruits Producers' Organisations (http://www.apot.it/Apot/cosa.htm). APOT is member of ASSOMELA (http://www.assomela.it/tuttiasso.htm) that groups the most important Associations of Apple POs (Producers' Organisations) and is accommodated in the Istituto Agrario di San Michele all'Adige (see Par. 3). Organic farmers can be also members of the most important national Farmers' Union.

#### 2 - The know-how and quality aspects

The Gross Value (GV) of Organic Agriculture sum up to 8-10% of the total GV in PAT.

90 are the farms (mainly small-sized family farms) producing Organic Apples (OA) according to Reg. (EC) 2092/1991; the land used is about 250 hectares.

The surface of Old/traditional Organic Apples is not known. These varieties are less productive than the most currently used (i.e. Golden Delicious), more rustic and resistant to main pests; their fruits are crispier and tastier; in many cases they are juicy and adapt to be processed as apple-juice.

Organic apples farms are fragmented in different and scattered plots (production units). Anyway most of organic apples' producers are full-time farmers. Some farms are grouped in co-operatives that can be aggregated in consortia and are recognised according to Reg. (EC) 2200/96 as Organisations of Producers (see web site of APOT). Two of them are engaged to develop the segment of organic apples: "MELINDA" and "LA TRENTINA" (see Par. 1 Chapter 1). The former is converting 50 hectares of Integrated Production apples in organic apples and the co-operative SAV - member of the latter - sells already 10% of its total amount as organic farmers with the label "La casa del picchio verde - The House of Green Woodpecker".

Production method is closely driven by Reg. (EEC) 2092/91. Physical and further commercial quality requirements for apples are specified by Reg. (EEC) 920/89 and its successive modification.

Organic farmers "pioneer" farmers, at the beginning of their activity, had no formal knowledge on production. Education level of "post-beginners" is higher, but the knowledge is still developed mainly through "learning by doing". The contribution and efforts of public institutions, as OAFQ and IASMA (see Par. 3), are not yet clearly perceived.

Fruits are stored in fridge cells owned by the farmers or by co-operatives located in PAT.

## 3 - The relations with public authorities and public policy aspects

One should remember that PAT, in the field of agriculture, owns primary competence. It means that PAT can adopt legislative acts as long as it is not in opposition to the general legislation issued by EC and national central government (Parliament).

PAT issued in 1991 the Provincial Law 13/1991 aiming at disciplining organic agriculture according to Reg. (EEC) 2092/91. It provided incentives for the adoption and the use of collective marks. This law has been repealed by the Provincial Law 4/2003; its art. 47 provides (only for exclusive organic farmers) supports:

- a) to purchase, modernise and increase collective equipment (max 40%),
- b) to buy harvesting machines (max 50%),
- c) to cover charges for the implementation of organic farming methods (only for five years: 1st year 100%, 2nd year 80%, 3rd year 60%, 4th year 40%, 5th year 20%),
- d) to cover costs linked to control/certification (100%).

As to organic agriculture, it should be remembered that:

- 1) producers should notify their activity on Organic Production to the Office of Agro-Food Quality (OAFQ) of the PAT (importers have to apply to the Office of Organic Agriculture of the Ministry of Agriculture (MA)) and sign the commitment to comply with the requirements of Reg. (EEC) 2092/91;
- 2) producers are audited by a Control/Certification Body (CB) implementing EN 45011 (accreditation is not mandatory) -. which, according to the Provincial Law 4/2003, should be located in PAT);
- 3) when accepted, producers are included in the Register of Organic Producers (National Importers) by OAFQ (it has to transmit yearly the issues and data of the register; MA shall do the same with European Commission);
- 4) yearly, producers have to communicate to Certification Body the Annual Production Programme (PAP) and report the activities carried out;
- 5) Certification Body yearly audits (once or more times) producers (Non Conformities shall be advised to MA; controls on activity of CBs is carried out by the OAFQ; the traced "non compliant" bulk can not use the label).

Of course, organic apples' farmers can also have access to other subventions for different purposes according to provincial legislation (see Q1 axis 3 case 1).

As to administrative matters, the <u>Ufficio per la Qualità delle Produzioni Agroalimentari</u> (Office of Agro-Food Quality-OAFQ) of the PAT (<u>www.provincia.tn.it</u>) alse has to be mentioned. It controls the activities of the Control Bodies assuring their homogeneous auditing behaviour. It has contributed to new Provincial Law on organic agriculture n. 4/2003 that obliges Control Bodies to have an effective location in PAT. It controls also the use of funds delivered by PAT to organic farmers. OAFQ provides subventions by application of Regulation (EEC) 2078/1992 and is having funds through the Rural Development Plan (measure 6.1: Introduction or maintenance of organic agriculture methods) according to Regulation (EC) 1257/1999 and EAGGF funds (European Agricultural Guidance and Guarantee Funds). Moreover, OAFQ published in 1997 and then in 2001 the following publication (http://www.trentinoagricoltura.it/risultati\_ricerca.asp): Agricoltura Biologica-Elementi Informativi (Organic Agriculture-Basic Information).

The <u>Istituto Agrario of San Michele all'Adige</u> (IASMA) (<u>www.ismaa.it</u>) contributes to organic farming through:

- a) education of young students,
- b) research on protection of fruits against different phyto-pathologies (in 2003 an Excellence Research Centre named "Safe Crop" has been funded. It participated in a research and Development project on protection of plants with low impact on the environment and compatible also with organic farming. Six research institutions participated in this network: INRA-France, BBA-Germany, University of Arlnap-Sweden, Polytechnic of Zurich-Switzerland, Volcani Centre-Israel and IASMA-Italy).
- c) training of farmers (quality and certification are yearly topics of the courses) using also the European Social Fund).

The technical assistance can be provided by its specific Centre (<a href="http://www.ismaa.it/CentroAssTec.htm">http://www.ismaa.it/CentroAssTec.htm</a>). Laboratory services (<a href="http://www.ismaa.it/Organico\_LAR.htm">http://www.ismaa.it/Organico\_LAR.htm</a>) can be also purchased by farmers.

## 4 - The quality control aspects

The production is controlled by third party organisation – ICEA – that is recognised by the Ministry of Agriculture and by the National Accreditation Body (SINCERT); it is the most important Control/Certification Body in Italy and is a member of A.M.A.B. and I.F.O.A.M..

OAFQ is the Control Authority which audits the activities of the Control/Certification Bodies in order to assure their homogeneous behaviour. The <u>Agenzia per la Garanzia della Qualità in Agricoltura</u> (AQA), public Certification Body (<a href="https://www.ismaa.it/aqa/">www.ismaa.it/aqa/</a>) is not involved in Control/Certification of organic products, but contributed to the control activity of OAFQ through the writing of a Quality Management Handbook.

## 5 - The strategy aspects

Old organic apples' range of products is quite varied and is comprised of: Reinette Canada and old/traditional cultivars (Bella di Boskoop, Calvilla Bianca d'Inverno, Reinette Ananas, Reinette Champagne, Gravenstein and Reinette Ananas, Pearmein Dorata, Ruggine Dorata, Belfiore di Ronzone, Sant'Anna). In general terms, there isno identified demand for OOAs and it is quite difficult to give a right dimension to this segment of market.

OOAs allows to exploit also marginal areas not suited for more demanding modern cultivars. The gradual ripening of the fruits during the year (already from the third decade of June, e.g. Flabewy) is a good

motivation to distribute the family activity. A demand for new apple varieties also has to be noticed. Besides old apples are naturally adequate for organic agriculture because of their rusticity and resistance to pests without the use of any chemicals.

Moreover, the activity of the Associazione Spadona has to be noticed. It has been dealing with the recovering and the economic viability of old apples cultivars in PAT since 1997 and - when existing - of old apple trees (called "patriarchs"), in order to preserve particular typology of mountain landscapes and to create alternative sources of income, e.g. trough innovative processed products (distillates, traditional cakes), didactic activity along the "path of patriarchs", ...).

## 6 - The impact of mountain area location on the various aspects

They have been mentioned in Par. 1 and Par. 4 of Chapter 1.

The climate – mainly the high range of temperature between day and night during the spring – contributes to produce fruits that are slightly sour and with more vitamins.

Some farmers are involved in didactic activities that young students and families of urban areas join, about their work and the protection of the territory and marginal areas. This facilitates direct selling and other contributions of citizens coming also from out of PAT (it is to be mentioned that PAT is one of the most important tourist place in Italy).

Old organic apples' cultivation allows the preservation of some particular landscapes (i.e. pastures with rare apples and old apple trees typical of the altitude between 800-1000 m.s.l.) and provides opportunities for a particular niche for cultural and gastronomic tourism. Thanks to the natural low use of chemicals, environmental conditions are highly taken into account.

## 7 - production aspects and links to the territory

From an environmental point of view, all production aspects are linked to the organic methods and the use of traditional cultivars is helping and maintaining the biodiversity.

From an economical – in financial terms - point of view, their interest is totally marginal.

From a social point of view, these cultivars are important because they make people aware of the importance to maintain plants that can disappear if not cultivated, even though they have not explicit economic interest.

## CHAPTER III - PROCESSING AND TRANSFORMATION

Old organic apples are usually marketed as fresh. When processed, they can be used to blend apple juice; they are seldom processed as pure juice.

They are having success as mono-variety and blend of old organic apples distillates, in confectionery linked to traditional cakes, e.g. the apple Strudel and in producing exclusive type of mono-variety and blend (also with old organic apples' distillate) ciders.

## CHAPTER IV - DELIVERY CHAIN

## 1 – The organisational aspects

Contacts with consumers/customers are managed according to the following three approaches:

- a) through the involvement of the farmers (individual selling/direct sale) that contact personally customers,
- b) through co-operatives (see Par. 2 of Chapter 2);
- c) through consortia (Apple Ops; see Par. 2 of Chapter 2.).

ATABIO is usually asked by farmers and cooperatives (by a) and b)) to find new customers and asked by customers to find OAs from PAT. As to c), customers are captured by marketing offices of the consortium. Data on Old Organic Apples market are non-existent. One can compare its situation with what happened to Organic Apples at the beginning of the 80's: new products, fragmented and de-located supply, high prices

Organic Apples at the beginning of the 80's: new products, fragmented and de-located supply, high prices with low penetration capacity, extremely specific sale-channels as organic shops in franchising, low level of

promotion to compensate for the lack of information. In general terms, there is an heavy asymmetry in contractual power among the actors of the delivery chain.

## 2 - The know-how and quality aspects

All Organic apples' farmers are oriented to assure the compliance with the requirements of Reg. (EEC) 2092/91 and particularly the absence of any chemical residue.

Along the chain, the hygienic quality is assured by the customers/clients that have to be compliant with Reg (EEC) 43/93 (in Italy Parliament Decree 155/97).

Anyway, it has to be remembered that from the 1st January 2005, the traceability – according to Reg. (EC) 178/2002 - will be mandatory for all organisations along the chain, including organic farmers. In Italy, Organic Farmers Associations are working out a document that will regulate it along the whole chain. In some cases, the systems of quality management according to ISO 9001:2000 are implemented by organisations of the chain in order to ensure the maintenance of the identification and the traceability of the products. Electronic devices are used to help through bar codes the traceability of bulks.

This happens also for Old Organic Apples. Besides, farmers are strongly engaged in communicating their particular nutritional characteristics and adaptability to different uses.

## 3 - the relations with private firma and organisations

When the relations between the actors of the chain are not directly managed by the farmers, ATABIO helps its members through the elaboration of specific marketing/business plans and contractual forms.

There are two types of consumers:

- a) people more than 50 years old which knew and ate them, and
- b) people younger which are willing to taste new food with high level of safety.

In general terms, the consumer is inclined to give up the aspect of the product.

Old Organic Apples are priced at higher levels than both Organic Apples and IP apples. For consumers this means also better quality and consequently justifies high prices. The consumer is willing to pay a premium price for them: in some case more than 25% for current apples.

Because of distance and when sold as fresh product, the sale point is the farm. When processed (mainly in juice), sales are based mainly on close co-operation with ATABIO which gives access to an increasing share of consumers/customers.

Consumers/customers are their main information source.

## 4 - The relations with public authorities and public policy aspects

ATABIO helps Organic Apples' farmers to participate in fairs. Advertisements in organic-specialised magazines are used.

In November '03 three different Ministries - Agriculture, Tourism and Trade - have been aggregated in order to make the communication on the image of the products originated in PAT more efficient (see Chapter 6 - Par. 6 about individual mark "Trentino"). Before, the institutional promotion (image of PAT) was carried out and funded by the local Ministry of Tourism and the promotion made by ATABIO was co-funded by the local Ministry of Trade. These funds allow Organic Apples' farms to reach the most important agriculture specific (for organic products) and general (for quality agricultural and products) local, national (e.g. SANA for organic and biodynamic product (http://www.sana.it/indexing.html)) and international fairs.

## 5 - The quality control aspects

Control/Certification Bodies - registered by the Ministry of Agriculture and accredited by the National Accreditation Body (SINCERT) according to EN 45011 and or EN 45012 (when the organisation is certified ISO 9001:2000) – assure the continuous traceability of Organic Apples along the chain.

Promotional activities on Old Organic Apples managed directly by farmers are rare.

## 6 - the marketing strategy aspects

First organic farmers, the so called "pioneers", used several marketing channels and tried to establish, as much as possible, direct links with the consumers, or with a limited number of specialised organic shops.

The current situation is quite heterogeneous and depending on the characteristics of the farm. Direct sale to consumers is particularly explored when it is joined with integrative activities (rural tourism, restaurant, didactic, ...).

The national market is the main market.

ATABIO (for promotion programme 2001-2003 costs see <a href="http://www.atabio.it/">http://www.atabio.it/</a>)

- a) contributes to put together Organic Apples producers in order to sell products collectively;
- b) promotes the consumption of organic-derived food at different levels (refectories, canteens, ...);
- c) organises workshops and seminars on organic agriculture;
- d) has an editorial space on national reviews: "Agricoltura Trentina" e "Biolcalenda".

#### 7 – the impact of mountain area location on the various aspects

The short and structured (with the help of ATABIO) chain seems to impose too high prices of Old Organic Apples for consumers which are not closely related to those paid to the producers, but rather to the costs carried out at the level of the processors and retailers; these costs are linked to the lack of scale economies and to the limited surface of processors and the downstream actors of the chain.

Anyway, the Public Administration, through subsidies provided by Provincial Law 4/2003 and further financial contributions linked to the Rural Development Plan as well as to other EU Programmes (i.e. Leader +), are aiming at enhancing co-operative ways to market organic products and concentrate their supply.

## CHAPTER VI - LABELLING

## 1 - the type of label

Whereas mandatory indications of Regulation (EEC) 2092/1991 are systematically used with the individual mark/logo of the farm, EU label/logo for organic products and/or the brand of the Certification/Control Body (CB) are occasionally indicated to promote the product and inform consumers.

Farmers often use the collective mark "ATABIO-II Biologico Trentino" (ATABIO the Organic Agriculture of PAT), that is owned and granted by ATABIO with the aim to ensure the territorial origin of the organic product and to provide local Organic Apples with a brand.

Reference to the name of well-known local valleys and typical alpine summits are sometimes indicated on the label.

#### 2 - The reasons behind the choice of labelling

The qualitative image of Organic Apples is enhanced by the use of this label which honestly informs consumers/customers. This clarifies why many farmers add to EU label/logo:

- a) CB's brand that is perceived as an added value to promote products, when CB is leader on the market, and
- b) the mark "ATABIO-II Biologico Trentino" which helps Italian consumers/customers to recognise local mountain organic products and consequently to segment further the market. PAT is known as a safe and healthy territory and apples are the fruits that drive in the best way its positive image; this mark aims ultimately at exploiting this image
- c) associated benefits.

## 3 - the organisational aspects

#### As to EU label:

- 1) Organic Apples' farmers have to notify their activity on Organic Production to the Office for Quality of Agro-Food Products (OAFQ) of the PAT (importers have to apply to the Office of Organic Agriculture by Ministry of Agriculture (MA)) and sign the commitment to comply the requirements of Reg. (EEC) 2092/91;
- 2) producers are audited by the Certification Body (CB)- implementing EN 45011 (accreditation is not mandatory) which, as to PAT and according to the Provincial Law 4/2003 have to be located in the PAT;
- 3) when accepted, producers are included in the Register of Organic Producers (National Importers) by OAFQ (it has to transmit yearly the issues and data of the register; MA shall do the same with European Commission);

- 4) yearly, producers have to communicate to Certification Body the Annual Production Programme (PAP) and report the activities carried out;
- 5) CB yearly audits (once or more times) producers (Non Conformities shall be advised to MA; controls on activity of CBs is carried out by the OAFQ; the traced "non compliant" bulk can not use the label).

ATABIO's members will allowed to used the collective mark "ATABIO-II Biologico Trentino"

All organic products will allowed to used the individual mark "TRENTINO"; producers will have a further and more powerful promotion tool.

#### 4 – The know-how aspects

As to the EU label, rules of use are described in Reg.(EEC) 2092/91.

As to more details on the use of ATABIO's collective mark, more information is available from http://www.atabio.it/ .

CBs' trade marks rules of use are controlled by their own specifications.

In general terms and as regards the registration of a mark in Italy (Italian Trade Mark) the following documents have to applied: Royal Decree 929/1942 and Parliamentary Decree n. 480/1992 (the competent office is Ufficio Italiano Brevetti e Marchi; web site http://www.minindustria.it/organigramma/index.php?sezione=organigramma&tema\_dir=tema2&nodo=149a nd also http://www.ufficiobrevetti.it/marchi/). As regards the registration of a mark in the EU (Community Trade Mark) the following regulation has to be applied: Reg. (EC) 40/1994 (the competent office is OHIM-Office for Harmonization in the Internal Market; web site: http://oami.eu.int/en/default.htm); as to International Trade Mark, firms have to refer to the rules of the Madrid Agreement ((the competent office is WIPO-World Intellectual Property Organisation; web site <a href="http://www.wipo.org/">http://www.wipo.org/</a>).

#### 6 - the labelling strategy

Organic Apples originated in the "Val di Non" as well as in the "Val di Sole" and produced by farmers associated to the PDO "Mela val di Non" Consortium will be able to use also this other EU denomination. Reinette of Canada is included among the allowed varieties.

For the remaining OAs' producers in PAT, it has been planned to obtain the following denomination PGI "Mela del Trentino".

## CHAPTER VII - SUCCESS/FAILURE/NEEDS

#### 1 - To what extent and how the product may be considered a success

Organic Apples and Old Organic Apples are obtaining good results. The formers satisfy a demand also out of PAT and the latters the demand of a particular segment of consumers.

The land for apples has trebled in the last six years and has recently stimulated the most important local Organic Apples to diversify their portfolio and gamma of products.

OAs have obtained a strong attention by the Public Administration through the Provincial Law n. 4/2003 in terms of subsidies. That will give a new strong impetus for young farmers willing to engage themselves in this kind of production which currently does not show any sign of decrease in interest by consumers/customers.

At present there is a risk of label proliferation that can confuse consumers; anyway the recent institution of the Ministry for Tourism, Trade and Agriculture will clarify its framework.

The term "Trentino" has been recently enjoying a high fame among Italian consumers/customers because of its close link to the mountains.

Of course, there is a lot to be done in processing in innovative ways Old Organic Apples that are usually marketed as fresh (see Chapter 3). Old Organic Apples processed products are a new market that is now attracting the interest of high income consumers and people willing to pay a relevant premium price for products that are until now unique among organic products.

## 2 - To what extent and how the success mostly stems from the various chapters

The ranking is the following and quote the most significant items:

- 1) Par. 2 Ch. 1: the conditions that drive the protagonists to act
- 2) Par. 3 Ch. 2: the relations with Public authorities and public policy aspects
- 3) Par. 1 Ch. 2: the organisational aspects
- 4) Par. 1 Ch. 1: the natural, geographical, historical and economical conditions
- 5) Par. 2 Ch. 2: the know-how and quality aspects
- 6) Par. 1 Ch. 4: the organisational aspects

## 3 - To what extent and how the success mostly stems from the different aspects

- 1) Par. 2 Ch. 1: personal motivation, knowledge and innovative behaviour;
- 2) Par. 3 Ch. 2: public funds, strong presence of a Regional Innovation System and link to the 2nd pillar of CAP (rural development with attention to sustainability: proximity of urban areas to rural ones, low environmental impact of cropping and economic viability of activities (creation of new job opportunities);
- 3) Par. 1 Ch. 2: presence of ATABIO and Apple OP's with their national and international link that allow to continuously update technical knowledge of the market situation;
- 4) Par. 1 Ch. 1: tradition of apples cultivation, leadership in Italy of PAT in their production and proximity to German culture in innovative organic farming;
- 5) Par. 1 Ch. 6: EU label/logo and local labels;
- 6) Par. 1 Ch. 4.: concentration of supply to face pressing demand of organised retailing.

## 4- What are the needs, what is missing and what could be done (from the various aspects)

Part of the products is marketed fresh by direct sale in order to satisfy niche-demand of particular customers. For these small producers there are the following obstacles that influence their relation with the retailers:

- a) difficulty in supplying products of steady quality (ripeness and homogeneity) and "in time" for distribution outside PAT's territory,
- b) difficulty in informing consumers/customers about their possible advantages,
- c) lack of knowledge of marketing techniques to secure steady and high quality,
- d) lack of access to sources of capital.

The recent entry of several supermarkets chains into organic market has been another challenge/opportunity for the farmers.

# MUSTARDELA (BLOOD SAUSAGES)

<u>Area</u>: Province of Turin (Italy) <u>Author</u>: Elena Di Bella (Provincia di Turino)

#### CHAPTER I — BASIS DATA ABOUT THE EMERGENCE OF THE PROJECT

#### 1 - The Natural, Geographical, Historical and Economical environment

Mustardela it is a sort of "blood sausage" produced in Italy in Val Pellice and Val Chisone (1 producer) in the province of Turin.

Turin is one of the 96 provinces in Italy, and Val Pellice is one of the 13 mountain valleys in the province of Turin, located southwest of Turin city. Val Pellice is located at an average altitude of 500m and ranging from the first commune (Bibiana, located in the lowlands) to the last (Bobbio Pellice, 600-2500m altitude). Torre Pellice, the headquarters of the Mountain Community, which is the local authority of the valley, is located at an altitude of 500m. *N.B.*: we are in a mountain area although not at a high level of altitude.

Val Pellice has a population of around 500-1000 inhabitants (Luserna San Giovanni, Bibiana, Torre Pellice) and a population density of 50-100 per km square (Bobbio Pellice). The agricultural sector provides AROUND 10% of employment in the province (higher than the average). Nevertheless, this importance is decreasing day by day due to the national situation of the agricultural sector. In any case, the 2 elements (a high population density and a high percentage of agricultural operators) can be explained by the fact that Val Pellice (and Val Chisone) are the "home" to the Waldenses (Vaudois), who have been living in this valley since 1500, which was considered as a "stronghold" against religious persecution and which has now become their main "home".

The Waldenses created a strong social structure (schools, churches, hospitals) and a strong sense of cohesion that has led to the maintenance of certain traditions and limits the depopulation of the area.

## 4 - The Impact of the mountain area location on the launching of the project

Three elements link the mountain area to this product/project:

- 1- tradition (processing and not raw material production) maintained in mountain areas more than in other areas: in this case, Mustardela is a typical product of the "poor" mountain inhabitants
- 2- there are more financial resources in mountain areas to support traditional production and culture
- 3- consumers are more sensitive and attentive to mountain traditions as an expression of global "sustainability".

The impact of the project on the mountain area: the 5 producers<sup>5</sup> have not closed their shops because they doubled their volumes over the past two years.

<sup>&</sup>lt;sup>5</sup> In this case study, the term "producers" must be understood as "processors" or "butchers", and not "farmers".

# CHAPTER II AND III - BASIC PRODUCTION (RAW MATERIAL) AND PROCESSING AND TRANSFORMATION

### 1 and 3 - Organisational Aspects and Relations with Public Authorities

4 Butchers (family firm run by approx. 3 people) and 1 sausage factory (an enterprise involving 5 workers) kept the tradition and sold Mustardela in the valley. Mustardela was known to the inhabitants of the valley, but not to people living elsewhere.

These 5 structures are not run by farmers producing raw materials, but transform raw material (pork meat) in "Mustardela". They all have butchers with shops where they sell many different cold cuts and other food products. In this case, Mustardela is one of a "range" of products.

A very important restaurant ("Flipot": quoted in international restaurant guides) has based its dishes on the traditional products of the valley, such as Mustardela.

The Organisation Slow Food (Onlus) launched the "Presidi" (garrison) idea in 2000 in the aim of protecting and promoting agricultural products at risk of dying out, niche products that nevertheless play a strategic role in maintaining traditions and the quality of food.

During the second "Taste Exhibition" (Salone del Gusto), which took place in Turin in October 2000, <u>Slow Food</u> organised an exhibition of 100 Italian agricultural products from 100 "presidi" saved from the extinction. Each product had its producer-certified specifications and benefited from a large-scale promotion and communication campaign that was launched for the attention of consumers all over the world. This was the first real "impetus". But the idea succeeded thanks to the great "sensitivity" shown vis-à-vis traditional agricultural products, foods and dishes already existing in Italy, Europe and even in the USA: a sort of "lifestyle" that pays more attention to the quality of food and the link with traditions.

Then other actors followed: the Province of Turin, financing and support from the Mountain Community and producers. Without them, the idea could not take on a "structure" and have a future.

The <u>Province of Turin</u> included Mustardela in its "brand umbrella", i.e. its "basket of typical products" and also provided Mustardela with a commercial label/brand name, in accordance with Regulation EC 40/94, which establishes specific rules for production. The 5 Mustardela processors set up an association within this framework for the defence of the brand name.

Here is the brand umbrella:

"Basket of typical products"



We have here a clear case of "territorial logic<sup>6</sup>", with an important role played by the public authorities in the annual financing and support of the idea (promotion and communication costs).

#### 2 - Know-how and Quality Aspects

<u>records</u> Voluntary monitoring: processing is subject to specifications undersigned by the 5 producers. The 5 producers are self-monitoring as far as these specifications are concerned.

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<sup>&</sup>lt;sup>6</sup> Term coming from the DOLPHINS research programme results

Specifications were set by the producers with the help of scientific support. First of all, the University of Turin (Department for the Promotion of Agricultural Products) studied the chemical, physical and organoleptic characteristics of Mustardela. Secondly, a School for Milk and Dairy Production described the technology in the different 5 firms and identified the main critical points in the process. Both organisations have been paid by the Province of Turin.

<u>© Obligatory monitoring</u>: all of the producers have the HACCP manual and comply with HACCP procedures.

The 4 small butchers have national/European production authorisation, granted by the public veterinary authority, and only valid for direct sales (to consumers and restaurants).

Only the sausage factory obtained European authorisation to sell wholesale (mainly thanks to the fact that the premises for processing have sufficient space).

<u>© Origin of the raw material:</u> The pork meat comes from the region (Piedmont), except for one butcher, who obtains his meat comes from elsewhere in Italy (lowlands). There are no farmer-butchers.

The breed is not typical of mountain areas: it is a cross-breed (Cinta Senese\* with Large White). In one case, the origin of the pork meat differs from the origin of the blood.

#### Rules for production:

- **Production area**: Val Pellice, Val Chisone, Pinerolese Pedemontano
- *Raw material*: mixture of fresh pork meat (head, tongue, pigskin, bacon, throat, scraps of pork fat) refrigerated and not frozen + blood (10-20%), pluck, salt, pepper, onion, garlic, leeks + (optional) red wine, spices, flavouring. The mixture is processed into sausage meat.
- **Processing**: fresh pork meat is boiled (separately: head, tongue, pigskin, bacon, throat) and then ground (8-10 mm), the fried scraps of pork fat are added, and then the 3 vegetables (onion, garlic, leeks), fresh or cooked, followed by spices and flavouring. Finally, the blood is added and all of the ingredients are kneaded into sausages (pieces of 1.5-5hg).
- The Mustardela is left to dry for 2 days and/or boiled for 2' and/or boiled for 15' and vacuum-packed. In the first and second cases, the Mustardela is sold fresh, can be kept in the fridge for 3-4 days and has to be boiled for 20' before being consumed; in the third case, the cold storage limit is 3 months and the Mustardela can be eaten after 5' of boiling.
- Physical chemical characteristics:
- humidity: 46 61%ash (g/100g): 1.3-4.5
- proteins (q/100q): 13.3-24
- carbohydrates (g/100g): 0-2.4
- fat (g/100g): 24-30.

## 4 - Public Policy Aspects

The entire project has mainly been financed by the Province of Turin with its current autonomous resources for the promotion of agricultural products in the framework of a "Strategic Project" entitled "Creation of a Basket of typical products in the Province of Turin". The Mountain Community also used current financial resources. The promotion of typical products does not come under specific regional or national programmes in Italy.

## 6 - Strategy Aspects

Producers and public partners pursue a "niche product" strategy: the idea is to select products, by means of scientific and economic criteria, and to launch some of the very typical and clearly identified products of the Province's territory, to provide them with a European brand name (EC 40/94) and to promote them through the use of an "umbrella label" guaranteed by the Public Authorities (Basket of typical products).

Then each producer, farmer, butcher or sausage factory can promote its entire production through this niche product image that has become their "visitor's card", so to speak. Economic operators are therefore

encouraged to produce high quality for this specific product and not to diversify in their activity or produce many different products. They specialise in a production type with very high added value.

## 7 - The Impact of the mountain area location on the various aspects

There is no actual impact on raw material but it could be very important to develop a chain from the farmer/breeder to the butcher. For instance, it would be unrealistic to use local breeds (no longer in existence?) from the Mountain area as a raw material.

Moreover, the existing link between the product and the mountain area is down to the traditional processing and transformation methods, which form part of the poor local mountain traditions.

## CHAPTER IV AND V - DELIVERY CHAIN AND GLOBAL SUPPLY CHAIN ASPECTS

#### 1 – The Organisational Aspects

Delivery chain is organised in 2 different ways:

✓ The 4 butchers (40-50%) sell directly to consumers in their shops + to local restaurants + Slow Food restaurants + the 52 restaurants in the province of Turin that were contacted and selected by the "Basket of typical products" project, which created a sort of selected "network" for the promotion and sales of the Basket products. They also participate in many fairs and exhibitions (30 per year, mainly local − only one is national) organized by the Communes and the Province of Turin (one of them is dedicated to Mustardela, and takes place in September in Torre Pellice: "La sagra della Mustardela"). These exhibitions are important occasions for raising consumer awareness of Mustardela in the area of Turin.

The President of the Association for the promotion Mustardela and the defence of the brand name/label (EC 40/94) is a butcher.

✓ The sausage factory (accounting for around 60% of the total volume) sells to wholesale dealers, retailers (also the 2 shops to be opened by the Province of Turin to sell and promote the "Basket" products), to supermarkets (10-30%) and to the restaurants.

Mustardela has a regional market, only 1-5% of the total volume is sold in Italy in the Piedmont region.

- <u>Fig. 18</u> The total investment in communication (financed for instance by public authorities: Province, Region, Mountain Community, Communes) totals around 15,000 Euro per year. There are 2 different communication networks:
- the Slow Food network supported by the Piedmont Region
- the Province/Communes/Mountain Community network supported by the Province (80%) and the Mountain Community (20%), quoted at around 10,000 Euro per year.

The 5 producers manage the trade by themselves. The aim of the communication campaign is to lay greater emphasis on their production and steer it more towards direct sales and restaurants.

No direct relationships with consumer organisations.

## 7 - Marketing Strategy Aspects

The image strategy focuses on the idea of:

- this product specific to this particular area linked to the real historical tradition of the territory,
- the forgotten product, i.e. the product that we ate when we were young and that we forget about later. Now we can find it again and enjoy real flavour once more,
- the food of our territory.

## 8 - The Impact of the mountain area location on the various aspects

The impact of the mountain area location is a negative one and above all affects transport costs and time.

Location in a mountain area has a positive influence on the "image" of the product however (even though the pork meat is not necessarily from these mountain areas).

## CHAPTER VI - LABELLING

## 1 - The Type of Label

The brand/label "Mustardela" is European (collective brand name in accordance with EC Regulation 40/94). It defends the image (logo) and the product name. It is always possible for there to be other producers in the "Mustardela" production area, but they cannot use the same logo.

Only a PDO could really defend Mustardela, but this would be too expensive and the market is too small.

#### 2 - The reasons behind the Choice of Label/non-labelling.

The choice to have a label/brand name is linked to the image strategy: we want to show and promote out territorial identity and specificities. We therefore need to present the products we have in a clear way, one by one, and to defend them under an umbrella brand.

We must choose one label per product and not per farmer or per valley: a label per product under the umbrella of one big territory, as the Province of Turin.

#### 3 - Organisational Aspects

Each label has been registered by a producers association. Each label entails specifications and a logo. Each Association defends and monitors the respect of its specifications and rules. No external organisation can be responsible for this monitoring process.

#### 4 - Know-how Aspects

As already mentioned (see chapters II and III ), 2 different scientists drafted the specifications and the product characteristics.

#### 8 - The Impact of the mountain area location on the various aspects

Mustardela is a mountain product, but in the labelling strategy and in the label itself, no mention is made to mountain areas.

Re: "Basket of typical products of the Province of Turin".

#### 1) how to obtain this logo: which way a product can enter under this logo?

A technical and scientific commission was set up by the Province of Turin and is composed of: The university, a private research centre specialized in milk, cheese and sausage production, Slow Food, technicians from the Communes and Mountain Communities, the Province of Turin, a public research institute specialized in fruit and wine production, a secondary school which has participated from the outset in the census of producers of typical products, the 3 farming organisations in the Province of Turin (technicians).

The role of this committee is to examine the demand for products that wish to use the logo (applications submitted by communes, Mountain Communities, farming organisations, individual producers and tourist organisations).

## To "pass" the examination and become part of the "Basket", the product must show:

- a tradition of processing, supported by historical documents (for example "Mustardela" has a very long history of production in Val Pellice; in the case of fresh products (for example "old Piedmont apples" the

varieties should originate in the area (e.g. "Gamba Fina", "Buras", etc.) and may not be national/international varieties (such as Golden Delicious);

- the product should be not industrial but "hand-produced" (hand-made products);
- the economic potential or actual importance of the product should be following a positive trend (in terms of volume or producer numbers);

Then, if the product passes this first stage, the Province commissions 3 studies from the research institutions, according to their competencies:

- verification of the producer list and the traditional production zone
- an historical analysis of the history of the product
- a technical analysis of a sample of producers
- analysis of the chemical, physical, hygienic and organoleptic characteristics of the product.

These studies usually require 6 months to one year for completion.

## Finally, we have all the information we need to make the final decision (committee).

Then we write the rules for production (specifications/cahier des charges) WITH THE COOPERATION OF ALL of the producers.

Together with the producers, we choose the logo of the specific product (financed by the Province of Turin), the producers set up their Producers' Association, register the logo and undersign the rules of production. Lastly, the Province of Turin enters the product officially in the "Basket" and prints a leaflet with the picture of the product logo, and the names, addresses and telephone numbers of the producers, alongside a presentation of the product.

The control is conducted by the Province of Turin by the producer associations: we check the possible entry of new producers, or any fraud on the part of producers in other zones. As yet, there is no official control of the respect of production rules: this is left to the associations.

**Each producers association is composed** of all of the producers of a product in a specific area: it has a President, a Vice President and a Committee (usually 3 people). It is an onlus. Its role is to register the logo of the product and the rules for production, to defend the product and the logo from imitations, to organise self-monitoring for the respect of the rules and to organize promotion initiatives. The daily running of the association is financially supported by producers. The initial establishment expenses are covered by the Province of Turin. The committee is in charge of conducting the controls. The President is the reference for any new trade contacts (52 restaurants, shops and supermarkets) and for all of the promotion initiatives proposed by public or private bodies.

## CHAPTER VII - SUCCESS/FAILURE/NEEDS

#### 1 - To what extent and how may the product be considered a success or failure?

Success: this project is a success from 3 points of view:

- 1) the added value per product and per producer is increasing (the image policy has led to increasing prices) and volumes are increasing;
- 2) the entire economy of a territory (the Province of Turin) can benefit from a policy to promote typical products and from the possibility of creating a network involving shops, farmers, restaurants and tour operators;
- 3) the identity of a territory (not only in mountain areas but also in the greater Turin area) can benefit significantly from the policy of promoting typical products: from a social point of view, and not only for the population living in mountain areas but also for citizens living in Turin, who need to feel a link with their past and their territory.

Failures: this "territorial logic" fosters the idea of setting up a network for small economic operators, which allows them to keep their independence for producing and selling simply through the establishment of specifications for production and a joint communication campaign.

This idea is that of the "district", i.e. "small is beautiful". This model can work if demand is not too high and if we are talking about niche products in disadvantaged areas, where all resources must be optimised.

In this case, the risk is that if demand increases and starts to exceed supply, the sausage factory will became more and more important and the 4 small butchers will risk bankruptcy or the loss of market opportunities and may have to abandon production.

In addition to this, there is the risk of another sausage factory coming to the area to produce Mustardela that could then monopolize the market. In this case, the corporate-global approach may triumph over the "territorial" logic. But in mountain areas, there is a great need to ensure the survival of many small operators working together with some bigger ones.

Working towards a PDO could improve the quality level of the product but would not defend the territory against this risk.

4 - What are the needs, what is missing and what could be done (from the various aspects)?

We need to increase the link with local pork producers.

# GAMALOST (OLD NORWEGIAN CHEESE)

Area: Sogn (Norway)

Authors: Researchers Eivind Brendehaug and Kyrre Groven

(Western Norway Research Institute)

#### CHAPTER I - BASIC DATA ABOUT THE EMERGING OF THE PROJECT

### 1 - The Natural, Geographical, Historical and Economical environment

Gamalost (old cheese) is a traditional dairy product especially known from the districts of Hardanger, Voss and Sogn in Western Norway. The cheese is made from sour skimmed cow milk, ripened by the mould species Mucor mucedo. Gamalost is a semisoft table cheese with a sharp, aromatic flavour. The rind is brownish, and the interior is yellow-brownish. The cheese contains only 1 % fat, nearly 50 % protein, 2.5 % ash and 1 % salt. Moisture should be no more than 52 %. Gamalost contains chitosan, a compound which is thought to reduce blood cholesterol levels.

Gamalost was originally made during the summer season when the herd was held at mountain farms. The summer farm system made it possible to utilize abundant mountain pastures, which in many cases constituted the most important resource base for the farm. Each family had their own mountain dairy, mostly run by young female family members (milkmaids), to take care of the milk. As transport down from the alpine region was difficult and time consuming (and no effective refrigeration was available) the raw material had to be processed into a concentrated and durable product. One way to preserve as much as possible of the valuable milk resources was to separate the milk, make butter from the cream and gamalost from the skimmed milk. This traditional production of old cheese in small family-owned mountain dairies has continued in the Sognefjord region until the present time, though most of the small scale production disappeared along with the widespread active mountain farming during the postwar period (1950's and 60's).

As dairy production was industrialised during the 20<sup>th</sup> century, making of gamalost took place in dairy plants. At this stage the inevitable link between the product and mountainous areas was somewhat broken, but still much of the raw material was of alpine origin. In the case of Vik dairy – since 1991 the only remaining production site for the Gamalost – the production continued in a community surrounded by mountains, and where the knowledge of traditional manufacturing of the cheese was kept alive. It is also true to say that gamalost in most Norwegians' consciousness is a typical "mountain product" associated with the traditional mountain dairies.

The community of Vik is situated south of "Sognefjorden", in the southwestern part of the study area. Vik municipality covers 828 km2. There are 2,900 inhabitants; 2/3 of the population live in the central area of Vik. Population has decreased by 5 % last decade; the decrease has been noticeable since 1997. The unemployment is very low, only 1.7 % (national average 3.2 %). But uncertainty regarding future prospects for agriculture and local industry, including Vik dairy, still gives reasons for concern.

In response to decreased sales of Gamalost (at that time the only product of Vik Dairy), the Municipality of Vik in 2000 decided to initiate a developing project for the Gamalost. In 2001 four parties raised 3,5 million  $NOK^7$  for the first phase of the project "Value creation linked to Gamalost production in Vik". The project started in January 2002 and will last for three years.

## 2 - The Conditions (Opportunities / Threats) that caused the local players to take action

In the early 1970's the annual production of about 500 tonnes Gamalost was sold by 5 Norwegian dairies. Since then the Norwegian market for the product decreased steadily. In 1991 Vik Dairy became the only

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<sup>&</sup>lt;sup>7</sup> 1 NOK (Norwegian currency) is about 0,125 €

Gamalost manufacturer, as the production was closed down at Øystese Dairy, Hardanger. One year later the production in Vik reached 216 tonnes. Ten years later, in 2002, the production had declined by 29 % to 153 tonnes. During the last decade the production has varied from 120 to 150 tonnes a year.

Despite fluctuations, the overall trend is negative. In 2000 there were no signs that this negative development would cease. The owner of Vik dairy, the Tine Company, showed barely any interest in developing the markets for the Gamalost: during the 1990's Tine did not advertise the Gamalost at all. For Tine the production was not profitable. Therefore it was likely that the era of this traditional cheese would come to an end within a relatively short time.

This development formed the background for initiation of "The Gamalost Project" (2002-2004). Even though the players behind the Gamalost Project are focusing on increasing the sales of Gamalost, their basic reason to act is probably their concern for the existence of the local dairy. The future of the local dairy is closely linked to the faith in the Gamalost. If Vik Dairy had not been chosen as the only manufacturer of this product in 1991, the dairy would most likely have been closed down by Tine several years ago. The Gamalost Project also has a broader scope than boosting sales of the cheese: development of the local society, for instance by supporting a local "Gamalost Festival", strengthening local identity and facilitating tourism are aspects of the project.

#### 3 - The Human Dynamic and/or Categories of Actors that provided the impetus

The Gamalost Project was initiated by the Municipality of Vik, as part of its Master Plan for 2001-2004. A project for developing the basis for Gamalost production was one of three main measures in the Master Plan. In co-operation with Vik Dairy, the Municipality applied for grants from the Norwegian Industrial and Regional Development Fund (SND). The application was granted 0.9 million NOK for the first two years of the project. The total project expenses during the two first years (3.5 million NOK) are covered by four parties, three of which are making approximately equal contributions: SND through the governmental programme "The value creation programme for food and forestry" (Verdiskapingsprogrammet for matproduksjon); the Municipality of Vik (including coverage of project management expenses), and the Tine company (both regional and central parts of the company). In addition the local savings bank of Vik has granted a somewhat smaller amount (approx. 10 %).

#### 4 - The Impact of mountain area location on the launching of the project

The mountain area location was a precondition for the existence of the Gamalost production in Vik, linked to the mountain farms as described above. There has been close links between traditional production at mountain dairies and the industrial manufacturing of Gamalost in Vik, which account for today's practice at Vik Dairy.

The location of Vik Dairy in a mountainous region might have prevented closing of the dairy at an earlier stage (see chapter III, item 7). In that respect mountain area location indirectly might have had an impact on the launching of the project.

# CHAPTER II - BASIC PRODUCTION (RAW MATERIAL)

## 1 - The Organisational Aspects

Gamalost is made from skimmed cows milk. The raw material used in production of Gamalost in Vik comes from farms in Vik and the neighbouring community of Balestrand. If necessary the dairy can get milk from other parts of the county, within the delivery system of Tine Meieriet Vest.

There are 108 cow milk farms delivering cow milk to Vik dairy on a regular basis. 8 of these are situated in Vetlefjorden, a small community in the neighbouring municipality of Balestrand on the opposite (northern) side of the Sognefjord. The rest of the milk farms are placed within the borders of the municipality of Vik. From April until the end of the production season (May or June) the milk producers in Vik and Vetlefjorden cannot meet the demand. In springtime the supplies are therefore being supplemented, mostly with milk from Sogndal.

The Tine company is a co-operative owned by the milk producers. The farmers delivering to Tine are therefore part-owners of the overall company, but farmers from Vik have no more formal influence on the local dairy than on dairies in other parts of Norway. The milk farmers are members in a local *Producer's association* (produsentlag) that elects representatives for the *Regional conference* or regionmøte (corresponding to the annual meeting in the regional company Tine Meieriet Vest, before the organisational structure was changed in 2002). Most Norwegian farmers belong to one of two farmers' unions. The biggest of these, *Norwegian Farmers' Union* (Norges Bondelag), has a local union in Vik. Both the Producer's association and the local branch of Norwegian Farmers' Union have been engaged in the struggle to secure the future of Vik Dairy, the former mainly by lobbying within the Tine Company / Norway's Dairy Cooperative.

#### 2 - The Know-how and Quality Aspects

Quality control in the milk production is mainly executed by a "production supervisor" employed by the Tine company. This supervisor offers advice on dairy cattle husbandry, with emphasis on keeping the milk from each farm within the premium standard set by an internal quality classification system. The dairy regularly takes samples of delivered milk to ensure high quality.

Quality development within crop production is organised via membership of the Agricultural Extension Service, which gives advice based on local research. Nationally there are 93 extension groups numbering 29.000 members. In Vik farmers belong to a local extension group, Indre Sogn

Forsøksring, covering mainly the same area as our study area (inner parts of the Sognefjord area).

#### 3 - The relations with Public Authorities

Farmers receive support from the public authorities at the local level mainly in terms of supervision. The agricultural office of the municipality of Vik count five employees (one of whom mainly deals with industry and trade matters). Local agricultural policy is based on the municipal master plan of Vik, which aims to enhance the conditions for the agricultural sector.

## 4 – The Public Policy Aspects

Public policy towards agricultural primary production is dominated by subsidies and grants (further explained under "6 – The Strategy Aspects"). The local agricultural office guides farmers on different subsidy arrangements, while the County Governor is responsible for distribution of most state grants to farmers.

#### 6 – The Strategy Aspects

In order to prevent over-production, milk production is restricted by licence. The Government has issued milk quotas for each milk farmer, and these quotas are tradable within regions (counties).

Cattle husbandry in Vik is characterized by good access to grazing land due to farmland cultivation in recent years. Hence the use of concentrated cattle foods (grain feed) is low compared to the national average.

Government grants for milk production can be divided into the following categories:

- Area subsidies
- Cattle subsidies (a fixed grant per animal)
- Production subsidies
- Protection subsidies
- Subsidies for maintenance of the cultural landscape

In recent years grants have been made more independent of production quantities, because environmental aspects have become more important.

## CHAPTER III - PROCESSING AND TRANSFORMATION

## 1 -Organisational Aspects

In the Gamalost case processing and transformation is carried out by Vik Dairy, which is owned by the company *Tine Meieriet Vest BA* (TMV) or Tine Dairy West. This is one of five regional branches of Norway's Dairy Cooperative, collectively known as Tine and owned by 20,600 dairy farmers. The Dairy Cooperative is Norway's largest food industry with a total of 5300 employee and an annual turnover of 11.1 billion NOK.

TMV covers most of Western Norway, extending approximately 400 km along a coastal and mountainous region and including four counties. Tine Meieriene Vest receives 253 million litres of cow and goat milk each year from 4,165 dairy farmers. The company has at its disposal 8 dairy plants, of which Vik Dairy is the smallest and 740 employees altogether. The annual turnover is 2.2 billion NOK. The headquarters is situated in Bergen, Norway's second biggest town.

Vik Dairy is officially named *Tine Meieriet Vest avdeling Vik* (Tine Dairy West, Department of Vik). The dairy has approximately 18 employees. Originally Vik Dairy manufactured butter, old cheese and whey cheese (mylse). In recent years Gamalost has been the only product made at Vik Dairy, while most other dairies have a somewhat bigger selection of products. In 2003 Vik Dairy re-launched whey cheese as a part of the dairy's range, with an estimated annual production of 20 tonnes.

#### 2 -Know-how and Quality Aspects

Internal procedures in Tine address know-how and quality development during the processing. The staff of Vik Dairy is trained both by attending courses elsewhere, and by competence personnel visiting the dairy. Every year a training plan is worked out along with the budget.

#### 3 -Links with Public Authorities

The most important link with public authorities is the close co-operation between Vik Dairy and the Municipality of Vik, which emerged from the priorities in the Master Plan of Vik. This collaboration resulted in the Gamalost Project. One part of that project is concerned with production capacity at Vik Dairy, which today is limited to 300 tonnes per year. If the demand is doubled, production capacity will have to be extended. Conditions for such an extension will be outlined by the project.

## 4 -Public Policy Aspects

Facilitating production of quality food products is a part of Norwegian agricultural policy. The SND grant to the Gamalost Project through "The Value creation programme for food and industry" can therefore be understood as a result of political priorities.

## 5 -Quality Control Aspects

The Food control authority (Mattilsynet) at local level regularly takes product samples to ensure that legal standards for food quality are followed. Vik Dairy also has a continuous dialogue with the Food control authority on revisions of the internal control system to meet the food quality legislation.

#### 6 - Strategy Aspects

For a long time the Tine company seemed to have no strategic approach to further development of the Gamalost. Nevertheless, some strategic work has recently been done by Tine Meieriet Vest: development of new package sizes and layout has been carried out, but the implementation has been postponed in anticipation of transferral of marketing responsibility to a new body. TMV has planned to introduce a new package size in-between the existing 125 g and 380 g, mainly because the smaller size ripens too fast in the delivery chain and consumers' fridges, while the bigger is hard to get into the grocery chains' assortment. Rationalization of the expensive production process is another reason for Tine to alter the package line.

Another strategic move that has been assessed by TMV is to make the Gamalost from organic milk. The purpose is to give the product added value that will attract "green" consumers. A substantial number of milk farmers in Vik must be encouraged to start organic production if this strategy is to be combined with AOC/PDO labelling application for the Gamalost (see Chapter VI).

An overall goal for the Gamalost Project is to save a traditional product and production form that is threatened by eradication, and to secure the existence of Vik Dairy. See chapter IV.

#### 7 - The Impact of mountain area location on the various Aspects

Mountains and fjords represent geographical obstacles that might have influenced the organisational aspects. From Vik the only available connections with the surrounding world are a winter-closed mountain road to the south, and ferry crossing of the Sognefjord to the north. The manager of Vik Dairy says that this location has complicated transport of milk, and might have contributed to preserving the organisational structures. If there had been easier access and cheaper transport of milk from Vik to Sogndal or Voss before communications in the region were modernised, Vik Dairy might have fallen victim to rationalization at an earlier stage.

#### CHAPTER IV - DELIVERY CHAIN

#### 1 -Organisational Aspects

The nationwide company Tine BA is the sales and marketing organisation of Norway's Dairy Cooperative, and the Gamalost is distributed by means of the national delivery chain of Tine BA. Vik Dairy belongs to Tine Meieriet Vest BA (TMV), one of Tine's five regional branch companies. TMV has its own market department under the leadership of a marketing director. In April 2002 Tine adopted a concern model, which implies that TMV is obliged to follow and execute strategies laid down by the central administrative leadership and board. All investments and prioritisations made by the branch organisation are to be approved centrally. Along with introducing the concern model, Tine has established a complex matrix organisation, which regularly includes marketing personnel from the five regional branches in central marketing meetings. Thereby TMV has some influence on the choices made by the marketing management of Tine.

By January 2004 the responsibility for marketing the Gamalost will be transferred from Tine BA to a newly established company designed to market cheeses that belong to the niche segment. The new company called *Ostecompagniet* is totally owned by Tine.

In Vik there is a widespread understanding that Tine as the owner of Vik Dairy has done too little to develop the dairy and utilize the market potential of the Gamalost. As part of the Gamalost Project an organisation analysis will be carried out in order to map what kind of organisation structure, ownership and management the dairy will benefit from in years to come.

#### 2 -Know-how Aspects

There seems to be a problem with some of the marketing staff of Tine who have little knowledge about the Gamalost, especially in the market division of Tine BA. Salesmen who do not identify themselves with the product, or who even dislike it, will hardly be good ambassadors for the Gamalost with customers.

Tine has not carried out a market analysis of the product. Hence the basis for making optimal decisions could have been better.

## 3 -Relations with Private Firms and Organisations

The Gamalost has its own "fan club" called Norsk Gamalostlag (the Norwegian Gamalost Society). The club is not very active, but is participating in the Gamalost Festival, and is making some PR for the product.

#### 4 -Relations with Public Authorities

The Norwegian Industrial and Regional Development Fund (SND) is supporting the development project through grants. In addition to the Gamalost Project, SND is also grant aiding the foundation of Ostecompagniet, which is about to take over the marketing of the Gamalost. In addition public authorities are preparing infrastructure for farmers' markets, which have become an arena for promoting Gamalost.

#### 5 - Public Policy Aspects

Quality food has gained increased publicity and interest due to public policy. A lot of projects have been grant aided through the governmental programme "The value creation programme for food and forestry". This policy as a whole might benefit single products like Gamalost.

#### 6 -Quality Control Aspects

The food control authority (Mattilsynet) is executing quality control inspections in food stores. Hygienic standard and temperature level in refrigerators are among the parameters being checked.

#### 7 - Marketing Strategy Aspects

Marketing personnel of Tine admit that the company's attitude to the Gamalost has been characterized by ignorance and lack of a proper market strategy. Decisions made by Tine during the last year might indicate a change in this respect:

- A new marketing plan has been framed
- the marketing responsibility will soon be relocated to a new body
- and TMV has decided to open a restaurant at Vik Dairy.

For the very first time the marketing division of Tine BA has recently established a marketing plan for this product, possibly provoked by the Gamalost Project. As the marketing plan is for internal use only, we do have not access to details, but we have been told that it contains a SWOT analysis describing the product's weaknesses and possibilities in the market. Based on general information from Tine personnel we believe that the marketing plan proposes a rise in prices to the highest the market can bear in order to minimise loss or preferably sell at a profit.

Ostecompagniet, which is totally owned by Tine, will shortly become the new marketing body for Tine cheeses in the niche segment, in addition to cheeses made by small, independent dairy companies. This change may offer a new start for the Gamalost, as it will imply a marketing budget that has not been available before (with the exception for the last couple of years with the Gamalost project). It is also promising that the marketing work is now to be done by people who focus on promotion of niche products, not by staff whose main responsibility is to gain maximum profit from large volume products.

In 2003 Tine Meieriet Vest has budgeted 0.5 million NOK in order to establish a cheese restaurant in connection with the existing cheese shop at Vik Dairy. By promoting the Gamalost towards tourists in Vik (both domestic and foreigners) Tine hopes to improve sales.

As much as 96 % of the Gamalost production is sold through grocery shops. This is also the sales channel Tine consider the most important to develop. Canteens, hotels, hospitals etc. have also been evaluated as possible focused markets with potential to grow. As this category today constitute only 3 % of the total sales, Tine has concluded that it is not important enough for further attention.

Despite some promising features, it seems clear that the Gamalost needs to make major market progress to survive in the long run. The cheese is regarded by Tine as a "culture bearer", and that is probably the main reason why the company has not disposed of the product so far. Closing down the production of a "national symbol" may have been considered too much of a strain for the company's image. Nevertheless, in a situation with increased competition, both from abroad and from newly established domestic dairy companies, Tine claims they are forced to get profit from every part of their business. According to the Tine company itself, reduced production costs combined with improved sales is therefore a prerequisite for continued Gamalost production in the future.

The aim of the Gamalost Project is to reverse the decline of the Gamalost, and in an initial phase the project leadership intended to give the project a rather strong marketing profile. Due to restrictions placed on the project by SND, this ambition had to be reduced. Instead emphasis has been put on local social development with the Gamalost and derived products as a basis. Nevertheless the project has carried out a kind of marketing strategy through some of its sub-projects.

Strategic choices of the project can be summarised by the catchwords *tourism, health* and *exports*. The project has partly focused on *tourists* as potential customers. This has mainly been done by developing the Gamalost Festival, which is held in Vik every Whitsun. The festival has become a popular combination of gastronomic feast, cultural festival and sports meeting. The festival is a manifestation of the importance the Gamalost has to the localcommunity, and also emphasises the cultural and health aspects of the cheese. Ambitions to promote the cheese on board visiting cruise ships have been abandoned, as it was found to be too time consuming. The *health* aspect has most prominently been focused through co-operation with top-level athletics from the Sognefjord region. Through sponsorship agreements with the Norwegian Premier League soccer team *Sogndal*, the Gamalost project has aimed to promote the cheese among young people engaged in athletics. The low fat and high protein content of the cheese may appeal to this consumer group. There have been attempts to facilitate exports of the Gamalost by participating twice in *die Internationale Grüne Woche* in Berlin. The cheese has received good response at this exhibition, but so far it has not resulted in contracts with foreign wholesale dealers. Plans for a PDO labelling application should mainly be seen as a part of an export strategy (see chapter VI).

The manager of the Gamalost Project says that the most important task of the project is to make Tine take their position as owner of Vik Dairy and the Gamalost product more seriously. So far the manager is somewhat pessimistic in that respect.

## CHAPTER V - GLOBAL SUPPLY CHAIN ASPECTS

#### 1 - Organisational Aspects

Tine is the largest food industry company in Norway, and is divided into separate divisions (raw material; production; marketing). The responsibility for marketing Gamalost has so far beenwith Tine Meieriet Vest (Bergen) and Tine BA (Oslo). Hence there has been a long distance between the production system and those controlling the delivery chain. Gamalost is a unique product with peculiar taste and odour, and it takes some knowledge and enthusiasm to sell the cheese in an effective manner. Lack of integration between the production and marketing chains may therefore be a severe disadvantage for a product like the Gamalost. The new marketing body Ostecompagniet is, despite its promising specialisation on niche products, no guarantee for good integration between the production and marketing divisions, as the physical distance from the production unit will remain the same.

## CHAPTER VI - LABELLING

## 1 - The Type of Label

The Gamalost has received labelling approval from the foundation "Norwegian Heritage". Their label, St. Olav's Rose (to the right), was established in 1993, and has been given to 89 different high quality cultural heritage products. Most holders of the label are cultural monuments or attractions linked to old buildings etc., and only two commercial food products have been approved to use the St. Olav's Rose label. At present the Gamalost does *not* bearing this label due to the old packaging. The Gamalost

Project has been working on this, and the label will be used when new package sizes and layout have been settled.

The old package layout is also the reason why the label "Godt Norsk" (see below) has not been used for the Gamalost so far. This label, owned by the food labelling authority Matmerk, is a guarantee of quality and origin for Norwegian food products. Tine intends to use this label too when new packing is available.



Steps have been taken by the Gamalost Project to attain PDO labelling during 2004 (Protected Destination of Origin is in Norwegian called "Beskyttet opprinnelsesbetegnelse"). The Norwegian variety of the PDO label is shown below.



The further text in this chapter refers to PDO labelling.

#### 2 - The reasons behind the Choice of Label / non-labelling.

An important motivation for Tine to apply for PDO labelling of the Gamalost is the reputation this label has in other European countries. For the purpose of export to Germany, for instance, Tine considers the PDO label to be an advantage. In the case of exports we assume that the PDO label regulated by EU legislation, and not the Norwegian variety, is to be used. The Norwegian label is poorly known so far, and is not thought to have much influence on the consumers.

#### 3 - Organisational Aspects

The PDO application has been prepared by the Gamalost Project. At present Tine and Ostecompagniet have the initiative on this issue, and they intend to apply for PDO labelling, as they are responsible as owner and marketing body respectively.

## 4 - Know-how Aspects

Tine has no experience with PDO labelling. So far the product strategy of Tine has been characterised by covering up regional or local features, aiming at conformity rather than uniqueness. Though geographical names always have occurred in trademarks in Tine's assortment, they have not implied any guarantee of the geographical origin of the product. If Tine/Ostecompagniet apply for PDO labelling of the Gamalost, there will be a change from a long tradition within the Norway's Dairy Cooperative.

In 2003 the Gamalost Project manager represented Norway at an AOC congress in Normandie on behalf of the Norwegian labelling authority Matmerk. He has been working through the application process and handed over necessary information to Tine and Ostecompagniet.

#### 5 - Relations to Public Authorities

PDO labelling is covered by the Act on quality control of agricultural products, and provisions of the act (FOR 2002-07-05 nr 698). The foundation Matmerk owns and administraters the label on behalf of the Ministry of Agriculture.

## 6 - Public Policy Aspects

In 2002 the Norwegian parliament passed legislation regulating labelling of quality products (see item 5). The EU legislation on the promotion and protection of food products (Council Regulation No 2081/92) served as model for the Norwegian labelling system, though several adjustments weremade.

## CHAPTER VII - SUCCESS/FAILURE/NEEDS

#### 1 - To what extent, and how, can the product may be considered a success or failure?

Gamalost sells poorly, and in commercial terms the product must be considered a failure. The last four years the sales have shown approximately 10% decline yearly, with the exception of 2002. That year the sales remained at the level of 2001, but this "recovery" might be temporary: by October 2003, the sales are 10% lower again than by the same time the previous year.

With respect to product quality, Gamalost is a success story: despite a complicated production technique involving biological processes, Vik Dairy has maintained an even product quality.

## 2 - To what extent and how the success/failure mostly stems from the various chapters?

The failure of the Gamalost stems from the delivery chain: so far the Tine company has not managed to reach new consumer groups. Young people especially seem to turn the back on this traditional cheese. Attempts to appeal to young people that take part in athletics have not given provable results in better sales. This may be due to the fact that it is difficult to change the image of a product. So far there has not been any advertising whatsoever for the Gamalost.

The grocery chains seem to play a role in the market failure of the Gamalost. Particularly two of the four major Norwegian grocery chains, which dominate the soft discount (semi low price) market, and are reluctant to facilitate the sale of niche products. As the Gamalost is excluded from the basic product range of the chains, it is up to the individual shopkeepers to find shelf space for this product. In many cases the Gamalost loses this competition to the benefit of volume articles. This situation is expected to get even tougher when the hard discount grocery chains (e.g. Liedl) make their entry in 2004.

With the lack of a thorough market analysis it is hard to decide whether the Gamalost project has had any effect on consumers' choice. One might expect that the project would result in some increased demand, but that this effect has been outweighed by worsened access to low price grocery shops.

#### 3 - To what extent, and how, does the success/failure result from from the different aspects?

It seems that the organisational aspect can partially explain the market failure of the Gamalost, as the Tine company has shown little interest in establishing a new market strategy for the product in response to declining sales. The marketing staffs have only had marginal resources at their disposal for promoting the Gamalost. Little has so far been done to develop new packing and decoration, and the different varieties of the product have not been given a uniform and easy recognisable image. These facts show that the Gamalost is given low priority from the marketing division of Tine, and that is likely to influence the sales in a negative way.

On the other hand the Tine Company has never said that it would dispose of this product. The Gamalost is regarded as one of the "cultural products" of Tine, a major reason why the Gamalost still is being manufactured, after being run at a loss for a long time.

The know-how and quality aspects are important when it comes to Vik Dairy's position as the manufacturer of Gamalost in the future: Tine will under no circumstances move the production to another dairy in order to rationalize. That is because Gamalost production is a complicated process, and it will take considerable resources and time to establish the required know-how and production facilities in another place.

## 4 - What are the needs, what is missing, and what could be done (from the various aspects)?

If the Gamalost is to penetrate new markets and improve sales, the product needs to be esteemed and given priority by the leadership and market division of the company. By January 2004 the responsibility for marketing the Gamalost will have been transferred from Tine Meieriene Vest and Tine BA to Ostecompagniet, a newly established company designed for marketing cheeses that belong to the niche

segment. This might offer a new start for the Gamalost, provided that the new marketing body is supplied with sufficient resources and can make the right strategic choices.

It seems likely that increased sales can be obtained by implementing a marketing strategy that follows the path of the Gamalost Project, focusing on two aspects:

- 1. The Gamalost as a cultural icon with cult status potential one of very few surviving specimen of a cheese variety that once was common in most European mountainous regions.
- 2. The Gamalost as a unique health product, almost fat free and extremely rich on protein. In addition the Gamalost is the only known article of food *worldwide* containing natural chitosan, a compound which reduces blood cholesterol.

## UNDERDALSOSTEN, THE CHEESE FROM UNDREDAL

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## CHAPTER I - BASIC DATA ABOUT THE DEVELOPMENT OF THE PROJECT

## 1 - The natural, geographical, historical and economic environment

Undredal is a small village with 120 inhabitants in the valley of the same name. The village is located where the valley meets the Aurlandsfjorden, and is part of the Aurland municipality, which itself has about 2000 inhabitants. The Aurlandsfjord is part of the larger Sognefjord. Prior to 1986, it was only possible to travel from the other parts of the Aurland municipality to Undredal by boat or on foot over the mountains. Goat farming and cheese production has been, and still is, the most important business activity, and has formed an unbroken tradition up until the present day. Important reasons for this unique situation include the following:

- Prior to 1986, it was economically rational for the The Norwegian Dairy Cooperative (now called *Tine*), and the national agriculture authorities to allow the farmers to process their own milk in Undredal.
- In the 1970s, *Oslo Lysverker*, the energy company, started construction work on the development of hydropower in the valleys and mountains of Aurland. In adapting to the new situation which resulted, many of the farmers in other parts of the municipality changed from goat to sheep farming. For geographical reasons, this new employment market did not affect the farmers in Undredal.
- In 1980, a local man of great resources and engineering knowledge moved back to Undredal. He saw the potential in cheese production and started an initiative to establish joint cheese production during the summer months (prior to this, each farm had its own separate cheese production facilities). Four farmers joined the initiative and a common dairy building in an outlying field was constructed for summer cheese production (during the winter season, the goat milk was delivered directly to Tine). The other farmers continued their separate cheese production in the summer months.
- In 1986 the four farmers modernised the dairy, but experienced great problems with the quality of the cheese. They solved the problem by conducting an intensive analysis, which found that the modernisation had resulted in the destruction of the natural cheese production climate. From now on they had to learn how to carry out cheese production despite modern hygiene principles.

#### 2 - The conditions (opportunities & problems) that forced farmers to act

In 1996 a common organisation for all goat cheese producers in Undredal was founded with the name "Underdalsoster" (The Underdal Cheese). A common understanding of their problems and opportunities brought about the establishment of the organisation. A principal threat was the liberalisation of national and international agricultural policy (as a result of pressure from the European Union and the World Trade Organisation (WTO)). Small and steep-hill farms, such as existed in Undredal, were not compatible with low-cost and low-price strategies. The local farmers saw a development opportunity in producing a quality product with a strong brand image and local label, which would capitalise on the opportunities that existed for selling to consumers who demand high quality food.

#### 3 – The human dynamic and categories of actors that provided the impetus

After these experiences and developments the farmers were ready to act together to market and develop the product. But it was now that the real battle with the Norwegian Food Control Authority (SNT) began. In the words of our informant: "With the Norwegian Food Control Authority constantly pounding us – it meant six years of struggle for survival". Producing cheese using unpasteurized milk is impossible, at least as far as the SNT is concerned, and not compatible with safe food practices; the scientific tradition of food production is based on a philosophy which involves killing all bacteria and micro-organisms or keeping them to a minimum level.

The battle with the Norwegian Food Control Authority resulted in a reduction in the number of farmers in the group, as some of them dropped cheese production. The three farms that were left built a joint enterprise based on the common understanding that they had a quality product, a market and a marketing channel (the local grocery store). The farmers on these three farms possessed very different experiences and competence, so they complemented each other in a very positive way.

One of the farmers educated herself in food product technology in France during this period. This competence proved to be important both for the future local development of cheese production, and also for the rest of the small cheese-producers in Norway. The farmer is now much in demand, and often consults on issues concerning the development of cheese production, especially based on unpasteurized milk.

## 4 - The impact of mountainous location on the launching of the project

As described above, the mountainous geographical terrain surrounding of the Undredal village gives it some infrastructure challenges. The communication difficulties with the other parts of the municipality partly explain why there has been continuous cheese production up until today. In addition, the physical environment - precipitous mountain slopes - has provided good conditions for goat farming. Taking this into consideration, it is clear that the farming system is closely adapted to the physical and landscape resources.

# CHAPTER II - BASIC PRODUCTION (RAW MATERIAL)

## 1 - Organisational aspects

The Underdal Cheese is made from fresh unpasteurized goat milk produced on the farms of Undredal. The milk is produced on pasture from May to November, and inside (in the goat barns) during the winter.

Although the farmers of Undredal produce their own cheese, they are still members of the Tine cooperative (the dominant Norwegian dairy co-operative). The contract with Tine gives them the opportunity to deliver surplus milk to the company if needed, instead of using it in their own processing; this provides the farmers with a positive flexibility. In the 1980s and 90s it was usual in Undredal to produce cheese during the summer months, and to deliver the goat milk to the national cooperative dairy during the winter; one farm in Undredal still follows this practice today.

Most Norwegian farmers are either members of: 1) Norwegian Farmers' Union (*Norges Bondelag*) or 2) the Norwegian Farmers' and Smallholders' Union (*Norsk Bonde- og Småbrukarlag*).

#### 2 -Know-how and quality aspects

The raw material, goat milk, is put through a set of traditional quality controls by Tine, as is milk produced by other farmers throughout the country. A "production supervisor" employed by the Tine Company is primarily responsible for carrying out the control. The supervisor offers advice on dairy cattle husbandry, emphasizing the importance of keeping the milk from each farm within the premium standard set by an

internal quality classification system. The national dairy regularly takes samples of delivered milk to ensure that this high quality is maintained.

Quality development within crop production is organised via membership in The Agricultural Extension Service, which offers advice based on local research. Nationally there are 93 extension groups counting 29,000 members. In Aurland municipality, farmers belong to a local extension group, *Indre Sogn Forsøksring*, which to a large extent covers the same area as our study field (i.e. the inner parts of the Sognefjord area).

The most important quality-related aspect is the special agriculture and pasture system that exists in Undredal. The goats get high quality pasture in outlying fields from May to November. The fodder from the pasture contains a high variation of plants, which gives the milk, and especially the cheese, its taste. During the pasture period the flora differs, resulting in changes in the taste and structure of the cheese product. As the local farmer, Pascale Baudonnell puts it:

"The milk and the cheese express a picture of the local ecology system".

As a part of these quality aspects the local goat species are important. Goats that are adapted to the local environment are necessary in order to be able to use the fodder they obtain while at pasture. The use of concentrate in goat milk production in Undredal represents 20-25 % of the total fodder.

## 3 - Relations with the public authorities

Farmers receive support from the public authorities at the local level mainly in terms of supervision by and support from the Aurland municipality agricultural office. Local agricultural policy is based on the municipal master plan of Aurland, which aims to enhance the conditions for the agricultural sector in the area.

## 4 - Aspects of public policy

Public policy towards agricultural primary production is dominated by the provision of subsidies and grants (further explained under "6 – Aspects of strategy"). The local agricultural office administers various subsidy arrangements for the farmers, while the County Governor is responsible for distributing most state grants to farmers.

#### 6 - Aspects of strategy

Milk production is licence-restricted in order to prevent over-production. The Government issues milk-quotas for each milk farmer, both for cow and goat milk, although these quotas are negotiable within regional areas.

In 2002 the government implemented changes in the milk production licence system which gives small processing firms new opportunities. Farmers who deliver milk to such enterprises are allowed to produce milk in excess of the licence volume.

Government grants for milk production can be divided into the following categories:

- Area subsidies
- Cattle subsidies (a fixed grant per animal)
- Production subsidies
- Protection subsidies
- Subsidies for the maintenance of the cultural landscape

In recent years grants have to a greater extent been made independent of production quantities, as the environmental aspects of the programme have received greater emphasis.

#### 7 - The impact of mountain area location on the above factors

See chapter I, points 1 and 4, and chapter II, point 2.

## CHAPTER III - PROCESSING AND TRANSFORMATION

## 1 - The organisational aspects

In 1996, producers of goat cheese in Undredal founded a production association "*Underdalsosterl*" (The Underdal Cheese). The organisation was founded with the aim of participating in the strategic discussions and decisions concerning the future development of production and marketing for the cheese.

The enterprise, the Underdal Mountain Dairy, is organised as a local cooperative (company with limited responsibility). Three farms jointly own the dairy, and the company rules do not permit the inclusion of owners from outside the Undredal area. The organisation is robust due to the flexible ownership conditions. Three farms are involved today, but the dairy could also survive with milk deliveries from and ownership by only one farm.

One important principle is the separation of the ownership and management of the dairy. This principle will become an important aspect of co-operation between the farmers in the years ahead. Farmers working in the Underdal Mountain Dairy are employed by the company, and receive wages like other employees.

The milk transformation process is carried out in the dairy. The dairy, and the local marketing channel, the local grocery shop, *Underdalsbui*, manage the storing process. The finished products are marketed through the Underdalsbui; as a result, Underdalsbui acts as both a wholesale dealer and an outlet for the cheese. The dairy has an agreement with the shop giving the shop owner the responsibility for marketing the cheese, but the farmers are also required to participate in selling the cheese at local farmers' markets.

The shop and some of the farmers are members of a local co-operative for product development and marketing of quality food and other products called Aurland Cultural and Nature Heritage (ANKA).

The enterprise co-operates with the regional agriculture school, *Sogn Jord- og Hagebruksskule* (SJH). The school is one of five regional competence-centre institutions in quality food production in Norway, and has a national role in promoting and facilitating the use of unpasteurized milk in cheese processing.

Some of the Underdal Mountain Dairy owners have taken part in the establishment of the private organisation *Norsk Gardsost* (Norwegian Farm Cheese). The organisation's objective is the conservation and future development of Norwegian local hand-made milk processing traditions. The organisation has attempted to influence the public authorities to improve the conditions for small-scale milk producers.

## 2 - Know-how and quality aspects

As described in chapter II, the fodder from the pastures in outlying mountainous areas provides the basic quality element of the cheese. The fodder contents a high variation of plants; these plants give the cheese its characteristic taste and structure. The cheese is a picture of the local ecology system, but one that is destroyed by milk pasteurization; therefore, it has always been important for the farmers in Undredal not to pasteurize the milk.

The Underdal Mountain Dairy's philosophy is to produce traditional cheese using traditional methods. "Traditional" is used to mean employing historically developed techniques and methods adapted to the local environment, culture and resources. The demand for sterile hygienic standards from the SNT makes it difficult to practice this philosophy. After years of struggle, discussions and negotiations, as well as transfers of knowledge to the SNT, some compromises were made between the SNT and the farmers.

Other quality principles involve the use of fresh milk and local technology in the transformation process, all of which is carried out locally. Only the acid culture (bacteria) used to start the milk bacterial fermentation process is imported, and the cheese produced is a live, local product. A local acid culture would strengthen the local identity of the product, and therefore the enterprise has an ambition of producing the acid culture itself.

Using grass ensilage as fodder during the winter causes problems for the cheese transformation (bacterial) process. Therefore, the farmers use mainly dry grass as the basic fodder during winter.

Both the white and brown sweet cheeses are made from the milk. Two types of white cheese are produced, one with salt and one without salt. The brown cheese is made of whey. In Undredal the farmers use the fat from the milk in both the white and the brown cheese. The normal procedure in Western Norway is to use the fat in the brown cheese. The brown cheese has 8% cream (from cow's milk) added.

## 3 - Relations with the public authorities

The farmers received grants from the Norwegian Industrial and Regional Development Fund (SND) to build the dairy. Through the governmental programme "Value Creation Programme for Food and Forestry" the SND has also supported the enterprise through marketing initiatives, for instance labelling strategies.

In the spring 2003, the Underdal Mountain Dairy obtained authorisation to produce and market goat cheese using unpasteurized milk. This very important approval allowed the enterprise to market the cheese all over the EEA area.

## 4 -Public policy aspects

Facilitating the production of local quality food products is a central aspect of Norwegian agricultural policy. The SND grant to the Underdal Cheese Project through "Value Creation Programme for Food and Industry" can therefore be understood as resulting in part from Norwegian political priorities.

#### 5 -Quality control aspects

See point 2 and chapter III.

The enterprise has established co-operation with the Bergen branch of the Norwegian National Veterinary Institute in a joint project to develop systems for quality management, focusing on ecology hygiene and infection control.

#### 7 - The impact of mountain area location on the various aspects

See point 4.

## CHAPTER IV - DELIVERY CHAIN

#### 1 - The Organisational aspects

The local grocery shop, Underdalsbui, is responsible for the marketing of Undredal cheese. The farmers have an agreement with the owner of the grocery shop based on old traditions. The structure of the delivery chain is as follows, given in percentages of turnover in the budget for 2003:

- 50 % sold directly to the consumer over the counter at the local shop, Underdalsbui, (mainly tourists and other visitors).
  - 10 % to consumers at different farmers' markets in southern Norway.
  - 15 % (10 %) by post direct to the consumer.
  - 25 % (30 %) to other groceries (delicatessen stores), hotels and restaurants.

Concerning the two last channels of sale, the percentage differs between the sale of brown and white cheese (the turnover for white cheese is in brackets). Prior to 1986, most of the cheese was distributed by post due to the lack of road transport to the village. Today some customers travel rather long distances to Undredal to buy the cheese, so it is not only traditional tourists who buy the product, but also what we might call "quality food tourists".

Underdalsbui is part of the grocery chain, *Nærkjøpmenn* (local groceries), which again is attached to the Spar chain of grocery shops, itself attached to *Norgesgruppen* (the Norwegian Group of grocery shops). Norgesgruppen is one of the four largest grocery chains in Norway.

However, Norgesgruppen has no influence on the sale of Underdal cheese. Underdalsbui has maintained its traditional role over several years as a wholesale dealer for different kinds of locally produced farm cheeses from Western Norway. This is a role managed under agreement with Norway's Dairy Cooperative. Today Underdalsbui only handle local quality products from Undredal.

Underdalsbui has no formal agreements with its customers, which include grocery shops and hotels, but rather long and stable relationships. The opportunity to take up new customers is limited due to the lack of products; demand currently exceeds production.

#### 2 - The know-how aspects

One important aspect is the close relationship between the shop, Underdalsbui, the farmers and the cheese production. Underdalsbui has a good knowledge of the local farming systems and the transformation process from milk to cheese. These knowledge forms a fundamental part of the strategy of promoting and communicating the product value added to consumers and other customers.

#### 3 - Relations to private firms and organizations

An important activity during the summer in Undredal is the goat cheese festival. The festival is connected with the traditional moving of the goats from spring to summer pasture. At the end of July the herd is moved from the spring mountain farm, Melhus, to the summer mountain farm, Langhuso, where some of the celebrations take place. One of the main objectives of the festival is to stimulate local traditions, especially those concerned with quality food. The festival invites various local food producers to sell their products, and the visitors are guided around the production facilities and the maturing storage area for Underdal cheese. National and international folksong music and dance performances contribute to the festival being a 'people's festival'. The festival is a manifestation of the importance of traditional cheese production for local society, and it also emphasizes the cultural and landscape quality aspects connected with goat farming. The festival is organised by the Underdal Youth Association and the Underdal Local Association.

#### 4 - Relations with the public authorities

SND supports the development projects through grants. Furthermore public authorities are preparing infrastructure to open additional farmers' markets, which have become one of the principal arenas for promoting local quality products such as the Underdal cheese.

#### 5 - Public policy aspects

Quality food has received increasing attention publicity and interest as a result of a shift in public policy. A lot of projects have been granted through the governmental programme "Value Creation Programme for Food and Forestry"; taken as a whole, this policy may also benefit single products such as the Underdal Cheese.

The manager of Underdalsbui has underlined the relationship between policy conditions for agriculture and other activities in small villages. Public policy provides a common focus for people, through the connections between and significance of different activities in small rural communities.

## 6 - Quality control aspects

The cheese also goes through a kind of 'quality control' after it has left the dairy. By selling the cheese directly to the consumer, 'quality control' is carried out when selling the product. Customers are usually given a taste of the cheese, and the sales-person also tastes and controls the product as well.

The white cheese undergoes a higher level of control by the local marketing channel, due to the maturing period in the shop. This cheese is also usually sold in smaller pieces than the brown cheese, which enables quality control opportunities when cutting it into pieces for sale.

#### 7 - Marketing strategy aspects

The Undredal farms are unable to compete on cost and pricing strategies. Their only opportunity is to produce a quality product with a strong image and local label in order to exploit the market of consumers who demand high quality food.

The marketing strategy is to sell as much as possible directly to the consumers, from the local shop in Undredal, by post or at farmers markets. Selling directly to the consumer also offers the largest profit margins. The manager of Underdalsbui, underlines the importance of direct marketing:

" If we had to sell all the cheese through other wholesalers and shops we wouldn't be able to do it. The economic situation would be too poor for the farmers to continue."

Underdalsbui receives about 2 Euros more per kilo by selling the cheese directly to the consumer than it would if other market channels were used.

The sales methods have changed according to the development of communication and transportation infrastructure. Prior to 1986, when there was no road to Undredal, most of the cheese had to be sold by other shops or by post.

Today there is little need for active marketing such as advertising, because demand greatly exceeds production.

An important marketing strategy is the development of various tourist products based on the cheese. One example is the Underdal Cheese Festival; another is guided tours of the village and the cheese processing facilities (where a tasting menu is offered).

## 8 - The impact of mountain area location on the above factors

The quality of the natural and agricultural landscape is important in attracting tourists to Undredal and its surroundings, and the community maximizes this strategic opportunity. The building of the road from the village to other parts of the municipality has increased tourist traffic and provided new opportunities for direct quality food marketing to the consumer, thereby resulting in the greatest profits to the farmers and the sales outlet. However, the community has also at the same time been able to develop new and different quality activities for tourists and the local inhabitants, using the fjord and the traditional transport possibilities on the fjord. The Goat Cheese Festival and the short boat tour from Gudvangen to Flåm, the Åreleiken ("Paddle Games"), are examples of what we might call quality tourism.

## CHAPTER V - GLOBAL SUPPLY CHAIN ASPECTS

#### 1 - The organisational aspects

If we look at the overall organisational aspects we see that the local community controls the production and marketing, via the three owners (farmers) of Underdal Mountain Dairy and the owner of the local grocery shop. The relationship and co-operation between these people is close and has been developed well over the years.

## 6 - Global strategy of the supply chain

As described above, the Underdal Mountain Dairy and the local marketing channel (the grocery shop) control the production and the marketing from the farmer to the consumer. One external actor has also had an important influence, namely the Norwegian Food Control Authority (SNT). The enterprise has been approved by the SNT. This approval represents a milestone for the Underdal Mountain dairy.

## CHAPTER VI - LABELLING

#### 1 - The type of label

Today the Underdal Cheese has its own label, which is only used on this product. It is a private label owned by the producer organisation in Undredal. There is no third controlling party. Some of the farmers and the market channel, Underdalsbui, are members of the Aurland Cultural and Nature Heritage (ANKA). ANKA has a private label for use by its members which must meet two criteria:

- The product has to meet the quality roles designated by ANKA.
- The production has to be located in the Aurland municipality.

In the future, the enterprise, the Underdal Mountain Dairy, may perhaps also use the ANKA label, but no decision has yet been made.

The enterprise is also in the process of evaluating the advantages of attaining PDO labelling.

## CHAPTER VII - SUCCESS/FAILURE/NEEDS

## 1 - To what extent and how the product may be considered a success or failure

The project has established the joint production and marketing of the Undredal goat cheese and is a success in relation to the following factors:

- Market response and demand. The product is well known and has a good reputation. Consumers trust the quality of Underdal Cheese. In 2003, production was doubled and the price also increased by 20-30%. Nevertheless, the farmers were unable to produce enough cheese to meet demand.
- **Higher milk prices for the farmers.** The market success enables the enterprise to pay a high price for the goat milk to the farmers. The price is about the double the price received for milk which is delivered to Tine.

- Ripple-effect economic consequences. The success in Undredal has had positive consequences for other villages in the Aurland municipality, as well other regions in Norway. The example of Undredal illustrates to others what opportunities may be available in this sector.
- Positive effects on the village, Undredal. The goat cheese success has resulted in positive economic consequences: it has helped the local food store to survive, and has also made the village more attractive for tourist development.
- **Positive landscape effects.** The goat-farming system in Undredal is very important for maintaining an attractive landscape with open mountains with a high diversity of plant flora. The landscape and the animals at pasture are important values for the tourism businesses in Flåm and Nærøyfjorden. About 700,000 tourists from all over the world visit the area annually.
- **Quality authorisation**. In 2003, the enterprise obtained quality authorisation from the Norwegian Food Control Authority to sell white goat cheese produced from unpasteurized milk.

## 2 - To what extent and how the success/ failure can mainly be attributed to the state of affairs described in the various chapters

The success is directly related to the various aspects described in all the chapters.

## 2.1 The development of the project

An important element is the unbroken tradition of goat farming and cheese processing in Undredal which continues in the present day. Goat farming and cheese production has been, and still is, the most important business activity in the village. The current successful model is a result of a long development process under different co-operation conditions for joint cheese production which have evolved since 1980. This process began with an initiative started by one person who saw the opportunities in joint cheese production. The project establishing the enterprise the Underdal Mountain Dairy in 2002/2003, is an important result of common goals and visions over a number of years.

A common understanding of problems and opportunities among the farmers was important in managing the long struggle to establish the enterprise. The opportunity on which they capitalized was the development of a quality product with a strong image and a local label, and one which exploited the market of consumers who demand high quality food.

Another important factor for the success of the project is the different competences possessed by the farmers in the project/enterprise. The farms have complementary competences: mechanical engineering, cheese processing, organisation and strategic leadership and practical work competence.

#### 2.2 Basic production

In explaining the success of the venture, the landscape and pasture qualities have been important elements contributing to the success of the basic products which are made. Moreover, the goat farming and pasture system is closely adapted to the landscape and natural conditions in the area.

## 2.3 Processing

The basic production of the cheese processing is closely adapted to local natural conditions. The cheese production is also built on long cheese production traditions in Undredal. In addition, one of the farmers completed a formal education in cheese processing technology in France in the 1990s, a competence that has been important for the success of the venture.

## 2.4 Delivery chain and global supply chain

The local community, the people in Undredal, control the total production and marketing: the owners (farmers) of the Underdal Mountain Dairy and the owner of the local grocery shop, Underdalsbui. The relationship and co-operation between these people is close and well developed over the years.

In addition, the building of a road to the village during the 1980s has contributed to the development of local infrastructure. In particular this has provided a good opportunity to market the cheese in the most

profitable way - directly to the consumer, over the shop counter. At the same time, Undredal has retained its special and exotic image with its high quality cultural landscape.

#### 2.5 Labelling

The Underdal Cheese has for many years built up a well-trusted and well-known quality image among consumers and sales organisations in the market. However, the label itself is according to our assessment not the most important factor contributing to its success, due to the dominant market channel: directly to the consumer from the grocery shop in Undredal, by post or at farmers' markets.

## 3 - To what extent and how does the success/failure primarily stem from the different aspects discussed

#### Organizational aspects

With the establishment of the production association "Underdalsosten" (The Underdal Cheese) in 1996, the co-operation between the farmers was established in a formal framework. The organisation has played an important role in the strategic discussions and decisions on the future development of production and marketing.

The enterprise, the Underdal Mountain Dairy, is organized as a local cooperative (company with limited responsibility). An important principle is the separation between ownership and management of the dairy. This principle proved to be important for the co-operation between the farmers.

The co-operation among the farmers during the last 20 years has given them important experience and competence in joint action, especially in how to solve conflicts and how to support each other. This competence is as important as production and processing competence. Without the farmers' 'go-ahead spirit' and positive determination the project would probably not have been successful.

The success of the venture is also due to the farmers' informal agreement with the local grocery shop for marketing the cheese and to the high volume of direct sales of the product to consumers.

#### **Know-how and quality aspects**

Another important aspect is the close relationship between the local grocery shop, Underdalsbui, and the farmers. Underdalsbui has a good knowledge of the farming systems and the transformation process from milk to cheese. This knowledge is fundamental in promoting and communicating the desirability of the product to consumers and other customers.

The Underdal Mountain Dairy's philosophy is to produce a traditional cheese by using traditional methods. Traditional — is used to mean historically developed techniques and methods adapted to the local environment, culture and resources. The cheese provides a picture of the local ecology system that would be destroyed by milk pasteurization; therefore, it has always been important for the farmers in Undredal that their milk not be pasteurized before use.

The co-operation among the farmers over a period of 20 years has also established a culture of quality. The farmers have worked hard over the years to establish good systems for quality control and climate management for cheese storage.

#### Public authorities and public policy authorities

The establishment of the enterprise was facilitated by grants obtained from SND. The governmental programme "The Value Creation Programme for Food and Forestry" (from SND) has also supported the enterprise's marketing initiatives.

In spring 2003, the Underdal Mountain Dairy received authorisation to produce and market goat cheese from unpasteurized milk. This very important approval also allows the enterprise to market the cheese all over the EEA area.

#### **Quality control aspects**

The co-operation with Bergen branch of The National Veterinary Institute in a joint project to develop systems for quality management has been, and will in the future be, important.

## Strategic aspects.

The farms in Undredal have no possibilities to compete on the basis of low costs and pricing strategies. Their only opportunity was to develop a quality product with a strong image and local label to exploit the market of consumers who demand high quality food.

In connection to this overall strategy it has been important to:

- Maintain control over production, processing and marketing.
- Sell most of the product directly to consumer.
- Develop different tourist-oriented initiatives based on the cheese.

#### The impact of mountain area location

The steep mountains, good climate and productive land provide good conditions for goat farming. The farming system is adapted to the local conditions and produces a high quality cultural landscape, which is an important aspect supporting the region's increasing tourist traffic.

In the past, Undredal has been handicapped in its development because of infrastructure problems. Earlier difficulties with road communication to other parts of the municipality go some way towards explaining why there has been a continuous tradition of local cheese production from old times up until the present day. However, the road built in the mid-1980s has provided development opportunities, by enabling increased tourist traffic and direct marketing of the cheese to the consumer. In this way, it seems that the community is maximizing the strategic opportunity it derives from its unique location. The community is also developing different new 'quality' activities for tourists and local inhabitants using the fjord and the traditional transport possibilities on the fjord.

## **OSCYPEK (SMOKED CHEESE)**

<u>Area</u>: Podhale – the Tatras (Poland)

<u>Authors</u>: Beata Kupiec (University of Wales Bangor)

Monika Wszolek (KPPZ AR Krakow)

## CHAPTER I - INTRODUCTION TO OSCYPEK: MOUNTAINS, PEOPLE AND THEIR CHEESE.

Poland has a long-standing tradition in sheep husbandry. Records dating back to the thirteenth century document a local sheep breed that provided wool, and in the fourteenth century the country was exporting woollen cloths to Persia, Turkey and even China. A census of Polish agriculture carried out in 1870 recorded 12 and a half million sheep, but political environment and competition caused the number of animals to rapidly decline. In Podhale region the ancien sheep breed still survives. It is to originate from the Zackel, a Carpathian breed that were brought to these pastures by nomadic Wallachian (Wolosi) shepherds. Here they adapted perfectly to the conditions and allowed a unique shepherd culture to develop.

In Poland there are now about two million animals providing both meat and wool. Of these 50 thousand ewes are in the Podhale region where farming in the form of traditional, pastoral system. This is based on the seasonal employment of baca (pronounced *batza*), the head shepherd who, in May, collect sheep from the local farmers (approximately 10-12 per farm) and take them up to the pastures at an altitude of 800-1,500 meters, where they stay until October. Due to the environmental damage done by intensive grazing the Podhale herds have been moved to other Carpathian regions (such as near Beskidy or even to remote South-East range called Bieszczady). This policy has been introduced due to the fact that most of the Tatras belong to the Tatras National Park that has been founded in 1954. Grazing pressure declined in the last years because of inefficient wool production, which has become unprofitable in the 90s.

Poland has no tradition of ewe's milk cheese and apart from fresh curd that is commonly produced across Poland, no typical farmhouse hard or smoked cheese (regardless of the type of milk) exists. The exception to the rule is Podhale, where the tradition of *oscypek* making survived and production developed due to increasing demand and strong relation of the cheese with the region in which it is produced. Oscypek is a smoked cheese traditionally made of ewe's milk but increasingly being produced from cow's milk or ewe's and milk in certain proportion. Tasting oscypek, and bringing it home to family and friends, has long been tourism attraction for anybody who goes for a trip to Tatra mountains or visits Kraków and Zakopane. The locally produced cheese was traditionally sold in stalls and open-air markets. Its substitutes available in some supermarkets are largely unsuccessful: pasteurised and vacuum-packed have dubious sensory quality. These cheeses are often described as tasteless, gummy, and too salty.

In the wake of the EU accession Polish traditional products, including oscypek face an uncertain future. Some of the fundamental questions have to be asked and the answers should ensure not only survival but development of the product, especially in the context of its contribution to bio- and cultural diversity of European production systems.

## CHAPTER II - BASIC PRODUCTION (RAW MATERIAL)

#### 1 - Organisational Aspects

In the Tatra Mountains animal husbandry has a form of Co-operative<sup>8</sup> Livestock System (CLS) which implies some cost, revenue and risk sharing between all the actors involved.

The management of the Podhale CLS is still carried out in the traditional way. Similarly to the alpine practices in Switzerland the animals are grazed in the summer by a head shepherd ("baca") in the alpine zone and the summer grazing areas range from 5 up to 200 ha with an average of 50 ha (Ryszkowski, 1997)<sup>9</sup>.

The land in the alpine zone is split into privately owned parcels. A shepherd bargains with each landowner for the tenure of his land. Other production factors (huts, equipment) are owned by the pastoralist. Some animals belong to baca (on average. 10%) and the rest are collected from small family farms of the region. After the grazing season the animals are kept in the villages and graze on small private meadows (in some cases the collective pastures are also used). In winter sheep's feed consists of hay supported by small proportion of grain based feed. The lambs are sold for meat both for the local market and some export mostly to Italy and France. Traditionally baca is paid for his work with milk obtained during grazing season. All the milk is for the pastoralist disposal and used for oscypek, bundz, bryndza and zetyca production sold locally and regionally.

Overall, the pastoral system used for ewe's milk production can be characterised by the following features: all forage is used by livestock (mostly sheep), the yield of milk/ewe/ha is low, the resources is used by a group of people in a structured manner.

#### 2 - Know-how and quality aspects

The single landowner can look for the best offer made by any pastoralist (either in the form of payment or land tenure).

Considering the definition of CLS, the co-operation could be considered at four different levels: between several landowners (resource provision),- between several pastoralists (resource acquisition), - between pastoralists and the animal owners,- and between landowner and pastoralists.

In Podhale the co-operation exists between **pastoralists and the animal owners** as the shepard also owns some of the flock. The baca provides labour, knowledge and capital in the form of feed, livestock management and production factors. The livestock owner contributes capital in the form of livestock and milk. The pastoralists work with all participating owners to achieve maximum yield at minimum costs.

Co-operation between the landowners and the pastoralists does not involve shared revenues and the tenure is independent of the profits achieved by the shepard. The contract between the two has a form of negotiated agreement. There are no shared managerial activities with regards to the use of the land.

## 3 - Public Authorities

In Podhale CLS is based on the tenure and boarding contracts of limited duration and negotiated between the pastoralists and the landowners of the summer pastures. As the land is treated as a private good the intervention of public authorities at that stage is minimal. There is no direct or regulated competition (e.g. in a form of an auction) between the pastoralists for the land. Each pastoralist negotiates individually with the landowners or the community of landowners. In Podhale land use is based on the principles of private

<sup>&</sup>lt;sup>8</sup> "acting together, in a co-ordinated way in the pursuit of shared goals" .Argyle, M. (1991): Cooperation: The Basis of Sociability. London, Routledge.

<sup>&</sup>lt;sup>9</sup> Ryszkowski L., Ksztaltowanie obszarów rolno-lesnych dla trwalego i zrównowazonego rozwoju. VII Ogólnopolskie Forum "Ekologia Wsi: 9-31, 1997.

property, with the shepherd deciding how many animals he intends to stock on his tenured land again without any control from Public Authorities.

Public institutions regulate the animal losses during the grazing period; they have to be compensated by the pastoralist.

## 3 - Public Policy Aspects

As ewes numbers decreased over the nineties in 1994 a national system supporting sheep flocks was enforced, and included continuation of the former breeding flock subsidies and new premium for ewes, focusing on renovation and development of flocks for production of slaughter lambs. The national "Programme for improvement of sheep population in Poland up to 2010" was adopted; it comprised both a scheme of economic support of flocks - subsidies to ewes on farms keeping at least 10 ewes and support for transformation of sheep breed structure to ensure their use for meat production. Also the Podhale region qualifies for subsidies to producers of sheep meat as an area which suffers deficiency of green fodder due to soil-climatic conditions. In consequence some of the pastoralist and animal owners have to transfer their animals for grazing into other areas.

Due to the specific soil-climatic conditions in the Carpathian region, particularly the short plant vegetation period, only a single hay harvest is possible from local meadows and this hay is used for feeding sheep in the winter. The sheep of the Polish mountain breed are fed within an extensive system with grass in the summer and hay in winter. Since small (up to 3 ha) farms prevail there, the farmers do not have sufficient areas of grasslands for grazing sheep within their own farms during the spring and summer. Moreover, since the Polish Mountain sheep kept in these areas are used also for milk production, development of collective grazing should facilitate organisation of milking and milk processing as well a distribution of milk products.

## **5 - Quality Control Aspects**

The quality control of milk produced with traditional system is non-existent.

## 6 - The Strategy

Podhale region started developing rapidly when the city of Zakopane got fashionable as a tourist resort at the end of the 19. century. The highlanders (*gorale*) revalued their attitudes and got consolidated as local community. Highland identity plays an important role in socio-economic development of the region and the pastoral CLS is also one of the signifiers ascribed to the region and a tourist attraction supported by local authorities. The start of the grazing season is a festive day and an opportunity for the Highlanders to manifest their folk customs. The production system has also a symbolic role and gives a competitive edge to the only region in which these traditions survived, sometimes outside economical reason.

#### 8 - Other issues - sustainability of pastoral CLS

The sustainability of natural resources used in this mode of production is especially important when land resources are seen as a private good. This creates the need for development of sustainable pastoral methods and collective controls of the resources. The problem of sustainability of the Tatras' pastures was illustrated by overgrazing of the mountain pastures in Poland during a boom period in the beginning of nineties.

## CHAPTER III - PROCESSING AND TRANSFORMATION

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 $<sup>^{\</sup>rm 10}$  Art. 2.3 of the Council Regulation (EEC) No 3493/90 of 27 November 1990

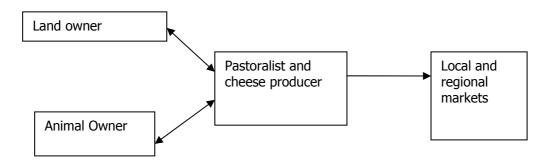
#### 1 - Organisational Aspects

There are two sources of oscypek type cheese: i) traditional one produced in the mountains in shepards' huts and ii) mostly cow's cheese produced on small farms in the Podhale<sup>11</sup> region.

Apart from these there are also oscypek cheeses produced by local dairy plants with a mechanised system and from pasteurised milk. This aspect of oscypek production is beyond the scope of this case as these cheeses can not be classified as traditional, hand made oscypek.

The organisation of production systems for the two hand made oscypek type cheeses is presented below:

Fig. 1a. Organisation of production system: traditional oscypek.

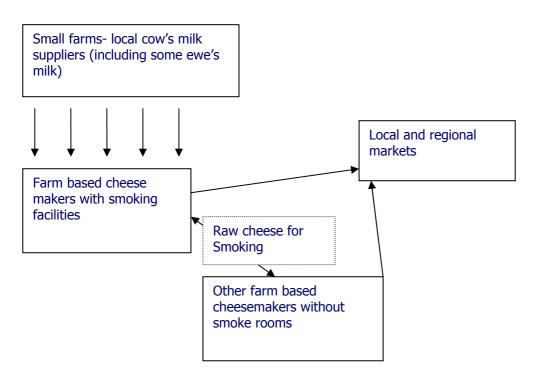


The average sheep grazing area in the Podhale is 50ha with flock size of 500 ewes. Each ewe gives on average 120 l of milk per year and 60 l is used for lamb. The average yield is 7l of milk per 700g oscypek. One baca/pastoralist is capable of producing 4000 traditional ewe's oscypek cheeses per season. With population of 50 thousand ewes, Podhale and Zywiec regions are capable of producing 400 thousands of oscypek cheeses from 3 mln litres of available ewe's milk.

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<sup>&</sup>lt;sup>11</sup> Podhale will be used throughout the text to refer to all three protected geographical areas where oscypek is produced.

Fig. 2a. Organisation of production system: on-farm oscypek.



According to unofficial estimates by Regional Association of Ewe's and Sheep's breeders (unofficial data, 2003), around 30 thousands litres of cow's milk is being processed into oscypek type cheese in farms of Podhale region. Some of these operations are illegal (i.e. unregistered with the Tax office), some are registered as smokers and distributors of cheese. In case of any inspections farmer declares production for own consumption. Taking into account only moderate estimates, 7,5 mln of cow's milk is being processed into oscypek type cheese yielding 1mln of regular (800g) cheeses a year. As most of the cheese is sold in the open markets without any quality schemes/labels consumers have little chance to trace its origin.

#### 2 - Know-how and Quality Aspects

The traditional technology of oscypek is strongly connected with the **location of the production site** (i.e. shepherd's hut) and **hand processing** with application of **traditional tools and pre servation method**. The step-by-step production of oscypek is described below:

- 1) Milk is mixed in copper kettle hung over the open fire.
- 2) It is warmed and after powdered calf rennet is added it coagulates in 36° in 30 to 40 minutes.
- 3) The curd is broken with *werula*, a wooden paddle used for working the cheese, and left for 30 minutes.
- 4) Afterwards the curd is scalded with hot water in a wooden tub, the *czerpak*.
- 5) Mixed curd grains settle in the wooden tub.
- 6) Cheese maker uses *czerpak* and works out the curd measuring necessary quantity, squeezing and breaking it up finely.
- 7) The curd is pressed by hand, kneaded, put back into hot water, and pressed again. The process is repeated until the curd is transformed into a firm elastic ball. A slim metal rod, the *kotlik*, is then inserted through the central axis of the ball.
- 8) The ball is squeezed by hand around the *kotlik*, allowing the water to gradually drain out, creating the typical spindle shape. The characteristic symbols of the head shepherd are impressed on the surface of the cheese using engraved wooden stamps.

- 9) The cheese is immersed in brine for 24 hours and, once dries, is stored on wooden racks below the hut's roof.
- 10) Smoking takes place in the hut with the smoke from the open fire. (3 days to 2 weeks)

In the production process baca is assisted by his junior shepherd – *juhas* employed by him. The other products of shorter shelf life include bundz (ewe's fresh curd), bryndza (salted and aged bundz) and zetyca (fermented whey).

The very characteristic patterns that are sculptured in the wooden moulds are unique and it is said 30 thousand of different designs exist across Podhale and Zywiec region. The average cheese weighs between 600-800 g.

#### 3 - Public Authorities

The control of health and safety aspect of production belongs to the local office of Veterinary Inspectorate. They are the first contact agency which helps to authorise processing of milk. The legal basis for this procedure is described in the Minister of Agriculture Directive<sup>12</sup>.

This document lists detailed procedures for farm and livestock control, bacterial counts, somatic cell count, hygiene of milking, control of employees. The processing should take place only with stainless steel equipment, there should be appropriate cleaning procedures in place, pest control and sewer. Anybody buying milk for production should (is allowed to) buy only milk of the highest quality ("extra grade") according to Polish classification.

Although in recent years, many producers made enquiries with regards to this requirement, none of them proceeded further.

Producers are not able to pay high veterinary fees or to modernise production facilities due to lack of space or land or unexplained status of land ownership. As a consequence there are only four dairy plants controlled by Veterinary Inspectorate: large plants in Zakopane and Nowy Targ, private company in Bialka Tatrzanska and a yoghurt manufacturer in Szaflary.

Apart from the sanitary conditions which are controlled by public authorities the district Treasure (Tax) Office (Urzad Skarbowy) in Nowy Targ investigates the volume and value of production. The measures involve visits to farms to estimate the throughput, profit and eventually fines for not reporting the additional business activities. Most of the farmers caught while producing the cheeses register their businesses as trade companies handling and selling local cheeses. They are not able to register themselves as manufacturers due to the official safety and hygiene requirements but are tolerated by public authorities as long as they pay the taxes.

At the national level Ministry of Agriculture (Ministerstwo Rolnictwa) controls all general aspects of production and distribution of any of food products especially in the context of the EU negotiations. Main Veterinary Inspectorate is in charge of the health and safety procedures. Other institutions involved at the local level are Association of Sheep Producers (Regionalny Zwiazek Hodowców Owiec i Koz) and Nowy Targ District Authority (Zarzad Powiatu) with Agriculture Department (Wydzial Rolnictwa). Apart from these similar structures of the Malopolskie Voievodship authorities have a regional input. The local and regional representatives argue the regional/local food case at both the country and European level.

#### 4 - Public Policy Aspects

There are numerous policy related initiatives which aim to support regional and local food and in this case oscypek.

Commission for Agriculture and Rural Modernising<sup>13</sup> supports programme "Oscypek" which is to lead to the legalisation of the traditional oscypek and its sales in Polish wholesale and retail outlets. However in according to the Commission local authorities at the gmina and powiat level were passive and did not

<sup>&</sup>lt;sup>12</sup> Rozporzadzenie Ministra Rolnictwa z 5 lipca 2002r.

<sup>&</sup>lt;sup>13</sup> Komisja Rolnictwa i Modernizacji Terenow Wiejskich, September, 2001.

respond to the initiative. Since then the legalisation of production of oscypek is supported by Malopolskie Voievodship and also by individual local authorities in the areas where oscypek is produced.

## 5 - Quality Control Aspects

At the moment all QC is performed by Veterinary Inspectorate, apart from that there is a support provided by local umbrella organisation and local authorities in a form of code of good practice. The Association of Sheep Producers in co-operation with French organisation GRET<sup>14</sup>. The aim is to prepare Polish producers to comply with European regulations and create terms of reference (cahier des charges) for the product to receive traditional speciality status for the product (Protected Designation of Origin (PDO<sup>15</sup>).

#### 6 - The strategy

Although not researched to the full extent the factors determining the quality of oscypek are related to mountain conditions of the production such as specific breed, alpine microflora and traditional know how. The shepherds use their own experience and follow the methods passed from generation to generation. There is little communication and co-operation between individual pastoralist in the process of production.

The characteristics of cheeses which originate from different producers vary: a final product is light yellow to dark orange as the colour is influenced by type of wood used for smoking.

Cheeses differ in their texture and taste although there is always presence of the regular holes, taste is slightly sour, piquant, salty and smoked<sup>16</sup>. Chemical composition of cheeses also differs especially with regards to water, fat and acidity levels. Water and salt content varies the least.

In the on-farm production provision of labour is very often kept within extended families.

From the strategy point of view the following factors inhibit developments in production of oscypek cheese:

- Lack of working capital and production resources;
- Weak supply chains
- Weak co-operation between pastoralists and other actors in the supply chain.

## **CHAPTER IV - DELIVERY CHAIN**

## 1 - Organisational Aspects

The distribution chain of oscypek type cheese is not formalised and involves hundreds of small participants – more often than not, unregistered individuals selling the products directly to consumers in the markets and streets of Zakopane, Nowy Tarq and Krakow, an also other attractive tourist locations.

Most of the oscypek cheese is sold at farmers markets such as one based at the foot of Gubalowka mountain. The rest is distributed via street sales (individual vendors very often carry only few kilos of cheese in baskets). In recent years sales in good restaurants and other catering outlets contributed to increased popularity and enhanced the image of the cheese.

As the production of oscypek increased (especially the cow's milk one), the distribution of the cheese expanded beyond the traditional regional farmers markets and the streets of Krakow. There are examples of organised distribution via railway courier mail. In summer cheese is sent overnight and arrives to tourist locations along the Baltic coast and Warsaw.

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<sup>&</sup>lt;sup>14</sup> Groupe de Recherche et d'Echanges Technologiques <u>www.gret.org</u>. François M., Smyckla A. (2002) *Oscypek: un fromage traditionnel qui merite la reconnaissance de qualité*.

<sup>&</sup>lt;sup>15</sup> French AOP Appellation d'origine protégée.

<sup>&</sup>lt;sup>16</sup> Drozd A. (2001) <u>Quality of the Polish traditional mountain sheep cheese "oscypek"</u>. In Rubino R. (ed.), Morand-Fehr P. (ed.) . *Production systems and product quality in sheep and goats. Les systèmes de production et la qualité des produits en ovins et caprins* . Zaragoza (Spain) : CIHEAM-IAMZ, 2001. p. 111-114.

#### Private Firms and Organisations, included Consumers and Consumer Organisations



There are private and NGO organisations that are involved in promotion and culinary education of oscypek consumers. In May 2003, for the third time, the *Festival of Oscypek and other cheeses*<sup>17</sup> have been organised. The group of organisations and companies involved in this particular event illustrates the institutional structure of (what can be understood under the term of) "marketing of oscypek cheese." The authorities of

different levels took part in the venue and the government was represented by Minister of Agriculture and Regional Development. Traditional oscypek producers were represented by the Association of Sheep Producers and Association of Podhale Inhabitants. Representatives of local catering and tourism businesses included both large, multiple hotel chains (e.g. Sheraton) and small restaurants. The interest of catering community was represented also by umbrella organisations<sup>18</sup>. Dairy producers were present together with recognised brands of the food industry (Hellmann's, Knorr). Regional media (Tygodnik Podhalanski, radio) and specialist industry periodicals (Poradnik Restauratora) provided media coverage.

The promotion of oscypek is supported by government and NGO's initiatives as well as European efforts. Amongst the most prominent ones are <u>Slow Food Polska</u>, and also local initiatives that can be seen within overall policies of region promotion and Public Relations – see for example <u>Official Oscypek Web Page</u>.

#### 2 - Public Authorities

With the registration of oscypek earlier this year, Regional Association of Sheep Producers together with local authorities of the three authorised districts plan to control distribution of traditional oscypek. No procedures or regulations have been introduced yet.

## **3 - Public Policy Aspects**

The only regulatory aspect is related to the fact that cheeses produced from unpasteurised milk can not be sold in retail and catering outlets. These are product designated for own consumption only.

## 4 - Quality Control Aspects

Only oscypek type cheeses (non traditional produced by dairy plants are controlled following the same procedures as apply to other dairy produce. No QC regulations for "products of specific quality" have been introduced although Main Inspector for Commercial Quality of Agri-food Products<sup>19</sup> has power of regulating speciality products.

## 5 - The strategy

The product and its consumer can be viewed from both tradition and progress of a local produce, point of view. Oscypek is an important element of traditional food in the Podhale region and beyond its boundaries. It features strongly in menus of local and some of prominent restaurant across Poland. The product signifies and enhances cultural and economic diversity of the region. Overall there are two major groups of consumers that the product appeals to and which can pay premium prices: i) visitors (mostly foreign) who

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<sup>&</sup>lt;sup>17</sup> III Festiwal Oscypka i Serów Wszelakich i I Mistrzostwa Polski w Potrawach z Serów Kucharzy Zawodowych i Amatorów. Zakopane 3 Maja 2003

<sup>&</sup>lt;sup>18</sup> See e.g. www.gastronomia.pl.

<sup>&</sup>lt;sup>19</sup> Glowny Inspektor Jakosci Handlowej Artykulow Rolno-Spozywczych.

are not seek unique, quality experience and ii) Polish tourist for which oscypek is a part of mountain experience that involves trekking, folklore of Highlands and regional food and drink feast. As the oscypek has been appreciated by the foreign cheese experts, its legal access to the Polish and EU markets is of importance for any marketing strategy developed in the future.

## CHAPTER V - GLOBAL SUPPLY CHAIN ASPECTS

### 1 - Historical development.

Historically the supply chain for all agricultural products produced and processed in Podhale is characterised by the following:

- □ Small, inconsistent quantities of products being distributed;
- □ Fragmented structure of supply chain without channel directors;
- □ Lack of supply chain infrastructure especially in relation to perishable foods (e.g. fresh oscypek);
- ☐ High margins due to low turnover and distribution via numerous middlemen;
- □ Lack of market expertise and information, relayance on personal judgement, tradition.

In recent years, due to transitional changes, the retail and wholesale markets underwent significant alterations. Large, and especially multiple, retailers dominate urban markets, and operate with regional distribution centres. They demand large voulme and consistent quality supplies. Even speciality products on offer in supermarkets have to be managed centrally. In consequence local products such as oscypek have little chance to not enter large supply chains. (Even if they wide retail distribution is allowed, the cheeses will face organisational barrier of large multiples).

## 2 - Organisational aspects.

The organisation and management of the rural supply chains is limited. The fragmented structure of production does not support vertical (agreements between producers and sellers) and horizontal (marketing and producers groups, common utilisation of resources) integration. This not only increases transaction costs but also augments the risk and cost of supply chain organisation. It also hinders competitiveness of individual pastoralists and cheese sellers.

#### 3 - Know-how aspects

The importance of management and organisation of supply chains has not been fully appreciated in Poland. There is a need for co-operative system tailored to the Podhale production conditions and facilitating introduction of oscypek to new markets as well as increasing profitability of distribution.

## 4 - Management of the product quality

There are limited efforts within the supply chain to maintain/enhance quality of the traditional products. Within "Oscypek" programme, mentioned above<sup>20</sup>, producers were issued with an initial set of code of good practice guidelines. Also information from sporadic and irregular research into oscypek cheese is fed back to the supply chain via local umbrella organisations and local authorities.

 $<sup>^{20}</sup>$  GRET op. cit.

#### 5 - Public Authorities

Local and regional government as well as central government are involved in improvement of supply chains and its infrastructure. Some of the initiatives include organisation of training and support for producers group, sustainability and ecology of production and development of networking. Organisations such as Agency for Modernising and Restructuring of Agriculture (ARMR) and Foundation of Assistance Programmes for Agriculture (FAPA) support individual projects within agri-food sector at local and regional level.

#### 6 - The global strategy.

In the Polish and EU markets there are continuous changes in consumer trends. One of the prominent tendencies is fragmentation of the markets a separation of individual segments into niches that require provision of specific product attributes. As far as oscypek is concerned the following niches are considered appropriate: organic food, healthy food, products for catering, culture food<sup>21</sup>.

The food supply chain can also diversify and specialise in cultural food, with oscypek and other Podhale products being in the forefront of this development. Oscypek signifies Podhale and a very distinctive highland culture. Once oscypek receives all required quality certificates and is protected by PDO, it can be an important case indicating an access to the European markets for other Polish speciality products.

## CHAPTER VI - LABELLING

#### 1 - The type of Label

Oscypek and also bundz, bryndza i żętyca are now protected. On the 22<sup>nd</sup> of April Regionalny Związek Hodowców Owiec i Kóz, Zarząd Główny Związku Podhalan, Starostwo Tatrzańskie, Starostwo Powiatowe in Nowy Targ and Starostwo Powiatowe in Żywiec (original names from legal document) received positive decision by the Polish Patent Office. The Polish Patent Office has granted several of the region's dairy products a "*mark of geographic assignment*", meaning they now can only officially be made in three local districts: Tatra, Nowy Targ and Zywiec. The products now have to be trade-marked, meaning that their physical attributes have to be standardised for the first time: the patent office will determine what actually makes an oscypek an oscypek, and not a e.g a redykolek.

The oscypek name can be now registered as a trademark and according to the Stowarzyszenie Podhalan registration will take place next year. After this registration, producers from other Carpathian regions: Bieszczady, Beskid Slaski and Beskidu Cieszyński can apply for the broadening of the territorial rights.

#### 2 - Why to protect oscypek? The choice of legal protection.

The traditional ewe's milk oscypek has to be protected from other *counterfeit* cheeses already present in the Polish market. Moreover there were attempts by Slovak authorities to apply for protected oscypek name in the EU, for Slovak cheese. Although the Slovaks claim that oscypek has been produced in Slovakia since XVII century, Polish sources dated it back to the XVIth century. At present there are no other legal measures to protect the name so the strict, patent-based route has been chosen to ensure safety of name and tradition of production.

## 3 - Organisational Aspects

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The structures have not been implemented yet. As the *oscypek* name and its geographical origin have been patented only recently, there is no common/co-operative system of labelling applied to the product. In November the verification commission in the Association of Sheep Producers is going to discuss the ways of product identification and institutional measures that have to be undertaken in order to ensure its

<sup>&</sup>lt;sup>21</sup> Ministerstwo Rolnictwa I Rozwoju Wsi (2003). Sektorowy Program Operacyjny. Restrukturyzacja i Modernizacja Sektora Zywnosciowego i Rozwoj Obszarow Wiejskich 2004-2006.

traceability and production controls. The core of the verification commission consists of traditional producers – pastoralists (batzas).

#### 4 - Know-how Aspects

Local authorities and other industry umbrella organisations introduced initiatives which target development of both producers and consumers markets for the protected products. The individual marketing consultants and advisors have been involved in creation of marketing schemes and larger producers/dairy plants introduced their own labelling and symbolic of the product.

#### 5 - Public Authorities

The name is protected by the Polish Patent Office certificate that states that oscypek can only be produced in the three registered areas, under this name, using traditional method and shape and patterns. Apart from traditional oscypek cheese other products are illegal if sold using the name oscypek. Also as the characteristic shape signifies the product its use for production outside Podhale is forbidden.

In consequence both local authorities and Association of Sheep Producers are going to investigate and report illegal products. At the beginning it is going to be an invitation to close down illegal production. If this does not work Veterinary Inspectorate, Sanepid services (which control hygiene and safety of food distribution) will be informed as well as the Police and Sheriff Office. The manufacturers which will not cease the production will face civil court cases.

## 6 - Public Policy Aspects

In the policy of support for regional agri-food sector, the important role is ascribed to non-production aspect of local agriculture. This importance and priority of the approach is related to the changes of the social perception of the agricultural production in specific regions of Poland. There are new challenges awaiting Podhale such as protection of environment or disappearance of local traditions. In local and national policies and also in negotiations documents<sup>22</sup> there is an emphasis on the balanced development of agricultural production to deliver *public goods*.

#### 7 - Labelling Strategy

At present the labelling strategy aims to differentiate the product and ensure protection of traditional oscypek (both from the producers and consumers point of view.) The long term strategy has to be yet developed. However as the next step for oscypek and other Podhale traditional products is to obtain the European protection and recognition, the strategic outcome should be the presence and differentiation in the European market of speciality/traditional food. At the moment Polish regulations are incoherent and do not comply with their EU equivalents<sup>23</sup> and the development of the strategy is only possible when the procedures and quality labels have recognition in both producers' and consumers' markets.

## 8 - Other aspects

At the moment, the product is sold unpacked, the labelling strategy applies only to the very narrow range of oscypek products being sold in shops. Even then its function is secondary in relation to characteristic shape of the cheese and Podhale based ethnic patterns which are easily recognisable across Poland. The labelling information and names of the producers are very often design to promote association of a given producer with the product which is a generic name for Podhale specific cheese. This applies to non-traditional oscypek only.

<sup>&</sup>lt;sup>22</sup> Council of Ministers of the Republic of Poland, Warsaw, 9.12.1999. Poland's position paper in the area of agriculture for the accession negotiation with the European Union.

<sup>&</sup>lt;sup>23</sup> Duczkowska-Piasecka M., Gasiorowski M (2003) Mozliwosci i koniecznosc przyjecia przez polske procedur rejestracji zastrzezonych znakow dla produktow spozywczych. Ekspertyza wykonnn w ramach Polsko Amerykanskiego Projektu Rozwoju Produktow Lokalnych. Warszawa Lipiec 2003.

## CHAPTER VII - SUCCESS/FAILURE

The oscypek cheese can be considered as an example of success in many dimensions. Although the sales volumes are difficult to estimate, the increase in the demand and following increase in production of "non-traditional" oscypek cheese, indicates that the cheese is a well established product in the local and national markets.

When the wool trade had collapsed in the first half of the transition decade, the added value processing of ewe's milk rescued many of sheep owners and pastoralists. Free market and relaxation of private enterprise regulations stimulated development of small businesses. This happened by extension of existing family businesses and also by providing local product to catering and tourism enterprises serving ever-increasing interest in the region and the Tatras.

Moreover, the usually vulnerable, pastoral, CLS's were also protected in the condition of fierce competition of the first years of market transformation.

As the oscypek story is not one-side success the SWOT approach (See table 1 below) was used to illustrate the influence of external and internal environmental forces.

Table 1. SWOT evaluation of oscypek cheese production.

STRENGHTS	WEAKNESSES
☐ Traditional pastoral livestock system.	□ Fragmented structure, small producers.
□ Strong links of producers with tradition	□ Lack of capital.
and resulting processing know how.	□ Low profits.
<ul><li>Sensory characteristics of the final product.</li></ul>	□ Lack of business and marketing knowledge.
Low cost of labour and land.	□ Poor technical and supply chain infrastructure.
<ul> <li>Low level of agricultural input (chemicals, fertilisers)</li> </ul>	<ul> <li>Lack of compliance with EU processing and hygiene requirements.</li> </ul>
<ul><li>Strong links with tourism industry.</li></ul>	☐ High transaction costs across the supply chain.
<ul> <li>Strong recognition of product in the domestic market.</li> </ul>	<ul> <li>Lack of vertical and horizontal integration and co-operation between producers.</li> </ul>
□ Protection of biodiversity.	<ul> <li>Unstructured marketing and promotional activities.</li> </ul>
□ Clean environment.	☐ Incoherent and incompatible with the EU
□ Protected name and shape of the product.	product protection legislation.

Opportunities	Threats
<ul> <li>Registration of oscypek in the EU and introduction to the Common Market;</li> </ul>	☐ Competition from well established European products
☐ Additional support for producers via CAP.	☐ High cost of introduction of EU standards across the supply chain.
<ul> <li>Development of the region with CAP</li> </ul>	☐ Introduction of milk quotas.
funds.  Use of EU examples in protecting the product.  Growth in organic and speciality markets.	<ul> <li>Low productivity and increase in cost of production but no increase in profit margins.</li> </ul>
	☐ Intensive and not co-ordinated exploitation of the environment and natural factors of production.
	□ Tourism pollution.
<ul><li>Registration of trade name.</li><li>Protection of biodiversity and sustainability of pastoral systems.</li></ul>	☐ Improper execution of product protection — replacement of traditional product by "semi-industrial" oscypek.
	<ul> <li>Loss of land to environmental causes (e.g, the Tatras National Park)</li> </ul>
	□ Lack of interest in tradition – new generation not interested in continuation of pastoral traditions.

From the policy and institutional point of view the following policy instruments contributed (and will contribute) to the success of the oscypek product. The summary in table 2 indicates environment and product oriented aspects (green shading) and business oriented ones (blue shading). The combination of different approaches to the specific mode of production is a critical success factor. Lack of certain considerations or a strategic imbalance can cause long term consequences which are difficult to reverse (e.g. lack of tradition continuity).

Table 2. The summary of policies and initiatives influencing oscypek cheese production in Podhale.

Policy

## **Expected Outcome**

Marketing of speciality	Organisation of distribution channels for speciality products especially for
products	protected products and products included in quality schemes. Help with
	trade marks and branding.
Restoration of rural	Preservation of Podhale identity by protection of cultural heritage of
heritage and tradition	villages and traditional methods of production.
Environmental	Protection of countryside and natural environment contributed to
programmes	diversity of production systems and balanced development of agri-food production.
Tourism development	Additional sources of employment, diversification, increase of the markets.
Protection of	Countryside protection, restoration of natural habitats related to
biodiversity,	traditional methods of agricultural production
improvement of animal	
welfare	
Least Favourite Areas	Podhale has worse natural conditions what contributes to smaller level of
	profits obtained from agricultural production. These policies aim to
	maintain agricultural production and level off inequalities between
	producers.
Semi-subsistence	These programmes aim to tackle increasing hidden unemployment by
programmes	stimulating market oriented specialised production.
Support for producers'	Help is provided for the groups and associations to cover administration
groups	and initial support. The two objectives covered are: introduction of EU

	standards and development of supply chains.
Compliance with EU	Lowers costs associated with introduction of the EU standards.
Help for young farmers	Young farmers are help with business takeovers and modernising of farms.
Training	Enhancement of technical and business skills. Changes of attitudes and help with EU integration challenge.
Agricultural services	Creation of services for agriculture: accountancy, farm management and social security.
Developement of infrastructure	Better business environment and regional development

### **Conclusions:**

If oscypek is to continue its success the following issues should be taken into consideration:

- Quality assurance to be developed in accordance with EU standards/
- The supply chains should be developed in accordance with specific (special character of oscypek cheese).
- Management and marketing practice should be involved at production, distribution and protections stages.
- Regional infrastructure has to be improved but traditional technology and pastoral system should be protected.

## CHAPTER VIII: LINKS WITH TERRITORY: ENVIRONMENTAL AND SOCIAL CONSIDERATIONS.

**Low intensity** of oscypek production, well established traditional methods and diversity of business environment create unique opportunity for development of Mountain Quality Products. (See chapter 2).

Attractive and undulating countryside, enriched by occurrences of various geological, biological, agricultural formations and other semi-natural environments contribute to the final quality of oscypek cheese. (See chapter 3).

These diverse characteristics together with its social and cultural background add to the value of extended oscypek product.

The environmental considerations create the competitive edge of oscypek which can be marketed as high quality product amongst more and more demanding European clientele. In this aspects otherwise "backward" product and technology is perceived as a solution for both sustainability of agri-food production and demanding palates of contemporary post-modern consumers.

Further development of the product and its rural environment will require investment in sustainable infrastructure and education of Podhale inhabitants. In some respect they perceive the countryside as their property and some efforts by ecological movements are seen as an infringement of their "highlander's rights and freedom".

Polish mountains have good conditions for development of agro-tourism. Again cultural background and tourism tradition dating back to XIX century are in favour of Podhale farmers. The links between pastoral culture and agritourism are however limited. Although the numbers of farmers involved in tourism increase there are still opportunities that are not exploited due to lack of market orientation and limited entrepreneurial skills.

## **SEED POTATOES**

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## CHAPTER I - BASIC DATA ON THE EMERGENCE OF THE PROJECT

#### 1 - The Natural, Geographical, Historical and Economical Environment

In this document, potatoes for consumption and for seeds have been studied together because it is almost impossible to separate the potato for consumption from the seed potato. Many farmers use the potato for consumption as a seed potato and many consumers buy potatoes that were initially meant to be seed potatoes. Both types of potatoes are in fact the same product – it is only the way in which they are used that differs.

The potato, cultivated from ancient times in high areas of the South American continent (Columbia, Ecuador, Peru), was introduced to Romania in the XVIII<sup>th</sup> century, and became the second bread of the country. The potato is used as food for human and animals and also as a raw material for industry. It is of high nutritional value due to its qualities: taste, easy digestion, high energy content, etc.

Botanically, the potato belongs to *Solanaceae* family, *Solanum* gender, which has over 2000 species, from herbage to shrubs. It grows very well on easy soil of middle texture, soil often found in the studied mountain and pre-mountain area.

The studied mountain area for MQP, which belongs to two administrative districts – Mureş and Harghita – has a temperate-continental climate very propitious for potato growing and particularly for seed potatoes. Here, we can find an annual medium temperature of 2 to 6°C and rainfall of about 519-700mm/year.

The agricultural area of the Mureş and Harghita districts represents about 821,209ha, of which 440,973 is situated in mountain areas. The arable mountainous area represents about 99,222ha and the area under potato cultivation about 21,503ha with a total production of 323,000 tons of potatoes per year, from which 137,000 tons are used as seed potatoes.

#### 2 - The Conditions (Opportunities/Threats) that caused the local players to take action

#### Opportunities:

- This area has the most favourable climatic conditions in the country and even in Europe for potato and seed potato production.
- The low temperatures in the area prevent the development of pests and diseases, so these are great conditions for organic production.
- The area is "closed", i.e. surrounded by high mountains that play a protective role.
- The existence of two clone points SCPC (The Potato Research and Production Station) Miercurea Ciuc and ICPC (The Potato Research and Production Institute) Braşov at 1,200-m altitude. *A clone point is a special place where high quality seed is produced through cloning technology.*
- The existence of an "INSECT-PROOF hothouse" for the production of virosis-free mini tuber and the existence of a lab with "ELYSA TEST", both at SCPC Miercurea Ciuc.
- The existence of qualified specialists in the fields of research and processing.

#### Threats:

- The holdings designated for potato production are small and widely dispersed;
- Low professional training level for small producers.
- Few agrarian associations for potato production, little co-operation between producers;
- Not enough space for potato storage, with no automation and no ventilation;
- Little equipment i.e. specific machines and installations;

These opportunities and threats are also valid for other areas, not only for the studied area.

## 3 - The Human Dynamics and/or Categories of Actors that provided the impetus

Small producers use the crop mostly for self-consumption. Just a small quantity is sold to others. There are no development projects.

#### 4 - The Impact of the mountain area location on the launching of the project

- Very good conditions for potato culture as far as regards climate, soil, lack of aphids and virosis.
- The mountains, which surround the valleys in which the potato is cultivated, are natural barriers against disease and pests.
- There are no host-plants for potato pests in the area.
- Precipitation totals over 500-mm/year, thus setting optimal conditions for potato production.

## 5 - Other Aspects

Seed potato production is not sufficient either in the studied area or elsewhere in Romania.

## CHAPTER II - BASIC PRODUCTION (RAW MATERIAL)

#### 1 - The Organisational Aspects

Some potato farmers have joined one of the 9 associations, representing about 7,000ha (31% of the entire area cultivated with potato). The others – about 26,000 small peasant producers – work the rest of the area on holdings of between 0.10 and 2ha/family in an unorganised way.

The associations are affiliated to "The Romanian Potato Cultivators Federation" in Braşov. The result of federation activity is less than potato farmers had expected in terms of experience exchange, or financial and commercial support. Each year, the federation organises "Potato Green Day", a kind of model symposium, but this is not of great use for the farmers.

#### 2 - Know-how and Quality Aspects

Opportunities for farmers to exchange experiences are rare and difficult to achieve. Few unorganised small producers are trained by the OJCA (District Office for Agricultural Training), an official institution which does what they can, but not what they need to do! There are also potato research stations that provide advice and training for the peasants, but only at a small scale.

#### 3 - Relations with Public Authorities

The state authority is represented by DADR (Direction for Agriculture and Rural Development) which applies agrarian policy at district level and facilitates the subsidisation of seed potato production, and by the OJCA, which provides advice and training at district level.

## 4 – Public Policy Aspects

According to Law 266/2002, the producing, processing and/or marketing of seed potatoes can only be undertaken by economic agents registered for this purpose and which have received authorisation from the MAAP (Ministry of Agriculture, Fisheries and Forestry). Authorisation is issued on an annual basis by the local control authorities and results in the certification of the seed potatoes for that year.

In accordance with Governmental Decision no. 210/2002, the subsidy for consumption potatoes cannot be paid due to a lack of funds.

The state subsidy for certified seed potatoes is granted only to producer companies and represents 25% of production costs. Individual producers cannot obtain certification, and therefore do not receive subsidies.

#### 5 - Quality Control Aspects

Small farmers do not have any quality control procedures.

Organised producers in agricultural associations or commercial companies who produce seed potatoes are subject to control by the local *Seed Quality Control Inspectorate*.

The protection of agricultural plant varieties is assured by Law 225/1998.

## 6 - Strategy Aspects

There is no any national strategy for potato production. There are strategies at association level either.

#### 7 - The Impact of the mountain area location on the various aspects

The studied area is considered to be one of the most favourable areas for potato production in Romania. It is also one of the most favourable in Europe. This is mainly due to the climatic and soil conditions and the biological isolation of the area (virosis-free area).

#### 8 - Other Aspects

In Romania over the last 6 years, more than 270,000ha were cultivated with potatoes for consumption, and 97% of this surface is in private possession.

## CHAPTER III - PROCESSING AND TRANSFORMATION

#### 1 - Organisational Aspects

At local level, potatoes are post-processed by alcohol companies such as "REGUN ALCOOL", and at national level by companies that produce chips (CHIPS, STAR FOOD Bucureşti) or potato flakes (ROCLIP Făgăraş).

Most of the crop is used as nourishment for people and animals.

The post-processing of the potato is very uncommon in Romania.

## 2 - Know-how and Quality Aspects

Do not exist.

#### 3 - Relations with Public Authorities

The factories that use potatoes as a raw material need to have a licence. No other involvement of public authorities in potato post-processing is known.

#### 4 - Public Policy Aspects

Do not exist.

#### 5 - Quality Control Aspects

Do not exist.

## 6 - Strategy Aspects

Do not exist.

#### 7 - The Impact of the mountain area location on the various aspects

Does not exist.

## CHAPTER IV - DELIVERY CHAIN

## 1 - Organisational Aspects

There are no local structures for the organised delivery of potatoes in the studied area. Each producer sells according to his own methods and possibilities.

The producers of potatoes for consumption have been concluding sales contracts with seed producers since the summer.

The consumption potato is priced at around 0.2€/kg and the seed potato at around 0.36€/kg. Over the last 4-5 years, the average potato price was about 0.15€/kg. These prices apply all over Romania.

#### 2 - Know-how Aspects

No one gets involved!

#### 3 - Relations with Private Firms and Organisations

The main potato consumers are from Bucharest and they buy almost 90% of the production of consumption potatoes. There is no market organisation

#### 4 - Relations with Public Authorities

There are no relations with any authority.

#### 5 - Public Policy Aspects

There are no such aspects.

### 7 - Marketing Strategy Aspects

There have been some recent producer initiatives to establish potato marketing associations. However, in the studied area, such structures do not yet exist. The consumers consider the potatoes from the studied area to be higher in quality, but there is no price difference between these potatoes and the potatoes from other areas.

## 8 - The Impact of the mountain area location on the various aspects

Both the potato for consumption and the seed potato have a strong positive image due to their mountain origin. The two types of potato are in fact the same product, but they are used differently.

## CHAPTER V - GLOBAL SUPPLY CHAIN ASPECTS

#### 1 - Organisational Aspects

No organisation in any part of the commodity chain.

## 2 - Know-how Aspects

Peasants may participate in training courses given by private or state institutions that are entirely lacking in coherence. The emphasis is mostly laid on theory rather than practice. These courses are free of charge, but are not approached in a professional manner.

## 3 - The Organisation and management of product quality

The seed potato can be obtained from many sources such as:

- certified producers,
- import,
- self production,
- uncertified producers (mostly small individual producers).

Market supply for consumption potatoes is unorganised and takes place on a trial and error basis.

## 4 - Relations with Public Authorities

Public Authorities do not get involved.

## 7 - The Impact of the mountain area location on the various aspects

For a potato producer buying seed potatoes, the mountain origin of the seed potatoes has a strong impact on the image of the potato, but this image is not certified in any way and is based only on reliability.

#### CHAPTER VI - LABELLING

## 1 - The Type of Label

Labelling is only for certified seed potatoes at national level, according to EU standards.

For the uncertified potato, a kind of labelling is possible, but only in some supermarkets. This labelling indicates the producer and the area of origin for commercial purposes and on an own-initiative basis.

#### 2 - The reasons behind the Choice of Label/non-labelling.

Usually the potato has no label and consumers do not expect a label for this kind of product.

#### 3 - The Organisational Aspects

For the seed potato, the label serves as a "phytosanitary passport". Each biological category has a specific coloured label indicating the origin, quality, purity level, variety and biological category.

#### 5 - Relations with Public Authorities

The public authorities only control the labelling for the certified and subsidised seed potatoes. There is no other involvement.

## 9 - Other Aspects

According to Government Decision no. 573/07.09.1998, the State Office for Invention and Trademarks (OSIM) has sole authority in Romania over industrial property protection. According to this authority, OSIM administrates the following laws regarding trademarks, geographical indications and plant-variety protection: Law no. 84/1998 regarding trademarks and geographical indications, Law no. 255/1998 regarding new plant varieties.

The **trademark** distinguishes between enterprise and competitive products and services. For the consumer, it offers the easiest way to recognise a category of products and services that has been recommended to him or which he prefers in comparison to other products or services of the same kind. The first applicant for a trademark receives a registration certificate which gives him the right of property over that trademark and allows him to oppose any counterfeit or illegal copies. The registration of a trademark is valid for 10 years.

The **geographical indication** is the denomination used to identify the origin of a product as being from a country, a region or a locality, in the cases when a certain level of quality, a reputation or other specific characteristics can be essentially assigned to that geographical origin. This kind of identification and protection is still hardly ever used. It is used mostly by wine producers. In the mountain area under study, no foodstuffs are subject to geographical indication, but we think that in the future, this kind of indication could be a good starting point for the implementation of identification types such as the PDO and PGI.

## CHAPTER VII - SUCCESS/FAILURE/NEEDS

## 1 - To what extent and how may the product be considered a success or failure?

In local Romanian conditions, this product can be considered to be a success, but in a wider and more competitive market, it would have many problems. The long production period and the small areas used for potatoes lead to the local market's need for import.

Seed is produced in 6-8 years in a clone system and in 4-5 years in meristematic system. There are also cultivated potato varieties from Holland, Denmark, Scotland, Germany and France. Out of 30 varieties, 2 of them are cultivated for seed. The REDSEC and RAZANT varieties are the most frequently used and cover about 30ha.

## 2 - To what extent and in what way does the success/failure mostly stem from the various chapters?

If the product is in a way successful, that is only due to the local mountain conditions and basic production. Aspects pertaining to transformation, the delivery chain and labelling mostly represent negative parts of the global supply chain for the product.

#### 3 - To what extent and how does the success/failure mostly stem from the different aspects?

The main aspects that determine the success of the potato are the mountain location of production, the seed quality and the natural conditions.

The success also stems from the fact that demand is greater than supply. The high number of farmers has a strong social impact and allows sufficient consumption to cover domestic needs in a relatively poor area.

## 4 - What are the needs, what is missing and what could be done (from the various aspects)?

- The most necessary thing is a potato production policy. The potatoes are cultivated by people
  mostly for their own consumption and for local markets with no policy for production, the cultivated
  areas or importing strategies.
- To precisely define the closed areas for seed production,
- · A ban on using uncertified seed,
- Monitoring the aphid population in areas formerly used for seed potatoes,
- Treatment for aphids and state clearance,
- Training and information for potato producers,
- · Support for producer associations,
- Financial support for the subsidisation of all consumption and seed potato producers.

#### CHAPTER VIII - PRODUCTION ASPECTS AND ITS LINK WITH THE TERRITORY

## 1 - Environmental criteria

Environmental influences on production

- The most important environmental aspects that affect potato production in the area are the climatic and soil conditions and the biological isolation of the area (virosis-free area).
- The growth of the potato is faster than in other areas (about 8-12 days), and this factor reduces the risk of viral contamination.
- The local soils allow for shallow sowing;
- The environment is isolated and closed, thus ensuring healthy crops;
- The soil type is "medium to heavy" and "deep", rich in organic substances;
- The sowing period takes place in the second half of March and all of April.
- Due to the environment, it is possible to ensure that storage spaces are isolated from viral infection sources. The area is free of over 45 types of mycosis disease, 10 types of bacterial disease, and 25

types of viral and micro-plasmatic diseases. The isolation of the area is due to the high mountains that surround and protect it.

#### Production influences on environment

- On the other hand, the production does not affect the environment, as it is undertaken without chemical treatment and is not extended to wild areas.
- The healthy environment and the lack of pests reduce the need for chemical treatment.

#### 2. – Local economic criteria

- The potato can be used as precursory crops for many other annual or multi-annual crops;
- Potato growing is an important agricultural activity in the area, but it is of lesser global importance than other activities such as the forestry and timber industry.

#### 3. - Social criteria

• The high number of potato farmers – about 26,000 peasants – has a strong social impact and enables subsistence production in a relatively poor area.

## **ROSE HIP TEA**

Area: Oriental Carpaths (Rumania)

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(Fundatia pentru Promovarea Agriculturii si Economiei Alimentare)

## CHAPTER I - BASIC DATA ON THE EMERGENCE OF THE PROJECT

#### 1 - The Natural, Geographical, Historical and Economical Environment

The studied mountain area for MQP, which belongs to two administrative districts –Mureş and Harghita – , has a temperate-continental climate. Here we can find an annual average temperature of between 2 and 6°C and rainfall of about 519-700mm/year.

The raw material consists in fruits of the *Rosa Canina* species – rose hips – which are a very widespread species in the mountain area, due to reduced ecological requirements.

Fruit is one of the main secondary products of the forest. Among these, the rose hip is one of the most representative due to its dispersion, economic importance and usefulness for different purposes.

The wild rose is a shrub, about 2-3m high, which grows on the edge of forests, grassland and scrub, as it cannot stand the shadow. As far as soil is concerned, it is not a demanding species. It even grows on rocky or eroded soil, has a great resistance to low temperatures and does not need much humidity. Wild rose can be found at up to 700m altitude.

Rose hips are oval or round and have a diameter of about 1.5-3cm. In the first stage of growth, they are light red in colour, and later become dark red. The pulp is fleshy and is sour and flavoursome. Rose hips are therefore used for making natural juice, tea, vitamin paste, alcoholic drinks and various extracts.

Rose hips are traditionally harvested in forest areas. Each year, the harvest totals about 250,000kg.

## 2 - The Conditions (Opportunities/Threats) that drive the protagonists to act

#### **Opportunities:**

- This area has favourable climatic conditions;
- The plants are harvested from spontaneous flora in an unpolluted region,
- Easy to harvest,
- Good possibilities for export.
- About 500 jobs are created for a period of 2-3 months each year.

#### Threats:

- Not enough workers,
- Lately, some companies have been importing cheaper rose hips from Chile and Egypt.

## 3- The Human Dynamics and/or Categories of Actors that provided the impetus

Demand for rose hip tea has increased in recent years and is still increasing on both the internal and external market.

The main actor involved in local rose-hip refinement is LARIX, a company with direct co-ordinated relations with harvesting teams and commercial relations with raw material suppliers and distribution companies, and which also collaborates with the public authorities.

Private companies harvest on town hall properties, private properties and state properties.

#### 4 - The Impact of the mountain area location on the launching of the project

- Very good conditions for wild roses.
- The raw materials are close to the processing factories.
- A clean environment that allows the growth of healthy rose hips.
- Strong impact on product promotion.

## **Chapter II - Basic Production (Raw material)**

## 1 - Organisational Aspects

The rose-hip harvesting starts very spring with preparative measures such as: exploring the area to evaluate production potential based on wild rose density, establishing the collection points for pickers, the laying down of formalities to obtain official approval for the harvesting.

LARIX Company harvests the rose hips on the forested area of the Mures and Harghita districts. Sometimes LARIX buys rose hips from other small companies in the harvest period, but all the harvested rose hips are processed by LARIX. Other pickers are not organised in any way.

All the rose hips used by LARIX are derived from wild flora.

LARIX, whose development is studied in this document, is the only firm in the studied area that produces rose hip tea.

#### 2 - Know-how and Quality Aspects

The rose hips are ready to be harvested at the end of August and in September. Rose hips must be harvested before the first frost, while they still are dark red and the pulp is still hard. At this stage, they have the highest vitamin C content.

The acquisition manager must identify the best sites for harvesting on a daily basis and must co-ordinate the collecting operations: the harvest, the carrying, the reception, the sorting and the conservation.

#### 3 - Relations with Public Authorities

Relations with public authorities exist in relation to the approval required to harvest from wild flora. Thus, based on the agreements with the forest owners (usually the District Forestry Direction and town halls), and in accordance with the impact study performed by the Cluj Biological Research Institute, the company receives harvest authorisation from the Mures Environment Protection Agency.

#### 4 - Public Policy Aspects

The Law regarding medicinal plants was only submitted to the Parliament this year. It is to be discussed as soon as possible.

## 5 - Quality Control Aspects

The harvest is manual, and the picker chooses rose hips that are at the same stage of ripening. At the collection point, they check the appearance, colour, smell and taste for each batch on the basis of quality standards. Collected samples must be tested in the lab for purity and identification reactions.

Through selection, impurities and useless or damaged parts are removed (yellowed or mouldy fruit, fruit that has been attacked by pests, etc.). After selection, rose hips are stored in covered spaces in thin layers. They can be kept for up to 30 days, after which time they will be processed.

The producer carries out the quality control himself in his own laboratory. The quality controls organised by other authorities are strictly the same for other foodstuffs, and are conducted through the Consumer Protection Inspectorate and the Sanitary Direction.

LARIX has its own company quality standard.

Consumers control the finished product when they buy it – in other words, they can accept/validate the product. However, this is a subjective matter.

## 6 – Strategy Aspects

The forest fruits harvest is not taxed in any way, according to Income Tax Law.

## 7 - The Impact of the mountain area location on the various aspects

The main harvesting area is located around Sovata City, an area that was certified each year as of 2002 by BCS Oko-Garantie Nurnberg Germany as being a "natural area". Area certification is obtained from the commissioner - Herbarum Veronicae Bucharest – that arranges the exportation of the tea. The area certification specifies that the land is ecological, with no industrial activities or intensive agriculture nearby that could affect the wild flora. It also indicates the absence of access roads and other pollution sources.

## CHAPTER III - PROCESSING AND TRANSFORMATION

## 1 - Organisational Aspects

The technological process consists in:

- The artificial drying of the rose hips,
- Milling,
- Selection,
- Storing,
- Obtaining the final product.

Drying is done in special rooms with temperature, relative humidity and air circulation control equipment.

LARIX is a member of the Planta Romanica Limited Agency, which unites many tea producers from all the country.

#### 2 - Know-how and Quality Aspects

Milling and selection results in the rose hip shell that is later packed in textile bags and stored in clean, disinfected, dry and well-ventilated areas. A sample is taken from the stored batch for laboratory analysis according to technical specifications.

The prepared raw material is used for rose-hip tea processing. This stage entails the following operations:

- primary packaging: dosing in small tea-bags using packer machines,
- Group packaging,
- Finished product control.

After processing, the finished product goes into a quarantine stage until analysis approval is obtained. Analysis operations are conducted in the LARIX laboratory. The micro- and macroscopic characteristics, purity, humidity and presence of ash, heavy metal or active substances are controlled here. Finally, analyse approval is granted.

The traceability of the product from the raw-material stage through to the end product is carefully ensured. This aspect is achieved through the control, co-ordination and monitoring system, which contributed to by all three compartments of the factory: production, quality control and quality insurance.

At this point, LARIX implements the GMP (Good Manufacturing Practice) system for tea production.

#### 3 - Relations with Public Authorities

Relations with public authorities exist mainly with the National Drugs Agency, which regulates and controls medicinal tea production, Mures Health Direction, the Cluj Hygiene Institute and with the Consumer Protection Authority.

The rose-hip tea is registered with the Public Health department of the Ministry of Health and is granted hygiene approval.

## 4 - Public Policy Aspects

Do not exist.

## 5 - Quality Control Aspects

The public authorities and the Consumer Protection Office conduct control assignments.

## 6 - Strategy Aspects

The organic product type is promoted on the basis of market studies.

## CHAPTER IV - DELIVERY CHAIN

## 1 - The Organisational Aspects

The delivery chain is structured in this way: Producers – Zone distributors – Retailers. The zone distributors are organised according to geographical area throughout the entire country. At the start of each year, commercial contracts are concluded between producers and each distributor separately. At last, an annual meeting with the most important distributors has been arranged to discuss strategic aspects related to marketing and market development.

The retailers can be:

- drugstores,
- health food shops,
- grocery shops,
- supermarkets.

LARIX uses the dried shells of the rose hips as a raw material for medicinal and nutritional teas. In this form, the product is delivered for export and is used to obtain finished products: rose-hip simple tea and combined teas.

LARIX is the market leader in this sector.

The rose hip is exported as a raw material through commissioners.

### 2 - Know-how Aspects

They consist in market studies, marketing plans and periodic meetings with distributors.

## 3 - Relations with Private Firms and Organisations

Do not exist.

#### 4 - Relations with Public Authorities

The Consumer Protection Office has the ability to control the finished product.

## 5 - Public Policy Aspects

Do not exist.

#### 6 - Quality Control Aspects

At the moment, quality control is part of the global process of quality insurance according to GMP (Good Manufacturing Practice) standards. Each product batch is therefore strictly monitored. In other words, every stage in the production, from harvesting to consumption is followed closely (product traceability). If a complaint is made, it is then possible to precisely identify the history of the product concerned, and it can then even be withdrawn from the market along with the entire batch in question.

At consumer level, controls are conducted by the Consumer Protection Office.

#### 7 - Marketing Strategy Aspects

LARIX uses a strategic marketing plan.

The price of rose hip tea is about 3.5 EURO/kg.

#### 8 - The Impact of the mountain area location on the various Aspects

Does not exist.

## CHAPTER V - GLOBAL SUPPLY CHAIN ASPECTS

#### 6 - The Global strategy of the supply chain

There are co-operation relations with advertising companies and mass media representatives. LARIX is present on the Internet and intends to develop e-commerce activities in the future.

#### 7 - The Impact of the mountain area location on the various aspects

The mountain origin of the raw material is used successfully in the promotion of the product. The main harvest locations are clean, low mountain areas with no surrounding industries.

## CHAPTER VI - LABELLING

## 1 - The Type of Label

Product labelling/tagging is done in compliance with legislation for nutritional supplement products. The rose-hip tea is therefore packed in standard cardboard boxes that are marked with a considerable volume of consumer information:

- the producer name, address and logo;
- product name;
- quality standard;
- manufacturing date;
- storage time;
- manufacturing serial number;
- composition (scientific and popular component names)
- method of use;
- net weight:
- CAEN international code;

#### 2 - The reasons behind the Choice of Label/non-labelling.

The choice of label is made in accordance with indications given by the advertising company and with company labelling tradition. The aim is to have a high impact on the consumer and to reflect the product qualities including those pertaining to its mountainous origin.

## 3 - Organisational Aspects

The internal operational procedures are compulsory for employees, and they are in compliance with the general GMP (Good Manufacturing Practice) standards.

#### 4 - Know-how Aspects

Do not exist

#### 5 - Relations with Public Authorities

The information on the label meets the requirements set by the Consumer Protection Office and the Pharmaceutical Inspection required by the Ministry of Health.

#### 6 - Public Policy Aspects

The information on the label meets the requirements of Decree no. 528/2002 issued by the Ministry of Health Command, which regulates the labelling of pharmaceutical and food products.

#### 7 - The Labelling Strategy

The aim of the labelling strategy is to achieve the correct identification of the product and its qualities, and ensures product traceability of the product and processing methods.

#### 8 - The Impact of the mountain area location on the various aspects

On the label, it is specified that the tea is produced in Sovata City and is in this way recognised as being produced in a mountain area. This information has a strong impact at consumer level.

## CHAPTER VII - SUCCESS/FAILURE/NEEDS

#### 1 - To what extent and how may the product be considered as success or failure?

This product is obviously a success. Its market grows each year and it is sold all over the country. LARIX is the third largest producer in the country in terms of rose hip tea production quantity. The spontaneous flora is highly promoted. The social impact is strong; during the harvest period, jobs are created for over 500 workers at LARIX. Another 60 employees have permanent jobs in LARIX.

# 2 - To what extent and in what way does the success/failure mostly stem from the various chapters?

The product is successful, mainly due to the origin of the rose hips (mountain origin), and to the local conditions and clean environment of the mountains. The delivery chain and marketing operations are also important factors in the product's success. Labelling is done well but not better than the labelling for other products.

The global supply chain is considered to be good in terms of economic expectations in Romania, and it is very important for product success.

The most important aspects for the product's success are the processing/transformation factors.

## 3 - To what extent and how does the success/failure mostly stem from the different aspects?

The main aspect that determines the success is the mountain location of harvesting and processing.

The success mainly stems from the know-how and quality control aspects related to processing and transformation, and from the strategic and organisational aspects related to the delivery chain.

The poor organisational aspects at the raw material stage have a negative impact on the product.

#### 4 - What are the needs, what is missing and what could be done (from the various aspects)?

There is no policy for medicinal and flavoured plants from spontaneous flora.

The public authorities are not proficient in this area.

There are no contacts with foreign commercial agents, and internal contacts are weak.

The harvest process does not affect the wild rose shrubs, because only the rose hips are picked, so the harvest of the following year is not affected by the exploitation of rose hips in the current year. At the moment, the annual harvested quantity represents about 30% of the area's potential.

## CHAPTER VIII - PRODUCTION ASPECTS AND THEIR LINK WITH THE TERRITORY

#### 1 - Environmental criteria

The wild rose is not a typical plant for a mountain region, but it grows well in the lower mountains of the studied area. The rose hip from this area is appreciated as coming from a clean area, but there is no scientific proof that these rose hips are better than others from a different area.

The harvest is taken from wild flora, but only a small part of it is taken from the most accessible areas. The short harvest period and the small percentage of shrubs exploited lead us to the conclusion that the natural environment is not affected.

Furthermore, only the rose hips are picked and the shrubs are left untouched, and a different area is selected for harvesting each year. In this way, wild flora development is not affected.

#### 2 - Local economic criteria

Tea production is only developed in a small part of the studied area, in the area of Sovata City, and is of little economical importance at the level of the entire area of study. However, owing to its potential, it is a quite promising activity for the future of the Sovata City area.

#### 3 - Social criteria

The social impact of this activity is insignificant for the whole studied area. Very few workers are involved in tea production. A significant impact is only felt on a small scale, in Sovata and nearby.

# EXTRA VIRGIN AND ORGANIC OLIVE OIL "SIERRA DE SEGURA" (PDO)

Area: Sierra de Segura - Andalusia (Spain)

<u>Authors<sup>24</sup></u>: Dr. Pedro Ruiz Aviles

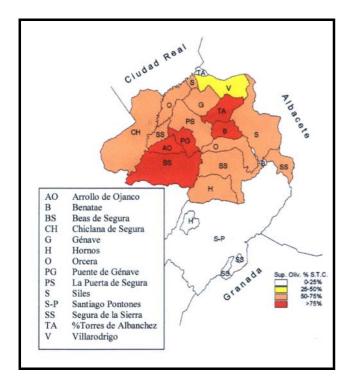
Luis Navarro Garcia Francisco Barea Barea Dr. Manuel Arriaza Balmón (CIFAs de Sevilla y Cordoba)

## CHAPTER I - BASIC DATA ABOUT THE EMERGING PROJECT

#### 1 - The Natural, Geographical, Historical and Economic environment

Sierra de Segura is located in the Northern province of Jaen (Andalusia, Spain) and consists of 14 villages: Arroyo del Ojanco, Beas de Segura, Benatae, Chiclana de Segura, Génave, Hornos de Segura, Orcera, Puente de Génave, La Puerta de Segura, Santiago-Pontones, Segura de la Sierra, Siles, Torres de Albanchez and Villarrodrigo. This region covers 2,164 km² (216.392 ha) and has an average altitude of 899 m, ranging from 490 to 1,992 (50.2% above 1.000 m). Almost three quarters of the territory (72%) are located within the Natural Park of "Sierra de Cazorla, Segura y Las Villas" (69% Sierra de Segura). This area is also protected by its registration as Reserve of Biosphere.

The area has 29,921 inhabitants (census 2001) and a density of 13.9 inh/km2. The working population amounts to 11,300 people with a GDP per capita between 5,500 and 6,100 euros (55-60% of Spanish GDP per capita). In the mountain of Sierra de Segura 56% of the total area is devoted to forestry and pasture, followed by olive trees with 47,945 ha that represent 22% of the total area and 66% of the cultivated area.



<sup>&</sup>lt;sup>24</sup> See the list page 156

### 2 - The Conditions (Opportunities / Threats) that forced farmers to act

<u>Opportunities</u>: This area is favourable for quality olive oil production due to climatic and altitude conditions. It is, by far, the most important agricultural activity (one third of the working population of the area). The production is mainly located in the central part of the region. Only one of the agricultural districts has not a process industry to produce oil.

<u>Threats</u>: There is a lack of competitiveness due to the mountainous conditions and the small-medium farm size (average of 5.6 ha), wioth lower yield.

#### 3 - The Human Dynamic and/or Categories of Actors that provided the impetus

The production and sale of olive oil began at the end of the C19th as the public authorities took control of the land, moving from livestock and forestry uses to olive oil production. Since then, people in this area have achieved a notable specialization and command of the olive oil production techniques (organic production, regulated production, minimum tillage, vegetal cover against erosion), being for many of them the only source of income.

#### 4 - The Impact of mountain area location on the launching of the project

The area is representative of mountain olive oil production with medium-low yields and recognised quality oil. It is one of the seven olive oil PDOs of Andalusia and the first one producing organic olive oil

# 5 - Other Aspects

There is a trend towards certified quality production systems in this area: organic and integrated since 1978. This was the second PDO of olive oil of Spain as well as the second in producing organic olive oil.

# CHAPTER II - BASIC PRODUCTION (RAW MATERIAL)

#### 1 - The Organisational Aspects

In the Sierra de Segura PDO, 42,695 out of 47,945 ha belong to this denomination of extra virgin olive oil. There are also 1.436 ha producing organic olive oil. The PDO covers 6.600 farmers, most of them (92%) associated in cooperatives.

One third is full time farmers, 55% part time and some 12% share the olive production with other activities different from agriculture like tourism.

#### 2 - The Know-how and Quality Aspects

In the PDO, olives are produced according to certain rules (integrated production). Organic olive production follows its specific rules. There is a separation of olives from the tree and from the soil to enhance the quality of the olive oil. There are also several control processes to ensure the quality of the oil in all its phases promoted by the PDO council that produces booklets, reports, etc.

#### 3 - The relations with Public Authorities

The regional government controls the farmers' declaration of production via the farmers' olives delivery to the cooperatives and two companies that belong to the PDO.

### 4 - The Public Policy Aspects

Farmers need a certificate of olive oil producer to receive the EU subsidy for his/her olives handled to the processing industry. The CE Regulation 136/66, and 1638/98 and its modifications contain the norms of the sector.

#### 5 - The Quality Control Aspects

The initial impulse for the quality control regulations came from the Spanish *Real Decreto* (Royal Decree) 9/sep/79 that created the PDO denomination and its European counterpart DOCE 20-06-96. It contains the type of olives, quality parameters and PDO Regulatory Council (*Consejo Regulador DOP*). Only local varieties of olive of good quality, aroma and fruity flavour must be used.

#### 6 - The Strategic Aspects

The PDO Regulatory Council and producers' associations promote olive quality. There are specific courses and seminars on this issue. The Regional Government of Andalusia (*Junta de Andalucía*) has helped to create two ATRIAs, associations to control the agro-chemicals used in the production of olives and participate in a number of courses on organic diseases control, sustainability, technical innovation, irrigation, etc. The LEADER+ and PRODER groups also contributed to the improvement of quality controls.

#### 7 - The Impact of mountain area location on the various Aspects

Although most of the olive trees in the area are old, their importance in providing rural employment and biodiversity and soil protection is beyond any doubt. These villages belong to the European olive tree network (REMO) and 72% are included in the Regional Park, therefore the olive oil produced in this area benefits from the Natural Park image. Tourism is the second activity from an economic point of view.

### CHAPTER III - PROCESSING AND TRANSFORMATION

# 1 - The Organisational Aspects

In the agricultural district there are 29 industries, 22 cooperatives among them, and two SMEs, associated to the PDO Council, including 6.600 growers. All but one industry has installed the continuous extracting system that reduces the residuals and helps to comply with the environmental regulations. The organizational aspects of the producer organization are regulated in CE 1334/2002.

#### 2 - The Know-how and Quality Aspects

The modern technique to mill the olive oil does not produce the traditional residue known as "alpechín", this aspect is most important since most olive trees are within a Regional Park.

The PDO council carries out severe tests on the quality of the olive oil in two phases:

- 1. Chemical analysis of the olive oil (acidity, humidity, residuals)
- 2. Panels of experts to assess the flavour quality

The PDO regulations (November 1993) indicate that more than 90% of the olives must come from the "picual" variety with an acidity level lower than  $0.8^{\circ}$ , level of peroxides lower than 19, K270 $\leq$  0.20, humidity $\leq$  0.1% and impurities $\leq$  0.1%.

There are also flavour and aroma tests that the extra virgin olive oil must pass. These tests are carried out in the laboratories of the PDO Regulatory Council by two panels each of 8 experts. In the last 10 years only 23.9% of all virgin olive oil passed both the quality requirements and the panel test, only then can the virgin olive oil be classified as extra virgin olive oil.

Extra virgin olive oil from Sierra de Segura compared to other extra virgin olive oil of the area is characterized by the highest content in Vitamin E and Antioxidants.

#### 3 - The relationship with the Public Authorities

The Spanish government and regional authorities (*Junta de Andalucía*) develop the legislative framework, advise and supervise the processing industry and guide the PDO Regulatory Council (the latter with a member in the Regulatory Council without the right of vote).

#### 4 - The Public Policy Aspects

There is a new legislative framework in progress to regulate the PDO operation and stressing the quality control aspects. These norms have been implemented by the compulsory adoption of control quality systems (HACCP, EN45011, ISO 9001:2000).

#### 5 - The Quality Control Aspects

There are some requirements included in the PDO regulations for an extra virgin olive oil to be labelled as PDO Sierra de Segura extra virgin olive oil. Briefly:

- The farmer must be registered in the PDO directory.
- The Olives must be cultivated and harvested according to the guidelines of the PDO norms.
- Olive processing by phicical means (cold temperature lower than 30°)
- The origin of each lot of olives must be traceable by attaching a control label.

# 6 - The Strategic Aspects

The strategy aimed to improve oil quality includes:

- Investment in new machinery, resulting in one of the most advanced oil processing industry of Spain.
- Public support for programmes to improve quality, the establishment of the HACCP quality control procedure and compliance with the environmental regulation EN 45011.
- Differentiation of oils towards organic, integrated and traditional production.
- Organisation of seminars to study different technical aspects of the production and fairs to promote the consumption of extra virgin olive oil, for example *Ecoliva* and *Biosegura*.
- Attendance to international fairs: Biofach, Premio Biol, Biocultura, FITUR, etc.

#### 7 - The Impact of mountain area location on the various Aspects

The mountain conditions give the olive oil its particular fruity and slightly bitter flavour. It has the highest content of antioxidants (vitamin E) of all PDO allowing the storing of the extra virgin oil "Sierra de Segura" for several years without any quality loss and the repeated use for frying.

# 8 - Other Aspects

There is an upward trend to produce organic olive oil. We have the example of "*Oro de Génave*" (Gold of Génave) and "Sierra de Segura" produced since 1982 (the first in Spain), which does not belong to the PDO. Two cooperative branches also produce organic olive oil within the PDO. They sell their oil all around the world at a price 39% above the PDO extra virgin olive oil price.

Since 2000, the number of companies that sell olive oil has increased from 9 to 16. Within the PDO there are 20 cooperatives of production but only 8 of bottling.

# CHAPTER IV - DELIVERY CHAIN

#### 1 - The Organisational Aspects

There are 23 brands of extra virgin olive oil belonging to 15 bottling companies. Only half of the 3 million kilos of PDO qualified olive oil is distributed with the PDO logo, the rest is distributed by large retailers or used for local consumption. The number of brands has increased by 44% since 2000.

There is a large company that buy olive oil to be mixed with other extra virgin olive oil in order to enhance the content of antioxidants, vitamin E, and oleic acid of the former.

#### 3 – The relationship with Private Firms and Organisations

There are large retailers in the area (Carrefour and El Corte Inglés) that keep advisers to buy and check the quality of the olive oil distributed by these companies.

#### 4 - The relationship with the Public Authorities

There is a LEADER+ and regional rural development programme to promote not only olive oil but also other products from the area such as lamb and honey. Two of the largest distribution companies, "Olivar de Segura" and "Potosi 10" olive oil are using the governmental brand "Calidad Certificada" monitored by a producer association (Landaluz), this brand is certified by an independent body.

# 5 - The public policy aspects

Regulated through CE 1019/2002 and the Real Decreto 1431/2003 on delivery channels. Also, via the regional Ministries (Consejerías) of Agriculture and Finance several activities to promote the consumption of extra virgin olive oil are co-financed with the Industry (EXTENDA) and also the National Government (ICEX).

# 6 - The Quality Control Aspects

In addition to the PDO logo, the label includes an additional logo of Sierra de Segura (a squirrel). Only one label shares this logo with the Regional Park logo, although some of them mention this aspect. *Olivar de Segura* and *Potosí 10* also include the Regional Government logo of certified quality ("*Calidad Certificada*").

#### 7 - The Marketing Strategy Aspects

This extra virgin olive oil is consumed by all sorts of markets. Two brands, *Olivar de Segura* and *Potosí 10* can be found in several gourmet and delicatessen shops. The common recipient is a crystal bottle of 500 and 750 cc with names related to local landscapes.

# CHAPTER V - GLOBAL SUPPLY CHAIN ASPECTS

#### 1 - The Organisational Aspects

The total production of olive oil in Sierra de Segura is approximately 20 million kilos (90% is virgin olive oil), of which 3.2 million kilos is classified as extra virgin by the PDO Council, some 2 millions are sold in bottles. There are also 400 tonnes of organic olive oil without the PDO brand.

The total added value is 50 million euros per year (2.75 ∈/kg), of which 10.7 million comes from the PDO olive oil (3.3 ∈/kg) and 1.2 million from organic olive oil (4.6 ∈/kg). The benefits are distributed among 8,000 producers (92% of them with less than 5 ha), with 6,600 PDO labelled.

Between 8% and 10% of PDO extra virgin olive oil (some 400 tonnes) and one fourth of the organic olive oil (some 80 tonnes) is exported mainly to Germany, France, Japan, USA and Brazil. There is PDO olive oil that is sold in large containers aimed to the national market (a small quantity to Italy).

#### 2 - The Know-how Aspects

The know-how aspects are discussed in the assembly of the cooperative and other forums such as seminars and training courses organised by the regional authorities and the association of farmers (ASAJA, COAG, UPA) and cooperatives (FAECA).

#### 3 - The Organisation and management of the product quality

The quality of the olive oil is guaranteed by four controls: (1) olive controls following a specific regulation (organic and integrated production), sustainable tillage; (2) cold pressing of olives to obtain the olive oil and HACCP quality control, EN 45011, ISO 9001:2000; (3) during the bottling the quality is supervised by an independent company; (4) PDO analyses and qualification for extra virgin olive oil (chemical and panel).

#### 4 - The relationship with the Public Authorities

There are some public programmes to promote the quality and consumption of olive oil funded by the National Institute of Origin Denominations (INDO), the Spanish Ministry of Agriculture and Fisheries (MAPYA), the Institute of Foreign Trade (ICEX) and the regional Directorates of Agriculture (CAP) and of Trade (via the public entity EXTENDA).

#### 6 - The Global strategy of the supply chain

The PDO Regulatory Council has carried out different strategies to promote the consumption of olive oil, via INDO, ICEX, EXTRADA, COI, Rural development groups, etc. There are advertising campaigns financed by the largest companies. PDO members attend and support international forums and fairs (e.g. Ecoliva and Biosegura).

#### 7 - The Impact of mountain area location on the various aspects

The natural heritage and landscape of Sierra de Segura has become a major element in the development of the area through the increasing number of tourists. The combination of the environmental resources and the extra virgin olive oil is producing a positive synergy in line with the multifunctionality framework of agriculture, tourism and environmental protection.

#### 8 - Other aspects

This PDO is characterized by a small production with very high quality that is gaining market quota through a reputed brand.

# CHAPTER VI - LABELLING

#### 1 - The Type of Label

There are two quality labels in the area: PDO "Sierra de Segura" (used by 24 brands), which is the most important in terms of sales volume (42,695 ha, about 4,195 tonnes). Another cooperative of organic extra virgin olive oil has two brands: "Sierra de Génave" and "Oro de Génave".

One cooperative and a private company from the area have added to the above brands the certified quality label ("Calidad Certificada" guaranteed in 2000 by the regional government for the best products of Andalusia).

There is also a brand called "Parques Naturales de Andalucía" that refers to mountain quality products produced in the Regional Parks of Andalusia. A controversy about the use of this logo on the PDO olive oil brand has arisen recently.

In addition, there is a label given by the mountain association "Asociación para el Desarrollo Rural de la Sierra de Segura" to some traditional and artisanal products, among them the extra virgin olive oil.

#### 2 - The reasons behind the Choice of Label / non-labelling.

Local inhabitants recognise the quality of the olive oil produced in the area and therefore, the PDO was created. In recent years, rural tourism has been a major force in the modernization and improvement of the quality of their products.

#### 3 - The Organisational Aspects

When the olive oil is classified as PDO two labels must be included: one related to the company and the other one designed and supplied by the PDO Regulatory Council. The latter is numbered by the national national factory of stamps and money. In the case of organic olive oil, the body in charge is the Andalusian Committee of Organic Olive Oil (*Comité Andaluz de Agricultura Ecológica*), or any other of the 4 private companies that are entitled by *Junta de Andalucia* (regional government) to certify.

#### 4 - The Know-how Aspects

The control carried out by the PDO Regulatory Council involves not only the storage of olive oil but also the properties of the bottle. It is compulsory for the bottling company to inform the PDO Regulatory Council of the opening of the tanks to bottle the PDO olive oil.

#### 5 - The relationship with Public Authorities

The regional government through their unit of Industry and Food and Agricultural Research, and the Spanish Ministry through the National Institute of Origin Denominations (INDO) provide technical support to the PDO Regulatory Council, as well as the bottling companies with respect to marketing and consumers protection.

#### 6 - The public policy aspects

The Regulation CE 136/66, 1638/98 and 2081/92 and their modifications include all the norms that apply to the production of PDO.

#### 7 - The Labelling Strategy

To ensure the quality of the olive oil, only the extra virgin oil can authorise the use of the PDO labels on the bottles.

The same applies to "Agricultura Ecológica" (organic farming) that is certified by one of the 4 bodies previously mentioned.

#### 8 - The impact of mountain area location on the various aspects

Most of the brands of extra virgin olive oil from Sierra de Segura have on the label a reference to the mountainous origin and its relationship with the Natural Park.

# CHAPTER VII - SUCCESS/FAILURE/NEEDS

#### 1 - To what extent and how may the product be considered a success or failure?

The alternate bad-good year characteristic of the production of olives must be taken into account to analyse the evolution of the market. In percentage terms, since 1994 there has been an upward trend of PDO certified olive oil; the average production has increased from 2,700 in 94-98 to 4,000 tonnes in 99-03.

The organic olive oil production follows a similar pattern, increasing on average from 200 to almost 400 tonnes. This production is expected to increase due to the shift towards organic farming by many farms, and the new section of "agricultura ecologica" (organic farming).

#### 2 - To what extent and how does the success/failure mostly stem from the various chapters?

The prestige of the PDO olive oil comes in part from its rigorous classification of olive oil produced in the area. There has been a notable increase in new machinery and marketing expenditure of the cooperatives. The number of bottling companies has increased from 8 to 16 in the last 5 year.

As a weakness, there are a certain number of small bottling companies that cannot access the market in a competitive way. There is one exception, "Olivar de Segura" that receives olive oil from 14 cooperatives and 2 SMEs.

#### 3 - To what extent and how does the success/failure mostly stem from the different aspects?

The key aspects of the success of these products come from the favourable climatic conditions of the area (cold winter, mild summer temperatures and regular rain). The variety of tree is not important for the olive oil quality, although it adds some differences in flavour.

#### 4 - What are the needs, what is missing and what could be done (from the various aspects)?

Technological and scientific support from the public institutions is needed, for example, conservative tilling, erosion measures, pest disease control and residual transformation into compost.

WEAKNESSES	STRENGTHS
Structural and demographic difficulties Old plantations Low yields and high costs Long distance to consumption centres	High quality olive oil Modern transformation and distribution sector Reputed PDO and organic farming product Linked to the Natural Park image Long tradition of producing olive oil
THREATS	OPPORTUNITIES
Competence with other olive oils with lower costs Progressive reduction of the subsidy Translation of fund from agriculture to other sectors	Objective 1 area until 2013 Increasing demand of olive oil Environmental subsidies for olive trees Public initiatives to promote the consumption of quality olive oil (PDO). Relationship between olive oil production and tourism, mainly near the Natural Park

# CHAPER VIII - PRODUCTION ASPECTS AND THEIR LINK WITH THE TERRITORY

#### 1 - Environmental criteria

In the mountain areas, e.g. *Sierra de Segura*, the olive trees have an essential and multifunctional importance preventing soil and environment degradation of a Mediterranean Ecosystem. The increasing area of organic and integrated olive oil production has had a beneficial impact on the environment, landscape and the biodiversity through the total or controlled use of pesticides and agrochemicals in general. The situation of these farms within the Regional Park reinforces the environmental requirements towards a more sustainable agriculture: use of vegetal covers, minimum tillage, aromatic plants within olive trees, etc.

# 2 - Local economic criteria

Total value of Sierra de Segura olive oil production (1998-2003)

Type of olive oil	Production (10 <sup>3</sup> Tm)	Price (€/Tm)	Total sales (10³ €)
Total Extra Virgin	18,362	2,750	50,497
Certified by DOP	4,146	3,300	13,681
Organic oil (aprox.)	370	4,600	1,702

Source: Datos del Consejo Regulador del D.O.P.

The PDO olive oil benefits from a higher price compared with that of non PDO produce (3.3 and 2.7 €/kg, respectively -4.9 €/kg for organic olive oil-). Another 0.95 €/kg from EU subsidies must be added, although with a reduction of 38% for production over the Spanish quota, much higher when compared to Italy (11%) and Greece (8%).

The olive oil production has a decisive impact on the local economy since it provides 10 times more farm employment and added value than the annual crops (cereals, oilseeds and protein), in addition to its positive environmental role in the mountain areas.

The olive oil is an important part of the Mediterranean diet and the local gastronomy, both fresh and fried consumption.

#### 3 - Social criteria

As previously explained, the production of olive oil represents the most important activity in terms of rural employment. This crop demands 20 man-day labour/ha, 60-65% during harvesting.

In relative terms, a quarter of the working population in the area of study is related to the production of olive oil, either directly (on the farm) or indirectly (e.g. consulting, inputs supply industry, machinery, etc). Therefore, one year of low production implies hard living conditions for a large part of the population.

The concentration of labour during a short period (from December to March) allows producers to complement their income mainly from rural tourism, building and small manufacturing activities either in the area or on the Mediterranean coast.

#### 4 - Global strategic aspects

The main experts' recommendations to improve the situation of the sector are:

- To promote the consumption of mountain olive oil with better quality highlighting the positive impact on the environment.
- To implement the "good practices" on the production of olive oil: non tillage, minimum tillage, vegetal cover, agrochemical control, management of residuals, etc.
- To support the modernization of oil mills with quality controls (HACCP).
- To continue with rural development programmes to promote DOP and integrated production.
- To include the PDO Sierra de Segura and the Natural Park within the initiatives to promote tourism.

# EXTRA VIRGIN OLIVE OIL "PRIEGO DE CORDOBA" (PDO)

Area: Sierras Subbéticas de Cordoba - Andalusia (Spain)

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# CHAPTER 1.- DESCRIPTION OF THE REGION AND THE ORIGIN OF THE PDO PROJECT.

#### 1.- The natural, geographical, historical and economic environment.

The production zone that defends the Origin Denomination is perfectly defined as it refers to a natural county: that of Priego de Córdoba. It is situated in the southeast quadrant of the Córdoba's Province, between the 37° and 18' parallels of the northern latitude and between the 4° 5' to 4° 10' southern parallels of the western latitude, bordering the provinces of Jaén and Granada in Central Andalusia.

This county is composed of the following municipalities: Almedinilla, Carcabuey, Fuente Tójar and Priego de Córdoba. It has a total surface of 44.818 hectares. Priego de Córdoba, with a population of 22.000, is the judicial seat.

78% of the area is mountainous with average altitudes ranging from 500 to 1.000 metres. It has a landscape setting with an extraordinary panoramic view. Most of this area is located within the Sub-betic Mountain Range Natural Park with important autochthonous flora and fauna.

Its rich silk tradition supported an important textile industry until the end of the last century. Over the centuries, this industry changed from silk to cotton and is presently limited to the making of clothes varying in fabrics, styles and quality.

The abundance of fountains, rivers and streams as well as the natural richness of the territory and its textile industry has converted this zone in a great measure into an populated county, with cultured minorities and important monuments and buildings in which the baroque style (principal in Andalusia) stands out. It also has a traditional water culture with many artistic fountains, among which the "Fuente del Rey" in Priego de Córdoba is out standing.

Micro agriculture, excessive division of land units and overpopulation with relation to its support capacity, along with the olive and textile crises, have provoked strong emigration, especially during the period from 1960 to 1975. The difficult competition of centenary olive trees in severe mountain zones demands an improvement in the evaluation of the exception quality of their extra virgin olive oils.

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<sup>&</sup>lt;sup>25</sup> See list page 156

#### 2.- Conditions that encourage the promotion of the Origin Denomination.

Hundred-year-old olive groves, high quality varieties especially "picudo" (58%) with fertile, fresh, healthy soil and planted laterally in a Mediterranean mountain climate guarantee a distinction and high quality in the region's oils. For this reason, there have always been important traders, brokers and exporters in this county that have given this oil great prestige in the olive oil market.

Valuing these qualities for the benefit of the overall sector as was experienced by other regions now having a protected origin denomination such as Baena or Sierra de Segura motivated the procedures to obtain a PDO (Protected Denomination of Origin) recognition for this region of Priego de Córdoba.

#### 3.- The force and category of those principals involved in the process to obtain the PDO

During 1991 and 1992, at the joint initiative of a researcher at the Centre for Agrarian Research (1990), the municipality of the city of Priego de Córdoba and the olive oil sector, a task force was established, a dissertation was prepared and a petition submitted for the recognition of a protection of origin denomination, which was provisionally recognized in 1993 (Order 11/06/1993, BOJA 8/07/1993). The rules for the origin denomination and for its regulating council were approved by the Orders of 29/11/1995, BOJA 14/12/1995, and were modified by the Orders of March 13<sup>th</sup> and December 20<sup>th</sup>, 1996.

They were ratified on 14/02/1997 in the BOE Official State Bulletin (BOE) 28/02/1997. The recognition of the protected origin denomination was obtained from the European Union in 1999 by way of the Rule (CE)  $N^R$  2107/99, DOCE L258 on 5/10/1999.

Its creation, was preceded by a series of meetings were held involving the representatives of different companies from this cooperative, sector together with bottlers, marketers and municipal authorities (especially Priego de Córdoba).

With a joint technical study from C.I.F.A. (Research and Formative Agrarian Centre) in Córdoba and the Office for Local Development in Priego as well as the involvement of the whole oil sector, a dissertation was written for the petition for an origin denomination (D.O.). Later on, with the technical support of the Provincial Delegation of Agriculture the standards for the D.O. were written up.

Since then, the sector has been holding the necessary meetings to accomplish the tasks demanded to start things moving: improvement in reception facilities, the cleaning or washing, and the transportation of olives to the feeding **box (tolva)** of the presses, along with the creation of separate system for receiving and feeding olives from the ground and olives from the trees, the creation of a testing panel, the installation of laboratories, personnel training, etc.

# 4.- The localization impact on the launching of the Project.

The features of limited size of this Natural Region where the variety of Picudo -the principal source of quality in oils from this area, along with similar denominations- is highly specific, the high altitude, a certain chauvinism, deriving from both isolation and a cultural wealth, and an artistic and landscape heritage facilitated the development of the initiatives.

The refinement of the initiative and re-adaptation of the changes necessary to improve equipment with promotion was facilitate by the existence of quality, know-how, a critical mass and minorities connected with the orientations of agrarian policy and with the market.

#### 5.- The impact of the PDO on the mountain region.

The county's rich landscape, and cultural, artistic and built heritage, enabled the DOP impulse to take advantage of this positive image and opportunities for promotion it offered to improve environmental activities and, above all, to develop its gastronomy and rural tourism, principally through a joint Tourism and Olive promotion Plan developed by the Priego de Córdoba town council and Regulating Council, both locally and outside the region.

# CHAPTER II.- OLIVE PRODUCTION

#### 1.- Organizational Aspects.

Agents involved: the whole sector in the production area: producers, pressers (transformers of olives into olive, oil) bottlers and traders.

Out of a total geographical surface of 44.818 hectares, 29.628 hectares of olive trees represent 97 % of the growing surface (30.508 hectares) which makes this one of the foremost regions in Andalusia and in the world, dedicated especially to one crop, in this case, the olive. The rest of the crops are fruit crops, principally the high quality native quince, grown in low lands where there is a lot of rainfall.

The number of olive farms registered is 5.908. The average surface per plantation is 5 hectares, distributed in 3 lots. This illustrates the degree of subdivision and allotment that exists and the survival difficulties it faces, unless significant steps are undertaken in community exploitation and re-evaluation of olive oil pricing.

Generally crops are grown on the basis of private ownership and part-time labour, the majority of the owners being elderly and non-substitutable. There is a relatively low average of culture. The main varieties of olives are: "Picudo": 17.141 hectares, "Picual": 7.754 hectares and "Hojiblanco": 4.721 hectares. This distribution of varieties, in hundred-year-old trees carefully grown and looked after in limey, deep and fresh soils, guarantees the real qualities of extra virgin olive oil with unequalled taste, aroma and colour.

The total production of olives and oil in the "DOP" region for the last 4 seasons is shown in the following table:

	Olives	Olive Oil	
Season	kilos	kilos	% Profit
1999/00	34.372.640	7.862.435	22,87
2000/01	85.004.810	18.740.201	22,05
2001/02	104.940.523	23.992.238	22,86
2002/03	58.673.662	14.046.041	23,93

#### PRODUCTION OF VIRGIN OLIVE OIL

# 2.- Know-how and Quality aspects.

As a result of the thousand-year-old tradition, this region benefits from the presence of people who are very qualified in the different sectors of production, conversion, storage packaging and marketing. The skill of the pruners, the expertise of the millers, the tasters, the brokers and local traders and exporters is outstanding.

The creation of this PDO (Protected Denomination of Origin) has made a great impact on the training of personnel in the sector, especially among the millers, the oil tasters and the technicians in charge of pests and diseases (participants in "ATRIAS" (Olive Plagues Treatment Association)).

#### 3.- Relations with Public Authorities.

At all times, these relations are excellent both with the local administrators as well as with provincial, county and national authorities, as is shown in Chap VI.

#### 4.- Public Political Aspects.

This sector is governed by Norm (U.E.) Num. 136/66 on Fat Matters and their complex development. The producers, through their various organizations receive financial support for olive oil production that represents around one-third of their total income, a figure somewhat less than the assistance to herbaceous and other important crops from the FEOGA budget which supports this sector at the level of approximately in 40-50% of the producers' income.

With money withheld from this assistance, quality improvement programs are financed, including training sessions, research, support for the creation of laboratories tasting panels, associations for integrated treatment etc. as well as, in the future, activities for orientation and promotion of consumption.

#### 5.- Strategies.

Olive production in this region is undergoing an accelerated process of innovation and equipping, to improve the competitivity, sustainability and quality of the product and the area, with actions to combat erosion and to control and reduce the inputs and the improvement of efficiency.

#### 6.- Impact on the Mountain Condition.

The ageing of the population (average age 55-60 years) among the producers and also among the labour - which is very scarce in relation to the needs especially during picking time - is a serious problem.

There is a high percentage of part-time help due to the small size of the orchards and lots, which do not render enough income to live on. A great number of owners have left, the area to live elsewhere in Spain. All this contributes to high costs and makes things very difficult during the olive season, creating technical and economical problems. Furthermore, a historical desire for the land, once necessary to make a living, the beauty of the country side, the abundance of water and streams and, what is more, some optimum conditions for country residences and rural tourism maintain a very high price for land. This makes it especially difficult for the local grower to improve and invest in structure of agrarian production.

# CHAPTER III.- PROCESSING AND TRANSFORMATION

#### 1.- Organisation.

The county has 17 olive oil processing plants, 8 of which belong to Cooperative societies and the rest to private owners and corporations. Somewhat more than half of the growers belong to cooperatives, even though many of then deal with the olives from their spouses and parents through private companies. A relative balance exists, therefore, between both types of businesses.

They all have facilities for a 2 step assembly line, they have eliminated the old system, and now have separate chains for receiving grining and storage of high quality oil (proceeding from olive trees in the best conditions) and from fallen or damaged olives. The grining is generally done within 24 hours of picking, although a margin of flexibility of up to 48 hours is allowed.

There are 3 large centres for grinings with annual production of around 25-30.000 sg. Tons of olives. Two of these centres are family-owned: Hermanos Muela García, S.L. and Aceites Fuente Grande, S.L. and the third is the Sociedad Cooperativa Andaluza Virgen del Castillo.

The other plants are of average-size with a production that ranges from 5-10.000 sg. Tons of olives producing between 1100-2200 tons of olive oil per plant.

#### 2.- The Know-how and the Quality.

This region has very capable people in each phase of production, especially since the creation of the PDO which has meant a considerable advance in the training of personnel, most notably in the areas of millers, tasters and ATRIAS technicians. Directors, manages and workers in different activities in the plants have gone through a training programme for the improvement of competitivity and quality. This training, along with substantial investments of money, has considerably improved the quality of the oil with a number of innovations such as:

- A complete separation in the different phases of receiving, transportation, maturation and storage of high quality olives, directly picked from the tree and those of fallen or damaged olives producing inferior oils. Also, a growth in the fields of cleaning, washing and transport.
- The installation of stainless steel storage tanks and other facilities such as washers tolvas for high quality oil.
- Change in the extraction process, from a 3 to a 2 phase system, to obviate alpechin waste (vegetal waste).
- To obtain maximum quality it has been necessary to increase the capacity of extraction, in order to be able to reduce the temperature during processing in the primary extraction, meaning less need to repeat the processing to recover some of the oil not obtained in the first processing.
- The introduction of techniques and hygienic handling practices, taking special care of the stagnancy and isolation in the tanks in order to avoid oxidation and staling.
- Installation of pit separator.
- Facilities of the Critical Quality Control System and the initiation of this system in various plants and bottlers.
- Probably, many of these improvements would not have been achieved without the need to respect
  the standards of the DOP Norms nor without the encouragement of inter-regional awards, given in
  recognition of the best extra virgin olive oil from the best producers with DOP.

#### 3.- Relations with Public Authorities.

Besides the improvements in facilities and procedures, we should point out contribution of the Agricultural Training and Research Centres (CIFAs) in Cabra, Venta del Llano (Jaén) and Córdoba, along with the Fat Institute in Seville (CSIC). Also, the Official Agrarian Laboratories in Córdoba and Granada, the County Delegation and its County Agrarian Offices as well as its Agrarian Industrial Section, its promotion office and vegetal protection department, with its ATRIAS. Thanks are also due to the Advisory Board for Fishing and Agriculture. The Improvement Programme in High Quality Olive Oil partly financed laboratories, training and taste panels. Regulating Boards, and industrial and co-operative associations have also supported and co-operated in this effort.

#### 4.- Public Policies Aspects.

This working sector is regulated by the standards controlling fat products, regulation (CEE) Num. 136/66. The future will greatly determine the results of the OCM reform.

# 5.- Quality Control.

The regulation Board of the Council, through periodic visits to different sites, determines the optimum dates of initiation and termination of quality oil picking. It also follows closely the process of elaboration and fruit origin as well as carefully controlling the end product, performing the necessary analyses and tests to guarantee the quality of the facilities which, once sealed, can only be opened by a controller from the official Board of Council, all of which is documented and registered according to its quality control manual.

#### 6.- Strategic Aspects.

These are checked assessed periodically by the Regulating Council to guarantee maximum quality and marketability. Currently a system of virtual time control is being installed in respect of all phases of

process: reception, production and storage, with a permanent connection from the oil presses to the Regulating Council. This will enable us to know at all times the origin of each delivery (orchard, lot, and situation) the grinding conditions, its tank location and its degree of quality and/or any defects. The cooperative presses already have installed this system.

Furthermore, the production of ecological oil is being promoted, and there now exist in this region oil presses, bottlers and traders. An effective waste control is wide-spread. A beginning and end date for picking olives of high quality oil has been planned. Pesticide and insect control are being carefully coordinated and new techniques in the processing and bottling of high quality oils are being introduced.

#### 7.- The impact on the mountain zone.

Streams and creeks have facilitated the construction of oil presses. Today it is forbidden to dump waste matter into public streams and this has resulted in a new 2-phase operation. The topography and poor conditions of the highways cause problems in the transportation and delivery of the fruit.

Low temperatures (in winter) during grinding produce high quality oils and allow excellent storage.

# CHAPTER IV.- MARKETABILITY

#### 1.- Organizational Ways.

Most producers are members of cooperatives in olive oil and its marketing however, 50% of the market is from privately-owned presses.

Over all, the economic weight of the non-cooperative societies is greater, given that their participation in fairs and other promotional activities, as well as their presence in the competitive market is higher. Of the 15 Patented Brands (DOP) only three belong to cooperatives. Also, other non-cooperative oil companies in the area compete in the market and supply local companies further damaging the industry.

There are two important private oil industries in the county: Brother's Muela García, S.L. and Aceites Fuente Grande, S.A., whose marketers are, respectively, "Mueloliva, S.L." and "Gomeoliva S.A.". The former is an olive oil producer and bottler of oils, vinegars and saucers. With more than 79 million Euros in sales in 2001, it is one of the largest national oil olive companies. The second is important in production and especially in processing, packaging and commercialization in virgin olive oil, ecological oil and bulk oil.

In grinding capacity (30-40.000 m. tons) and in production quality and diversification, the Virgen del Castillo Cooperative Society, which currently has 3000 members, is very important. This society also does its own packaging and deals in bulk olive oil. It also produces and markets table olives (2.500 metric tons annually) along with guince and goat milk.

In sector of ecological olive oils, there exists Gomeoliva, S.A. with the patented name brand of BIO MOLINO de LEONCIO GÓMEZ, Señorío de Vizcántar with the brand names of ECO VIZCANTAR and the SCA Virgen del Castillo with their ecological PAROUEOLIVA.

The list of packagers -marketers and brand names- are shown in Annex I.

#### 2.- The Know-how Aspects.

The creation of the PDO (Patent Protection) has remarkably promoted the training of personnel, especially in millers, tasters and specialists in pesticides and diseases, belonging to ATRIAS (Society for the Treatment of Olive Pests).

As well as a permanent participation in fairs, taste competitions, national and international meetings, the very dynamics and structure of this industry have both promoted and improved the quality of the oil.

The constant participation of the Regulating Council in Forums, Fairs, Expositions, Demonstrations and other events, either with their own stand which attracts business or with a stand shared with Priego de

Córdoba Forum Hall, has produced a remarkable increase in training of directors and marketing personnel of the various enterprises.

# 3.- Relations with Private Firms and Organizations.

The two main private traders (Gomeoliva, S.A.) obtained the distinction "Foods of Andalusia" for their high quality oils. This AWARD is given by the association that manages the quality brand "LANDALUZ".

Likewise, they belong to the National Association of Olive Oil Exporters, ASOLIVA.

Cooperatives are members of FAECA: Federation of Agrarian Cooperatives in Andalusia.

#### 4.- Relations with Public Authorities

Both the Regulating Council and DOP business have frequent relations with national, regional, provincial and local authorities during their various imaginative promotion campaigns: TOURISM AND OLIVE OIL, on a county level, to which journalists gastronomes and well-known national figures are invited; CORDOBA, HERITAGE OF QUALITY, in Cordoba, Malaga and other Spanish provinces for restaurants, directors of shopping centres, opinion researchers, etc; OLIVE OIL AND HEALTH, with the participation of Health and Medical investigators and visited by the medical community, representatives of medical professionels, consumer groups, housewife associations an opinion-polls, etc.

These authorities are aided and supported by the Junta of Andalusia, by the Public Firm C d A – today EXTENDA-and by the Institute of Foreign Commerce.

#### 5.- Public Policy

The promotion of olive oil consumption with community financing is the subject of a general promotional framework, both in the interior market (EU) and abroad, in which activity proposals are presented by authorities and professions and approved for pluriannual programs, with partial financing for the approved proposals to be carried out by the petitioning organization.

This implies the disappearance of the former process of Promotion Campaigns, finances totally by the European Union.

# 6.- Quality Control

#### PRODUCT DESCRIPTION

The oils protected by Origin Denomination must be extra virgen olive oil which meet characteristics set by the European Union with the following limitations:

Acidity: Maximum 1º Peroxide Index: Max. 15

Ultraviolet Absorbancy - K270: Max. 0,15

Max. Humiditig: 0,1 % Máx. Impurities: 0,1 %

For virgin oils from the season that remain in storage until the end of October, the maximum index for peroxides allowed will be 18 m.e.q. of active oxygen per kilo of fat. The types of oil, all of which are extra virgin are established as:

#### A) PICUDO

Max. Acidity: 0,5°

Elaboration whith more than 50 % Picudo.

Colour: Yellow

Aroma and taste: Fruit, fresh, pleasant and sweet.

#### B) HOJIBLANCO

Max. Acidity: 0,5°

Elaboration with more than 50 % Hojiblanca

Colour: Golden yellow

Aroma and taste: Fruity, fresh, pleasant and sweet

# C) PICUAL

Max. Acidity: 1º

Elaboration with more than 50 % Picual

Colour: Greenish yellow

Aroma and taste: Fruity, aromatic and slightly bitter

Oil with protected origin (PDO) from Priego de Cordoba can only be commercialised through Packagers registered with the Regulating Council, located in the county, and with extra virgin olive oil whose origin and quality are certified by the Council.

The extra virgin oils with this PDO go from a golden yellow colour to greenish yellow depending on the proportion of the varieties of Picudo, Hojiblanco and Picual. A fruit, sweet taste, balanced and harmonious. Its strong fruity aroma give off the smell of apples, green almonds and newly–cut grass. Pleasant and lingering to the mouth, strong-bodied, tasty with high-lights of bitterness and spiciness.

In order to meet the demands of Rule 45.011, the Regulating Council of the PDO has had to establish a strict Manual of Procedures and Technique Instructions to be able to certify with documentation that all demands of Quality Control for the oils of this PDO have been complied with.

The quality control system has the following documentation:

Quality Manual System Procedures Technical Specifications Technical Instructions

The documentation for the process of certification is:

- Programs of Certification
- Evaluation reports, certificates, licenses for use of the brand
- Meeting minutes of the Regulating Council and Certification Committee.

The Quality Manual has 12 Chapters:

- 1 Introduction and Quality Policy
- 2 Organization
- 3 Regulation Council
- 4 Certification Committee
- 5 Quality System
- 6 Document Control
- 7 Personnel
- 8 Certification
- 9 Assays
- 10 Confidentiality
- 11 Conditions of the use of brand name and certificates
- 12 Appeals and Claim

The brand names of the PDO Priego de Cordoba are the property of the Regulating Council and duty inscribed in the Official Register of Brand and Patents. The registration will be done by the Regulating Council at the places were certified oil are commercialised.

Only those suppliers granted a license for the Brand by the Regulating Council can use said Brands and only with Extra Virgin Oils that meet the norms of the Council.

All parties who commercialise with the PDO label of quality must be perfectly controlled, certified and authorized in their growing plots, transport, processing and the filling with controlled and authorized standards for each step by the Regulation Council.

The quality control is double: Physical-chemical checks by the Official Laboratory accredited by the ENAC to comply with the norm 45.011, today 17.025. The sensorial checks will be made by a tasting panel from the Regulating Council which will collaborate with other National tasting panels for the calibration.

The criteria for certification are defined in the Technical Specification (ET-01). Every year these criteria can be modified with campaign rules that the Regulating Council may consider necessary, judging by exceptional characteristics of a given harvest.

When the filling begins in a tank that must be certified, identification is displayed in a well visible place. When the tank is full, the press will notify the Council so it can pick up the sample as soon as possible. This will be performed by the sampler according to corresponding technical instructions.

#### 7.- Marketing Strategy.

With a total production of virgin olive oil in this region of 18.000 tons, between 1.710 and 5.492 Tm of extra virgin oil has been being certified in the last 5 harvests within the standards of the Council, with an average of 3.900 Tm; some 1.650 Tm sold with the PDO quality label.

Often an initial marketing of most exclusively PDO oil in the national market, in the last 3 seasons, 38 % was sold nationally, 56 % in the EU and 6 % in other countries.

At the national level, the most important markets are in Galicia, the Basque Country and Madrid and, in a less measure, Catalunya.

In Europe the most substantial shipments were to France (85-98 %), Germany, the UK, and Austria. It is difficult to enter the Italian market with Spanish DOP olive oil. Only in 2003, the oil began to gain entry, which can be considered a success, achieved by its quality and promotion. In other countries, most sales were in Switzerland, Japan and the U.S.

Of a total of certified oil, around a third was sold in the county packaged for consumption by the harvesters.

Uncertified bulk oil is generally purchased by major national firms, especially those that operate with quality oil, bottling it for the centre and north of Spain, for the French market and other countries. Around 20 % is sent to Italy.

After an initial phase of consolidating its quality image by participating in the most important competitions and fairs that have placed its oil in the very first ranks on a national basis, the PDO Regulating Council market strategy has now widening to include participation in international activities.

Future orientation of the market strategy will address traceability, environmental and processing certification, orientation to ecological production, and a strict waste control along with a strengthening of the quality image of the product in a clean conservative, privileged natural setting.

#### 8.- Impact of its mountain zone location

The existence in its main centre, Priego de Cordoba, of a Tourist Villa with a capacity for 221 persons as well as several other types of lodging, hostels and a complex range of leisure activities in the open space, the fruit of a consolidated tradition in rural tourism, along with the many landscape, cultural, monumental, gastronomic and sports attractions in the mountain area all help promotion in the county to succeed in welcoming visitors to this area. There is also a consolidated Programme of Summer Courses around Landscapes Painting, Theatre, Music and Dance Festivals, various nationally declared Monuments and another festival, along with the Tourist and olive oil programme. These are attracting a growing number of visitors who, learning of the quality of the area's product, contribute to the promotion of this region when they return home.

# CHAPTER VI - LABELLING

#### 1.- The type of label

The labelling of extra virgin olive oil backed by the PDO, must follow all the norms established both in sector's rules and in those of the PDO and, specifically, in the norms coming from their own rules.

Consequently, both bottlers and brand names must be registered and follow the procedures officially established by the Regulating Council. The Council is flexible as to the size and colours of back labels, that may be adapted according to the front label on the bottle as long as the colour-scheme and sizing of the UE and PDO logotypes are respected.





#### 2.- Reasons of choice of label

The PDO trade mark highlights the O of the word origin with an olive of the variety Picudo with its green on the outside (before ripening) and its black on the ripe fruit. The rest of the word origin is in golden letters, the colour predominant in the area's olive oil. This is meant to point out the importance of the Picudo variety in the quality of these oils.

# 3.- Organisational Aspects

It involves the whole sector in production: Producers (growers), converters of olives into oil, bottlers and tradesmen. Representatives of producers will be fixed on a proportional basis according the production volume of each oil press.

The Regulation Council of PDO is composed of:

- A president
- A vice president

- Five voters representing the producers
- 3 voters from the grinders' sector
- 2 voters from the bottling marketing sector

To fulfil their needs, the Council has a Secretary General in charge of all administrative and financial tasks, a technician in charge of the technical part and control and vigilance services.

It also has a qualification committee formed by a panel of ten experts from the area. Their aim is to report on the qualities of the olives and of the extra virgin oil that may be protected by the PDO. During the harvesting they meet frequently, generally every day to perform tasting sessions to determine the quality of different tanks that are being filled.

The sellers oversee the arrival of the product at each press and the conditions of the elaboration process and fluxes of extra virgin olive oils.

#### 4.- Features of the know-how

In the beginning, the Regulating Council had to gain experience required in the many other activities. Along with its relationship with business and organizations in the field, this allowed it to elaborate manuals of detailed and very effective procedures.

#### 5.- Relations with Public Authorities

There has always existed a perfect harmony with the local authorities (Town Halls) and with national and regional authorities.

With local town halls, the Tourism and Oil Program was developed as well the awarding of Annual Prizes to the best oil and cellars of the DOP and the Picudo Award.

The Council of Agriculture and Fishing of the Junta of Andalusia fosters the Regulating Council with the aim of controlling its activity and supporting it in promotional campaigns. At the same time, it aids businesses in their programmes of training and quality improvement.

It has Official Regional Offices in Cordoba and Granada for making Analyses of soils, water, waste products, olives and oils with standard prices.

It also collaborates through the Service for Protection of Vegetal Matters in support of ATRIAS, Associations for the treatment of plagues and diseases in olive trees.

The Environmental Council, while controlling operation in the Subbetic Mountain Natural Park, also regulates and penalizes any irregularity in dumping, clearings of any other anomaly damaging to the environment. A permanent guard service exists for this purpose: Service for the Protection of Nature (SEPRONA).

The Public Firm EXTENDA –formerly, C de A-, as well as the Institute of Foreign Commerce (ICEX) promotes the participation of the sector's businesses in Forum and Promotional Activities.

The Ministry of Agriculture, Fishing and Food each year organises a National Competition to award prizes to the best extra virgin olive oils. It is a neutral, qualified and outstanding vehicle for public recognition of the high quality of the DOP Priego of Cordoba extra virgin olive oils, which has received the most awards in Spain since these prizes were established.

At the same time the many businesses in the sector participate in Programmes of Quality Improvement and Training of Personnel.

The Provincial Authorities annually organize an Ecological Agriculture Faire with Forums and expositions related, among other sectors, to the ecological olive sector.

The Association of Town Halls along with the Association for the Rural Development of the Subbetic, promote activities for the improvement of infrastructures and for the support Rural Development activities.

#### 6.- Public Policy Features

Like most of the agricultural and food sectors in the European Union, the olive oil sector has a meticulous set of rules contained CEE regulation Num. 136/66 and in its vast complex development.

As to the application the CEE Regulation Num. 2081/92 on DOP, the authority for the pursuit and control belongs to the Junta of Andalusia.

# 7.- Strategic Aspects

In the future, the strategy is to maintain the excellent results from prize awarding and promotional activities, to intensify operations in biological oils and continuing to participate in activities of the Tourism and Oil and the Cordoba Heritage of Quality Programs. Support to research and the spreading of the relationship between health and oil, especially with reference to those contained in polyphenol, will be continued.

# **CHAPTER VII – SUCCESSES, FAILURES AND NEEDS.**

#### 1.- Successes and Failures.

The establishing of the PDO Priego de Cordoba can be considered a resounding success, especially in the following aspects

- a) Generalized recognition of the exceptional quality and peculiarity of it extra virgin olive oils of various types: intensely fruit, medium fruit and soft or delicate. That is clear from its receiving first prizes and mentions of honour repeatedly and with different brand names in the most important international and national competitions as shown in ANNEX II
- b) Consolidation, strengthening and expansion of the bottling and marketing sector in the region. From a base of four bottlers existing in 1996, there are now eleven with a total of 15 brand names with DOP and varying quality bottles. These brands are available in main quality shops, supermarkets and department stores. One of the brands belongs to Carrefour which in Spain it markets under the brand "De nuestra tierra" extra virgen olive oils from different parts of Spain. Among them all, the highest priced (3,95 Euros for a 0,5 I. bottle) is from the PDO Priego of Cordoba which received the highest quality ranking of prizes awarded in Spain.
- c) In recent years, around 1650 tons of oil bottled with PDO have been marketed- both on the home market as well as mainly, on the foreign market, principally in France, Germany, Switzerland and Japan, all countries with a high rate of annual growth of consumption of this product. It has gone from an initial sale in bulk oils to a still small but ever-growing presence in the small bottles market.
- d) All this above has been possible thanks to a continuous effort in improving the quality, both of the olive in the groves and in the process of reception, cleaning, washing milling, storing and bottling. Improved home and foreign promotions have also contributed.

# CHAPTER VIII. IMPACT ON THE COUNTRY

#### 1.- Economic and social incidence

The sector, which occupies 97% of the cultivated surface, generated an overall income in the region of some 50 million Euros annually, of which somewhat less than a third comes from olive oil production.

Requiring 22 annual working days per hectare, of which 60-65% are in picking and transport, the total direct employment in the growing and picking surpass 650.000 annual working days. This translates into around 2.900 fixed jobs. Including the activity in the press, in oil and by-product transport, bottling and

marketing, machine tool shops, supply firms, etc. the total number of jobs in the sector may approach 4.000, which means that around 50% employment in the region depends on the olive oil sector.

In a relatively depressed region, with a low income level and unsteady employment, the strategic importance of the sector is evident.

#### 2.- Environmental impact

From an environmental point of view, the maintaining of the olive orchards with corrective measures to prevent erosion is fundamental. No other agrarian activity could meet positively the joint needs of employment and control of erosion in a cultivated mountain zone.

Competition, quality and sustainability are promoting a generalization of some of the following measures of environmental protection.

- No tilling with the use of herbicides and/or clearing of brush or underbrush.
- Reduction in the number and depth of the working of the land.
- Reduction in the number of treatments and/or the doses or persistence of the products used. Improvement in efficiency thanks to integrated treatment from the ATRIAS group and to an improvement in the effectiveness and distribution of the teams.
- Crushing and incorporating into the soil the remains of pruning, reducing erosion.
- Elimination of the olive mill wastewaters.

#### 3.- Impact of the PDO on the sector's competitivity

In spite of the doubtless success of the PDO Priego de Córdoba in the improvement and differentiation of quality, image and promotion and presence in markets and specialized journals and the real repercussion on competitivity of the producers' plantations, the impact has been limited since the repercussion on prices obtained for the producers has been inappreciable.

It must be kept in mind that the proportion of oils sold with PDO doesn't exceed 10% of the total and most of these are marketed by private companies, not cooperatives. Taking into account that on the other hand, the majority of bottled oil sold without the PDO label is also from those non-co-op companies, the benefit in the improvement in image hardly affects the producer.

Given the high level of competency in the bottled olive markets, its difficult to profit by that improvement in image, especially in the short time and, above all, taking into account the scarce demand in Spain for bottled oils with PDO in small quality bottles.

Undoubtedly, the overall sector is investing in the future. Prestige allows the continuing penetration of the market by the region's brands and bottles which have been increasing gradually both in number and in the volume of bottled business. The benefit generated by the PDO up to now is the considerable improvement in the proportion of extra virgen olive oils with respect to the total oils produced, which today is around 75%, having increased from the previous 40-50%. This also translates into an improvement in price, which could be estimated at 7-10% except for some very good oils which at times may get better prices. All of the above has been achieved at a high cost to producers and businesses.

# 4.- Impact of the PDO on multifunctional aspects in the region.

Both the Public Acts of the annual awarding of prizes to the best extra virgin olive oils with the PDO Priego de Córdoba as well as the diffusion of the prizes and mentions given in other places are creating a very positive enthusiasm for quality in the region and the sector.

Consequently, each year new experiences in the promotion of picking at given times with small lots of special quality olives is developing and this is leading to other innovation in improving the procedures of receiving, transformation and storing oil with which to win prizes. It is a healthy competition in which different businesses in the sector are involved especially those that, having an proper promotion and marketing structure, can best profit from these activities.

Furthermore, the annual celebration of various public activities within the framework of the Tourism and Oil Program, undertaken by the Town Hall of Priego de Córdoba along with the PDO Regulating Council and other institutions to which select groups of journalists, gastronomes, medical personnel, etc. are invited. These activities play up the qualities of the PDO extra virgin olive oil product as well as the countryside, the culture, gastronomy, history and heritage of the region, giving an important profile to both facets. Tourism and oil mutually contribute to promote the processes of rural developments around agro-industry, lodgings, handicrafts and leisurely outdoor activities.

Future improvement, to achieve a greater market presence of producers' brand names, that will give their products an even greater added value will require a substantial renovation of the associative structures for a common management for such a complex mosaic of plantations, many with environmental and technical demands hardly addressable on an individual level. A greater professionalization and concentration on common operations of management, exploitation and commercialization with local brand names and bottles are especially necessary.

ANEXO I.- COMERCIALIZADORAS, MARCAS Y UBICACIÓN, EN LA DOP PRIEGO DE CÓRDOBA

COMERCIALIZADORA	MARCA/S	LOCALIZACIÓN	OBSERVACIONES
GOMEOLIVA, S.A.	BIO MOLINO DE	PRIEGO DE	ECOLÓGICO
	LEONCIO GÓMEZ	CÓRDOBA	info@gomeoliva.co
			<u>m</u>
001450111/4 0 4	EAL CATA	DDIEGO DE	
GOMEOLIVA, S.A.	FALCATA	PRIEGO DE CÓRDOBA	info@gomeoliva.co
		CORDOBA	<u>m</u>
GOMEOLIVA, S.A.	MOLINO DE	PRIEGO DE	info@gomeoliva.co
	LEONCIO GÓMEZ	CÓRDOBA	<u>m</u>
ACEITES VIZCÁNTAR,	ECO VIZCÁNTAR	PRIEGO DE	ECOLÓGICO
S.L.		CÓRDOBA	olifer@promi.es
A OFITEO VII ZOÁNITAD	artiania pr	DDIEGO DE	116 0
ACEITES VIZCÁNTAR,	SEÑORÍO DE	PRIEGO DE	olifer@promi.es
S.L. SCA OLIVARERA LA	VIZCÁNTAR EL EMPIEDRO	CÓRDOBA PRIEGO DE	accouricime a @b atm
PURÍSIMA	EL EMPTEDRO	CÓRDOBA	coopurisima@hotm ail.com
PORISINIA		CORDOBA	<u>an.com</u>
ALMAZARAS DE LA	FUENTE DE LA	PRIEGO DE	Alma5@arrakis.es
SUBBÉTICA, S.C.A.	SALUD	CÓRDOBA	
MUELOLIVA, S.L.	<b>FUENTE DEL REY</b>	PRIEGO DE	mueloliva@mueloliv
		CÓRDOBA	<u>a.es</u>
MUELOLIVA, S.L.	VENTA DEL	PRIEGO DE	mueloliva@mueloliv
WIDELOLIVA, S.L.	BARÓN	CÓRDOBA	a.es
	BARON	CORDOBA	<u>a.es</u>
MANUEL MUÑOZ E	FUENTE RIBERA	ALMEDINILLA	957-703143
HIJOS, S.L.			
SUCESORES DE	MARQUÉS DE	ZAMORANOS,	957 – 705326
MORALES MORALES,	PRIEGO	PRIEGO DE	
S.L.		CÓRDOBA	
SUCESORES DE	ORO DEL	ZAMORANOS,	957 – 705326
MORALES MORALES,	MEDITERRÁNEO	PRIEGO DE	

S.L.		CÓRDOBA	
S.C.A. VIRGEN	PARQUEOLIVA	CARCABUEY	info@virgendelcasti
CASTILLO			<u>llo.com</u>
MANUEL MONTES	PÓRTICO DE LA	PRIEGO DE	957 – 542299
MARÍN	VILLA	CÓRDOBA	
CENTROS	DE NUESTRA	MADRID	91 - 3331657
COMERCIALES	TIERRA		
CARREFOUR			

ANEXO II.-RELACIÓN DE PREMIOS CONSEGUIDOS PÒR ACEITES DE OLIVA DOP PRIEGO DE CÓRDOBA ENTRE 1998 Y 2003.

INSTITUCIÓN	TIPO ACTE	1998	1999	2000	2001	2002	2003
MAPA	FVA	FI(ACC)		1° P	1° P	MH (2)FI	FVD 1°P(4)
	FVM	(8)		(1)	(2)		FVD 2°P(2)
	FVnoA					FINAL FM	
						(5)	
COI			2° P		2° P		FM 4°F (7)
			(1)		(1)		
EXPOLIVA	FVno A				1° P		1° P (4)
	FMAD				(2)		2° P (2)
SIO-COI	FI					2° P (2)	
MARIO	FI					3° P (4)	
SOLIMAS	FM					FINAL(5)	
OLEOSUR						1° P	
2002						ALMAZAR	
						A(1)	
						2° P	
						ALMAZ	
						(2)	
						1° P	
						ENVASAD	
						(4)	
						2° P	
						ENVASAD	
CALIBRAT						(1)	
SALIMAT						1° P (2) 2° P (6)	
PACO (PATR			2° P			2 P (6)	
COM OLIV)			(1)				
DIPUTACION			(1)	1° P			
PROV				(1)			
CORDOBA				(')			
BIOL							DGM (3)
LEONE	FD(FRUT						DGM (3)
LEGIVE	DELICATO)						DOW (3)
OLIVE OIL	DEE: O/(1.0)						MP (3)
AWARD							
LA COUNTY							MO (3)
FAIR							MP (2)
FIRA LLEIDA							1° P (3)
ECOL							
DIPUT CO							1° P (3)
ECOL							
RADIO						МО	
TURISMO						(6),(1),(2	
						)	
	•	•	•	•	•	• -	•

# RELACIÓN DE EMPRESAS Y CLAVES DE ACEITES Y PREMIOS

	1	EMPRESA  MUELOLIVA	TIPO	DE ACEITE	TIPO DE	PREMIO
	2	SCA VIRGEN	FI	FRUTADO	ACC	ACCÉSIT
		CASTILLO		INTENSO	DGM	DIPLOMA
	3	GOMEOLIVA	FM	FRUTADO MADURO		GRAN
	4	MANUEL	FMAD	FRUTADO MEDIO		MENCION
		MONTES MARIN		AMARGO	FINAL	FINALISTA
	5	SUC. MORALES		DELICADO		
	_	MORALES	FVA	FRUTADO VERDE	MH	MENCIÓN
	6	ACEITES		AMARGO		HONOR
		VIZCANTAR	FVD	FRUTADO VERDE	MO	MEDALLA
	7	MARÍN		DELICADO		DE ORO
		SERRANO "EL	FVM	FRUTADO VERDE	MP	MEDALLA
	_	LAGAR"		MEDIO		DE PLATA
	8	SCA VIRGEN DE LA CABEZA	FVnoA	FRUTADO VERDE NO AMARGO	Р	PREMIO

# EXTRA VIRGIN OLIVE OIL "SIERRA DE CADIZ" (PDO)

Area: Sierra de Cadiz - Andalusia (Spain)

<u>Authors<sup>26</sup></u>: Luis Navarro Garcia

Dr. Pedro Ruiz Aviles Franscisco Barea Barea Dr. Manuel Arriaza Balmon (CIFAs de Sevilla y Cordoba)

# CHAPTER I - BASIC DATA ABOUT THE EMERGENCE OF THE PROJECT

Olive groves and olive oil have been part of the "Sierra de Cádiz" agricultural system for centuries. Olive groves were probably introduced to the Iberian Peninsula (4.000 years ago) through the county of Cádiz; wild olives (acebuches) still survive in the Natural Parks "Alcornocales" and "Sierra de Grazalema". Olvera, the name of the main village of the area means "orchard of olives".

Olive grove production spreads through the northeast part of "Sierra de Cádiz"; which has low altitudes, mild climatic conditions and moderate rainfalls. Natural conditions in addition to the range of olive grove varieties, farming and processing practices ensure an outstanding quality to the product:



The sustainable farming systems (Organic Agriculture, Integrated Production, conservation tilling or plant covering), quality agricultural practices and the up to date processing technologies make it possible.

The structure of the olive grove remains similar for centuries (varieties and plantation type). Nevertheless farming and harvesting systems have changed significantly following the current agronomic trends. The main structural changes have been aimed to the introduction of productive and high market value olive varieties, increasing density of the new plantations, with olive trees with a single trunk and the use, where possible, of drip irrigation systems.

<sup>&</sup>lt;sup>26</sup> See list page 156

The evolution of the processing technology is moving towards the so-called *two phase continuous system* replacing the traditional one that survives as a relic of the recent past in some family factories. All these changes contribute to an improvement of quality. The awareness of a PDO has achieved recognition of this quality and drives the sector on to a continuous improvement of quality mountain olive oil.

"Sierra de Cádiz", in spite of their tradition of producing quality olive oil and the significance of this agricultural activity as an element in the gross product of the area, has lacked, until very recent time, official recognition of its quality. In fact, it was not until 1998, when the producing sector together agreed to apply to the Andalusian regional government for the creation of a PDO under the name of "Sierra de Cádiz" and, after getting the provisional approval obtained the definitive one on the part of the Spanish Administration in 2002 (Orden de 12 de junio de 2002 por la que se aprueba el Reglamento de la Denominación de Origen Sierra de Cádiz y de su CR, B.O.J.A. nº 77 de fecha 02 de julio, y ORDEN APA/2065/2002, 31 de 31 de julio, por la que se ratifica el Reglamento de la Denominación de Origen "Sierra de Cádiz" y de su CR, B.O.E. nº 193 de 13 de Agosto). The municipalities originally included in this PDO were: Algodonales, Olvera, El Gastor, Setenil de las Bodegas, Alcalá del Valle, Torrealhaquime, y Zahara de la Sierra from the county of Cádiz, and the bordering Pruna and Coripe from the county of Seville.

The first oil packaged under the label of the PDO came from the harvest 2.001/2.002 bottled by "S.C.A.A. Ntra. Sra. de los Remedios (Olvera, Cádiz) with the brand "Dehesa Vieja" and "S.C.A.A. San Antón" (Pruna, Seville) with "Prunoliva". The volume qualified from the first harvest amounted to 170.000 kg and 750.000 kg the one of the 2002-2003.

# CHAPTER II. BASIC PRODUCTION (RAW MATTERIAL)

The olive grove acreage in "Sierra de Cádiz" accounts for 15.000 ha with 3.000 producers. The average production of olive oil is about 5 millions of kg/year. This volume is processed in eight factories (*almazaras*) (4 Cooperatives and 4 Family Plants).

The "Study for the Sustainable Olive Grove Production of Sierra de Cádiz"<sup>27</sup> divides olive groves into four classes according to productivity: High Yield (20% of the surface of production), Average Yield (40%), Low Yield (35%) and "Adehesado" (combined with livestock) Olive Grove (5%). The main local olive grove varieties are "Lechín", "Picual" and "Hojiblanca". "Alameña" and "Verdial Tierno" are local varieties of the area. "Sierra de Cádiz" accounts with 1.000 ha and 150 producers of organic olive grove, a third of them are located in Olvera.

The structure of the sector is based on aged farmers (27% older than 60 years and 39% among 40-60 years) with a very low educational level (44% without studies) and agricultural education based on experience (60%) and training seminars (38%). Farms are monoculture olive grove (67%) with a very small average size (44% less than 5 ha and 72% less than 10 ha). Most of the farmers (70%) are part time workers. $^{28}$ 

Quality in the production of olives and olive oils is related to the custom and traditions of the area. It is a sector with a great demand for labour because of the multiple manual tasks needed: pruners, agro-chemical

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<sup>&</sup>lt;sup>27</sup> Ramírez, S.; Penco, J.M.; León, M. (2001): Estudio de sostenibilidad del Olivar en la Sierra de Cádiz. *Documento de trabajo*. *Servicio de Desarrollo Rural, Diputación de Cádiz*.

<sup>&</sup>lt;sup>28</sup> **Navarro**, **L.** (2003): Aceite de oliva procedente del cultivo ecológico – aceite de oliva procedente del cultivo convencional en la Sierra de Cádiz. Dos opciones comerciales de comercialización. *Documento de Trabajo Departamento de Economía y Sociología Agrarias CIFA Las Torres-Tomejil*.

operators, harvesters. Therefore, we are dealing with a labour demanding crop with a significant social impact.

Quality of olive oil depends upon quality of the olives it comes from. The main parameter for quality is more the mixture of olive varieties than the characteristics of each of them individually taken. The key agricultural step for producing an olive oil of quality is the harvest time: choosing the right moment according to the oil content and fruit attributes, and separating the olives picked from the tree from the ones fallen into the floor.

Transfer of technology to the sector comes from very diverse channels: Cooperatives usually offer continuous information and help farmers to improve educational skills through training seminars and workshops on innovative techniques coming from research.

The Agrarian Regional Office (OCA), the Associations for the Integrated Treatment of Plagues and Disease (*ATRIAS*) and *Diputación de Cádiz* are, at the regional level, the most active agencies for transferring technology: OCA has responsibility for general agricultural information.

ATRIAS advises on the opportunity and methods for fighting against pests; *Diputación de Cádiz* through its Department for Rural Development helps farmers through its Olive Grove Resource Centre.

The Regulator Council of the PDO Sierra de Cádiz, besides the control aspects, works in the promotion of olive oils, organizes training seminars for farmers and processors and participates in researching programmes on quality of olive oil. Quality controls includes: varieties grown (Lechín of Seville, Camomile, Verdial of Huevar, Verdial of Cádiz, Hojiblanca, Picual, Alameña of Montilla and Arbequina), and farming and harvesting practices.

The strategies recommended to improve PDO olive oils "Sierra de Cádiz" are related to the recognition of their specificity and the role of the mountain olive grove in relation to the environment, mainly regarding erosion. In this sense, according to the "Study for the Sustainable Olive Grove production of Sierra de Cádiz", strategies have to promote the increase of organic olive groves, the decrease tilling, and setting a vegetable covering; to use agrochemicals rationally, and to integrate drip irrigation systems in fertile lands with water availability. Many of these strategies are supported by the European Union through the Environmental Programme Aids.

# CHAPTER III. PROCESSING AND TRANSFORMATION

Most of the olive grove farmers are associated in Cooperatives for processing and marketing (90% of the PDO). The structure of these firms can be seen in the following table:

Name	Year	Processing system	Production (kg oil)
S.C.A. "Los Remedios"	1966	Continuous 2 Phases	2.000.000
S.C.A. "El Agro"	1965	Continuous 2 Phases	1.500.000
S.C.A. San Antón	1969	Continuous 2 Phases	1.000.000
S.C.A. San José Obrero	1963	Continuous 2 Phases	400.000
Troya Cantalejo	1889	Traditional	200.000
Acietes Blázquez	1920	Continuous 2 Phases	160.000
Las Pilas	1850	Continuous 2 Phases	100.000
Molino El Vículo	1775	Traditional	100.000
TOTAL			5.460.000
Cooperative		Continuous 2 Phases	4.900.000
Family plants		Continuous 2	560.000
		Fases/Trad.	
Continuous system			5.160.000
Traditional system			300.000

The table highlights the contribution of the family plants (10% of the total production), where olive oil is obtained using traditional methods. According to the processing system, six plants use modern-day technology (two - phase continuous systems that provide better quality oils and reduce environmental impacts), representing 95% of the total production. Sierra de Cádiz produces three types of olive oil made with a mix of the olive varieties cultivated in the region. According to the percentages used from each variety these types are defined as follows: *Olvera, Pruna-Coripe and Setenil*.

	MIX TYPE				
VARIETY	OLVE RA	PRUNA- CORIPE	SETEN IL		
Lechín	40	58	32		
Alameña	20				
Verdial Dura	10	16			
Verdial Tierna	10				
Manzanilla	10	10			
Picual	10	7	30		
Hojiblanca		9	29		
Others			9		

Source: Instituto de la Grasa (CSIC)<sup>29</sup>

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<sup>&</sup>lt;sup>29</sup> **Alba, J. (Instituto de la Grasa) (1999):** Estudio de potencialidad y caracterización de los aceites de la Sierra de Cádiz. *Informe de la Almazara Experimental del Instituto de la Grasa de Sevilla para la Exma. Diputación Provincial de Cádiz.* 

*Lechín* is the dominant olive variety in all the areas (in *Pruna* and *Coripe* represents 60% of the total acreage). The characteristics of these types of oils (according to the results of work carried out in a experimental processing plant, under optimal processing conditions) are indicated in the following table:

	Aroma	Taste	Sensory Punctuation
Olvera	Fruity of green olives, almost imperceptibly to green banana and lightly to leaf, bottom to aromatic grasses and green wood.	olives and threat	7.3
Prune- Coripe	Fruity of green and mature olives, lightly to apple and green banana.	Fruity of green and mature olives, lightly to banana and spicy, almost imperceptibly bitter	7.8
Setenil	Fruity of green olives and lightly mature to apple and tomato.	Fruity of green and mature olives, to green and almost imperceptibly bitter and spicy banana	7.0

Source: Instituto de la Grasa (CSIC)

Transfer of technology to this segment is carried out by the Agrarian Regional Office (OCA), and the Service of Rural Development of Diputación de Cádiz through the Resource Centre of the Olive Grove.

The Regulator Council has carried out tasks like auditing the processing plants to analyse quality critical points in order to advise millers about technical improvements in the process. The Regulator Council owns a laboratory (since February 2002) to analyse quality physical-chemical parameters. At the same time a sensory panel has been created.

Control activities of the Regulator Council are based on inspections to the processing and bottling plants. Quality certificates are given to the oils selected by the processors overcoming the standards of quality according to regulations. The Regulator Council also controls the distribution of qualified olive oils.

The evolution of quality in the first two harvests of regulation is shown in the following chart. These results support for the following conclusions:

- The volume of olive oil submitted to qualification does not differ a big deal from one year to the other.
- A substantial increase of qualified oils has been produced in the second harvest (11,4% in 2001-2002 and 52,4% in 2003-2003).
- In spite of that, plants need to have better environmental conditions, mainly in the places where olive oil is classified according to quality (since high temperature, noise, smells... disturb for a correct classification). Training technical staffs on sensory quality is also mandatory.

5.000.000 4.000.000 3.000.000 ফ 2.000,000 1.000.000 0 Qualified and Qualified, not Applied for Not qualified Remaining olive oil bottled bottled qualification 2001-2002 80.600 70.000 1.173.000 1323600 3.676.400 **2002-2003** 346.500 403.000 704,100 1453600 3.546.400

DOP Sierra de Cádiz. Qualified Olive Oils

The strategies for the continuous improvement of quality in the processing step could be defined as follow:

- modernization of some plants,
- improvement of the management, especially in the critical points (which also implies education of technical staffs),
- diversification of the olive oil production, with special care in producing organic and monovariety olive oils,
- to continue working on quality research and development programmes.

# **CHAPTER IV. DELIVERY CHAIN**

Despite 750,000 kg of the total olive oil production (15% of total olive oil production in the exercise 2002-2003) has being qualified as PDO, only 100.000 kg were been bottled. This is because an substantial part of it was sold in bulk. The reasons for that relate to the short experience of the managers in the high quality olive oils marketing. Trade marks and containers of PDO olive oils by firms are shown next:

Firm	Commercial marks	Pack	
SCA Los Remedios	Old meadow	Can (5 l.); Glass bottle (of ¾ l.)	
SCA San Antón	Prunoliva	Can (of 3 I. and 5 I.); Glass bottle (of $\frac{3}{4}$ I and $\frac{1}{2}$ I.)	
SCA El Agro Monte esquino		Glass bottle (of ¾ I.)	
S.C.A. Oleícola Coripeña	Corioliva	Glass bottle (of ¾ I.)	
Molino El Salado	La Alcarracera	Glass bottle (of ¾ I.)	
Aceites Blázquez	Aceites Blázquez	Can (5 I. and 2,5 I); Jar (½ I. and ¼ L.)	
Las Pilas	Molino Pepete	Glass bottle (of ¾ l.)	

Source: The Regulator Council PDO Sierra de Cádiz

SCA Los Remedios, the main producer of olive oil in the area and the leader in selling packed oil (1.100.000 litres.) works on diversification to organic (*Oro Natura*) and mono-variety (*Arbequina*) oils.

# **CHAPTER V. GLOBAL SUPPLY CHAIN ASPECTS**

Cooperatives are the first support structure for farmers for supplying olive oil jointly. They carry out the storing, processing and common marketing of oils besides other services such as the supply of agricultural inputs, tools and agricultural machinery; technical advice, and, in some cases, credit services.

Cooperatives are not involved in second or third degree cooperatives for marketing. What they do, at most, is to raise informal agreements about minimum sale prices. Some companies are associated in the Association of Quality of the Agricultural and Handmade Products of Sierra de Cádiz and Natural Park Los Alcornocales.

Public institutions (MAPA, ICEX and Junta de Andalucía) carry out generic promotion campaigns. In the case of Junta de Andalucía a trade mark "Calidad Certificada" has been created. The Programme PIPE 2000 (ICEX) for supporting agricultural products from small and medium firms to export has been welcomed by most of the firms.

The Regulator Council has carried out generic campaigns to support olive oil in nearby markets (counties of Cádiz, Málaga, Seville and Huelva). Advertising spots in local radio and television, catalogues, posters and promotional bottles besides participating in local and national fairs have been their main activities.

# **CHAPTER VI. LABELLING**

The label of PDO Olive Oils Sierra de Cádiz and Calidad Certificada are shown in the following chart





The Regulator Council has applied for and obtained the collective mark "Calidad Certificada" belonging to Junta de Andalucía, but only to be used in their promotion advertisements. Firms are able to use this mark after fitting the quality standards demanded by Junta de Andalucía.

# CHAPTER VII - SUCCESS/FAILURE/NEEDS

In the light of the preceding chapters we can summarise the following strategic analysis of weaknesses, strengths, threats and opportunities:

### WEAKNESSES

- Aged low trained farmers with difficulty to the promotion of the youngest ones.
- High level of erosion in some areas.
- Some lack of plantations with traditional varieties.
- Old plantations.
- Low yield and high production costs, mainly in pruning and harvesting.
- Some obsolete processing plants.
- Lack of training in the some new techniques for processing olive oil.

#### **STRENGTHS**

- Culture and tradition of olive grove in the region.
- Easy possibility to evolve to organic olive grove.
- Close markets for quality olive oils.
- Organisations supporting quality mountain olive oil.
- Improvement of quality practices in farms and processing plants.
- PDO guarantee of quality.

# **THREATS**

- Verticilosis. Endemic disease in intensive olive groves.
- Negative environmental impact of byproducts (alperujos).
- Delay in the effective operation of the PDO
- OCM aid system to mountain olive grove.

# **OPPORTUNITIES**

- Objective 1 region (support aids from the EU).
- PDO guarantee of quality.
- Growing demand for organic olive oil.
- Agro-environmental aids from the EU.

Strategies suggested by experts can be summarised as follows:

- To work on the recognition of the peculiarities of the mountain olive oil production and their positive environmental impacts.
- To increase the use of quality agricultural practices: reduced tilling, vegetable covering, and low use of agrochemical inputs (Ecological and Integrated Production).
- To use drip irrigation system in high yielding areas with water availability.
- Modernisation of the processing plants.
- Improvement of the processing systems especially in the quality critical points, which implies training to managers and technical staffs.
- Exhaustive control of by-products.
- Diversification of olive oil productions toward ecological and mono-variety olive oils.
- Increase researching and development programs on quality.
- To continue with generic promotion works and to start others techniques like creation of prizes for quality, presentations to gourmet and restaurants, etc.
- To include olive oil as a tourist resource associated to other tourist assets in the region: Route of the White Towns, Green Road, etc.
- To help firms in promotion activities (attending fairs with them or gathering potential clients to visit the production area).

# CHAPTER VIII - SOCIAL AND ECONOMIC ENVIRONMENTAL ASPECTS

Olive grove cultivation is the main agricultural activity in "Sierra de Cádiz" (85% of the total area under the PDO). Therefore it is an asset of remarkable importance from the environmental, social and economic points of view.

Olive grove represents also a decisive environmental asset since it decreases erosion impact, and improve water infiltration. The environmental systems of cultivation: reduced tilling and use of vegetable covers are frequent in Sierra de Cádiz (because farmers care about maintaining agricultural land and also because of the aids they receive from public programs). Many farmers follow in addition *Organic and Integrated Production Systems* that promote the reduction or limitation in the use of agricultural inputs, according to regulations. Negative environmental impact coming from olive oil by-products (*alpechines*) is being minimized because of the use of modern processing systems (95% of the olive oil is made by following two phases continuous system).

Olive grove is also an essential element of the agrarian landscape of Sierra de Cádiz. As a mono-crop system or combined with other Mediterranean species, like vineyard and "dehesa" (ecosystem). Traditional agricultural buildings (big farms and old almazaras) enhance the scenic value of this rural landscape.

Olive grove is a highly social crop (around 450.000 day's wages a year). Many farming activities are handmade undertaken (pruning and harvesting mainly) and women have an important role in them. The sector also generates a high added value: the gross product of oils and table olives in the region is estimated in 13 million euros.

Rural population is very concerned about olive grove and olive oil due to the small size of farms (a high percentage of rural families are olive grove owners), and the remaining importance of hand-made jobs demanded. All these traditional values have been passed on to literature, music, painting, etc.

Finally, olive oil is an important ingredient of local gastronomy, consumed fresh (with bread, in salads ...) and cooked, increases the aroma and flavour of traditional recipes.

# List of all the members of the department that have participated in different stages of the case studies in CIFA de Cordoba y Sevilla:

Dr. Pedro Ruiz Aviles, PhD in agricultural engineering and Sociologist

Luis Navarro García, Agricultural Engineer

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# IDIAZABAL (PDO CHEESE)

<u>Area</u>: Basque Country (Spain) <u>Author</u>: Rafael Herran, Clara Icaran

(IKT)

# CHAPTER I - BASIC DATA ABOUT THE EMERGENCE OF THE PROJECT

# 1 - The Natural, Geographical, Historical and Economical environment

The milk production and cheese elaboration area of PDO Idiazabal covers the natural diffusion areas of the autochthonous ovine breeds Latxa and Carranzana in the CAPV and Navarra (except Roncal valley). These zones are characterised by the abundance of grazing resources and the presence of large high pasture areas, mainly related to a mountainous relief and the predominance of an Atlantic climate, moderate in terms of temperatures and very rainy. These conditions make these areas very suitable for shepherding activities based on the utilisation of these natural resources and, actually, the production of cheese made of ovine milk constitutes a typical and traditional activity on these areas. In former years, this cheese used to be identified by the name of the specific massif or area of the CAPV or Navarra in which it was produced, having in that way names such as cheese from Urbasa, cheese from Gorbea, cheese from Aralar, etc. In 1986 all of them, except those produced in Navarra, joined efforts under a unique PDO, Idiazabal, being this name related to a specific location, equidistant to various important production areas, in which selling this cheese was fairly popular. Later on, in 1993, also the production of Navarra was included in this PDO.

#### 2 - The conditions (Opportunities / Threats) that drive the protagonists to act

In the middle 80's, the image of these cheeses commercialised under different names, was quite deprived of force by an increasing commercialisation of cheaper cheeses of doubtful quality imported from other territories that constituted a disloyal competence for our genuine product and a fraud for consumers.

In the middle of that situation and after a detailed analysis of milk production conditions and cheese elaboration methods, it was seen that all these traditional cheeses, produced in different areas of the CAPV and Navarra and identified using different names, were practically the same product. Taking advantage of this circumstance, it was decided to join all these productions under a unique PDO, Idiazabal, in order to share efforts in promoting the product and to provide it with an added value to be appreciated by consumers.

# 4 - The Impact of mountain area location on the launching of the project

In Point 1, it has already been mentioned how the particular natural conditions of the production area of this PDO make it very adequate for such an activity. As it will be described more in detail in the following chapters, this activity is perfectly adapted to our mountain conditions, in such a way that it traditionally has conditioned the way of living of many sheep keepers and also, at the same time, the landscape and the natural medium in which it is carried.

On the other hand, the mountainous relief of the territory makes its agricultural model to be characterised, especially in some areas, by a clear predominance of small no professional farms. In this sense, providing an added value to the product by means of a production of quality protected by the distinctive of PDO, can be an adequate alternative to favour the commercialisation of the product and the maintenance of the activity.

## CHAPTER II - BASIC PRODUCTION (RAW MATERIAL)

## 1 - The Organisational Aspects

Nowadays there are 554 milk producers registered in the PDO Idiazabal. 474 of them sell the milk they produce to different cheese factories that elaborate Idiazabal Cheese, whereas the remaining 80 producers consist on artisans that elaborate Idiazabal Cheese with their own milk. We can find producers with big herds, even up to 800 sheep, that present a high level of specialisation in this production. However, there is a clear predominance, specially in some areas (Gipuzkoa and Bizkaia), of small sized farms with 25-30 animals in which milk production constitutes a complement to other activities, either industrial activities carried out of the farm, other agricultural activities or both at the same time. Regarding the milk producers that also elaborate cheese, in general, we could say that they present a higher specialisation level and bigger herds than those only producing milk.

With respect to the level of participation of producers in different organisations, there are four Ovine Associations, three in the CAPV and one in Navarra, where producers can get orientation and support in different fields. They can also participate in the Management Centres of their respective geographic area, where they can get services in terms of yields control, accountancy and professional advice. In the case of milk producers that elaborate cheese, most of them are grouped in a co-operative society called Artzai Gazta that provides them different services. In addition, it must be indicated that milk producers and artisans are represented in the management instrument (Consejo Regulador) of PDO Idiazabal.

#### 2 - The Know-how and Quality Aspects

All the requisites that must be accomplished during milk production for Idiazabal Cheese are defined in the Technical Regulation of the product. The main differential know-how and quality aspect of this production consists on the utilisation of the autochthonous breeds Latxa and Carranzana, what directly determines the quality of the product. On the other hand, a production system based on a maximum utilisation of the natural resources of the territory is carried. In this sense, traditionally a short distance transhumance of the sheep herds is performed from valleys to higher zones, where the animals stay approximately from May to October. This short distance transhumance conditions the product to be seasonal, since, due to a higher facility of handling and in order to attain a mayor control on the feeding during the milk production, producers normally make coincide this period of milk production with the season the animals stay in the farm. During that period the alimentation of the animals, composed of different natural elements, is oriented to ensure a high content on fat materials (at least 45% of the dry extract) and proteins in the milk. The Technical Regulation also emphasises on different requisites aimed to ensure the sanitary quality of the milk as well as the proper conservation conditions.

In order to optimise the quality of the milk as well as to improve milk production yields, an important research work is being carried in collaboration with NEIKER (Basque Institute for Agrarian Research and Development) and ITG (Technical and Management Institute for Cattle of Navarra) in fields such as alimentation, genetics and milk production. These two organisations were created by the Public Administrations of the CAPV and Navarra respectively.

## 3 – The relations with Public Authorities/4 – The Public Policy Aspects

In general, milk producers working with PDO Idiazabal receive aids per animal coming from the European program of Cattle Primes. They can also get financial support related to the different help lines included in the present Sustainable Rural Development Plan of the CAPV or its equivalent in Navarra. In the case of the CAPV for example, in some of these help lines higher aids are given to producers working with some kind of quality mark (Organic Farming, PDO, mark Eusko Label Kalitatea). It must be also indicated that the Consejo Regulador of Idiazabal receives an important economic support from the Public Administrations of the CAPV and Navarra, what directly benefits producers if we consider the considerable promotion of the product performed by the Consejo Regulador and the role played by the distinctive of PDO. In addition, these Public Administrations also give financial support to the different research lines mentioned in Point 2

#### 6 - The Strategy Aspects

One important strategic aspect of this activity is that it consists on a low cost production system based on a maximum utilisation of the natural resources of the territory. On the other hand, the specificity of the

autochthonous ovine breeds Latxa and Carranzana, constitutes one of the main differential signals of identity of Idiazabal Cheese and an important added value for producers. The utilisation of the distinctive of PDO has also been a very important strategic aspect that has strongly enhanced the image of Idiazabal cheese, which is now well recognised and appreciated by the consumers, favouring at the same time the activity of milk producers.

#### 7 - The Impact of mountain area location on the various Aspects

As seen in Point 2, the aim of making a maximum utilisation of the natural resources of the territory directly determines the way of managing the herds during the year (short distance transhumance), influencing also the milk production to be seasonal. Both the production system, as well as the ovine breeds used, is perfectly adapted to the particular mountain conditions of the territory. In former times, this management of the herds characterised by a short distance transhumance, completely conditioned the way of living of many herdsmen that used to spend long times living in the high pasture areas where sheep use to stay approximately from May to October.

On the other hand, the mountainous relief of the territory also affects the characteristics of the agricultural model, characterised by the predominance of small no professional farms with difficulties to compete with more intensive agriculture models. This circumstance influences considerably the need of choosing alternatives such as the utilisation of quality marks in order to provide differential competitive elements on the product that will help in its commercialisation. It also determines the need of producers to group themselves and to participate in organisational structures such as Management Centres or Ovine Associations, in order to share and reduce costs that they could not afford themselves. The different economic aids coming from the Public Administration also intend to compensate, up to some level, the different limitations faced by producers.

## CHAPTER III - PROCESSING AND TRANSFORMATION

#### 1 - The Organisational Aspects

Nowadays there are 80 artisans that elaborate Idiazabal Cheese with the milk produced by their own herds. In addition, there are 17 cheese industries that elaborate Idiazabal Cheese with milk bought to different milk producers. To give an small idea about their size, we can indicate that 13 of these industries produce less than 100 Tm of cheese per year whereas the remaining 4 industries produce more than 100 Tm per year. These last 4 industries themselves produce approximately 55% of the total production of Idiazabal Cheese. Opposite to this, the 80 artisans together produce less than 25% of the total production. Idiazabal Cheese presents an annual production of approximately 1.135.000 Kg.

In the case of the biggest industries, even if Idiazabal Cheese is the main product, in general they also elaborate cheese made of ovine milk without PDO, cheese made of ovine milk mixed with bovine or goat milk, and also other products such as ovine milk curd. With respect to smaller industries, those 13 industries producing less than 100 Tm per year, their production is mostly specialised in Idiazabal Cheese. Some of these 13 industries consist on co-operatives of milk producers. Also artisans are mostly specialised in Idiazabal Cheese and, in general, this production uses to be their main economic activity. Most of these artisans are grouped in a co-operative called Artzai Gazta (Shepherd Cheese), which provides them with different services (availability of refrigeration tanks, etc.,).

Regarding the relation of industries with respect to milk producers, even if no official contracts are signed, they reach agreements in a way that each industry has its own milk supply and each producer knows who is going to by his milk.

#### 2 - The Know-how and Quality Aspects

The main know-how and quality aspects of the elaboration of Idiazabal Cheese are defined in its Technical Regulation and they were already studied in the first part of the present study (Q1). Among these aspects, it should be remarked first of all he utilisation of raw milk of the ovine breeds Latxa and Carranzana. In addition to the specificity of these breeds, the utilisation of raw milk makes a larger variety of microorganisms to be present during the fermentation, conditioning the characteristics of the cheese obtained. On the other hand, most of these cheeses are subjected to a maturation process between 4 and 8 months (according to the Technical Regulation this minimum maturation process must be at least of 2 months). The smoking applied to some of these cheeses is also an aspect that often acts as a signal of identity of Idiazabal Cheese.

An important aspect regarding the utilisation of raw milk is that, because of the absence of any thermal treatment in which the number of micro-organisms is controlled, the sanitary conditions during the processing of the milk as well as the proper conservation methods are crucial for the quality of the cheese. In this sense, each industry performs about two controls per month on the milk of the different producers they work with, analysing parameters such as fat and protein content, somatic cells, micro-organisms present, antibiotics, the absence of cow milk, etc. In order to promote the production of good quality milk, different tariffs per litter of milk are applied by the industries depending on the quality of the milk.

The application of new technology to the traditional elaboration methods together with the definition of various parameters (temperatures, periods of time for different processes, etc.,) in the Technical Reguation are contributing to obtain a more homogeneous and better-defined product. In this sense, a Tasting Committee is working in defining the characteristics of the "Ideal" Idiazabal Cheese. Also different research lines (regarding utilisation of ferments, management of the extracted whey, etc.,) are being carried in collaboration with Universities and research centres.

## 3 – The relations with Public Authorities / 4 – The Public Policy Aspects

It must be remembered that, as indicated previously, the Consejo Regulador of PDO Idiazabal receives financial support from the Public Administrations of the CAPV and Navarra. The artisans and cheese industries involved can also get financial support related to some of the help lines included in the present Sustainable Rural Development Plan of the CAPV or its equivalent in Navarra. In the case of the CAPV, for example, we can remark the help lines for *Improvements in the Transformation and Commercialisation of Agricultural Products, Commercialisation of Quality Products, Fomentation of Tourism and Artisans, etc.* In addition, the different research lines mentioned in Point 2 also get financial support from the Public Administration.

#### 5 - The Quality Control Aspects

The Consejo Regulador of the PDO is who performs the certification of Idiazabal Cheese. In this sense, even if they still do not have the official accreditation according to EN 45011, the certification is carried according to the indications given in that regulation. This certification is based on the results obtained in different inspections, analysis of cheese samples and an administrative control.

Inspections are performed on milk producing farms, artisans and cheese elaborating industries, milk collection routes and, in some cases, also at selling points in order to verify that the different requisites given in the Technical Regulation of Idiazabal Cheese are accomplished. These inspections are subcontracted to Kalitatea Fndazioa, who is accredited according to EN 45004 regulation.

Microbiological analysis on cheese samples in order to check that sanitary aspects of the present Legislation are respected are performed, as well as sensorial and physical-chemical analysis regarding requisites of the Technical Regulation of Idiazabal Cheese. All these analysis are performed in two labs that are accredited (one of them in process of being accredited) according to EN 17025 regulation.

The administrative control consists on contrasting data obtained from different declarations about heads of cattle, litters of milk, number of cheeses, labels consumed, etc., and checking that the results are within the established reasonable margins.

To finish, it must be indicated that the trazability of the cheese is guaranteed by means of a casein sheet carrying a reference number incorporated to every piece of cheese which is stored in a computer with information regarding the elaboration of that cheese.

### 6 - The Strategy Aspects

The main strategic aspect of this production is that it consists on a product with important specific characteristics that differentiate it in the market. The utilisation of raw milk of the ovine breeds Latxa and Carranzana or the smoking applied to some of the cheeses constitute real signs of identity for Idiazabal Cheese. The utilisation of the distinctive of PDO has also been a very important strategic aspect that has strongly enhanced the image of Idiazabal Cheese, which is now well recognised and appreciated by the consumers, that see it as traditional and typical quality product of the territory with specific characteristics.

This image of traditional and typical product is especially important in the case of the artisans, whose cheese is specially appreciated by many consumers that use to buy it by visiting the artisan or in local markets, often paying a higher price than that paid for other Idiazabal Cheeses.

#### 7 - The Impact of mountain area location on the various Aspects

The elaboration of Idiazabal Cheese itself is not affected by the particular mountain conditions in which it is performed, since the different parameters such as temperature, humidity, etc., are controlled during the different steps of the elaboration. However, Idiazabal Cheese still presents aspects linked to its mountain origin such as the smoking, which is related to the fact that in former times, when herdsmen used to elaborate cheese in the small hovels located in the high pasture areas, the cheese (as well as everything inside the hovel) used to be impregnated by the smoke coming from the fire switched inside.

On the other hand, it has already been mentioned in the previous chapter the adequacy of developing quality products with differential competitive elements, the need in many cases to participate in different organisational structures (e.g. co-operatives) and also the need to get public financial support in order to favour the activity of the different groups involved in an agricultural model such as that of the areas producing Idiazabal Cheese.

#### CHAPTER IV - DELIVERY CHAIN

#### 1 - The Organisational Aspects

In general, the artisans that elaborate cheese with the milk they produce use to commercialise their product through short distribution channels. These short channels can consist on direct sale to consumers, performed mainly in the farm itself and in local agricultural exhibitions, or on commercialisation through retailers that buy the cheese directly to the artisans.

Opposite to this, the biggest cheese producing factories use to commercialise the product through bigger distribution channels in which intermediaries such as big wholesale merchants are involved. In the case of smaller industries (those seen in chapter 3 that produce less than 100 Tm of cheese per year), the distribution consists on something in between the two previously mentioned cases. Some part of the cheese can be commercialised through relatively short channels, mainly through retailers, but in many cases intermediary agents use to participate.

Approximately 90% of the Idiazabal Cheese produced is commercialised within the CAPV and Navarra.

#### 2 – The Know-how Aspects

Special attention is paid both during transportation and commercialisation of the product to the maintenance of the adequate temperature and other conditions that will ensure the adequate conservation of the cheese.

On the other hand, Idiazabal Cheese is taken to the market through a very classical presentation in the form of whole cheese pieces or cut in smaller fractions. In any case, the label with reference to the PDO Idiazabal

is visible. In some cases, cheese is presented within individual carton boxes in which presentation has been carefully studied.

#### 3 - The relations to Private Firms and Organisations

The different cheese industries involved develop the marketing of their product and the different relations with the various wholesale merchants they work with. In the case of the Consejo Regulador, except the relation sustained with the artisans and industries involved in the PDO, there is no any other remarkable relation with respect to specific private firms.

With respect to consumers, the main relation consists on the different communication media described in the Point 7 of the present chapter. On the other hand, according to the EN 45011 regulation all the groups involved, including consumers and agents implicated in the commercialisation, must be present in the Certification Committee constituted in order to ensure and adequate and impartial certification of the product.

#### 4 - The relations with Public Authorities / 5 - The Public Policy Aspects

As mentioned before, the Consejo Regulador of PDO Idiazabal receives a considerable economical support from the Public Administrations of the CAPV and Navarra, being a fraction of this financial support destined to cover the costs of the different actions carried by the Consejo Regulador in the promotion of the product.

The public Administrations of the CAPV and Navarra also support local products by means of organising local agricultural exhibitions in which consumers can met and buy different products of the territory, including most of times also Idiazabal Cheese. The Public Administrations of the CAPV and Navarra also participate in prestigious exhibitions such as Alimentaria in Barcelona and Gourmet in Madrid in which the most important local products, included Idiazabal Cheese, are promoted.

To finish, some of the help lines included in the present Sustainable Rural Development Plan of the CAPV and its equivalent in Navarra mentioned in Point 4 of Chapter 3 also comprise financial support for some measures to be taken by industries or artisans aimed to improve the commercialisation of their products, specially in the case of quality products.

#### 6 - The Quality Control Aspects

The main Quality Control aspects regarding the whole supply chain of Idiazabal Cheese, including delivery and commercialisation, have been already mentioned in Point 5 of Chapter 3. Regarding commercialisation, it must be indicated that some inspections are also performed at different selling points. These inspections are performed by Kalitatea Fundazioa (accredited according to EN 45004 regulation), which is subcontracted for that purpose by the Consejo Regulador of PDO Idiazabal. As mentioned before, every Idiazabal Cheese incorporates a casein sheet with reference number which serves to identify its date of elaboration, artisan or industry that elaborated it and some other data related to the trazability of the product.

#### 7 - The Marketing Strategy Aspects

The type of distribution channels used has already been mentioned in Point 1. Anyway, the main marketing strategy of Idiazabal Cheese is that it consists on a product with specific differential characteristics (breeds involved, utilisation of raw milk, origin, etc.,) and with an image of traditional and typical product of the territory, which are recognised and appreciated by consumers.

A considerable promotion of the product is performed by different means. Even if every industry involved develops its own marketing, specially the biggest ones, the Consejo Regulador of Idiazabal contribute to the promotion of the PDO in a generic way. This promotion can consists on advertisements on the radio, press, organisation of tasting sessions for the general public, presence in different events such as local exhibitions and important national exhibitions such as Alimentaria or Gourmet, etc. The Consejo Regulador of Idiazabal also supports the different initiatives of the cheese producing industries regarding the promotion of Idiazabal Cheese by means of economic subventions. It also supports economically the specific pamphlets, boxes, bags, etc. used by artisans and industries to present Idiazabal Cheese.

In all these communication media, it is intended to include information regarding the main characteristics of the product. An aspect to which special attention is paid is to the origin of Idiazabal Cheese. That is because many consumers still identify Idiazabal Cheese as a product coming from the area of Idiazabal (Village of the Gipuzkoa), without understanding that all the cheese of these characteristics produced in the CAPV and a considerable part of Navarra is commercialised under this unique designation.

#### 8 - The Impact of mountain area location on the various Aspects

It is not worth to repeat again the reasons why Public Administrations of the CAPV and Navarra make efforts in supporting this kind of products by means of economic aids or other measures and why the choice of quality products is such an adequate alternative in this kind of territory (see previous Chapters).

On the other hand, with respect to the commercialisation structure used by the Artisans mentioned in Point 1 consisting often on direct sale performed in the farm, it can be indicated that the mountain and rural environment in which is carried constitutes an incentive for consumers. This type of commercialisation contributes to the relation of the urban population with the rural and mountain environment, and in fact, some artisans complement their productive activity with tourism activities.

#### CHAPTER VI - LABELLING

#### 1 - The Type of Label

The label used is a PDO, thus officially recognised at European level, whose geographic boundaries correspond to those of the natural diffusion areas of the ovine breeds Latxa and Carranzana in the CAPV and Navarra.

#### 2 - The reasons behind the Choice of Label / non-labelling.

As explained in Chapter 1, at the moment in which this project emerged, the image of the cheese elaborated in the different areas of the CAPV and Navarra, identified with different names, was quite deprived of force and an increasing amount of imported cheese was being introduced in the territory. It was thought that joining efforts under a unique PDO would serve to enhance the image of a product that in fact was full of specific differential quality aspects that could be recognised and appreciated by consumers.

This quality mark, in addition to bond the quality and specificity of the product to its origin, provides an optimum degree of protection of the product name, since the "geographic name" is exclusively reserved. The different requisites and control aspects involved by this type of quality mark also contribute to achieve a more homogeneous and better-defined product as well as to improve its quality.

#### 3 - The Organisational Aspects

The management instrument of the PDO Idiazabal consists on the Consejo Regulador. This instrument is composed by a president, six members chosen among milk producers, six members chosen among cheese manufactures (2 artisans and 4 representatives of industries) and representatives of the different Public Administrations involved (Public Administrations of the CAPV and Navarra, as well as the National Agriculture Fishery and Alimentation Department). The representatives of the Public Administrations have voice but no vote in the decisions. Most of times the representatives of milk producers present their candidature through different producer syndicates, whereas industries use do it independently.

It has been also mentioned that the Consejo Regulador itself performs the certification of the product based on the results obtained in different inspections, analysis of cheese samples and administrative controls according to EN 45011 regulation (even if they still are not accredited according to that regulation). In this sense, the Consejo Regulador has a Certification Committee in which the different groups involved are represented and whose main function is to ensure an adequate an impartial process all along the certification.

It must be also indicated that the Public Administrations of the CAPV and Navarra contribute considerably to the economical financing of the Consejo Regulador, whereas the remaining incomes of this instrument mainly come from the different quotes paid by producers and manufacturers working with the PDO.

#### 4 - The Know-how Aspects

The main know-how aspects addressed by this PDO all along the global supply chain of Idiazabal Cheese have been already explained in previous chapters (Chapters II, III and IV).

#### 5 - The relations to Public Authorities / 6 - The Public Policy Aspects

Since the geographic boundaries of PDO Idiazabal cover partially the territories of the CAPV and Navarra, both Public Administrations of the CAPV and Navarra as well as the general Public Administration of the Estate are involved in the management of this PDO. As mentioned in Point 3, these three Public Administrations are represented in the Consejo Regulador of PDO Idiazabal and in the case of the Public Administrations of the CAPV and Navarra they economically support it.

In a broader sense, and focusing in the CAPV (our study area), we could indicate that there is a policy of the Public Administration of the CAPV oriented to support the development of quality products using quality marks in the territory. It is intended to provide differential competitive elements on the agricultural products of the CAPV in order to favour their commercialisation. This can be noticed for example in the presence of instruments such as Kalitatea Fundazioa (owner of the mark Eusko Label Kalitatea), the support given to the different PDOs of the territory, the contribution of the administration to the different research lines regarding quality products, etc.

#### 7 - The Labelling Strategy

The main objectives intended to be achieved with the implementation of this PDO are:

- To improve the competitive situation of this type of cheese that traditionally has been produced in the CAPV and Navarra, helping manufacturers to commercialise their product and favouring at the same time the maintenance of milk producers activity by means of increasing the yield of the farms.
- To avoid the disappearance of such a traditional product of the territory and to contribute to the maintenance of the autochthonous breeds involved.
- To contribute, by means of associating the quality, singularity and typicality of the product to the territory, to the maintenance of the social and economical activities of the most fragile rural areas avoiding their depopulation.
- To allow consumers to identify the origin and characteristics of the product.
- To guarantee to the consumers an exigent quality level of the identified product.
- To develop an adequate control and supervision system and to promote a production of quality.
- To contribute to the adaptation of the different agents involved in the product to the different regulations in use.

#### 8 - The Impact of mountain area location on the various aspects

The mountain conditions of the territory determine the presence of an agricultural model characterised by small farms with difficulties to compete in terms of prices and yields with more intensive agriculture models. Despite of these limitations, on the other hand, the natural conditions of the territory and a long tradition has legated a typical product full of specific differential characteristics. The implementation of the PDO and the support given to Idiazabal Cheese by the Public Administrations aim to protect this product and to enhance its image making it to be recognised and appreciated by consumers compensating in that way some of the limitations faced and favouring the commercialisation of the cheese and the maintenance of producers activity.

## CHAPTER VII - SUCCESS/FAILURE/NEEDS

## 1 - To what extent and how the product may be considered a success or failure

With the implementation of the PDO Idiazabal the image of the product has been strongly enhanced and nowadays it is recognised by consumers as a typical and traditional quality product of the territory. To give an idea about how the production of Idiazabal Cheese has increased we can indicate that 553 Tm of Idiazabal Cheese were produced in 1991 whereas this production reached 1.135 Tm in year 2002. Even if after an initial increase in the prices of the milk and the cheese these did not considerably increase again, it has been achieved to maintain the activity of a sector that was facing serious difficulties before the emergence of this project. Ovine milk producing sector was also facing a high rate of abandonment that has been considerably slowed.

The maintenance of the autochthonous ovine breeds Latxa and Carranzana has been also favoured, belonging nowadays practically all the ovine cattle of the CAPV and a considerable part of Navarra to these two breeds (mainly Latxa). In fact, the biggest part of the ovine milk produced in these territories is destined to the elaboration of Idiazabal Cheese, being also some artisans that elaborate the same product without working with the PDO, since they do not have problems to commercialise their cheese.

The contribution to the maintenance of this activity also plays an important role in the management of the land, since all these farms are essential in the vertebration of the territory at the same time that the productive activity itself contributes to the maintenance of large pasture areas and landscapes.

The implementation of the different requisites given by the Technical Regulation of the PDO is also contributing to achieve a better defined and more homogeneous product, contributing also to improve its quality.

#### 2 - To what extent and how the success/failure mostly stems from the various chapters

It is difficult to associate the success of this product to aspects mentioned just within a specific chapter and I would say that various circumstances leaded to the present situation of Idiazabal Cheese:

- The project emerged in a moment in which the situation of the ovine milk producers and cheese manufacturers was worrying and in which a solution was clearly needed.
- On the other hand, related to milk production and cheese elaboration, a good quality product with important specific differential characteristics is offered (autochthonous breeds, raw milk, maturation process, etc.,), what provides potential competitive elements when facing the market.
- The PDO and the work carried by the Consejo Regulador of Idiazabal Cheese have played an essential role in enhancing the image of the product and making consumers to perceive it as the singular product it really is, bonding also its quality to its origin (even if, as explained before, there is still some confusion regarding this origin).
- Regarding the delivery of the product, each type of manufacturers (artisans and industries of different magnitude) found the way of commercialisation best adapted to their characteristics (short distribution channels in the case of artisans, intermediary wholesales in the case of the biggest industries, etc.,)

#### 3 - To what extent and how the success/failure mostly stems from the different aspects

Among the different aspects studied all along the different chapters the following ones should be remarked due to their importance regarding the success of Idiazabal Cheese:

The traditional and particular know-how aspects (specificity of breeds, utilisation of raw milk, etc.,) that lead to the specificity of a product directly linked to the natural resources of the territory. On the other hand, the implementation of the different requisites established by the PDO, together with the different lines of research carried, has contributed to reach a better definition of the product characteristics and to achieve a more homogeneous product.

- The strategy of differentiation followed, by means of taking profit of the potential competitive aspects of Idiazabal Cheese, in order to make consumers to perceive it as the typical and traditional quality product with specific characteristics it really is. In this sense, the distinctive of PDO has played an essential role, not only making a strong promotion of the product, but also offering a product of guaranteed quality.
- The support given by the Public Administrations of the CAPV and Navarra by means of contributing to the economic financing of the Consejo Regulador, supporting different research lines, etc.

## 4 - What are the needs, what is missing and what could be done (from the various aspects)

- Even if producers, artisans and industries get a very important benefit from this PDO, many of them, especially milk producers, present a clear lack of motivation in terms of providing the different administrative data about milk productions, milk sales, etc., required by the Consejo Regulador. This is an important problem since it implicates that some requisites can not bee verified in the proper way. A big effort is being made by the Consejo Regulador in order to adapt the whole supply chain to the requisites given by EN 45011 regulation. However, in order to obtain the improvements given by working according to that regulation all the groups involved must accomplish their respective obligations. Possible ways to solve these difficulties should be studied.
- ENAC (Entidad Nacional de Acreditación) does not accredit the Consejo Regulador of PDO Idiazabal, or any other Consejo Regulador, according to EN 45011, arguing that these instruments do not have the last decision in some aspects, being dependent of some decisions of the Public Administration. It would be interesting to find a way to make possible this accreditation (in the case of Idiazabal Cheese they are already applying that regulation) since it would favour the image of the PDO and the product.
- Even if Idiazabal Cheese is already recognised by consumers as a typical and traditional quality product of the territory, an effort could be made in order to increase the added value of the product by means of exploiting still more its specificity and singularity. Consumers should be informed and educated regarding different aspects of the product (maturation periods, etc.) in order that consumers could know what can be expected from each Idiazabal Cheese found.
- Opening up to some level the market of the product could be interesting, not in order to increase the sales (at present practically all the Idiazabal Cheese produced is consumed within the CAPV and Navarra and the present production level is practically enough to cop with the activity of the whole ovine milk producing sector), but because of the good image provided by being recognised also out of the own territory.
- Ovine milk producing sector in the CAPV and Navarra is a very aged group in which a fairly low generational relay is being observed. These generational relay should be supported in order to make possible the maintenance of this activity with all the benefits it carries with respect to the rural areas of the territory.

## CHAPTER VIII – PRODUCTION ASPECTS AND LINKS TO THE TERRITORY

As described in previous chapters, Idiazabal Cheese is a product directly linked to the natural resources of its production area. The aim of making a maximum utilisation of these natural resources determines the management of the sheep herds along the year, characterised by a short distance transhumance from valleys to high pasture areas where the animals stay approximately from May to October. As explained before, this management of sheep herds influences the milk production, and thus also cheese production, to be seasonal.

In addition, the milk used in the elaboration of Idiazabal Cheese comes exclusively from the autochthonous ovine breeds Latxa and Carranzana, which are perfectly adapted to the mountain environment of the territory. In fact, according to the Technical Regulation of Idiazabal Cheese, the production area of milk for

Idiazabal Cheese, as well as its elaboration area, coincides with the natural diffusion areas of these breeds in the CAPV and Navarra. These autochthonous breeds constitute one of the main signals of identity of Idiazabal Cheese. Also the smoking applied to some cheese is rooted in the mountain origin of the product. We could say that the elaboration of Idiazabal Cheese is linked to the territory by a long tradition.

From a social and economical point of view, the implementation of PDO Idiazabal has contributed to the maintenance of the activity of a high number of small milk producers and artisans that in another way would have had serious problems to go on with their activity. Practically the whole of the ovine milk produced in the CAPV and a considerable part of Navarra is nowadays destined to the elaboration of Idiazabal Cheese. At the same time, by means of favouring to the maintenance of many farms, this production plays an important role in the vertebration of the territory, in addition to contribute to the maintenance of large pasture areas and landscapes.

## **EUSKAL OKELA (BASQUE BEEF)**

<u>Area</u>: Basque Country (Spain) Authors: Rafael Herran, Clara Icaran

(IKT)

## CHAPTER I - BASIC DATA ABOUT THE ORIGIN OF THE PROJECT

## 1 – The Natural, Geographical, Historical and Economic environment

Because of its particular natural conditions, the study area (Comunidad Autónoma del País Vasco) has traditionally been a very good region for the keeping and exploitating cattle. The predominance of an Atlantic climate, moderate in terms of temperature and very rainy, together with mountainous relief, lead to the abundance of grazing resources and the presence of high pasture areas. Beef coming from an extensive production system based on maximum utilisation of these natural resources, is a strongly deep rooted product of the territory and, nowadays, it is the third most important product of the Basque primary sector after Insignis pine and milk.

The idea of giving protection to this product started to be developed in 1992 because of various circumstances (see point 2) among which were the opening of the common market, which threatened the commercialisation of the product and the maintenance of producers activity. In this way, in 1994 beef meat was incorporated to the Basque Label of Quality with the name of Euskal Okela (Basque Beef). This protection level will be soon enhanced with the next definitive incorporation of Euskal Okela to the European list of PGIs, already provisionally approved by the EC the 3<sup>rd</sup> of September of 2003.

## 2 - The Conditions (Opportunities / Threats) that cause the players to act

The opening and liberalisation of markets were the main threat for beef produced in the CAPV. In an agricultural system such as that of the CAPV, characterised by the predominance of small farms and relatively high production costs, it would be very difficult to compete with meats produced in other territories when there is no new differential competitive element to the product.

At the same time, a major reorganisation of the milk producing sector took place, and about 2000 small milk producing farms had to convert their activity to meat production.

At that time, maximum milk production quoaes were established for each country at European level. The calculations regarding the maximum milk to be produced by each farm (rights to produce milk) were based on milk production registered during the previous years. However, in the case of the Basque Country, the milk was produced by many small farms that practiced direct sale, and so was not being registered and not counted when defining those maximum quotas. So, the milk production quota assigned to the Basque Country (and at Estate level) was lower than the real amount that was being previously produced. On the other hand, at European Level, financial support was given to those farms leaving milk production activity with the aim of reducing the excess of milk produced in Europe.

This meant that, just at the moment at which commercialisation of meat was facing difficulties, its production grew.

Because of these reasons, and because of the opportunity arising from the fact that no meat trademarks existed in the CAPV at that time, the project began.

#### 3 - The Human Dynamic and/or Categories of Actors that provided the impetus

The Public Administration of the CAPV played an essential role in the emergence of the project, by means of the creation of the Basque Label of Quality in 1989 and the later incorporation to this label of beef meat in 1994. Producers also played an important part by communicating their worries to the Administration through different producer associations.

Kalitatea Fundazioa, owner of the trademark Eusko Label Kalitatea since 1998 and which now includes Euskal Okela, still comes from an initiative of the Public Administration of the CAPV. These two participate in its management and financing. The different groups involved (producers, consumers, industry etc.,) are also represented in Kalitatea Fundazioa (Chapter 6 Point 3).

#### 4 - The Impact of mountain area location on the launching of the project

It has already been mentioned (Point 1) that the abundance of grazing resources and high pasture areas, related to the climatic conditions and the mountains of the area, favoured development of beef meat production in the CAPV.

On the other hand, the mountainous relief of the CAPV directly determines its agricultural model, characterised by a clear predominance of relatively small family farms. Because of this, we can say that approximately 80% of the meat of Euskal Okela is produced by 20% of the producers working with this trademark, the remaining 80% consisting of small non-professional farms. Because of these circumstances the possibility of incorporating some kind of differential competitive element, for which consumers will be ready to pay, is one of the few good alternatives to allow competition in the market with meat having lower production costs.

## Chapter II - Basic Production (Raw material)

#### 1 - The Organisational Aspects

In 2002 there were 2.855 producers registered in Euskal Okela. As explained before, approximately 20% of them produce the 80% of the total amount of meat with this mark. The remaining 80% consist mainly on small non-professional farms in which cattle production adds to other activities: mainly industrial activities performed out of the farm and, to a lesser extent other agricultural activities.

The level of participation in different organisations varies, with some producers participating in the Management Centres of their local area. These Management Centres support producers in terms of control of yields, accountancy, professional advice and orientation. Whether they take part in these Management Centres or not, producers can also participate in the different Pure Breeds Associations that exist in each of the three Historical Territories that compose the CAPV. In addition, some of the producers working with Euskal Okela group themselves around wholesale merchants to whom they sell their cattle.

It is important to note that producers are represented in the management instruments of Kalitatea Fundazioa through Euskal Okela's Professional Committee (Chapter 6 Point 3).

## 2 - The Know-how and Quality Aspects

The Technical Regulation of Euskal Okela defines all the standards that meat producers of Euskal Okela have to accomplish. Among these we want to highlight the following:

• Animals are born, grown and slaughtered in the CAPV. 82% of the territory of the CAPV is classified as mountain area according to EU LFA Regulations. With possible small exceptions; almost the whole of the meat of Euskal Okela comes from farms located in mountain areas. Those exceptions would arise in areas located in small valleys where even if LFA conditions such as slope, differences of height level, etc. are not met, conditions are strongly affected by the surrounding mountain environment

- Strict control of the animals' feeding isapplied, as it must always be composed of raw materials from an authorised list. All the formulas of the mixed fodder used in the production of Euskal Okela must be registered and authorised by Kalitatea Fundazioa. This mixed fodder must be free of substances of animal origin, antibiotics, cocidiostatics and promoters of growth (including those normally authorised by EU legislation) and at least 85% of its composition must consist of cereals, legumes, or oleaginous plants.
- After slaughter carcasses are rigorously selectedbased on their weight, age, sex, conformation, fatness and colour.
- 48 hours after slaughter the meat is subjected to a maturation process no shorter than 7 days in the case of pieces of *Extra* and *First A* commercial categories, and no shorter than 3 days in the case of pieces of *First B, Second* and *Third* commercial categories.
- A control system has also been implemented in which the traceability of the meat is guaranteed at any moment, not only during production but also along the whole supply chain, as described below.

Considerable efforts are being made to optimise the quality of the product, which involves working with the different producer groups, as well as with external organisations. Kalitatea Fundazioa is collaboratign with the Quality Control Departments of the fodder factories involved, to optimise the cattle feed. Important research work is also being done in the field of the Analytical Objectivation of Quality Parameters, by means of tasting sessions and other studies. Periodically, studies are also carried out in order to find out about consumer perceptions of Euskal Okela in comparison with other marks of meat.

#### 3 -Relations with Public Authorities/4 -Public Policy Aspects

We must remember that the creation of Kalitatea Fundazioa and the mark Eusko Label Kalitatea was an initiative of the Public Administration of the CAPV and that this administration participates, together with the different groups involved, in the management of Kalitatea Fundazioa. So, it is clear that Euskal Okela has a deep relation with the Public Administration of the CAPV, and that this administration's policy is to promote the development of quality products in the CAPV. This policy can be also seen inform the higher bonuses per slaughter that beef producers working with some kind of quality mark (Organic Farming, Eusko Label Kalitatea, etc.,) receive, or in the fact that some of the help lines included in the present Sustainable Rural Development Plan of the CAPV present higher economic support for producers working with these marks.

Also at European level attempts are being made to promote the development of products working with quality marks. For example, the European fund EAGGF-Guarantee partially supports the costs of the control performed by Kalitatea Fundazioa on Euskal Okela, because of its consideration of PGI. In 2002 this contribution reached 40% of those costs.

#### 5 - The Quality Control Aspects

Kalitatea Fundazioa itself ensures that the different requisites given by the Technical Regulation of Euskal Okela are accomplished right through the production and commercialisation of the product. For this reason, Kalitatea Fundazioa is accredited by ENAC (Entidad Nacional de Acreditación) in order to perform inspections and the certification of the meat according to EN 45004 and EN 45011 regulations respectively. In the same way, all the analysis of samples taken during the inspections is performed in laboratories accredited according to EN 17025 regulation.

Focusing exclusively on the production process, 2.538 inspections were performed on the 2.588 farms that work with Euskal Okela during year 2002, 15 inspections on the 7 slaughterhouses involved and 70 inspections on the 30 fodder factories registered. During 2002, 2.170 analysis of hair and urine samples obtained from the animals, 1.270 analysis on fodder samples and 735 analysis on samples taken from carcasses after the slaughter were also performed.

#### 6 - The Strategy Aspects

The main strategy adopted by the producers of Euskal Okela consists of the symbiotic relation they have established with the retailers that sell this trademark. Producers offer a product of strictly guaranteed quality that is recognised by consumers and, on the other hand, outlets profit from the image created by the mark and the publicity carried by Kalitatea Fundazioa. The authorised outlets for Euskal Okela are obliged to ensure that a high proportion of the meat they sell must be meat of Euskal Okela. In this way, some kind of captive market has been created, in which the sales of the meat is practically guaranteed and at the same time the presence of other meats is hindered.

## 7 - The Impact of mountain area location on the various Aspects

As already explained in Chapter 1, the limitations imposed by an agricultural model strongly determined by the mountainous relief have led to the policy of promoting quality products in order to provide competitive edge in the market. This agricultural model also leads to the tendency for small producers to group themselves or to take part in different organisational structures such as Management Centres, making it possible to share or reduce costs that they would not be able to afford themselves. In addition, the particular relationship between the rural space and the urban medium of the CAPV, where there is close proximity between production process and selling point, favours the deep links between these two groups and the creation of a captive market such as that described in point 6.

On the other hand, if we reverse the point of view, we can see how this cattle-raising activity, based on a maximum utilisation of the natural resources of the territory, interacts with the landscape and the natural qualityof the environment. This traditional cattle raising activity has made possible the designation of large areas of the territory as zones of landscape interest, and their later official protection in terms of Natural Parks, Biosphere Reserves, etc.. Here cattle raising and leisure activities coexist.

## **Chapter III - Processing and Transformation**

#### Note:

- Despite of the maturation process to which some joints of meat are subjected after the slaughter mentioned in the previous chapter, Euskal Okela is a largely non -processed product and, in fact, there is no significant meat processing industry. For this reason, the part of the case study relating to Chapter 3 has not been required.
- However recently the possibility of working with processed products such as burgers, etc. in the near future is being studied. This study is mainly related to the increasing difficulties arising from the growing demand for a specific part of the carcasses, whereas those cuts requiring a more laborious cooking are in less demand. The idea is to try to find new alternatives for commercialising those parts of the carcasses.

## Chapter IV - Delivery Chain

#### 1 -Organisational Aspects

Approximately 70% of the meat of Euskal Okela is directly sold from producer to retailer. In general, the butcher himself visits the farmer and selects the animals he wants to buy. Both of them then share the costs of the transport and slaughter, which is carried in one of the 7 authorised slaughterhouses of Euskal Okela. So there is a short commercialisation structure in which any increase in the costs of the product is avoided.

The remaining 30% of the meat is sold via intermediate wholesale merchants, who buy the cattle fromproducers and deliver the meat to retailers. The presence of these intermediate agents in the delivery

chain generates an increase of approximately 4% in the cost of the product. At present there are 6 wholesale merchants involved in the commercialisation of Euskal Okela. Three of these have their own centres for butchering the carcasses. And so can sell smaller cuts than the others. Even though the degree of product specialisation of these wholesalers varies, in general they also work with non-beef products. Some producers group themselves around these wholesale merchants to whom they sell their cattle.

Chapter 2 has already mentioned inthat all the authorised selling points of Euskal Okela must buy a specified proportion of their meat from Euskal Okela. The 253 authorised selling points of Euskal Okela are located in the CAPV.

The CAPVhas more than two million inhabitants with generally high income levels, and this constitutes a potentially important market in which the gastronomic culture linked to the traditional products of the CAPV is strongly deep rooted.

#### 2 -Know-how Aspects/6 -Quality Control Aspects

The main Know-how aspects involved in the commercialisation of Euskal Okela are intended to ensure the traceability of the product all along the supply chain, from the production to the selling point. In this sense, Kalitatea Fundazioa has implemented a control system for Euskal Okela that is unique in Europe. All the electronic balances of the authorised selling points of Euskal Okela are connected to a central computer in which the sale of each of the meat pieces is registered. This computer also processes all the stock control information about animals, carcasses, pieces, etc., in the farms, slaughterhouses, wholesalers and butchery centres. In this way, the meat is under control at any moment.I In addition to protecting from fraud, this allows the computer to automatically check whether the standards set in the Technical Regulations of Euskal Okela are being respected (minimum time of maturation, etc.,).

In the same way as in the production process, Kalitatea Fundazioa also performs many inspections on the different agents involved in the commercialisation of the product, checking that at any moment the standards given in the Technical Regulation of Euskal Okela are beingachieved. During year 2002, 1.007 inspections were performed at the 253 authorised outlets of Euskal Okela, 14 inspections at the six wholesale merchants involved and 7 inspections at the 3 butchery centres.

#### 3 – The relations to Private Firms and Organisations

The contracts with the 6 wholesale merchants and the authorised outlets, who commit themselves to meet all the terms of the Technical Regulation of Euskal Okela, are the only significant private sector relationships.

The relationship with consumers is managed in various ways. First of all, consumers are represented in the management instruments of Kalitatea Fundazioa by means of the presence of a political representative of that group in the Certification Committee, as is described in Chapter 6. In addition a strong link is made with the various consumer associations of the CAPV and the different Municipal Offices for Consumers Information, in terms of providing information and training.

## 4 -Relations with Public Authorities/5 -Public Policy Aspects

The importance of the Public Administration of the CAPV in Kalitatea Fundazioa for the Eusko Label Kalitatea has been already mentioned in the previous chapter. Its policy for promoting the development of products using quality marks in the CAPV is equally important. It must be noted that slaughterhouses, wholesalers, butchery centres and retail outlets are also represented in the management instruments of Kalitatea Fundazioa, as happens with the other groups involved (producers and consumers). Although this policy responds mainly to demand for a commercial alternative to the agricultural products of the CAPV so that producers can remain in business, it also offers benefits for agents involved in the commercialisation of the product. This is true for the retail outlets, who profit from the image and publicity provided by the mark, and have an assured supply of a product with quaranteed quality.

At certain moments, selling points have also received economical support from the Public Administration. As an example, the installation costs of the electronic balances connected to the computer that processes the

traceability information were partially supported by the program of Aids to the Modernisation of Commercial Stores implemented by the Trade and Consumption Department of the Basque Government.

#### 7 - Marketing Strategy Aspects

One of the main Marketing aspects of Euskal Okela is the commercialisation structure used. As described in Point 1, this consists of a short commercialisation chain based on a direct relationship between farmer and butcher. This structure minimises added costs the distribution of the product.

On the other hand, it has already been mentioned that the authorised retailers of Euskal Okela must sell that a specified proportion of their sales must be Euskal Okela meat. This creates a kind of captive market in which both producers and selling points see their interests favoured (Chapter 2 Point 6).

Every year intense publicity campaigns are also carried in spring, when the availability of the product increases (related to some seasonal distribution of births in the production), and at Christmas, when demand for certain cuts of meat increases in a disproportionately. These publicity campaigns mainly include advertisement on TV, in newspapers, and the delivery of approximately 400.000 pamphlets/campaign, focusing on the differential characteristics of the product, locations where it can be found, and the certification mark that the meat incorporates. This is also intended to to promote use of the special electronic balances by all the sellers. Normally, these publicity campaigns also include some kind of promotion in order to attract consumers and thus increase the consumption of the product. The authorised retail outlets also exhibit information on these special promotions.

In addition to all this, every year an Euskal Okela Day is celebrated in about 20 or 30 villages, and Euskal Okela is also present in some other specific celebrations of the CAPV. Kalitatea Funadazioa has also been present in prestigious international exhibitions, such as Alimentaria in Barcelona, Gourmet in Madrid and FIAL in Paris.

After each campaign, different types of consumer research are performed in order to analyse possible changes on the consumption habits and on the perception the consumers have of the mark. According to recent studies, 85% of the consumers of the CAPV know Euskal Okela and recognise it as beef meat of superior quality produced in the CAPV.

## 8 - The Impact of mountain area location on the various Aspects

Point 7 of Chapter 2 has already explained how the mountainous conditions of the territory lead to the need for a policy that promoted the development of quality products. In this sense, and focusing exclusively on the commercialisation of the product, we could say that such a short commercialisation structure aims to compensate for the high production costs resulting from an agricultural model characterised by the predominance of small non-professional farms. On the other hand, the particular proximity of the rural land and the urban areas of the CAPV favours a the creation of a captive market such as that described before.

## Chapter VI - Labelling

#### 1 - Type of Label

Eusko Label Kalitatea, the mark which includes Euskal Okela together with other 10 products of the CAPV, was created in 1989 by the Basque Government as an official quality mark in order to provide an instrument for the producers of the CAPV. However, since 1998 it consists of a Guarantee Mark whose new owner is Kalitatea Fundazioa (a non-profit making organisation), who allow the mark to be used by those producers that adhere to the standards set for each of the products. Even though it is a private mark, it still comes from an initiative of the Public Administration of the CAPV.

In addition, Euskal Okela will be soon incorporated in the European list of products with PGI, which has already been provisionally approved by the EC on 3<sup>rd</sup> of September of 2003.

#### 2 - Reasons behind the Choice of Label / non-labelling.

The utilisation of a quality mark such as Eusko Label Kalitatea allows the product to be recognised and distinguished by consumers. At the same time, according to the Ley de Marcas in use in Spain, Guarantee Marks, together with the Collective Marks (the difference here is that the users of the mark are also its owners), are the only private marks that can use geographic references in their name. What is really interesting for products whose origin can be an incentive regarding consumers. Anyway, with these type of mark, the name of the product is protected but without the exclusive reservation of the "geographic name".

This protection level is increased in the case of Euskal Okela due to its consideration of PGI. In this case, the "geographic name" is exclusively reserved, so that no other beef meat will be able to be marketed using any reference to the Basque Country. In addition, the inclusion of Euskal Okela as a PGI may also offer advantages for other possible measures to be taken by the EU in the promotion and development of these products. The PGI distinctive can also contribute to enhance still more, if possible, the image of the product.

#### 3 - Organisational Aspects

Kalitatea Fundazioa, in addition to being the owner of the mark Eusko Lable Kalitatea, performs all the control and certification of the products it works with. Its management instrument is constituted in the form of patronage, at the same time that its internal working is governed by some delegated instruments. Amongst these, in addition to a Director and a Permanent Commission, are Professional Committees and Certification Committees for each of the products using the mark. The Professional Committees represent the professional groups involved in each of the products and they constitute consultation, collaboration and co-ordination instruments between these groups and Kalitatea Fundazioa. In addition, the mission of the Certification Committee is to ensure an adequate and impartial process all through the certification of the product. All the different groups involved are represented on the Certification Committee, consumers and industries through the presence of their political representatives in the Public Administration of the CAPV, producers and selling points through the presence of their representatives in the Professional Committees and members of Kalitatea Fundazioa including its Director.

### 4 - Know-how Aspects

Kalitatea Fundazioa aims for all the products using the Eusko Label Kalitatea mark to reach the market with particular differential characteristics and to be recognised and appreciated by the consumers. As the first part of the present study showed (Questionnaire 1), these differential elements could depend on the use of specific breeds or varieties, specific cultivation or breeding practices, and specific processing techniques, etc. In general these tend towards less intensive productions in which priority is given to product quality and consist, in many cases, of typical and traditional products strongly rooted in the territory. On the other hand, a special effort is being made to offer products with high food quality and which guarantee product traceability at any moment. In order to optimise some of these aspects, work is being done in different fields (Analytical Objectivation of Quality Parameters, consumer and market studies, etc.,), often in collaboration with external organisations.

## 5 - Relations to Public Authorities/6 - Public Policy Aspects

As mentioned in previous chapters, Kalitatea Fundazioa is a response to an initiative of the Public Administration of the CAPV included in its policy of promoting the development of quality products in the CAPV. With this policy, it is intended to incorporate differential competitive elements of the agricultural products of the CAPV so as to make their commercialisation easier. In addition, the Public Administration of the CAPV contributes to financing Kalitatea Fundazioa and is significantly represented in its managementstructure. In the particular case of Euskal Okela, because it is a PGI, the European fund EAGGF-Guarantee also contributes economic support, by partially financing the costs of the control and certification performed of the product (in 2002 this contribution reached 40% of those costs).

#### 7 - Labelling Strategy

The main objectives with this quality mark are:

- To improve the competitiveness of the CAPV agricultural products, helping producers to commercialise their product and to increase the profitability of their farms.
- To diversify the activity of the farms and to avoid the disappearance of some traditional products of the territory.
- To contribute, by associating the quality, uniqueness and typicality of products to the territory, to the maintenance of the social and economical activities of the most fragile rural areas, thus avoiding their depopulation.
- To allow consumers to identify the origin and characteristics of the products.
- To guarantee to the consumers a high quality level in the identified products.
- To develop adequate control and supervision systems and to promote quality production.
- To help the different participants involved in production to adaptat to the different regulations in use.

#### 8 - The Impact of mountain area location on the various Aspects

This strategy of identifying and promoting agricultural products of the CAPV by means of a quality mark that bonds their quality, singularity and typicality to the territory where they come from has been applied because of the limitations imposed by the mountainous relief on the agricultural model of the territory..

## Chapter VII - Success/Failure/Needs

#### 1 - To what extent and how may the product may be considered a success or failure?

Euskal Okela is obtaining very good results. Close to 30% of the beef producing farms of the CAPV produce Euskal Okela meat, and remarkablly, approximately 80% of them consist on small non-professional farms that in other circumstances would have serious difficulties continuing with their activity. They have have seen increased economic yield with the utilisation of the mark. Around 27% of all the beef cattle of the CAPV destined for market is subject to the control performed by Kalitatea Fundazioa. Even though the production of Euskal Okela has considerably increased since 1994 (from 53.121 Kg in year 1994 to 4.458.162 Kg in year 2002), the product has bee marketed without problems and the prices have been maintained or increased year by year.

In a qualitative sense, improvements in the product are being achieved. The different groups involved are also adapting to the legislation in use (labelling regulations, conditions regarding elaboration of fodder, etc.).

Awareness of the mark among consumers in the CAPV is high. According to recent studies, 85% of the consumers in the CAPV know Euskal Okela and recognise it as beef meat of superior quality produced in the CAPV.

An important role is also being performed in the field of land management, since this mark allows the coexistence of professional farms and small family farms, which are both very important to the structure of the territory and to landscape maintenance.

### 2 - To what extent and how the success/failure mostly stems from the various chapters?

Rather than talking about success related to aspects mentioned within a specific chapter, we could say that in total, a whole cloud of circumstances, and a range of measures taken at particular points and in different fields of the project lead, to the satisfactory results obtained by Euskal Okela.

With respect to the origin of the project, the greatest issue was the question of the Public Administration of the CAPV participating. From the outset this had been a worry amongst the producers, who also contributed

with their initiative, the creation of the Basque Label of Quality (later on the mark Eusko Label Kalitatea). The incorporation of beef meat in this label was essential for the later development of Euskal Okela.

Also cattle raisers performed an important role, adapting their productions to all the new requisites established by the mark and offering a product with high quality.

Regarding the delivery chain, an adequate solution have been found, creating a relation between cattle raisers and butchers in which both of them see their interests favoured and in which the marketing of the meat is practically guaranteed, which was really the main problem to resolve.

Regarding Labelling, Kalitatea Fundazioa and Eusko Label Kalitatea have constituted the essential instruments to carry the whole project.

#### 3 - To what extent and how the success/failure mostly stems from the different aspects?

With respect to the different points studied within each of the different chapters, the following aspects are important:

- The policy implemented by the Public Administration of the CAPV to promote the development of this type of products and the implication of this administration all along the project.
- The know-how developed by Kalitatea Fundazioa in both production aspectsand the control and traceability system. Together these have served to incorporate various quality differentials in the product, and these are now recognised and appreciated by consumers. In this sense, some aspects of the know-how applied have been real innovations, such as the control and traceability system that reaches even to the retail outlet (electronic balances, etc.).
- The strategy followed in the commercialisation of the product creating a captive market through the relation established between cattle raiser and selling point.
- The adequate selection of a quality mark that, by means of linking the quality, singularity and typical character of the products to the territory, has managed to generate a strong impact on the consumers of the CAPV, who are very aware of the natural and cultural values of that land.
  - 4- What are the needs, what is missing and what could be done (from the various aspects)?
- Adequacy of production with respect to the needs of the market (elimination of the present seasonal character of the beasts, etc.,) and promotion of contractual relations between cattle raisers and selling points.
- Development of the meat industry towards new processed products that could give assist with the
  difficulties faced in the commercialisation of specific pieces of the carcasses (in general those pieces
  whose cooking is more laborious), as well as the development of the technology needed in order to offer
  the new conservation methods demanded (controlled atmosphere, etc.,).
- Development of the technology needed to maintain the same level of intense control once the aspects mentioned in the previous point are tackled.
- Establishment by the different Public Authorities of unified criteria for the standards to be required by the different marks of certified meat.

## **CHAPTER VIII – Production Aspects and links to the territory**

This report has shown that the natural resources of the area make it very suitable for cattle raising and that this activity also maintains the natural environment in which it is carried out.

From a social and economical point of view, as mentioned before, beef meat is, together with wine and fishery, the third most important product of the Basque primary sector after the Insignis pine and milk. Approximately 30% of the beef meat producers of the CAPV work with Euskal Okela, which is contributing to the maintenance of the activity of many producers and making possible the co-existence of professional farms with small family farms, which also play an essential role in the structure of the territory.

## SCOTCH PREMIER HIGHLAND LAMB

Area: Scotland (United Kingdom)

Author: Kevin Gruer

(Highlands and Islands Enterprise)

## CHAPTER I - BASIC DATA ABOUT THE EMERGING OF THE PROJECT

#### 1 - The Natural, Geographical, Historical and Economical environment

The Highlands of Scotland is a major lamb producing area, and its breeding flock of 855,000 ewes, representing over 25% of the Scottish total, produces some 900,000 lambs per year. However, the majority of lambs leave the Highlands live for two main reasons. Firstly, the climate and natural environment means late lambing and a short growing season, and so many lambs are sold as store lambs for finishing over the autumn and winter by farmers on lowland pastures. Secondly, increasingly demanding regulations, a rationalisation of the abattoir sector in the UK, and a lack of capital investment resulted in many of the existing small-scale abattoirs in the Highlands closing. This now means that access to local slaughtering facilities in the area is pretty limited, and so many of the finished lambs are slaughtered outwith the Highlands.

### 2 - The Conditions (Opportunities/Threats) that drove the project

Scotch Premier Meat Ltd, based in Inverurie near Aberdeen, is one of Scotland's leading red meat companies, specialising in the supply of high quality beef, lamb and pork to retail butchers, hotels and restaurants throughout the UK.

Scotch Premier sources cattle, sheep and pigs primarily from the north of Scotland. The company has two meat plants in Inverurie and, until a change in hygiene regulations a number of years ago, they undertook the slaughtering and cutting of beef and lamb in one plant, and pork in the other. However, the aforementioned tightening of regulations required that there had to be a total washing of the plant following the slaughter of one species and before the commencement of the slaughter of the next species. This made the slaughtering of two species in the same plant operationally unviable, and so the decision was taken to undertake the slaughter of lambs elsewhere.

Initially, this was undertaken under contract at the plant of another meat company but, because the standard and consistency of quality control required by Scotch Premier was not being achieved by this arrangement, the company sought to acquire a dedicated slaughtering facility for lamb of their own.

Scotch Premier subsequently bought an existing meat plant in Dornoch, Sutherland which is in the study area of the Highlands. This modern abattoir had been vacant for a number of years and was ideally situated to source naturally produced lambs from the main sheep rearing areas in the Highlands, Western Isles and Orkney – areas where Scotch Premier was already sourcing much of its lamb.

#### 3 - The Impact of mountain area location on the project

Locating their lamb abattoir in Dornoch has resulted in a number of positive impacts for Scotch Premier. Dornoch is in the heart of the sheep producing area in the Highlands. This means that the distance that lambs are transported before slaughter is much reduced, resulting in reduced stress for the animals and improved meat tenderness. It also means reduced transport costs for the producer.

The plant is located in a part of the country where secure and skilled job opportunities are limited. Therefore, staff appreciate good employment opportunities, and this is being reflected in the quality, flexibility and loyalty of the locally recruited workforce. All the staff have been trained from scratch to the specific requirements of Scotch Premier, and the company reports that they work to a very high standard, and produce a top quality and consistent product.

## CHAPTER II - BASIC PRODUCTION (RAW MATERIAL)

#### 1 - Organisational Aspects

Scotch Premier is one of eight companies and divisions within the ANM Group which, with 7,500 farmer shareholders, is one of the largest farmer-owned agri-businesses in the UK. The ANM Group's core business is livestock marketing and meat processing. It owns a network of modern auction markets in the north of Scotland, has pioneered electronic and video auctions, and has extended its meat business into the ready meals market.

One of the other companies within the ANM Group is Highlands & Islands Livestock Ltd (HILL). Based in Inverness, HILL provides a range of specialist marketing services to sheep and cattle producers in the Highlands & Islands. HILL is also responsible for sourcing the lamb for Scotch Premier for slaughtering at Dornoch.

#### 2 - Know-how and Quality Aspects

Sourcing the right quality of lambs from farmers and crofters who practise good husbandry is the foundation of Scotch Premier's procurement process. It is HILL's role to achieve this in line with the daily throughput sought for the meat plant to meet customer demand.

Lambs are sourced from throughout the Highlands, as well as Orkney, the Western Isles and Aberdeenshire, almost all of them direct from the farmer or crofter. Lambs are purchased from August through to May. In addition to purchasing lambs ready for slaughter, smaller store lambs are also purchased which are then finished on low ground farms within the Highlands, enabling continuity of supply in the later months of the season.

The choice of breed is made by the farmer to suit the growing conditions on their land. In the vast majority of cases, they are pure breeds or cross-breeds native to the area which have the hardiness to grow in the fairly harsh climate. While these breeds do not have the size nor confirmation of larger breeds from other areas, they are extensively reared outdoors for their entire life, and as a result have good flavour, and have the added selling point of having been naturally reared.

The producer is paid according to the confirmation grading of the animals, with the incentive of higher prices for the higher graded lambs.

#### 3 - Interaction with Public Authorities

Being situated in a less favoured area, producers receive subsidies according to the number of stock they have.

Producers are also eligible for financial assistance under a state aids approved scheme called the Agricultural Business Development Scheme, which is jointly funded by the Scottish Executive and the European Union. The aim of ABDS is to increase the income-generating capacity of the farming family by providing financial assistance towards

a) investments in agricultural holdings;

b) the development of new, or the expansion of existing agricultural or non-agricultural diversification enterprises

The livestock marketing and procurement company, HILL, was first established in the 1980's with public funding through the Highlands & Islands Development Board, as part of an initiative to improve the marketing of lambs produced by small-scale producers in the Highlands & Islands.

## 4 - Quality Control Aspects

Scotch Premier maintain that establishing the provenance of the livestock procured is an integral part of marketing their brand, and this is based on a transparent traceability system which is independently audited.

Where possible, lamb is sourced from producers who are members of a scheme called Specially Selected Scotch Farm Assurance which is run by Quality Meat Scotland (QMS). This independently monitored scheme, which is EN45011 compliant and recognised by the public authorities, provides assurance that the animals are reared to an agreed set of standards of animal husbandry, health and welfare. This farm assurance scheme is part of the overall assurance scheme for the PGI registered brand of 'Specially Selected Scotch Lamb'. The overall assurance scheme covers farmers, hauliers, auctioneers, abattoirs, meat processors and retail outlets, and enables the product to be labelled as 'Specially Selected Scotch Lamb'.

## 5 - Strategic Aspects

Traditionally, farmers and crofters would sell their lambs in large lots at auction, either as stores or finished lambs. This meant that some lambs were really too small and, as a result, received poorer prices. By having a local abattoir which is purchasing lamb direct from farmers and crofters weekly, producers are being educated to grade their lambs and to sell only those which are of the right weight and confirmation, and to keep the others on until they too reach the optimum size. This means the abattoir receives the right size of lambs, and the producer receives a better return.

## 6 - Impact of mountain area location

Scotch Premier is in the business of supplying lamb to its customers all 52 weeks of the year, and also keeping its abattoir running throughout the year. Lambs are available for purchase from August to May, with the peak availability during the autumn. To even out the supply of lambs to the abattoir, and to maintain continuity of supply throughout the year, up to 20,000 lambs are purchased as stores and finished on lower ground farms in the Highlands(Low farms will be below 100m). The slaughter house is central as regards to the higher farms.

#### CHAPTER III - PROCESSING AND TRANSFORMATION

### 1 - The Organisational Aspects

Up to 2,000 lambs are slaughtered and butchered each week at the Dornoch abattoir which employs 15 staff. The scale of the abattoir means that throughput is not the main driver for profit as in large plants, but quality - focusing on how the lamb is slaughtered and butchered to achieve quality in the finished product which in turn drive sales.

Most of the lamb is sold whole, though Scotch Premier are moving into cuts as well to meet the demand from butchers who wish to augment their purchase of whole carcases with more of the most popular cuts as well.

## 2 - The Know-how and Quality Aspects

All the staff at the Dornoch abattoir have been recruited locally and fully trained by Scotch Premier to their own specifications including butchery techniques. This makes a major contribution to the quality of the end product, which Scotch Premier claims is better than most abattoirs in the UK.

The central location of the abattoir in the heart of the sheep producing area in the northern Highlands means significantly shorter transportation times for lambs prior to slaughter. Not only is this good for animal welfare, and a selling point in itself, reducing stress prior to slaughter has a positive benefit on the tenderness of the meat.

#### 3 - The Public Policy Aspects

Caithness & Sutherland Enterprise (CASE) is the government-funded local economic development agency, and is part of the HIE Network. Part of its role is to attract new businesses which will generate new jobs in the area. CASE provided financial assistance of some £115,000 to Scotch Premier towards the capital costs of over £1m1 million required to upgrade and equip the plant when Scotch Premier first took it over in 2001.

#### 4 - The Quality Control Aspects

Scotch Premier have their own in-house quality control systems which meet not only statutory requirements, but also those of the Guild of Scotch Quality Meat Suppliers. Scotch Premier's meat plant at Dornoch is independently inspected to qualify to use the PGI label, Specially Selected Scotch Lamb. All carcases are independently weighed and graded by the Meat & Livestock Commission.

As with all meat plants in the UK, the carcases are independently inspected by veterinary inspectors working for the government-appointed Meat Hygiene Service. Until recently, the inspectors were locally-based veterinary surgeons who undertook the work part-time. This had the dual benefit of providing an additional return to the local economy and helping to sustain local vet practices. It also meant that the vets could feed information back to producers in relation to general health issues identified from carcase inspection. However, this local link has now been broken. Following a re-tendering of the contract for inspection by the Meat Hygiene Service, the new contractors now use inspectors from outwith Scotland.

## 5 - The Strategy Aspects

The lambs are slaughtered using some of the most up to date slaughter lines. This, combined with a relatively low daily throughput, minimises contamination in the slaughter process, so there is, generally no need to hose down the carcases, which means the keeping quality of the carcase is improved.

Butchering techniques are said to have changed significantly over the past decade or so, in response to customer demand. By employing butchers with little or no experience, Scotch Premier have trained them to use the latest cutting techniques thus maximising yield and presentation, and by all using the same techniques product consistency is achieved.

#### 6 - The Impact on the mountain area location

The location of the meat plant is of major significance to the local economy. It enables much of the added value achieved from processing the lamb to be retained in the area through the wages of the local people employed in the plant, and the various local services used by the plant.

It also provides secure employment for 15 people in a rural area where such job opportunities are limited. The return is a highly committed workforce who are said to take pride in their work, and the product they produce.

## CHAPTER IV - DELIVERY CHAIN

#### 1 - Organisational Aspects

It is, generally, the responsibility of the farmer or crofter to arrange transport of their lambs to the abattoir. They will either use their own transport, share transport with another farmer, or use a livestock haulage contractor. HILL, as procurement agent, plays an important role here as they know who else they are procuring lambs from in that particular week.

Onward transport of the carcases is undertaken by Scotch Premier using its dedicated fleet of modern refrigerated vehicles. The lamb is first transported to Scotch Premier's main centre in Inverurie. The lamb is then made up into orders for individual customers along with Scotch Premier's other meat products including beef, pork and venison products.

Final distribution of product to the company's customers, who are located throughout the UK, is once again by the company's own fleet of refrigerated vehicles. Thus Scotch Premier has full control of the product from when it receives live lambs at the abattoir through to final delivery to the customer.

#### 2 - Know-how Aspects

Scotch Premier Meat is a well-established meat business of medium scale operating three meat plants, and integrated as part of the ANM Group. Its throughput is such that it employs all the necessary expertise required in production, quality control, management, sales and marketing, logistics etc. Scotch Premier's annual turnover is £34 million, of which £5 million comes from the Dornoch plant. The company employs 146 staff, of which 15 work at the Dornoch plant.

## 3 - Relations to Private Firms and Organisations

Scotch Premier has its own sales and marketing team and an active database of over 800 customers comprising butchers shops, hotels restaurants and caterers through out the UK. An average of about 500 customers will order in any week. The larger customers are managed as key accounts as a personal relationship with the customer is important. Through such dialogue, not only are sales achieved, but feedback is obtained about the company's products, other lines which the customer may be interested in buying, plus other useful information about happenings in the market place.

#### 4 - Marketing Strategy Aspects

Scotch Premier's marketing strategy is based on supplying a large number of small and medium-scale butchers and caterers who value quality and are prepared to pay a premium for quality and service. The company's philosophy is that if you get the quality right, the sales will follow.

Scotch Premier brand their lamb as 'Highland Lamb' not only to differentiate it from lamb from other regions of the UK, but also to emphasise its selling points of being a natural, seasonal product grown in an open extensive environment.

The interest of a nation-wide enterprise as ANM to get a local production of local meat: the ANM Group is one of the largest farmer-owned businesses in the UK, its membership is very much centred in the north of Scotland. Its activities are oriented to providing services to the agricultural community in the north of Scotland and to adding value to products from the area.

Does it represent a lucrative section/unit of the enterprise? Yes, Scotch Premier is a profitable part of the ANM Group, and Highland Lamb makes a profitable contribution to Scotch Premier, and allows it to offer to customers the full range of red meat – lamb, beef and pork.

Is it used to enhance the ANM group image? Highland Lamb fits with the image of Scotch Premier of being a source of locally produced beef, lamb and pork from the north of Scotland.

Scotch Premier's 'Highland Lamb' comes from the smaller hill breeds and crosses adapted to the conditions in the Highlands, and so the carcases do not have the confirmation of the larger breeds which some butchers have become accustomed. The company's line to butchers is "don't judge on confirmation, judge on flavour".

#### 5 - The Impact of mountain area location on the various Aspects

The impact of the mountain location in terms of the product is all positive for Scotch Premier. It is a quality seasonal product extensively reared in one of the UK's most natural and unspoilt environments. Animal welfare status is high with slaughter taking place close to production in a state-of-the-art plant.

#### CHAPTER V - GLOBAL SUPPLY CHAIN ASPECTS

#### 1 - The Organisational Aspects

Quality Meat Scotland (QMS) is the organisation with responsibility for promoting Scottish red meat products. QMS was formed in 2000 by three bodies:

- ☐ Meat & Livestock Commission (the UK public body responsible for the collection of a statutory levy which is used for research, development and marketing of British Meat).
- □ National Farmers Union of Scotland (representing 10,500 Scottish farmers).
- ☐ The Scottish Association of Meat Wholesalers (representing the majority of the abattoirs in Scotland through which Scotch meat must be processed to earn the designation 'Specially Selected Scotch').

#### QMS has two main objectives:

- 1. Improve the competitive position of the Scottish meat and livestock industry at home and abroad, thereby bringing tangible benefit to the sectors involved, from primary production to point of sale.
- 2. Provide co-ordination and leadership for the whole of the industry.

#### QMS has three main roles:

- Promoting Scottish red meat products, including the development of the 'Specially Selected Scotch' branding of beef, lamb and pork.
- Developing and maintaining the Specially Selected Scotch Quality Assurance standards (from gate to plate) within the Scottish red meat supply chain.
- Acting as a catalyst and facilitator in the identification and dissemination of best practice throughout the Scottish red meat supply chain.

#### 2 - The Organisation and management of the product quality

QMS is the custodian of the three brands of Specially Selected Scotch Beef, Lamb and Pork. Both Scotch Beef and Scotch Lamb are PGI's.

The three brands are underpinned by quality assurance standards which cover the supply chain from the farm to the consumer. The standards cover animal husbandry, feeding, health and welfare on the farm. Once the animals leave the farm, the standards cover transport and handling at the auction markets to ensure maintenance of high standards of animal welfare and the minimisation of stress. All processors and suppliers of Specially Selected Scotch Beef, Lamb and Pork are also subject to regular inspection, and all meat processing plants must have a fully documented HACCP system in place. The scheme provides traceability of the product at every stage of the chain.

Scottish Food Quality Certification Ltd (SFQC) is the independent organisation responsible for certifying and administering the Specially Selected Scotch quality assurance schemes. SFQC was the first food and farming certification body in Europe to be awarded EN45011 status, adopted by the EU as the yardstick for food certification schemes.

#### 3 - The relations to Public Authorities

QMS is strongly supported by the Scottish Executive because of the potential it has to provide coordination and leadership to a key aspect of Scotland's rural economy, and to the improvement of the competitive position of the Scottish meat and livestock industry at home and abroad.

As mentioned earlier, QMS is also partly owned by the Meat and Livestock Commission, the UK government-appointed body responsible for the collection of a statutory levy which is used for research, development and marketing of British Meat. MLC funnel part of this funding into QMS to undertake the promotion of Scotch Meat, under the 'Specially Selected Scotch' branding. Meat businesses require to be members of QMS to benefit from this promotional activity.

#### 4 - The Global strategy of the supply chain

QMS undertakes a range of marketing campaigns to promote the three brands, and is currently focusing on the following messages:

- Specially Selected Scotch Beef communicating the benefits of a rigorous Quality Assurance scheme married to the unspoilt Scottish environment.
- Specially Selected Scotch Lamb communicating the purity of the inputs (water, grass, air) to the production of Scotch lamb.
- Specially Selected Scotch Pork communicating the healthy eating aspect of pork as a modern fashionable food.

All aspects of the marketing communication mix have been used to communicate with the end customer, the consumer: TV (Beef), Posters (Pork and Lamb), Merchandising (Beef, Lamb and Pork), Press (all three species), Radio (all three species), Website (all three species), and Direct Mail (all three species).

#### 5 - The Impact of the various aspects on mountain area location

QMS plays an important role by stimulating market awareness and demand for Scottish red meat, which individual meat companies, such as Scotch Premier, can then exploit through their own sales efforts. QMS also arranges visits to member companies for domestic and overseas buyers interested in the possibility of buying Scotch meat. These have included visits to the Scotch Premier's meat plant in Dornoch.

QMS's promotional message for lamb focuses on the key elements from the Highlands – the purity of the inputs of water, grass and air.

## CHAPTER VI - LABELLING

## 1 - The Type of Label

Most of Scotch Premier's Highland Lamb is supplied as whole carcases which carry a small label attached to the hind leg. Where cuts are supplied, they are packed in branded cardboard cartons which are pre-printed with the Scotch Premier's own logo, incorporated as part of the Highland Lamb image.





## 2 - The reasons behind the Choice of Label / non-labelling.

Scotch Premier exclusively use their own logo on all their packaging and promotional material. Scotch Premier is a holder of the royal warrant which is awarded by Her Majesty The Queen to companies who supply her Royal Household on a regular basis. It is a highly prized mark of distinction, well recognised in the UK. The royal warrant is incorporated into Scotch Premier's logo, which also contains the strapline 'Traditional Quality Meat' to reinforce the nature of the product Scotch Premier is supplying.

The Highland Lamb image is an ellipse shape which has a photograph of a Highland mountain as a backdrop with the words 'HIGHLAND LAMB, Succulent and tender' across the middle, and the Scotch Premier logo positioned centre top.

#### 3 - The Organisational Aspects

As well as the logos appearing on packaging and within the company's brochure, Scotch Premier also has a range of 'Highland Lamb' point of sale (POS) material which it will supply to retail butchers free of charge. These include a poster, and a 'shelf-talker' for use in the display counter beside the cuts of lamb, and on which the price can be written. Butchers who wish to promote the source of the lamb as a means of generating sales will use this material. Other butchers choose to focus on promoting their own image as the purveyor of quality meat, and not that of their suppliers.

#### **4-The Strategy Aspects**

All Scotch Premier's marketing effort goes into promoting their own Scotch Premier brand, and the values it represents, not just in terms of product specification and traceability, but also customer service. Although an approved supplier of Specially Selected Scotch Lamb and Scotch Beef, the company chooses not to use these PGI marks, though they supply approved retailers who do use them.

#### 5 - The relations to Public Authorities

'Scotch Premier' and 'Highland Lamb' are both private labels.

## 6 - The Impact of mountain area location on the various aspects

The mountain location is the basis for the imagery for the labelling, and also obviously the name, of Highland Lamb brand used by Scotch Premier.

## CHAPTER VII - SUCCESS/FAILURE/NEEDS

#### 1 - To what extent and how the product may be considered a success or failure

Scotch Premier is now into its third season of producing Highland Lamb from its abattoir in Dornoch, and it is proving to be a success both from the point of view of the company and the local economy:

- □ The company reports that the operation is profitable and has a long term future.
- □ Through the establishment of the Dornoch plant, Scotch Premier now has full control over the production and quality of the lamb they supply.
- ☐ Throughput has grown from 300 to over 1,700 lambs per week in two years.
- □ Fifteen people now have year-round employment in a rural location where such job opportunities are limited.
- ☐ The local economy is benefiting from value being added to a local product, in terms of the salaries earned by the staff, and the services purchased by the meat plant from local suppliers.
- □ Sheep producers in the Highlands now have an additional outlet for their lambs, with the potential to earn higher returns than can be achieved through the traditional route through sale at auction.
- ☐ The image of the Highlands as a source of natural, quality food produce is being promoted throughout the UK by the company's use of the 'Highland Lamb' brand.

## 2 - To what extent and how the success/failure mostly stems from the different aspects

Scotch Premier was already a well-established business supplying traditional quality meat to a wide customer base throughout the UK. Lamb was already one of their core products. What they needed was a suitably located, additional meat plant to process lamb.

The modern vacant premises at Dornoch, with a suitable local labour pool, provided a cost-effective investment opportunity. It is also located in the heart of the sheep producing region in the North Highlands, and has good road transport links to Scotch Premier's main site at Inverurie.

HILL, Scotch Premier's sister company in the ANM Group, has been providing marketing services to sheep producers in the Highlands & Islands for approaching 20 years, so has a wealth of contacts and knowledge when it comes to procuring lambs for Scotch Premier.

So, in summary, success is being achieved through Scotch Premier's existing business skills in the meat sector and established customer base.

A key requirement for continued growth for Highland Lamb is the sufficient supply of lambs of the right quality to meet demand. More farmers and crofters will have to develop their production systems to focus on producing lambs for the market to achieve this.

## MACBETH'S OF FORRES (SCOTCH BEEF)

Area: Scotland (United Kingdom)

Author: Kevin Gruer

(Highlands and Islands Enterprise)

#### CHAPTER I - BASIC DATA ABOUT THE EMERGING OF THE PROJECT

#### 1 - The Natural, Geographical, Historical and Economical environment

With climate, altitude and soil quality in the Highlands dictating that a high proportion of productive pasture is permanent grassland, there is a long tradition of beef production in the region, though stock levels are now much lower than in previous generations.

Nevertheless, beef production is the most important agricultural enterprise, in terms of farm gate value, in the Highlands, representing 50% of output. Many farmers in the Highlands tend to specialise in rearing - producing heifers for sale to other farmers for breeding. Male stock are fattened for the meat market.

Traditional breeds such as Highland, Shorthorn and Aberdeen Angus - smaller breeds well adapted to the prevailing cold damp climate, slower growing but with good meat quality and flavour - are now much less common, as many farmers have adopted larger continental breeds or crosses favoured by many buyers in the market. These less hardy animals require to be housed for a longer period in the winter, and to be fed more intensively including use of compound feeds etc.

The emergence of BSE in the UK and the resulting introduction of controls had a major impact on the Highlands, despite the very low incidence of BSE cases in the area. The ban on exports was a major blow to breeders in the Highlands who had established sales of breeding stock to the Continent, as was the ban on the export of Scotch Beef. The introduction of a regulation which required that all cattle for human consumption had to be slaughtered before they were 30 months old also had a major impact, especially in areas where beef cattle are extensively reared, such as the Highlands.

## 2 - The Conditions (Opportunities / Threats) that drive the protagonists to act

Following an initial career as a chartered accountant, Michael Gibson, and his wife Susan, entered farming in 1974 with the purchase of Edinvale Farms, south of Forres, about 60 km from Inverness. The farm extends to about 400 hectares and ranges in altitude from about 180m to 350m.

Developing the farm from scratch, the Gibsons now have 600 head of cattle of which 180 are breeding cows. The Gibsons are strong proponents of maintaining native breeds in the Highlands, and only traditional breeds are carried on the farm.

The farm has two aspects to its business. The first is producing high quality breeding stock. Some are used as their own replacements, while other heifers are sold in-calf to other farmers for breeding. The second aspect to the business is producing finished cattle for meat. All the male steers are fattened on the farm for beef.

Up to the mid-1980's, the Gibsons sold their finished cattle through the local auction market. However, they were frustrated by the erratic prices and poor returns, and the inability to obtain a reasonable price, let alone a premium for their Highland steers as the buyers favoured continental breeds. Many of the animals

were also going outwith the Highlands for slaughter, so the local area was not benefiting from value being added to a quality raw material. The Gibsons, therefore, started to look at alternatives sales routes.

## 3 - The Human Dynamic and/or Categories of Actors that provided the impetus

The Gibsons initially undertook some market testing by having some of their own steers slaughtered and butchered, and they sold the beef to friends and local people. The positive response from the quality of the meat was overwhelming, and the conclusion was that there must be a niche market for quality traditionally produced beef.

In 1985, after some further research, Michael Gibson purchased a butcher's business called Macbeth's, in the local town of Forres. His strategy was that this vertical integration would not only provide a higher value outlet for their finished cattle and a stable income for the farm, it would enable them to add value to what he believed was an under-valued high quality premium product for which there existed a market demand.

## 4 - The Impact of mountain area location on the launching of the project

The location in the Morayshire hills, in the Highlands, meant that the farm consisted almost entirely of permanent grassland which favoured beef production. A successful breeder and strong proponent of traditional beef breeds, Mr Gibson felt that some of the finest traditional quality beef was being produced in the mountain area of the Highlands. The Gibsons were also sure there was a strong niche market demand, not only locally but throughout the UK and beyond, for traditional reared and hung beef as an alternative to the now common more intensively reared beef from continental breeds which are rushed through the supply chain with little or no maturation.

## **Chapter II - Basic Production (Raw material)**

#### 1 - The Organisational Aspects

Edinvale Farms is situated in the Morayshire Hills, south of the town of Forres, which is on the eastern side of the Highlands study area. The farm extends to just under 400 hectares and, in terms of cropping, consists almost entirely of grass for grazing and for the production of silage for feeding over the winter. Some fodder crops are also cultivated.

Edinvale Farms runs some 600 head of cattle, of which 180 are breeding cows. Two full-time staff are employed on the farm. The entire herd comprises of Scottish native breeds – Highland, Shorthorn and Aberdeen Angus. Generally, all the heifers are grown for breeding, either as replacements for Edinvale itself, or selling as breeding stock to other farmers. The steers are all fattened as the main supply of beef for Macbeth's, the Gibsons' butcher's business.

All calving takes place in spring, and finished cattle are slaughtered between 18 and 30 months, enabling a year round supply to the butchers. Some 120 head of cattle are slaughtered annually, all of which go to Macbeth's.

#### 2 - The Know-how and Quality Aspects

It has always been the policy at Edinvale to farm as extensively as possible and, whilst not organic, no compound feeds, growth promoters or hormones are used. This suits the native breeds of cattle they have, which respond well to being allowed to mature slowly on a diet of grass in summer with hay, silage, draff and beet pulp in the winter. The Gibsons believe that this feeding regime, together with allowing the cattle

to reach as high an age as possible before slaughter, results in succulent and well-marbled beef which is hard to beat.

Apart from supplying Macbeth's Butchers, Edinvale Farms has built a successful trade in providing top quality pedigree Highland cattle and Highland cross Shorthorn heifers to other breeders. During the 1980s, this included the export of many breeding cattle to continental Europe, and whilst this part of the business is in abeyance due to the ban on the export of live cattle currently in place, everything is ready to resume trade when allowed. Edinvale continues to sell top quality breeding heifers all over Scotland and have built up a reputation for breeding hardy cattle which will thrive anywhere.

#### 3 - The relations with Public Authorities

Edinvale Farms qualify for LFA subsidy payments based on the number of breeding stock carried on the farm.

Edinvale Farms was also successful in securing financial assistance through the Agricultural Business Development Scheme (ABDS) to undertake a major refurbishment of an existing farm building. ABDS is a state aids approved scheme which is jointly funded by the Scottish Executive and the European Union. The aim of ABDS is to increase the income-generating capacity of the farming family by providing financial assistance towards

- c) investments in agricultural holdings;
- d) the development of new, or the expansion of existing agricultural or non-agricultural diversification enterprises.

#### 4 - The Public Policy Aspects

The emergence of BSE in the UK and the resulting introduction of controls had a major impact on the Highlands, despite the area being free of BSE cases. The ban on exports was a major blow to breeders in the Highlands, such as Edinvale Farms who had established sales of breeding stock to the Continent. A similar ban on the export of beef was also a major blow, as Scotch Beef was highly prized in continental Europe, and Macbeth's had established some export trade.

Even more significantly, the UK Government introduced a regulation which required that all cattle for human consumption had to be slaughtered before they were 30 months old, as no cattle had been found with BSE up to this age. Traditional rearing of native breeds in the Highlands consists of feeding on grass, silage and other winter keep, with little use of compound feeds. This combined with the shorter growing season, meant that cattle would typically take longer than 30 months to fatten to market weight on this regime. Yet it was this extensive rearing system which contributed to the quality of the beef, and is considered by many as being one reason why BSE did not exist in such herds.

The over 30 month rule had an impact on the number of farms which could maintain their existing systems and still produce finished stock, forcing others to either feed more intensively, change breeds, or sell their animals as store stock for finishing by others.

Edinvale Farms has managed to maintain their overall policy of rearing only native breeds as extensively as possible and to finish them within the 30 month period , though they have had to reduce the age they slaughter animals by up to six months to comply.

#### 5 - The Quality Control Aspects

Edinvale Farms is a member of the Specially Selected Scotch Farm Assurance Scheme run by Quality Meat Scotland (QMS). This independently monitored scheme, which is EN45011 compliant and recognised by the public authorities, provides assurance that the animals are reared to an agreed set of standards of animal husbandry, health and welfare. This farm assurance scheme is part of the overall assurance scheme for the PGI registered brand of 'Specially Selected Scotch Beef'. The overall assurance scheme covers farmers, hauliers, auctioneers, abattoirs, meat processors and retail outlets, and enables the product to be labelled as 'Specially Selected Scotch Beef'. More details are given in Chapter 5.

#### 6 - The Strategy Aspects

The Gibsons have a strong belief in the importance of agriculture in the Highlands, believing that its long term future depends on making best use of commercial opportunities based on the outstanding environment in the Highlands, and adding value locally, wherever possible.

The Gibsons' overall strategy is to offer consumers premium quality, traditionally reared beef from native breeds, with the added assurance that the same family-run group of businesses has been in control of the product from conception to consumption.

#### 7 - The Impact of mountain area location on the various Aspects

The natural environment including the altitude, climate, soil type and length of growing season dictates the type of production which is appropriate and commercially feasible. Mainstream market pressures have resulted in some beef producers in the Highlands pursuing more intensive systems using continental breeds and expensive bought-in feeds. However, Edinvale Farms' strategy is to work with the natural environment and to exploit the selling points that this natural, if at times harsh, environment brings.

## CHAPTER III - PROCESSING AND TRANSFORMATION

#### 1 - The Strategy Aspects

It was in 1985 that the Gibsons purchased Macbeth's, a retail butcher's business in their local town of Forres, and about 10km from Edinvale Farms. At the time of purchase, Macbeth's was in financial difficulties and in need of significant investment. It was also at this time that the national supermarket chains were opening up new retail units in Forres and the surrounding towns of Elgin, Nairn and Inverness, and creating strong competition to local retailers such as butchers, a number of whom were to go out of business as a result.

The Gibsons refurbished and upgraded the butchery premises at Macbeth's, staff were re-trained, and products and markets identified which were not in direct competition with the supermarkets.

In terms of products, Macbeth's strategy has been, from the outset, to offer beef from their own farm, and lamb, pork, poultry and game sourced from other local farmers and suppliers who share the same production philosophy. Macbeth's selling points are:

- □ conception to consumption total control over the product by one vertically integrated business, with transparency in terms of production regime, animal health and welfare etc.
- □ Tradition making the most of native breeds and traditional rearing systems complemented by the best of science.

- □ Butcher's skills Extended hanging periods, traditional cutting techniques, and highly skilled butchers.
- □ Personal service Orders personally taken, and customers able to speak directly to the butcher who will be preparing their order.

#### 2 - The Organisational Aspects

Macbeth's purchase all the finished cattle from Edinvale Farms, about 120 animals each year, and this is sufficient to meet the whole-carcase requirements for the business. Macbeth's also buy in additional cuts to meet the demand for the more popular cuts of beef.

While the supply of quality beef is the key focus, as a wholesale and retail butchers, Macbeth's also supply top quality lamb and pork, as well as a comprehensive range of venison and game. Wherever possible, these are bought from specific local suppliers who match Macbeth's production systems and mechanisms. Macbeth's also make their own range of traditional Scottish meat products - sausages, burgers, haggis and black puddings.

In all, Macbeth's employ five full-time butchers and three office staff, with Michael and Susan Gibson personally undertaking sales and marketing and overall management of the business.

#### 3 - The Know-how and Quality Aspects

The Gibson's objective is to maximise quality at every stage of production through best practice. This starts with their breeding and rearing systems on the farm, and continues through the meat process too.

Their own cattle from Edinvale Farms are slaughtered at the nearby abattoir in Elgin, which is only about 15km from the farm. This is important as the short travelling distance minimises stress to the animals prior to slaughter. After hanging for a week in the abattoir, the carcases are delivered to Macbeth's where, prior to butchering, the hind-quarters are hung for a further 10 days in temperature and humidity controlled chills. All these measures contribute to maximising the quality of the meat, and bringing out its taste and succulence.

Being a small company employing its own butchers, Macbeth's can offer a personal service to all its customers, cutting and preparing the meat to their individual requirements. Customers can even speak directly to the butcher preparing their order to discuss their requirements.

This approach does add cost, but the result is a premium product which sets Macbeth's apart from larger scale meat companies who, because of the volume they handle and the need to keep cost out of the system, cannot contemplate hanging carcases, or cutting and preparing product to individual customer's specifications except for major customers.

#### 4 - The relations with Public Authorities

The only public sector financial assistance towards capital expenditure which the company has received from public agencies has been towards the cost of purchasing a labelling machine. Macbeth's have also exhibited at a trade exhibition targeting the hotel and restaurant sector in London, as part of a group stand organised by Highlands & Islands Enterprise.

#### 5 - The Public Policy Aspects

The Gibsons are fortunate in having an abattoir so close to their farms, enabling them to maintain the highest levels of animal welfare throughout. This is not the case for many livestock farmers. There are only some five abattoirs undertaking the slaughter of sheep or cattle in the whole of the Highland mainland, which covers an area of 3.5 million sq hectares, and all these are in the northern half of the area.

This situation has resulted from a rationalisation of the abattoir sector in the UK in the face of increasingly demanding regulations and higher costs. The standard of some of the small-scale abattoirs which did exist in the Highlands meant significant investment was required to upgrade or to build new facilities. A lack of capital available to undertake the investment required, combined with insufficient projected throughput to generate trading revenue, has resulted in fewer abattoirs in the Highlands.

## 6 - The Quality Control Aspects

Macbeth's are members of the Guild of Quality Meat Suppliers, and hence also members of the Specially Selected Scotch Quality Assurance Scheme which enables Macbeth's to use the PGI labels 'Specially Selected Scotch Beef' and Specially Selected Scotch Lamb'.

Membership of the assurance scheme involves regular independent inspection of premises and procedures to ensure that the company is complying with the strict product and processing standards of the scheme, which includes having a fully documented HACCP<sup>30</sup> system in place. Further details can be found in Chapter 5 of this report.

#### 7 - The Impact of mountain area location on the various Aspects and vice versa

A key impact is that the Gibsons are able to undertake the whole transformation from conception to final product close to the farm. This, combined with the use of native breeds enables them to offer a truly Highland product, and to add significant value to the product within the area. In addition to providing a local outlet for their own beef, Macbeth's also provides a local outlet for other local farmers and suppliers from whom Macbeth's purchase beef cuts, lamb, pork, venison and game.

In all, this small, integrated business directly sustains one farming family, two full-time farm staff and eight staff in the butchers, as well as providing sales for other local suppliers.

## **Chapter IV - Delivery Chain**

## 1 - Marketing Strategy Aspects

Macbeth's target three distinct markets:

- □ retail sales through their shop in Forres to local consumers wishing to buy traditionally reared, locally produced and succulent meat.
- mail order customers throughout the UK wishing to buy traditionally reared, premium quality meat, reared in one of the most natural environments in the country.
- wholesale supplying hotels, restaurants, and other catering outlets throughout the UK who wish to serve their clients with the best of meat.

60% of sales come from wholesaling to the catering trade, 20% of sales are through the retail shop, and the remaining 20% to mail order customers.

<sup>&</sup>lt;sup>30</sup> HACCP stands for Hazard Analysis and Critical Control Points

#### 2 - Organisational Aspects

Orders from wholesale customers are generally received by phone or fax. Mail order customers either use the order form received with Macbeth's catalogue sent out by post or use the company's website <a href="https://www.macbeths.com">www.macbeths.com</a> to order online.

In terms of wholesale business, Macbeth's supply product to suit a whole range of catering budgets, from the finest fillet and sirloin for award-winning restaurants, to quality mince and stew for pubs and cafés. As a result, they currently supply hotels and restaurants from Sutherland in the far north of Scotland, to Brighton on the south coast of England.

50% of wholesale trade is to customers fairly local to Macbeth's, and these orders are despatched using Macbeth's own refrigerated van.

50% of wholesale trade and 95% of mail order trade is to customers outwith the local area. Delivery to these customers is by a standard courier guaranteeing next day delivery throughout the UK mainland. The orders are packed in insulated boxes with a gel pack placed inside to maintain the meat at chill temperature, as the package must be leak-free.

While this is an expensive method of sending product, it is the fastest, most reliable and cost-effective means of getting small quantities delivered direct to small-scale customers anywhere in the UK.

#### 3 - The Impact of mountain area location on the various Aspects

While there is a significant amount of chilled food products brought into and despatched from the Highlands on a daily basis, distribution is all geared to large quantities. When consignments consist of pallet loads or less, the price becomes very expensive, and the consigning of product to diverse destinations complicated.

There is no cost-effective chilled distribution chain for small consignments within or from the Highlands, despite the large number of small food producers in the Highlands requiring to send chilled products to customers throughout the UK. It is an issue which businesses like Macbeth's find to be a major constraint on business growth, and one that they feel should be addressed by the public authorities, such as the economic development agencies.

#### CHAPTER V - GLOBAL SUPPLY CHAIN ASPECTS

#### 1 - The Organisational Aspects

Quality Meat Scotland (QMS) is the organisation with responsibility for promoting Scottish red meat products. QMS was formed in 2000 by three bodies:

- □ Meat & Livestock Commission (the UK public body responsible for the collection of a statutory levy which is used for research, development and marketing of British Meat).
- □ National Farmers Union of Scotland (representing 10,500 Scottish farmers).
- □ The Scottish Association of Meat Wholesalers (representing the majority of the abattoirs in Scotland through which Scotch meat must be processed to earn the designation 'Specially Selected Scotch').

#### QMS has two main objectives:

- 1. Improve the competitive position of the Scottish meat and livestock industry at home and abroad, thereby bringing tangible benefit to the sectors involved, from primary production to point of sale.
- 2. Provide co-ordination and leadership for the whole of the industry.

#### QMS has set itself three main roles:

- Promoting Scottish red meat products, including the development of the 'Specially Selected Scotch' branding of beef, lamb and pork.
- Developing and maintaining the Specially Selected Scotch Quality Assurance standards (from gate to plate) within the Scottish red meat supply chain.
- Acting as a catalyst and facilitator in the identification and dissemination of best practice throughout the Scottish red meat supply chain.

# 2 - The Organisation and management of the product quality

QMS is the custodian of the three brands of Specially Selected Scotch Beef, Lamb and Pork. Both Scotch Beef and Scotch Lamb are PGI's. The incorporation of the PGI symbol into the two logos is a recent innovation.

The three brands are underpinned by quality assurance standards which cover the supply chain from the farm to the consumer. The standards cover animal husbandry, feeding, health and welfare on the farm. Once the animals leave the farm, the standards cover transport and handling at the auction markets to ensure maintenance of high standards of animal welfare and the minimisation of stress.



All processors and suppliers of Specially Selected Scotch Beef, Lamb and Pork are also subject to regular inspection, and all meat processing plants must have a fully documented HACCP system in place. The scheme provides traceability of the product at every stage of the chain.

Scottish Food Quality Certification Ltd (SFQC) is the independent organisation responsible for certifying participating businesses, and for administering the Specially Selected Scotch quality assurance schemes. SFQC was the first food and farming certification body in Europe awarded EN45011 status, adopted by the EU as the yardstick for food certification schemes.

#### 3 - The relations to Public Authorities

QMS is strongly supported by the Scottish Executive because of the potential it has to provide co-ordination and leadership to a key aspect of Scotland's rural economy, and to the improvement of the competitive position of the Scottish meat and livestock industry at home and abroad.

As mentioned earlier, QMS is also partly owned by the Meat and Livestock Commission, the UK government-appointed body responsible for the collection of a statutory levy which is used for research, development

and marketing of British Meat. MLC allocates part of this funding to QMS to undertake the promotion of Scotch Meat, under the 'Specially Selected Scotch' branding. Meat businesses require to be members of QMS to benefit from this promotional activity.

#### 4 - The Global strategy of the supply chain

QMS undertakes a range of marketing campaigns to promote the three brands, and is currently focusing on the following messages:

- Specially Selected Scotch Beef communicating the benefits of a rigorous Quality Assurance scheme married to the unspoilt Scottish environment.
- Specially Selected Scotch Lamb communicating the purity of the inputs (water, grass, air) to the production of Scotch lamb.
- Specially Selected Scotch Pork communicating the healthy eating aspect of pork as a modern fashionable food.

All aspects of the marketing communication mix have been used to communicate with the end customer, the consumer: TV (Beef), Posters (Pork and Lamb), Merchandising (Beef, Lamb and Pork), Press (all three species), Radio (all three species), Website (all three species), and Direct Mail (all three species).

#### 5 - The Impact of the various aspects on mountain area location

QMS aims to play an important role by stimulating market awareness and demand for Scottish red meat, which individual meat companies, such as Macbeth's, can then exploit through their own sales efforts. QMS also arranges visits to member companies for domestic and overseas buyers interested in the possibility of buying Scotch meat. These are generally large-scale buyers who would be targeted by the medium and large meat processors, rather than small businesses such as Macbeth's.

#### CHAPTER VI - LABELLING

#### 1 - The Type of Label

Food labelling regulations requires the labelling of individual products with specific information relating to that product, eg. 'use-by' date, identifier code for meat plant etc.

The products which Macbeth's despatch to wholesale and mail-order customers is vacuum-packed, and an adhesive label applied to each individual pack. In addition to carrying information required by law, Macbeth's also use this label for marketing purposes. Firstly, the label incorporates Macbeth's own company logo. Secondly, Macbeth's also provide additional information as part of their full traceability policy.

Macbeth's logo also features in the retail shop on the packaging which the product is wrapped in following purchase.

The PGI labels of 'Scotch Beef' and 'Scotch Lamb' are also displayed in the shop with the display of posters and some promotional material supplied by QMS.

#### 2 - Labelling Strategy

The labelling of individual products carrying information specific to that product requires expensive machinery which represents a major investment for a small company. Macbeth's strategy is to make best use of the label by having it pre-printed with the company logo, and also incorporating other information which it feels is important to communicate to the customer. This includes information on the breed and sex of the animal and, indeed, a unique number which identifies which carcase the cut of meat came from.

The use of the 'Scotch Beef' and 'Scotch Lamb' logos in the shop and on the company's website are used as independent endorsements of the quality and provenance of Macbeth's products.

The cost of over-printing the company logo and other marketing information onto the outer boxes used for despatching the product is too expensive for a company such as Macbeth's to justify.

## CHAPTER VII - SUCCESS/FAILURE/NEEDS

#### 1 - To what extent and how the product may be considered a success or failure

The meat trade is a difficult business to be in at the best of times, and has a reputation for low margins. This has been exacerbated in recent years by a raft of new regulations which has added additional capital and revenue costs to such businesses. Nevertheless, the Gibsons have built Macbeth's into a profitable business which now has a turnover of over  $\in 1$  million.

The primary reason for success has been the entrepreneurial skills and determination of the Gibsons. They believe the vertically-integrated family-run farming / butcher's business they have built is unique in Scotland.

## 2 - To what extent and how the success/failure mostly stems from the various chapters

Since the first market testing of their beef through sales to friends prior to buying Macbeth's, the Gibsons have understood the product they are offering and the type of customers, both caterer and consumer, wishing to buy this traditional premium product. They have then successfully developed various routes to supply this market demand in a manner which is both profitable to Macbeth's and good value to the customer.

Although they have received a small measure of financial assistance from the public sector towards capital expenditure for the farm and Macbeth's, this has only represented a very small proportion of the total capital investment made in both businesses, not to mention the ongoing revenue costs required to meet a whole raft of public regulations.

Building a good reputation is a major marketing tool for any small business, and the Gibsons have spent many years building such a reputation for Macbeth's, delivering a product that matches the talk – a personal service delivering a succulent traditionally reared product with full traceability, and prepared to individual customer's requirements.

Michael Gibson believes that much could be achieved by collaboration with small businesses similar to his own, in areas such as sales, marketing and distribution. Despite making approaches to a number of such businesses producing non-competing products such as cheese, dairy products and fish, there has not been the commitment from other parties to take it forward. This is not uncommon in the Highlands, though there are examples of such businesses successfully working together in the area covered by Highlands & Islands Enterprise, particularly in island communities – Arran, Skye and Orkney are good examples.

#### 3 - What are the needs, what is missing and what could be done (from the various aspects)

Macbeth's is facing a constraint common for small businesses, which is when the business reaches a point where additional sales growth really requires the employment of a salesperson. However, a significant increase in sales is then required to cover the cost of employing such a person, which in turn requires a step change in output to supply the new orders, an increase in management resource and, potentially, capital investment in increased production capacity.

Related to this first constraint is understanding the size of the niche market in which the business is operating. Once the business has covered as much of the niche market that it can profitably reach, additional business is likely to have to be developed in increasingly competitive markets with reduced margins.

Mis-representation of beef on menus by hotels and restaurants is an issue for businesses such as Macbeth's who are selling the genuine article. Where the breed of beef is stated, it is invariably 'Aberdeen Angus' or sometimes 'Highland' as both breeds are known for their tenderness and succulence. Yet the output from these breeds is considered to nowhere match the supposed consumption.

While there has been a significant increase, in recent years, in the number of eating places in the Highlands using local produce, the vast majority of caterers have very low levels of purchase of locally produced food products. This is partly a consequence of the majority of hotel and restaurant groups undertaking centralised purchasing, and independent hotels and restaurants relying on deliveries from national catering distributors, and selecting from their product lists.

As mentioned earlier in the report, the lack of a cost-effective chilled distribution chain for smaller orders is seen as a major constraint by many small businesses in the Highlands producing chilled products, who are either selling to customers in other parts of the Highlands, the UK or overseas.

THE PROJECT ON QUALITY MOUNTAIN FOOD PRODUCTS IN EUROPE involved 13 partners including 10 mountain study areas from 8 European countries (France, Spain, Italy, Greece, Romania, Poland, Norway and Scotland).

This two-year project was divided into two phases:

- The first one, which lasted one year, aimed at collecting various strategic data from the field through two waves of enquiries focussing on 10 study areas and at analysing them;

The outputs of the programme are of two types:

- ✓ the wide dissemination of information through the establishment of a website in order to provide the relevant data to various actors, policy makers and researchers involved in this field;
- ✓ the identification of strategic proposals for the development of mountain food products at the European level, relevant to the professionals responsible for policy design and policy implementation at European, national or regional levels.

#### THE PARTNERS





























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